ZPWMA
SEBUNGWE ELEPHANT MANAGEMENT PLAN WORKSHOP

PROCEEDINGS

19-22 May, 2015
Musango Safari Camp, Kariba

CONTENTS

LIST OF ACRONYMS

AED	African Elephant Database
CAMPFIRE	Communal Areas Management Programme for Indigenous Resources
CASS	Centre for Applied Social Sciences
CUT	Chinhoyi University of Technology
ETIS	Elephant Trade Information System
JOC	Joint Operations Committee
KAZA	Kavango-Zambezi TFCA
MAPP	Matusadonha Anti Poaching Project
MEWC	Ministry of Environment Water and Climate
MFA	Ministry of Foreign Affairs
MIKE	Monitoring the Illegal Killing of Elephants
MNP	Matusadonha National Park
MOMS	Management Orientated Monitoring System
PIKE	Proportion of Illegally Killed Elephants
RBM	Resource Based Management
RDC	Rural District Council
SEWTF	Sebungwe Elephant Working Task Force
SMART	Spatial Monitoring And Reporting Tool
SOP	Standard Operating Procedures
TFCA	Transfrontier Conservation Area
TRAFFIC	Trade Records Analysis of Flora and Fauna in Commerce
TTI/TI	The Tashinga Initiative
UZ	University of Zimbabwe
WTF	Working Task Force
ZNA	Zimbabwe National Army
ZPWMA	Zimbabwe Parks and Wildlife Management Authority
ZRP	Zimbabwe Republic Police

1   ZPWMA Director General Opening Address

Address by The Director-General - E. Chidziya, Director General, ZPWMA
Delivered by Olivia Mufute. DG sent apologies but was attending to other pressing issues

Chief Mola Champion Rare, Chief Siabuwa, Chief Nenyuka, Chief Msambakaruma, Chief Negated, Conservation Force representative, Chief Executive Officers of Rural District Councils, Non-Governmental Organisations here present, Technical Experts, Zimbabwe Parks and Wildlife Officials, our host Musango Safari Camp, distinguished Ladies and Gentlemen, allow me to welcome you to this special gathering to deliberate on the future conservation of the Sebungwe elephant population. The Sebungwe region no doubt provides significant habitat to elephants and also boasts of key tourist attractions including our iconic world renowned Matusadonha National Park that we are duty bound to protect. This workshop comes at a time when the country is battling to contain the level of illegal wildlife exploitation which has obviously threatened our keystone species and overall conservation efforts the country over.

It gives me great pleasure and confidence to have an array of diverse minds gathered here for such a worthy cause as a follow-up from our recent Hwange workshop that called for complimentary management plans for the four distinct elephant populations in Zimbabwe. I have no doubt that the management plan developed from this gathering will be quite useful in guiding future conservation of elephants in the Sebungwe region that has shown a very huge decline during the last 10 years. This august group is expected to identify issues surrounding this worrisome trend and identify priority interventions to recover the population for continued future survival of elephants and benefits to local people. Local Communities have lived and benefited from elephants for a very long time has always played a key role towards their conservation and it is therefore our obligation in this workshop to ensure that they are not left out. We should therefore take full advantage of the presence and participation of our respectable Traditional Leaders and Rural District Council officials to guide us on how benefits to rural communities can be maximised as we craft the way forward for the recovery and sustainable management of Sebungwe elephant population.

As you might be aware, ladies and gentlemen, the Zimbabwe Parks and Wildlife Management Authority is finalising the national elephant management plan that can only be completed with input on the four major populations that have unique features and issues. It is therefore only logical for each of the four populations to have a management plan that feed into the overall plan for Zimbabwe. However, to a large extent we are guided by the previous Elephant Policy and Management Plan of 1997 though a bit outdated still remains relevant with a lot of its goals and aspirations still pertinent today.

At local level there is increasing pressure by communities to reap benefits from natural resources, with the elephant at the forefront, especially when the conflicts that elephants visit on some of our local communities are taken into account. Allow me, ladies and gentlemen, to point out the disturbing increasing trends in illegal harvesting of elephants that has also taken a new twist, with our locals becoming more directly involved, thus putting elephants at greater risk. Furthermore there is an increasing level of sophistication using more advanced means and technology to aid in the killing elephants and avoiding detection by law enforcement agents. Such unfortunate developments and other issues highlighted before have compelled us to sit and draw up an appropriate revised plan on how we manage our Sebungwe elephant.

Despite the highlighted challenges the Authority remains resolute in its campaign against wildlife poaching riding on the unwavering support provided by most of you here, particularly the country's security forces. Of paramount importance is the material support we continue to derive from The Tashinga Initiative, The Zambezi Society, Matusadonha Anti Poaching Project Safari operators and individuals and we are grateful for all such efforts that enhance the efforts to improve elephant conservation in the Sebungwe. In fact elephant conservation requires teamwork to deal with a gaps created by new technology, equipment inadequacy, financial support as well as moral support derived from all participating stakeholders making a huge difference and should guide us as we deliberate on the Sebungwe elephant management plan.

I have no doubt that given the sum total of expertise gathered here representing a cross section ranging from policy makers, wildlife managers, wildlife researchers, local communities and Non-Governmental Organisations we will be capable of developing a relevant and effective management plan that should help us reverse the current decline in elephant numbers.

I wish to thank Conservation Force and Padenga Holdings, whose dedication to conservation and generous sponsorship made this workshop possible, not forgetting everyone who has taken time from their busy schedules to attend and contribute towards this noble cause.

There is so much interest both locally and globally on how we manage our declining elephant population in the Sebungwe to the extent that this gathering is challenged to provide assurance and win the confidence and support of all stakeholders by coming up with the right prescription for future survival of elephants in the region.

The fact that many of you have sacrificed to travel long distances and spared your precious time to be at this remote venue bears testimony to how important this task is. And before I hand over to the Facilitator, I want to thank you once more for your sacrifice and support to elephant conservation and wish fruitful deliberations and pleasant stay at this wonderful Musango Safari Camp.

THANK YOU.
TWALUMBA

2 Welcome and Introductions

Charles Jonga (Director of CAMPFIRE Association) gave the opening introductions for the distinguished Chiefs after which Johanne Miyozi led a short prayer session to acknowledge their presence. This was followed by all participants introducing themselves.

3 Background to the Workshop

This workshop will produce a sub-regional Action Plan for the Sebungwe Elephant population that will be based on the Strategic Elephant Conservation Policy and Management Plan Framework of December 2014 (see Annex 3). The Sebungwe plan should be one that is applicable, practical, and achievable.

There is need for a greater coordinated and collaborative effort than ever before amongst the Sebungwe's stakeholders to deal with ongoing wildlife crimes and other challenges that are threatening biodiversity conservation. Specifically, private sector tourism and safari operators providing safari services in the Parks and Wildlife Estate see the threat as not only undermining the conservation status of the PWMA Estate but the very resources upon which their businesses and community benefits from wildlife depend.

As the Sebungwe's human densities increase, combined with the increased poaching of elephant and deforestation levels, the need for better and improved communication between all stakeholders, collaboration and coordination of conservation effort have become increasingly apparent. This is essential if optimum efficiency and effectiveness in the management of Elephant populations is to be achieved.

The outcomes of the Sebungwe Elephant Management Plan Workshop will be informed by two sources:

1. The Zimbabwe Strategic Elephant Conservation Policy and Management Plan Framework (As agreed at Hwange Safari Lodge Workshop on 4 December 2014).
2. The data, and specifically that related to the Sebungwe Region, from the National Elephant Aerial Survey undertaken in 2014.

4   Objectives and Purpose of the Workshop

The facilitator introduced the agenda (see Annex II) and aims of the Workshop. As indicated in the invitation "The primary goal of the workshop is to undertake detailed stakeholder and problem analyses from which a set of solutions and associated objectives can be developed leading to an action plan for implementation."

He outlined the logic and structure of the National Strategic Elephant Policy and Management Framework that was developed at the workshop held at the Hwange Safari Lodge in December 2014. The framework was based on the earlier 1997 elephant policy and management plan in which the **Long-term Vision** is:

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

And the three **Targets** are:

1. *To maintain at least four demographically and genetically viable elephant populations in Zimbabwe*

2. *To maintain or increase elephant range 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*

The framework of Strategic Objectives, Outputs, Key Activities, Key Performance Indicators (KPIs), and Mean of Verifying KPIs was structured under five components, namely,

1. Protection and law enforcement,

2. Biological management and monitoring,

3. Social, Economic and Cultural Framework,

1. 4, Building Conservation Capacity, and

4. Coordination, collaboration and programme management.

An outline of the national strategic framework was included in the workshop documentation (See Annex 3). The framework provides for the development of four sub-regional management plans of which the Sebungwe region is one. Key activities within the national plan that are appropriate at a sub-regional level, (e.g. *"establish a highly trained rapid response anti-poaching team for deployment to areas under threat"* a key activity at national level) could form "Outputs" at the sub-regional level. The necessary and sufficient activities that are required to achieve each output are specified together with key performance indicators that allow one to establish whether the outputs are being reached. He noted that monitoring in order to manage adaptively was a central requirement of an effective action plan. The geographical focus of the Sebungwe was confirmed to be the area covered by the aerial censuses and was the area lying to the north of the former tsetse fences that extended from Binga southwards to Sengwa Gorge and then northwards to Kanyati.

 It needs to be pointed out that this document is the proceedings of the
**SEBUNGWE ELEPHANT MANAGEMENT PLAN WORKSHOP. The ACTION
PLAN is an outcome of the workshop and is contained in Section 11 (Page 34)**

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5 Presentations Summary

The following table is an outline of the presentations given at the start of the meeting. The materials from the presentations were used to develop the descriptive narrative and maps used in the next section. Text in italics refers to questions and discussions following the presentation.

Presenter	Presentation
Hardwork Chikumba Sebungwe Elephant Management (9 slides)	This presentation gave an overview of the protected areas in the Sebungwe along with data on manpower strength for the various stations, The extent of known elephant poaching was described and comments made about the reasons for this. The presentation ended with a description of the law enforcement challenges facing the area and a possible way forward. *What weapons are used – Mainly .303s* *What is the Chirisa excision – was pointed out on the map* *Where does the ivory go – Mainly buyers from Byo and Hre. Fishing camps are thought to be a conduit to Zambia*
Victor Mkhwebu Matusadonha Law Enforcement (22 slides)	This presentation provided a description of Matusadonha and the park goals. Maps were provided showing the location of the sub-camps. This was followed by staff establishment and its distribution through the stations. Law enforcement strategies were described, as were the elephant poaching trends. There were some interesting observations regarding poaching hotspots and an analysis of the poacher entry and exit points. The presentation wrapped up with an analysis of the constraints, threats and a suggested way forward. Finally support from NGOs was listed.
Ashley Mudungwe Elephant Poaching Patterns and Trends in the Sebungwe Region (25 Slides)	The presentation drew attention to the recent elephant decline by area and also to the key research issues. Poaching trends were discussed along with identified knowledge gaps. Most of the remainder of the presentation dealt with Matusadonha and outlined poaching trends, including a seasonal analysis. Maps showing the poaching incidents in relation to camps and terrain were presented. Patrol effort data was presented along challenges and recommendations and suggestions to strengthen research capacity. *Is ZPWMA addressing carrying capacity of elephants for these areas. Do we know what we want in terms of numbers? – Elephant carrying capacity is highly subjective and related to policy* *Why is there a focus on guns and patrols etc. There needs to be a shift towards incentives to reduce poaching. This is an important concept as there are huge declines in all species. Need the Chiefs and the community to understand the issues and implications.*
Johanne Miyozi Elephant Management In Nyaminyami RDC (25 Slides)	This presentation contained information about elephant management in Nyaminyami under monitoring illegal killing of elephant (*MIKE)* System. Data on poaching statistics, PAC reports, PAC offtake and human deaths due to elephants was presented. The sport hunting quotas for the 4 hunting areas were also presented. Finally there was an outline of challenges and strategies. *Clarification was asked on how communities benefit from CAMPFIRE. Wards receive 45% of fees from animals shot in their areas. These funds then channeled to community identified projects. There are loopholes but these are being addressed. 35% goes to CAMPFIRE administration and the remainder to Council.* *Do the communities actually get 45%? – Yes they do.* *There appears to be a correlation between decrease in PAC and an increase in poaching.*

Presenter	Presentation
David Cumming Elephants and People in the Sebungwe: 1887 – 2014 (20 Slides)	The presentation began with an overview of elephant populations and land apportionment in the Sebungwe. It detailed the rise of the population from low numbers in 1925 and showed how this rose even in the face of population control measures. There was discussion on the rise of the human population and the expansion of settlement and the influx of livestock into the area followed by data on carcass density in 2006 and the 2014 survey results. Finally areas for corridor development were outlined along with suggestions for strategic approaches to the problem in the Sebungwe.

In order for the maps and diagrams to work in section 6 it needs to start on a new page.
See next page

6   Sebungwe Summary

The following description of the Sebungwe and the Matusadonha National Park is taken from the presentations given at the workshop.

6.1   Sebungwe Location and Historical Changes in Land Apportionment

The Sebungwe is located along the southern shore of Lake Kariba in the Midlands Province. It contains parts of the Binga, Kariba and Gokwe Districts and essentially follows the boundary of the previously demarcated Sebungwe District.

Historical changes in land apportionment in the area between 1925 and 1980 are shown in the maps below. Important points to note are the tsetse foci and the alignment of the game fences and tsetse clearance corridors. By 1956 Matusadonha and Chete had been given protected status while there were significant areas demarcated as forestry areas.
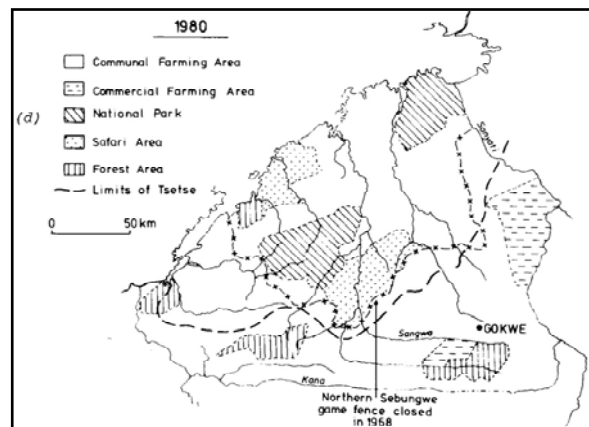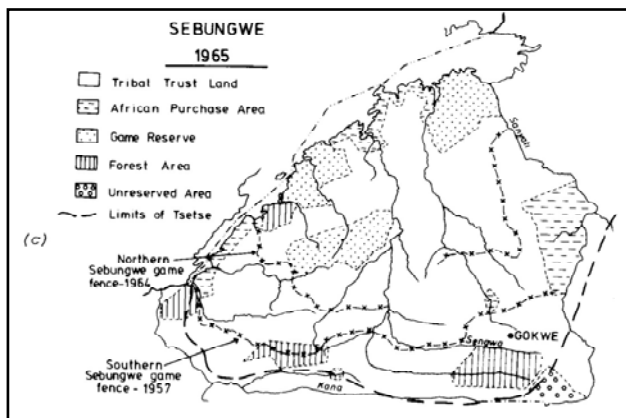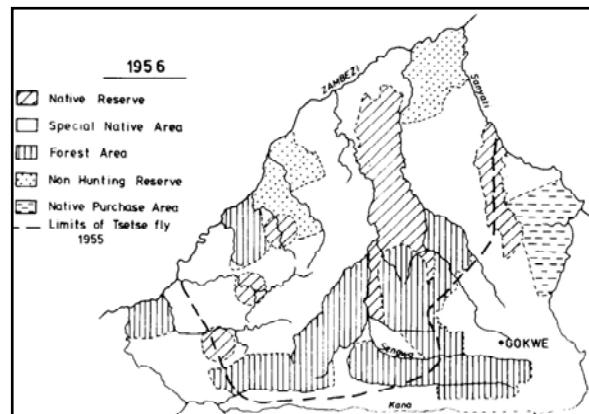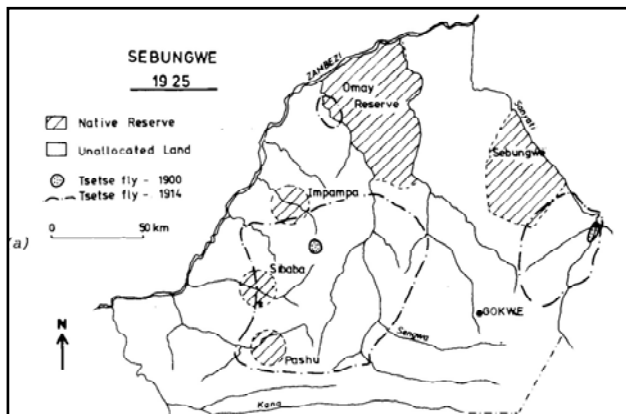
Cumming D H M (1981) The management of Elephant and other large mammals in Zimbabwe. pp 91-118, In: P A Jewell, S Holt and D Hart, (eds). *Problems in Management of Locally Abundant Wild Mammals.* Academic Press.

## 6.2   Current Land Classification of the Sebungwe

Sebungwe region as defined is 15,600 km2
Contains National Parks: Matusadonha (1,400 km^2), Chizarira (1,900 km^2) – 21%
Safari Areas: Chirisa (1,400 km^2 less the 2014 excision) ,, Chete (1,100 km^2) – 16%
Forest Estate: Sijarira (250 km^2) - <2%
Communal Lands: Omay, Gatshe Gatshe, Kanyati. Gokwe North, Siabuwa, Manjolo,
Busi, (9,950 km^2) – 61%
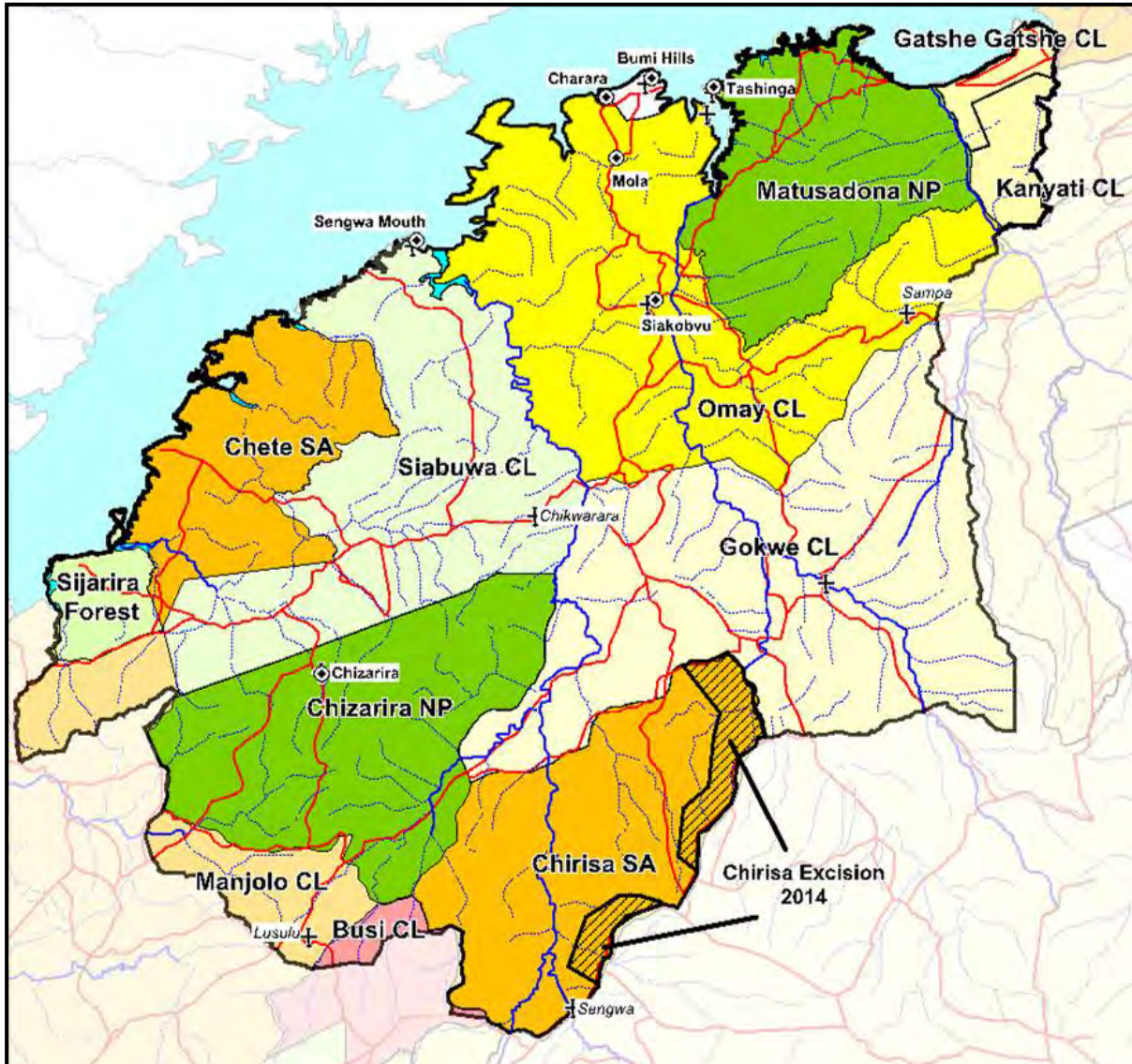
6.3   Sebungwe Elephant Information

6.3.1   *General*

(From presentation by D. Cumming)
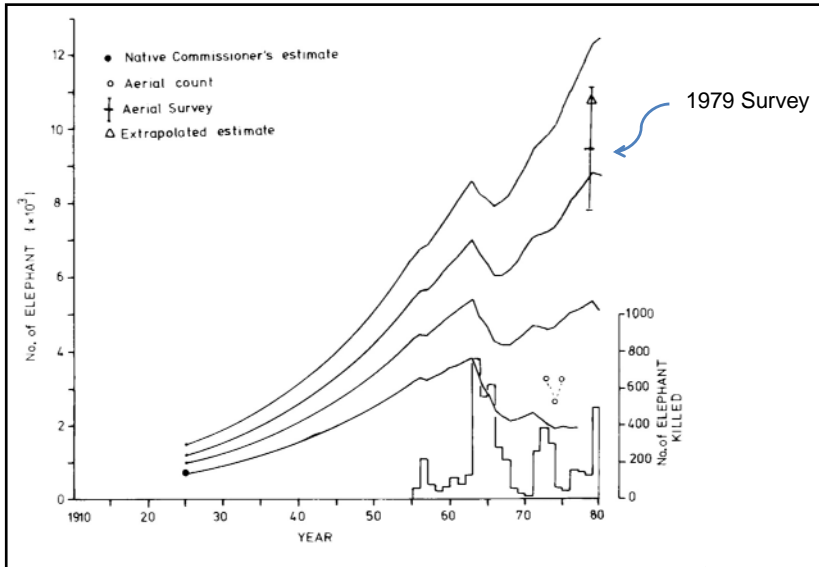
A starting estimate of 500 was proposed in 1925 by the resident Native Commissioner. The graph shows several scenarios with different start points and includes the known culling offtake. It shows that it would have been possible to reach the 1979 population level of nearly 10,000 animals with a starting population of around 1,500 animals.

Since 1955 the available range for elephant has decreased dramatically while the density increased to 0.8 per km^2 by 1980
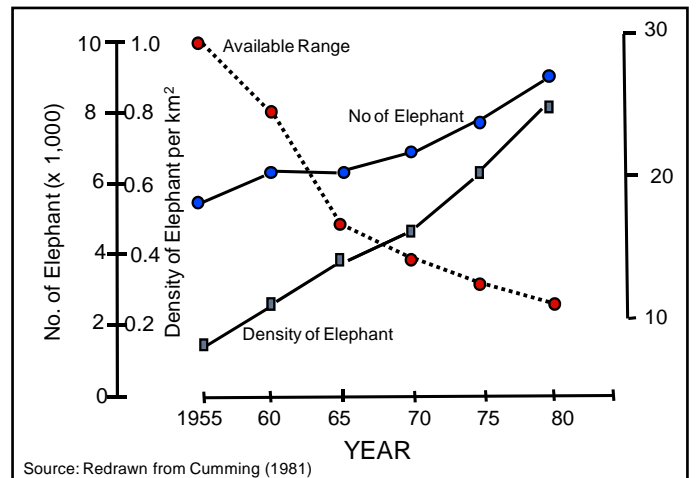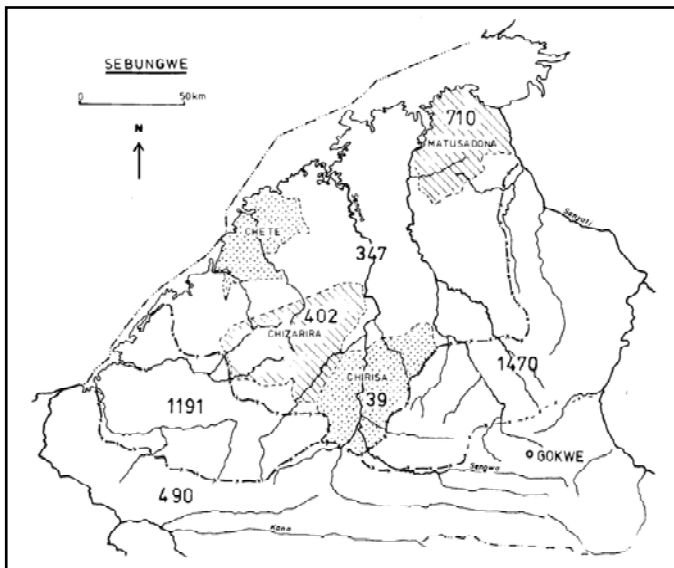
Source: Redrawn from Cumming (1981)

Cumming D H M (1981) The management of Elephant and other large mammals in Zimbabwe. pp 91-118, In: P A Jewell, S Holt and D Hart, (eds). *Problems in Management of Locally Abundant Wild Mammals.* Academic Press.

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6.3.2   Survey Data

Elephant Densities — 2006 and 2014

Carcass Ratio 2006 / Carcass Density 2014
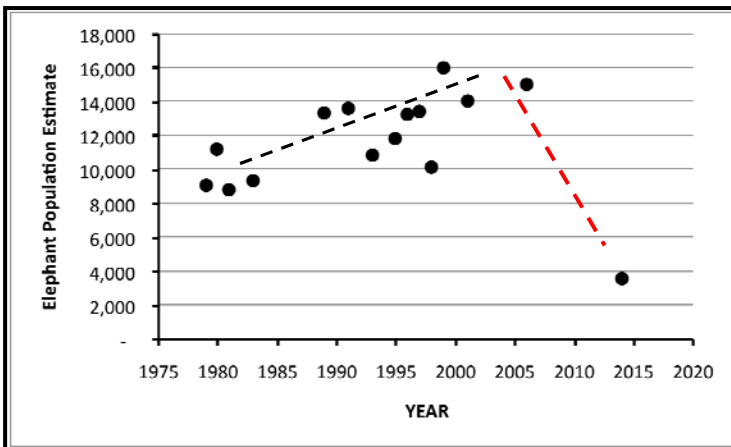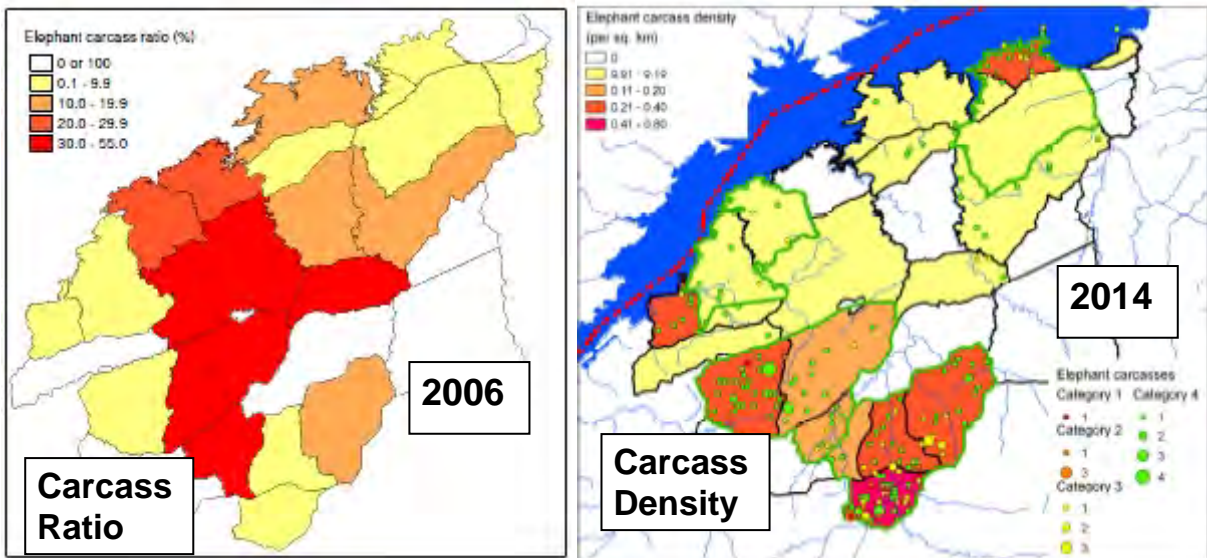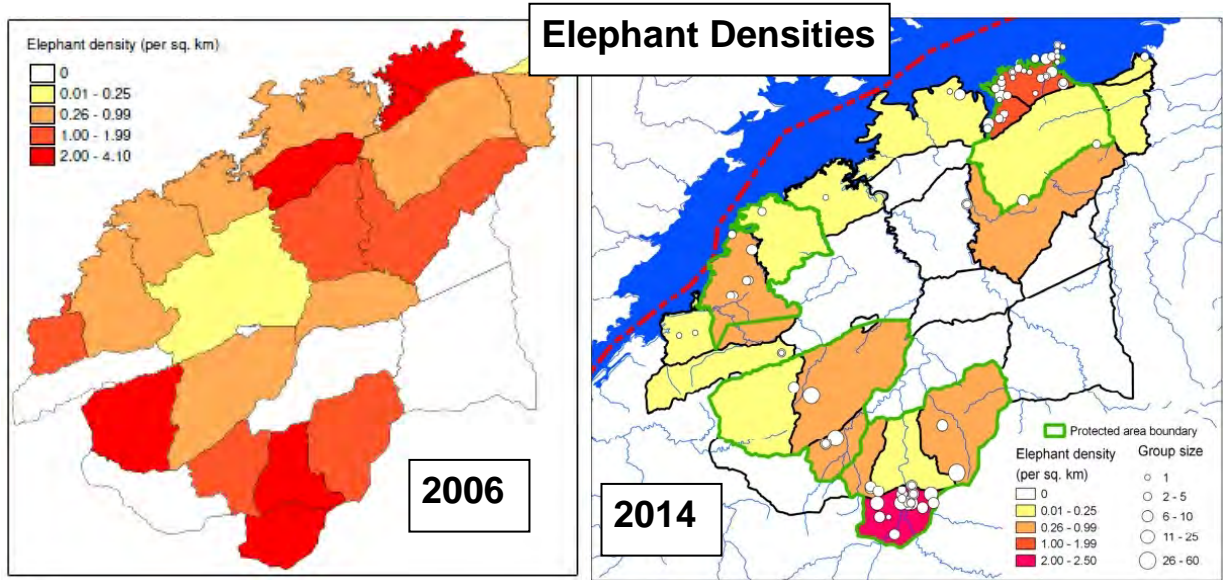
The aerial surveys show a steady increase in the numbers of elephant to around 15,000 in 2006. The 2014 survey showed a dramatic drop to less than 4,000 animals. There were indications that all was not well as the 2006 survey showed high carcasses ratios in the central Sebungwe these suggest that it is likely that the major loss may have occurred before 2010

6.4   Sebungwe Law Enforcement Overview

6.4.1   Enforcement Capacity

(From presentations by H. Chikumba & G. Moyo; A. Mudungwe; V. Mkhwebu)

Sebungwe law enforcement capacity			
Area	Size	Ideal manpower	Current manpower
Binga	1200+	20	12
Chete	1081	36	18
Chizarira	1910	63	29
Chirisa/Sengwa	1700	72+30	36 +19
Gokwe	621 + 848	30	12
Nyaminyami	2500+	25	17
Matusadonha	1470	74	37
TOTAL	15 000	320	180

6.4.2   Sebungwe Elephant Poaching

STATION	2011	2012	2013	2014	2015	totals
Chirisa	06	19	11	03	0	39
Sengwa	11	06	12	11	07	47
Chizarira	05	02	10	16	2	35
Chete	05	08	01	06	0	20
Matusadonha	39	08	27	18	07	99
TOTALS	66	43	61	54	16 (1st quarter)	240

Information is based on sightings of carcasses by rangers on patrol. The figures could be more considering the limited area of coverage by the patrol teams.

Sengwa ,Chizarira and Matusadonha seem to be hard hit due to the fact that there are high populations and trophy quality. High incursion rates are concentrated at Manyoni/Lutope area of Sengwa and the valley floor of Matusadonha.

6.4.3   Elephant Population Status

Chete Safari Area	Chizarira NP	Chirisa-Sengwa	Matusadonha NP
2014 Elephant population: 278 2001 Elephant population: 1219 -77.2%	2014 Elephant population: 747 2001 Elephant population: 5010 -85.1%	2014 Elephant Estimate: 1 200 2001 Elephant Estimate: 1 977 -39.3%	2014 Elephant population: 669 2001 Elephant population: 1716 -61.01%

6.4.4   Problems and Challenges for Sebungwe

Problems
- Low detection rate despite increasing threat
- Weak supervision of field operations
- Lack of support and back—up services (evacuation, scene of crime attendance
- Low morale (working conditions)
- Flight of patrol men from remote stations due to declining support and or lack of incentives
- Changing tactics of poachers avoiding detection in Matusadonha
- Poor coverage (Southern Matusadonha, Chizarira, Chirisa and Chete)
- Connivance and involvement of local community (Gokwe, Nyaminyami and Binga)
- Targeting of large tuskers in Matusadonha,Chizarira and Sengwa.

Challenges
- Resource constraints (transport, manpower and equipment Chizarira and Chete affected)
- Infiltration of system by poaching syndicates (through initial employment or internal recruitment)
- Changing tactics (e.g. hit and run Chirisa, increased use of dogs and traditional weapons in Chirisa and Chizarira and use of modern technology)
- Poor access and facilities in operational areas
- Uncertainty of outstanding cases and liability issues (interpretation of new constitution)
- Poor communication affect field command and coordination
- Greater part of population range is outside protected areas where there is no adequate management.
- Habitant being modified e.g. Settlements &Insecurity of tenure outside

Way Forward
- Mobilise resources for law enforcement with assistance of partners in Matusadonha (ZamSoc, MAPP, TI)
- Improve water transport for Matusadonha (repair Cameron and rebuild one speed boat) and Chete repair speed boat for Siandula)
- Improve air and ground coverage (Southern Matusadonha, Eastern Chizarira ,SW Chirisa and Chete Escarpment) using R22, TTI Facility, ZAMSOC volunteers
- Clear outstanding obligations to staff
- Call up system from low threat areas hence improving coverage, mobility and reaction time.
- Refurbishment of landrover vehicles(to navigate difficult terrains).
- Increased ICT use (cellphones)-under strict monitoring
- Increase patrols.
- Improve informer network base and support
- Use of modern technology (drone, unmanned area vehicles, trap cameras etc.)
- Maintaining a wildlife crime database (known poachers, escapees ,those coming out of prison etc)

6.5 Nyaminyami RDC Elephant Management

(From presentation by Miyozi)

6.5.1 Background Information

- The district has a coverage of 456,650 hectares while 60% which is 273,990 hectares is a wildlife area as at 2010.
- The current wildlife area has reduced to date by approximately 15% to 205,492.5 hectares due to community encroachment for agricultural and settlement purposes.
- 2012 population census results reveal that the district has 41,369 while 2002 results were 34,724.
- A population increase of 6,645 has been realized for the past 10 years

6.5.2 Department of Environmental Management

- The department is headed by the Executive Officer Wildlife who reports to the Chief Executive officer.
- There are 17 rangers and among them there is Data Capture Clerk and Senior Ranger responsible for coordinating Anti-poaching and P.A.C.
- Main activities include:
  o Anti-poaching
  o Problem Animal Control
  o Safari hunt monitoring
  o Conservation of environment (fire management etc).

6.5.3 MIKE

Main objective of MIKE is to provide elephant range states with information for making decisions on management and enforcement and institutional capacity building on elephant population management.
- Specific objectives of MIKE are:
  ✓ to measure levels and trends in the illegal hunting of elephants;
  ✓ to determine changes in these trends over time; and
  ✓ to determine the factors causing or associated with such changes, and to try and assess in particular to what extent observed trends are a result of any decisions taken by COP.

Characteristics of elephant management in Nyaminyami					
Year	**2010**	**2011**	**2012**	**2013**	**2014**
Poached elephant	20	17	6	8	10
PAC Reports	531	717	378	118	100
PAC Offtake	13	9	11	7	7
Human Deaths	1 (male, Mola)	1 Male, 2 Female, Mola	0	! Male, GacheGache; 1 Female, Mola	0

6.5.4 Elephant Quotas

Elephant Quota (Omay 1) – Bulembi Safaris						
	2010	**2011**	**2012**	**2013**	**2014**	**2015**
Male	10	10	7	7	5	5
Tusk/less	5	5	7	6	5	5
Total	15	15	14	13	10	10
Off-take	15	15	14	10	8	
Variance	0	0	0	3 (male)	2((male)	

Elephant Quota (Omay 2) – Safrique Safaris						
	2010	**2011**	**2012**	**2013**	**2014**	**2015**
Male	10	10	8	6	5	4
Tusk/less	5	5	5	5	5	5
Total	15	15	13	11	10	9
Off-take	15	13	7	6	3	
Variance	0	2(male)	6(male)	5(male)	7 (5male and 2T/less)	

Elephant Quota (Gache Gache 3) – Track-a-hunt Safaris						
Year	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Male	4	4	4	3	2	2
Tusk/less	1	1	1	2	2	4
Total	5	5	5	5	4	6
Off-take	5	5	5	5	4	
Variance	0	0	0	0	0	

Kanyati (Area 4) has been withdrawn as there wee no elephants

6.5.5 Challenges and Strategies

Challenges

- Lack of human and material support.
- Encroachment by local residents into wildlife areas
- Lack of proper land use in some areas
- International demand on elephant products
- Corruption
- Lack of participation in conservation activities by other stakeholders.
- Lack of appreciation of economic value of wildlife vs subsistence agriculture and livestock in communal areas.
- No indemnity on rangers
- Lack of state control in inshore(fishery)
- Lack of strategies to address human-wildlife conflicts

Strategies

- Joint operations (council, police, anti-poaching units, MAPP)
- Land use plan
- Enhance community awareness activities
- Source allowances
- Establishment of Conservancies

6.6   Matusadonha Introduction

Matusadonha National Park is the fifth biggest national park in Zimbabwe (1470km^2) between the Ume and Sanyati Rivers. Externally bounded by the Omay, Kanyati and Gatshe Gatshe Communal Lands.

Park goals are:
- To offer maximum protection to all species of flora and fauna.
- To preserve the aesthetic qualities of the three ecosystems that make up Matusadonha National park (Lake, Valley floor and Highlands)
- IPZ for black rhino

HQ at Tashinga (including airstrip). Outposts at Changachirere, Sanyati West, Vulanduli and Chifudze.

Flat lakeshore section with Matusadonha mountains in the south. Park includes some parts of Lake Kariba
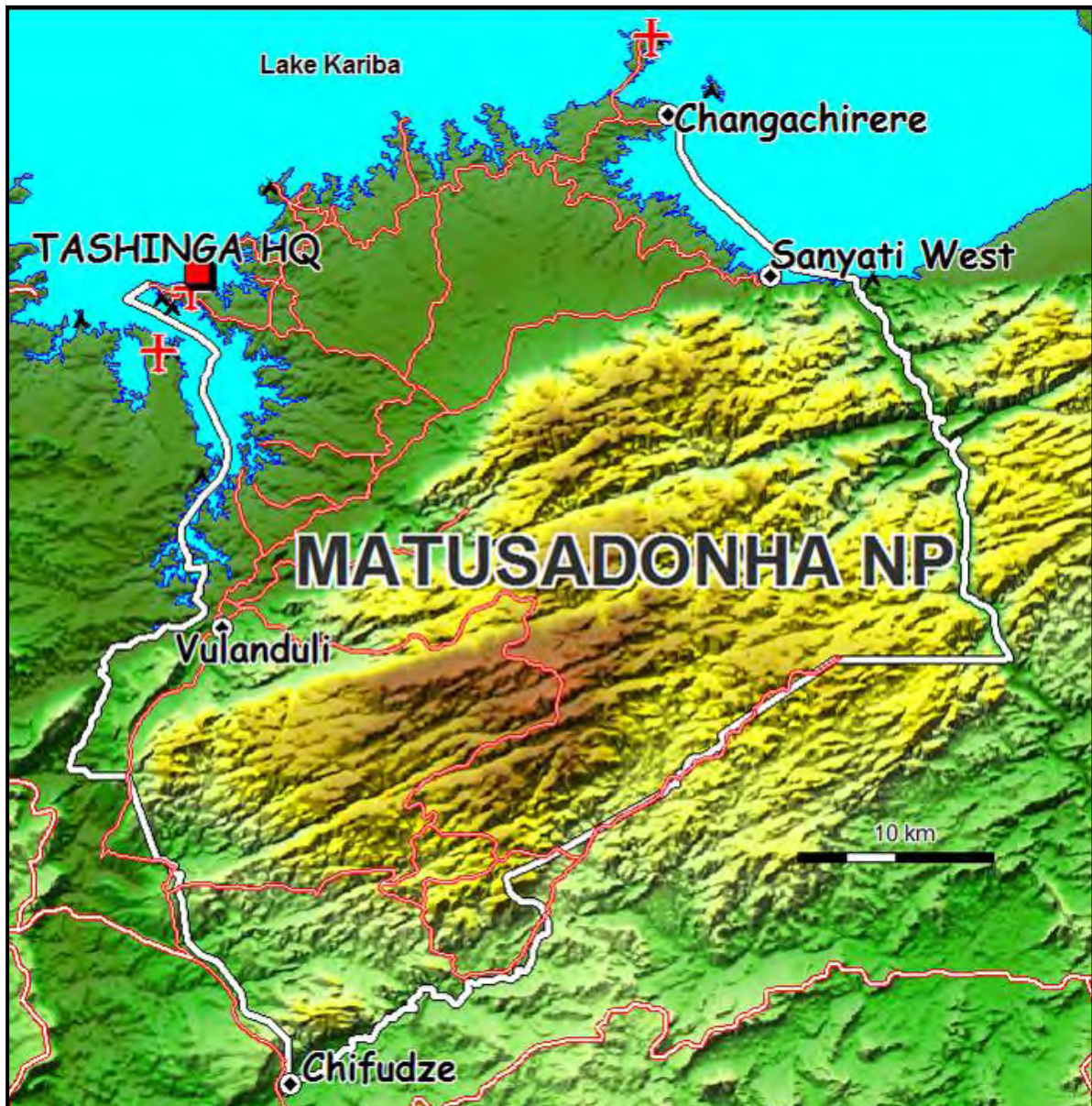
6.7   Matusadonha Law Enforcement

Information from presentation by Victor Mkhwebu

6.7.1   Staff Establishment

MATUSADONA SUB REGION	REQUIRED	CURRENT	VARIANCE
Area Manager	1	1	0
Senior Wildlife Officer	2	1	1
Ecologist	1	1	0
S/ R Scientific	1	1	0
S/R Operations	2	2	0
Reser. Assistant	1	0	1
Medic	1	0	1
Admin Clerk	1	0	1
Accounts Clerk	1	1	0
Handyman	2	2	0
Rangers	74	37	37
General Hand	1	2	+1
Lodge Attendant	3	1	-2
Total	**91**	**50**	**-40**

6.7.2   Staff Deployment

Sub-station	Available Manpower	Law Enforcement	Revenue Collection	Driver/ Coxswain
Tashinga	10	6	2	2
Vulanduli	4	3	1	
Chifudze	5	4	1	
Changa	3	2	1	
Sanyati	4	3	1	
Totals	**26**	**18**	**6**	**2**

Note
- At least7 Rangers are out on time or vacation leave at any given time
- Currently 2 Rangers are on Study leave
- 4 Rangers are unavailable due to other duties e.g. Night guard and radio

6.7.3   Law Enforcement Strategies

Sub station	Number callsigns	Type of patrol	Areas of patrol
Tashinga	2	Extended, locals, strategic, lake patrols	Valley floor (extended) Kings Camp to Sengwa mouth (lake patrols) Around Tashinga (local patrols)
Vulanduli	1	Extended and locals	escarpment
Chifudze	1	Extended and locals	Southern boundary
Sanyati	1	Extended, local and lake patrols	Valley floor, escarpment, Sanyati river to Kings Camp
Changachirere	1	Extended, local and lake	Valley floor, escarpment, Sanyati river to Kings Camp

Armed and Visual Contacts in Matusadonha 2009-2014							
Year	Incur	Arm. Cont.	Vis. Cont.	Poachers killed	Poachers arrested	Ele. poached	Recoveries
2009						6	
2010		0	2	0	7	19	
2011		0	2	0		39	4 x .303 rifles, 22x .375 rounds, 39x .303 rounds, 2x AK rounds. 1x santana
2012	21	0	29	0	49	8	
2013	42	3	20	1	72	27	3x rifles, 35x.303 rounds, 8x FN rounds, 5 pairs ivory
2014		3		1		18	3 pairs ivory

6.7.4   Resources

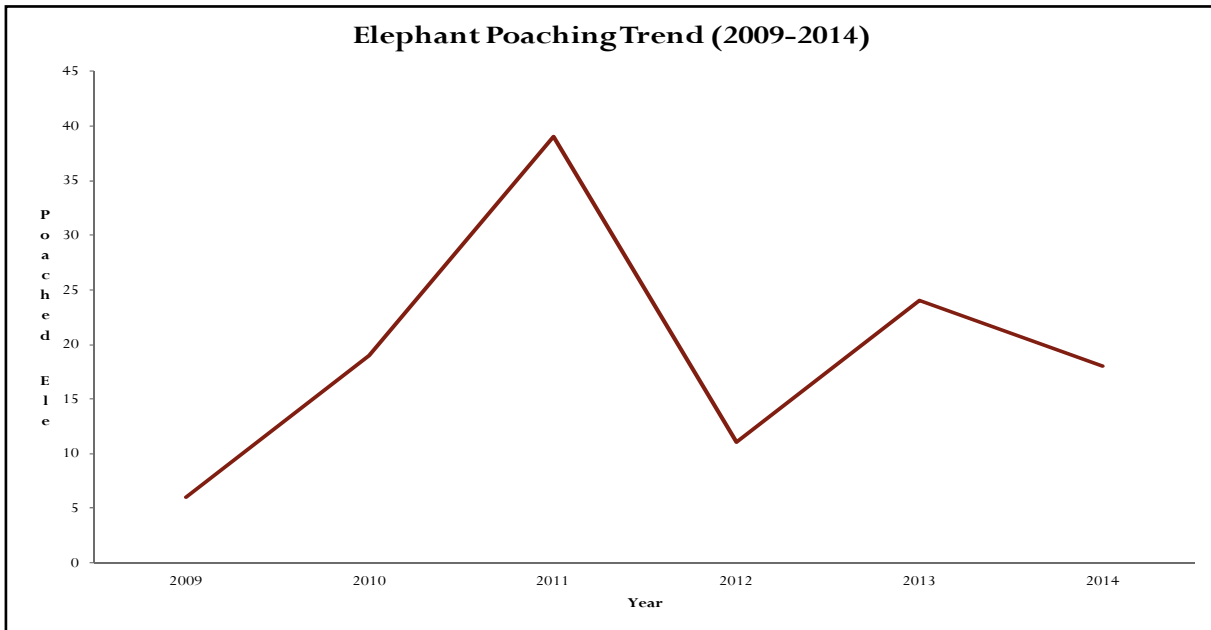| Resource	Current	Ideal
Field Rangers	37	74
Vehicles	0	3
Boats	1	4
GPS	4	10
Night Vision	0	8

6.8   Matusadonha Elephant Poaching
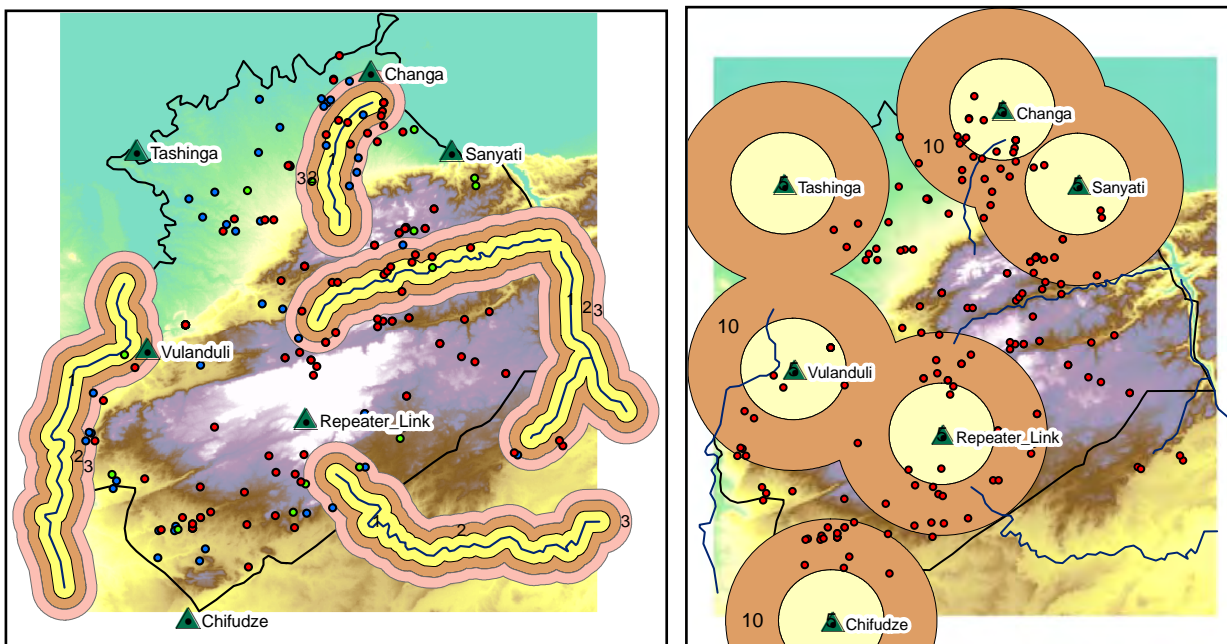
Information from presentation by Ashley Mundungwe

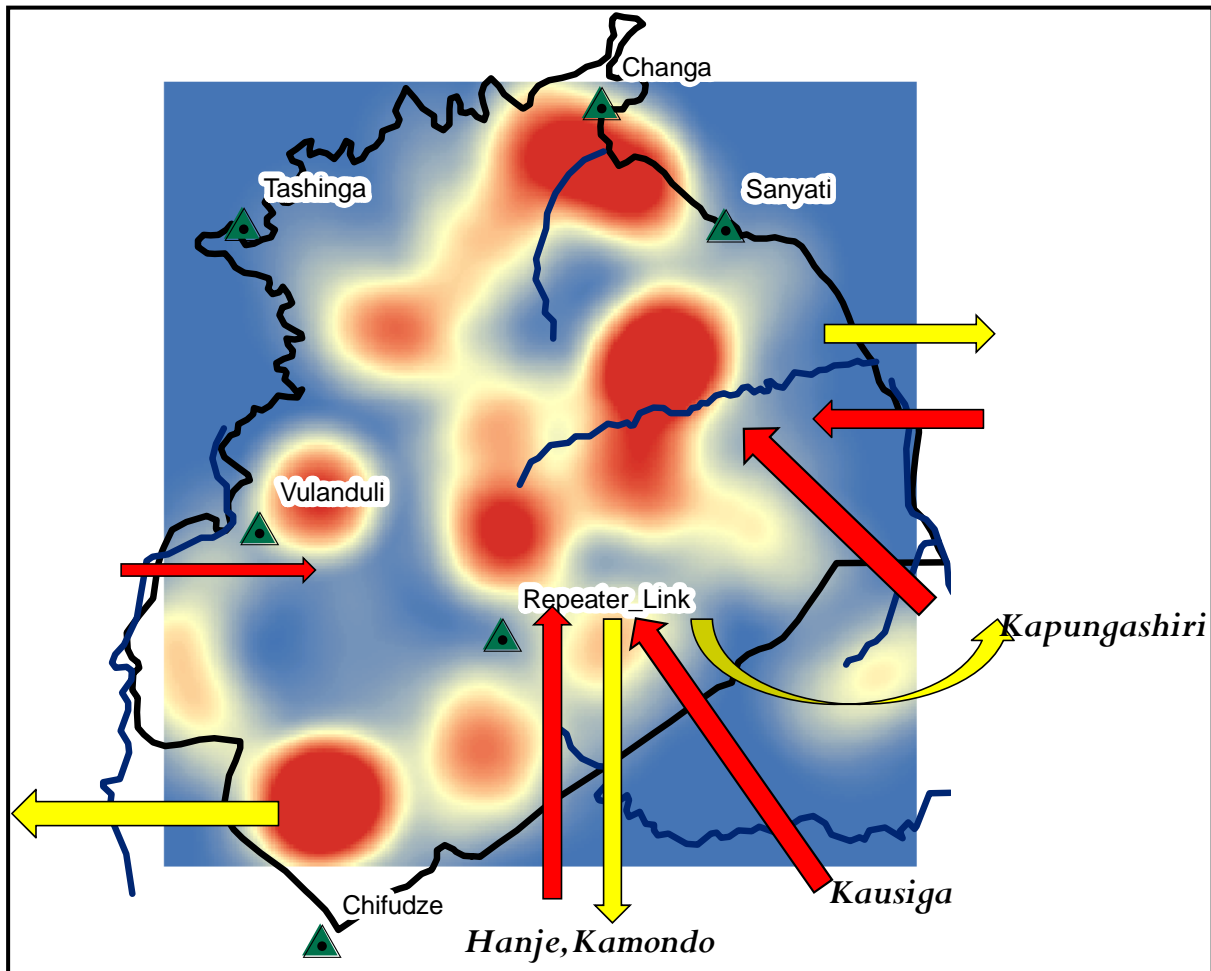**Elephant poaching incidents in Matusadonha 2005 to 2015**
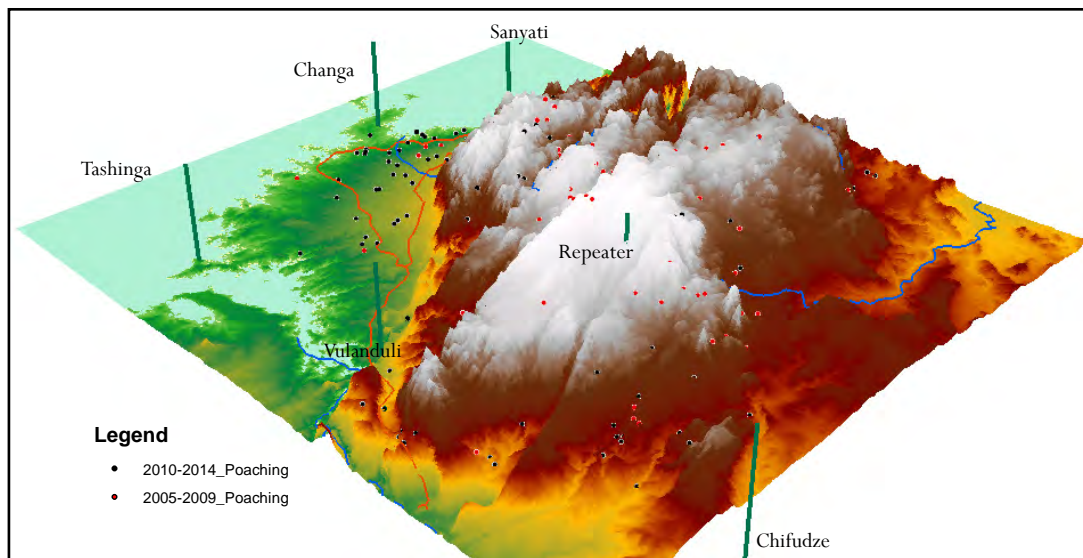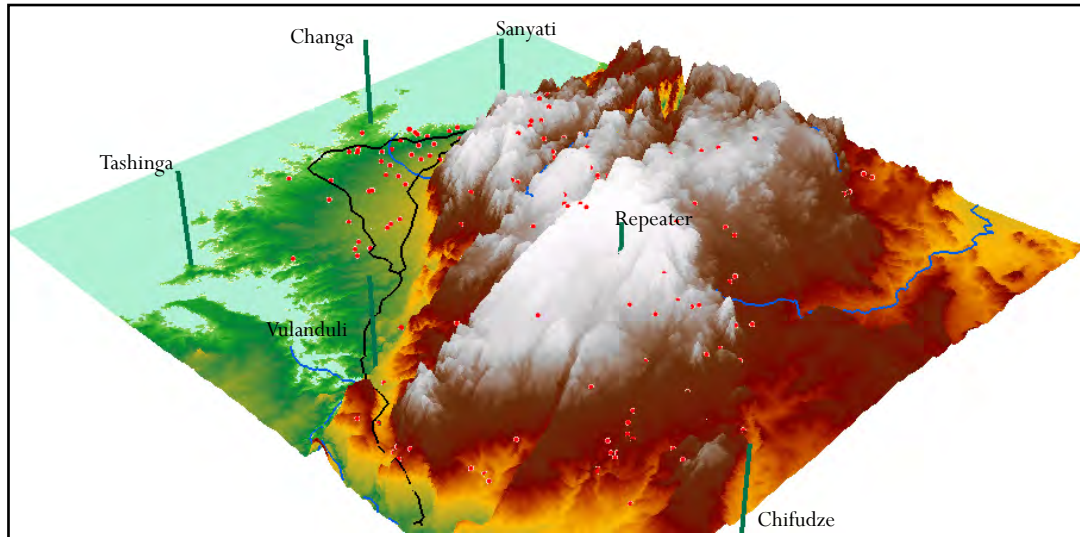
Recorded elephant poaching incidents in relation to sub-camps and main rivers

POACHING HOTSPOTS
- Area between Sanyati West camp and Changachirere camp
- Area between Changachirere Camp and Kemurara river
- Upper Shenga river
- Jenje springs
- Upper Mhukadzapera river.
- Kamondo/ Hanje/ Kausiga areas in the Southern boundary
- Hogwe/ Njofa areas
- Mwinga
- Gubu/ Shushuma/ Chorochoro/ Repeater link.
- Harudziva spring

6.8.1 Poaching access routes

Local Poachers	Foreigners
• 1st and 2nd Crossings on the Sanyati River. • Kapungashiri Vlei. • Mwinga Area from Mola (Omay Communal Lands). • Sawi raNebiri/Kavanga Spring Area. • Hanje/Kamondo Area. • Kausiga through to the Repeater.	• There is no recent proof of the participation of foreigners in big game poaching on Matusadonha mainland. • Possible foreigners (Zambians) poaching in Sibilobilo State Land and Omay Communal lands with assistance from locals. • There are some banana boats that are used by illegal fishermen from Zambia that we suspect to be a mode of transport for Zambian elephant poachers. Elephant poaching cannot be ruled out.

- Poachers travelling in very small groups 3-4 for elephant poachers and bigger groups of at least 8 people for small game using spears and dogs.
- Types of rifles being used , .303 and FNs.
- Groups consisting of mostly 1 gunner and carriers.
- Locals from the surrounding areas being used possibly for their knowledge of the interior of the Park.
- Elephant poachers travelling very light with provisions of a at least 2-3 days.
- Shots mostly being fired in the late afternoon or early evening and poachers remove tusks and head to the Escarpment in the evening.
- Poaching mainly in the Valley floor and poaching of small game concentrated on the Southern Boundary.
- Use of poison is still to be ascertained.

6.9   Settlement Expansion

1973

1993

2008
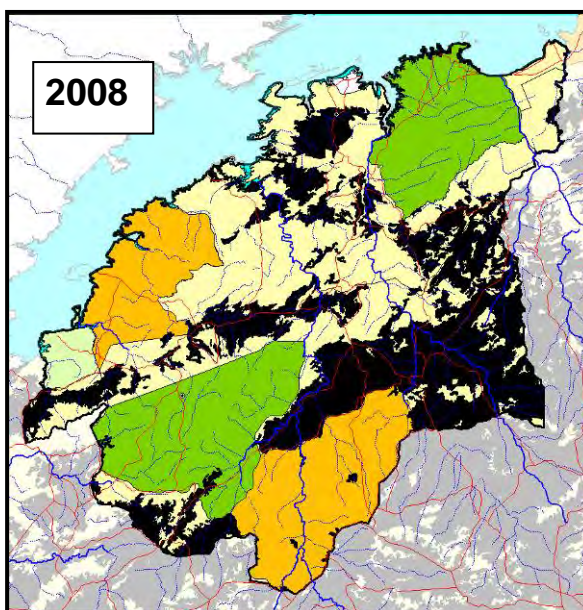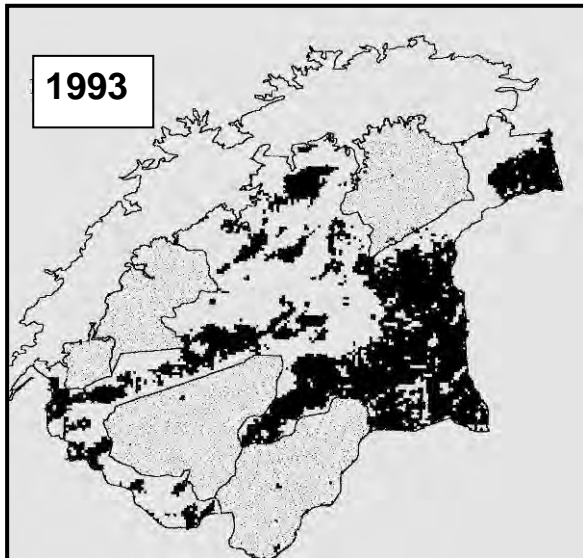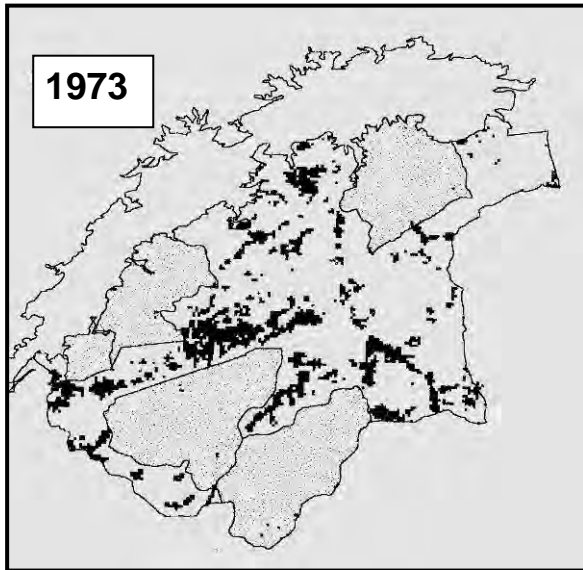
Population growth rate 1977 – 2012
= 3.58% per annum
Currently around 700,000 people

Human Population Density/km^2:
Binga 14, Kariba 8, Gokwe North 33,
Gokwe South 36

When human population densities reach 15/km2 this is a threshold. Elephant densities drop dramatically when this threshold is reached,

Black areas on the adjacent maps indicate settlement, clearing and cropping. Sources are

.Cumming, D H M and Lynam, T.J.P. (1997). Land use changes, wildlife conservation and utilisation, and the sustainability of agro-ecosystems in the Zambezi Valley: Final technical report. (Vols. **1:** Main Report; **2 :** Macro scale appendices; **3 :** Meso scale appendices; **4 :** Soil resources; **5 :** Vegetation; **6:** Resource changes; **7:** Published project papers). European Union Contract B7-5040/93/06**.** WWF Programme Office, Harare

Forestry Commission, 2008. Zimbabwe Landcover
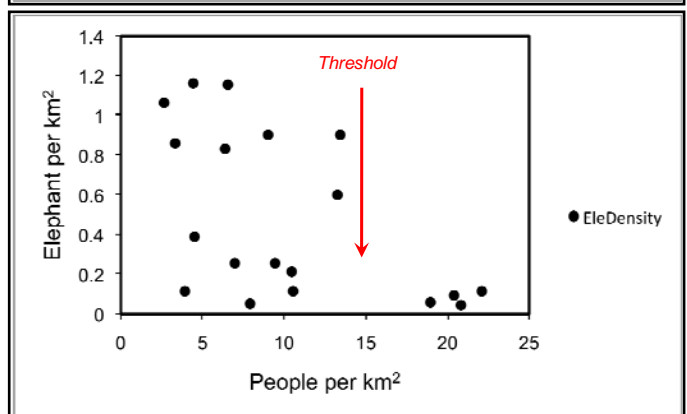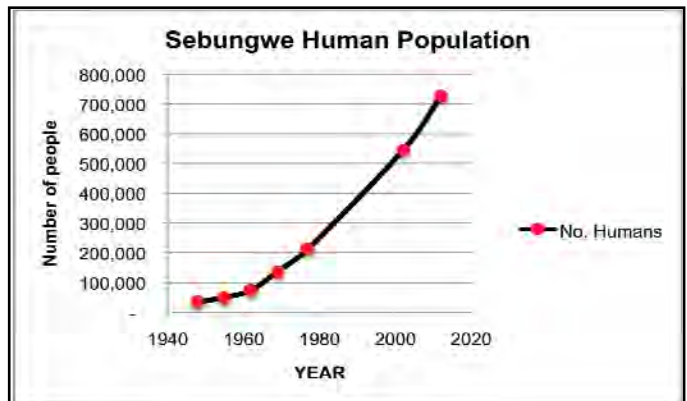
Hoare, R E (1997) The Effects of Interaction with Humans on Elephant Populations of the Sebungwe Region, Zimbabwe. D.Phil. Thesis, Department of Biological Sciences, University of Zimbabwe. 188pp
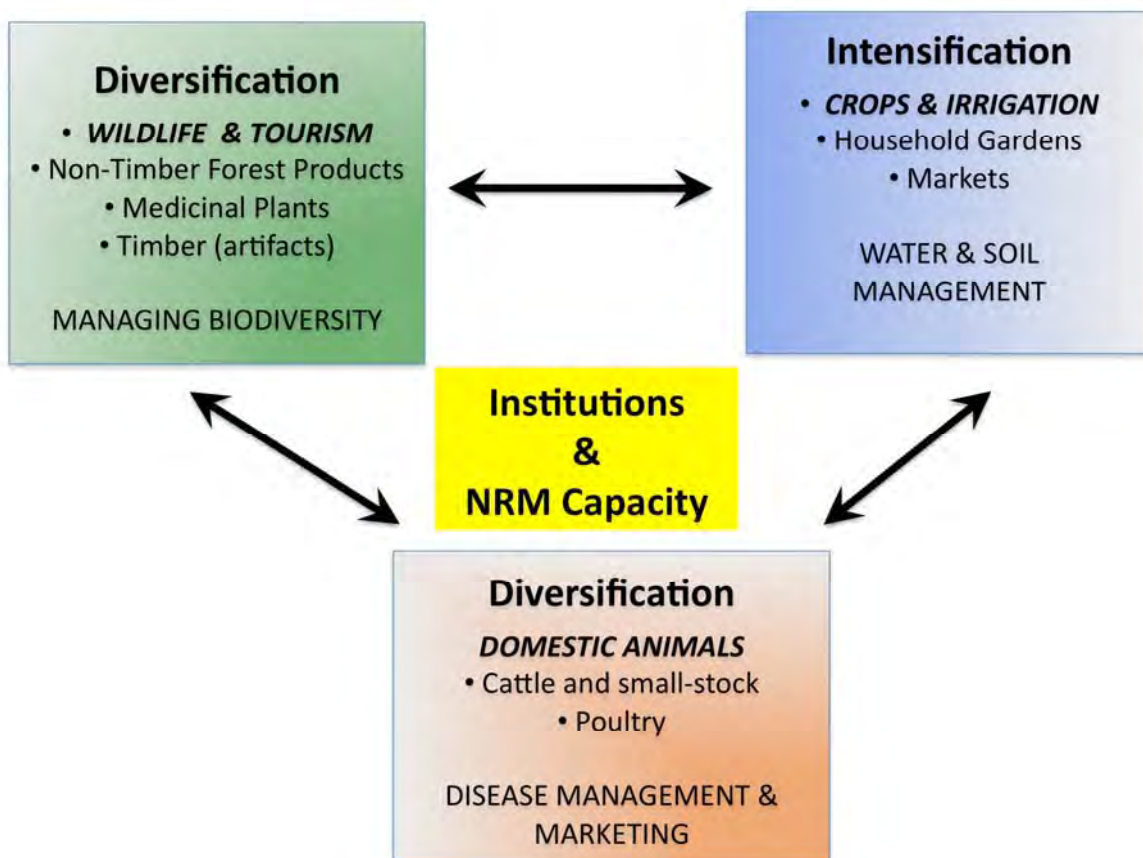
6.10   Landcover and Corridors

The map below shows landcover as recorded by the Forestry Commission in 2008.

Although there may have been some changes the map does provide some indication of potential corridors and linkage areas. It may be feasible to focus conservancy or other conservation initiatives in some of these areas (indicated by red circle).
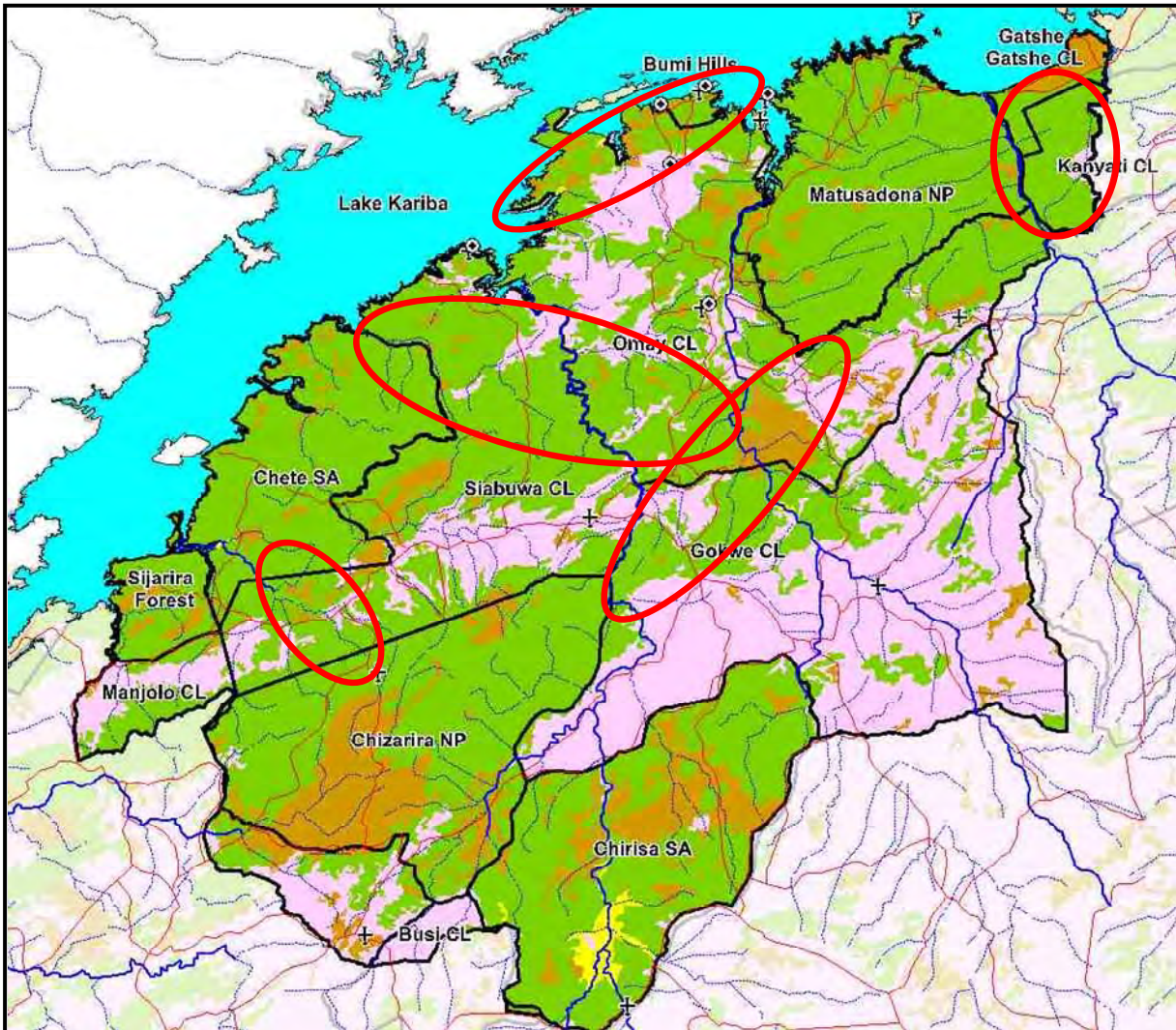
6.11   Implications for Strategic Approaches

1. Major wildlife rehabilitation problem

2. Focus on securing:
      a) Protected areas and connectivity between them (aiming for a population of ~ 5,000)
      b) Areas of low human population/intact habitat in CL

3. Mitigate human-wildlife conflict

4. Build supporting relationships between wildlife areas and neighbours

5. Linking Agricultural intensification, livestock and wildlife production systems

Diversification
- *WILDLIFE & TOURISM*
- Non-Timber Forest Products
- Medicinal Plants
- Timber (artifacts)

MANAGING BIODIVERSITY

Intensification
- *CROPS & IRRIGATION*
- Household Gardens
- Markets

WATER & SOIL MANAGEMENT

Institutions & NRM Capacity

Diversification
DOMESTIC ANIMALS
- Cattle and small-stock
- Poultry

DISEASE MANAGEMENT & MARKETING

7   Joint Statement from Sebungwe Chiefs

Given by Chief Msambakaruma

As we all know Chief's are the owners of all natural resources.

1. However, they are not being involved in the monitoring and implementation of wildlife activities

2. Chiefs are not directly benefiting from their natural resources so there is no morale

3. The safari operators are not considering Chiefs simply because they are not involved or consulted when granting hunting concessions. As a result they respect political leaders (e.g. Councillors) rather than Chiefs

4. Chiefs are not being business partners with safari operators

There was agreement from the floor that these are very valid statements.

There was also some discussion about the percentages due from hunting operations. Some recall that it was as much as 80%. The CAMPFIRE Director assured everyone that it had never been more than 55% and the 45% was a local Nyaminyami operational agreement

8   Stakeholder Analysis

A stakeholder analysis was carried out using a card-based system. Participants were asked to list stakeholders and these were then grouped on a board visible to everyone. This was followed by a separation of the stakeholders into inner or "core" stakeholder, a middle grouping and peripheral stakeholders.

STAKEHOLDER ANALYSIS			
Grouping	**Stakeholders**		
Communities	• Communal land inhabitants and their traditional/modern leadership • Community Chiefs • CAMPFIRE • Traditional Leaders • Local Leaders	• Local Communities • Communities: Nyaminyami, Binga, Gokwe • Communities, Chiefs • Youths	
District Authorities	• ZRP – Minerals and Border Control Units • Courts • ZPWMA • Forestry • Judiciary • Ministry of Home Affairs	• Ministry of Lands • Nyaminyami RDC • Local Authorities • Local Communities • Gokwe N and S RDCs • Binga RDC	
Private Sector	• Carbon Green Africa • Bulembi Safaris • African Conservancies • Safari Outfitters	• Bumi Hills lodge • Bumi Hill APU • Tour Operators • Tourists and Visitors	• Kapenta Fishermen • MAPP • Padenga
NGOs	• Zamsoc • WWF	• Tashinga Initiative • IUCN	
Research	• Universities – Chinhoyi University, University of Zimbabwe	• EMA • ZPWMA	

STAKEHOLDER ANALYSIS		
Grouping	**Stakeholders**	
Political Leaders	• Minister • Party Leaders	• Political Leaders
International Agencies	• KAZA • CITES/MIKE	• African Elephant Database

LEVEL OF STAKEHOLDER INVOLVEMENT	
Core Stakeholders	ZPWMA, Forestry Commission, ZRP, Local Authorities, Communities and their Representatives,
2nd Tier Stakeholders	MIKE, Carbon Green, African Conservancies, Bumi Hills APU, Tour Operators, Academic Institutions (CUT, UZ, CASS), WWF HSBCP, Tashinga Initiative, IUCN, Zambezi Society, Matusadonha Anti-Poaching Project, Safari Operators
Peripheral Stakeholders	Kapenta Fishing Operations, Tourists/Visitors, KAZA Structures, International Monitoring Systems (MIKE, AED)

9   Problem Analysis

The card based system was used again in plenary to identify the problems and group them into the five components of the National Elephant Management Strategy. Discussion added several more problems to the mix. It was pointed out that we need to identify the drivers of the problems and to be aware that the elephant management plan may not be able to directly address these.

PROBLEM ANALYSIS		
Component	**Identified Problems**	
Law Enforcement	• Parks manpower shortage • Illegal settlements • Poaching • Poaching management • Ivory demand (International markets) • Increased poaching from locals • HEC used to tolerate poaching in PAs?? • Lack of protocol observation • Encroachment into wildlife corridors • High poaching levels	• Poor funding of law enforcement • Corruption • Poor staff remuneration • Encroachment into PAs • Poaching and trafficking • Delays in prosecution • Poor prosecution procedures • Poor control of firearms (implementation of the Act) • Indemnity of law enforcers at the local level is unclear • No/few honorary officers
Biological Monitoring & Management	• High hunting quotas which are not sustainable • Limited research which affects adaptive management	• Insufficient monitoring • Poor regional coordination of quotas for elephants/wildlife • Outdated/no management plans

PROBLEM ANALYSIS		
Component	**Identified Problems**	
Social Economic & Cultural Framework	- Insufficient benefits - Poverty at the site level - Unsustainable demand for wildlife products - No incentive programmes - Wildlife income not reaching grassroots level - Revised legal incomes for incomes to grassroots level - Unemployment - Poor ownership rights - Political interference - Increased demand for ivory	- Limited conservation related benefits or incentives - Limited devolution of resource management to local persons - Economic hardships generally - No HWC compensation - Increase in human populations - Short leases hamper commercial tourism operations - RDCs do not have alternative income generating projects - Delays in devolution to producer wards - Lack of conservation education for children
Building Conservation Capacity	- Lack of financial support - Illiteracy - Poor infrastructure - Inadequate resources (Financial, HR, Equipment) - Lack/shortage of resources on enforcement	- Lack of knowledge on benefits derived from conservation by communities - High workforce turnover by conservation players after effective training - Resource management capacity at local level - No community involvement in stewardship
Coordination & Programme Management	- Lack of political will - Poor governance at national and local levels - Lack of communication and cohesion	- Poor land use planning - Mismanagement of resources - Coordination and sub-regional level lacking

10 Strengths, Opportunities and Core Competencies

Strengths, Opportunities and core competencies were defined using working groups and under the component headings of the Strategic Elephant Conservation Policy and Management Plan Framework. These were

- Protection and Law Enforcement
- Biological Monitoring and Management
- Social, Economic and Cultural Framework
- Building Conservation Capacity
- Coordination, Collaboration and Programme Management

The purpose of the exercise was twofold. Firstly it allowed participants to feel their way into the working groups and secondly it provided useful material for the development of the action plan. It was felt that weaknesses (usually a part of this sort of analysis) had already been effectively covered under the problem analysis (Section 9).

Following on from the presentations (detailed in section 10.1) there was significant discussion both after the individual presentations and the essence of this is shown in section 10.2. It was felt that these were valuable discussion points and ideas and should be recorded in the proceedings.

10.1 Working Group Outputs

STRENGTHS, OPPORTUNITIES AND CORE COMPETENCIES	
PROTECTION AND LAW ENFORCEMENT	
STRENGTHS • Good collaboration among law enforcement agencies despite inadequate manpower • Wildlife protection support from traditional leadership • Very supportive legislation • Local knowledge can be used to create voluntary community AP units • We have a large core of legally protected area (Parks and Wildlife Estate, Forestry) • Existing inter-relationships between Govt, NGOs, private sector in wildlife management (MAPP, private anti-poaching units, Nyaminyami, bi lateral JOC meeting) • Functioning institutions and law enforcement (e.g. police, border control, council, campfire etc) • Most communal areas are actively involved in sport hunting and provide ground coverage and wildlife protection • Existence of individuals with skills and experience in the area, both in service and private sector	• Huge informer network in existence • Multiple actors providing enforcement • Enabling legislation in place • Manpower gaps already identified • Weaknesses known/ identified • ZPWMA • Campfire scouts – APU • Safari operators APU Consumptive/non consumptive • NGO MAPP • ZRP support • CID Minerals and border control • Aerial support pvt helicopter hire • Parks act, gazette, legislation • Regional cooperation Zambia • Informer network (MAPP, ZPWMA, Carbon Green. African Conservancies, WEPU, BHAPU) • Community commitment
OPPORTUNITIES • Creation of voluntary community AP units • N. Parks to provide education workshop, awareness campaigns on wildlife protection (e.g. ZRP) • Potential of existing legislation to confer police reservist status on community leaders • Strengthen partnerships with traditional leadership • Use of the power of traditional leaders Act to mitigate encroachment into wildlife areas • Enhancing international transboundary collaboration in law enforcement through JOC, KAZA • Availability of technology in law enforcement (eg drones, IT, metal detectors, forensic database) • Develop and harness community support • Development of current operations including intelligence, logistics, community development, comms (radio/internet), incentives, awareness, reporting structures	• Space and willingness for other actors to participate • Tourism development (economic potential, deterrents) • Political will • Willingness of support from donors • Collaboration law enforcement agencies and private sector • Improve community participation in law enforcement • Incentive based informer network • Fund raising on international regional and local stage • Elephant on international stage • Conservation education in schools, campfire areas. Generation of conservationists • Ongoing training to wildlife officers from external expertise • More involvement of chiefs and traditional laws • Honorary officers. Tap into their experience and data • Enthusiastic population
COMPETENCIES • Ability to prosecute poaching cases effectively, efficiently and timeously • Supportive traditional leadership in prosecution on wildlife crime • Support of hunting/consumptive and non consumptive operators in anti-poaching activities • Trained law enforcement personnel. We have staff that is able to meet all minimum requirements in law enforcement	• Information system and intelligence gathering (working with informers) • Paramilitary skills (Weaponry, tracking, bushcraft, physical skills • Arrests and weapons recoveries • Trained ZPWMA rangers and campfire scouts, expatriates • Traditional empowerment, Chiefs, Traditional rules • Campfire • Historical data on wildlife and areas

STRENGTHS, OPPORTUNITIES AND CORE COMPETENCIES	
BIOLOGICAL MANAGEMENT	
STRENGTHS • Availability of skill and expertise (eg 3 ecologists in Sebungwe) • Availability of data (up-to-date), including 2014 survey • Many researchers involved, ongoing research (eg Zamsoc, universities) • EMA (resources and data) • Trained and skilled research workforce • Biological knowledge of safari operators • Availability of monitoring systems (eg MIKE) • Research training for students • Enhancing connectivity (KAZA) • Strengthen quota setting system	• Establish community conservancies • Develop park management plans • Monitoring systems in place and international accepted • Existence of a viable elephant population and habitat • Existing database and research • Expertise available and management • Quota system in place for sustainable utilisation • Donor support • Vet expertise and equipment for wildlife • Collaboration with UZ and other universities • Land set aside for protected areas
OPPORTUNITIES • To develop a management plan • Improve the monitoring of trophy hunting quotas and trophy quality • Encourage international collaboration	• Information gap – 2001 to 2015. Explore and avoid again • Encourage regional collaboration – KAZA • Fund raise for research and regular aerial surveys • Research of habitat with low elephant numbers

CORE COMPETENCIES
    • Survey methodology
    • Adaptive management, planning management
	• Interdisciplinary and multidisciplinary research
	• Trained research personal internal and external

STRENGTHS, OPPORTUNITIES AND CORE COMPETENCIES	
SOCIAL ECONOMIC CULTURAL	
STRENGTHS • Traditional leaders supportive of conservation issues • PAC now being carried solely by local authorities • RDC setting aside areas for wildlife (eg Jella Valley) and Manyuli – Enforcement of Eviction orders • Authorised Associations and Campfire • Benefit sharing mechanism both in place and defined constitutionally • Private and NGO support to schools, agriculture etc • Cultural connections to natural resource through totems, scared places (also a risk)	• Economic value of elephants recognised • Existence of campfire programme • Tourism • Existence of traditional leaders and laws • Existence of safari operators • Job creation from other natural resources • Existence of infrastructure • Recognition by Govt of elephant economic, cultural and social • Elephant the Icon for African wildlife
OPPORTUNITIES • Development of non-consumptive tourism in the CA • Development of community based conservation efforts (eg conservancies where the people become stakeholders) • Development of conservation education programme (eg Mckenzie point) • Empowerment of vulnerable social groups and promoting equity in conservation benefit sharing • PP partnerships • Employment	• Wildlife and environmental education • Diversification of Campfire • Traditional leadership engaged • Stable environment encourages tourist and stimulates economy • Opportunity to establish public/pvt community partnerships in Pas • Increase benefits and revenue flows • Alternative revenue income from Lake (eg irrigation) • Communities leading role for income generation • Cultural tourism
CORE COMPETENCIES • Conflict resolution • Financial management • Legal resources, provisions	• Communication • Campfire concept and idea • Skill base in wildlife based tourism

STRENGTHS, OPPORTUNITIES AND CORE COMPETENCIES	
BUILDING CONSERVATION CAPACITY	
STRENGTHS • Availability of skills and expertise both in Govt and private sector • Availability of key stakeholders eg TTI, Zamsoc. African conservancies. MAPP with great capacity to do fund raising initiatives for building conservation capacity	• Existing research programmes (eg alert lion project) • Institutions available to train and facilitate collaboration • Stakeholder interest • Skills and expertise available
OPPORTUNITIES • Expand communication networks through repeater links and standardising relationships between stakeholders • Interested actors and stakeholders	
CORE COMPETENCIES • Donor relationship building	

STRENGTHS, OPPORTUNITIES AND CORE COMPETENCIES	
COORDINATION AND PROGRAMME MANAGEMENT	
STRENGTHS • Existing coordination taking place through bilateral, local and international • Active conservation committees in the council to coordinate other players	• Collaborative structure – JOC, Campfire, PJC, TFCA committees, Kariba REDD project • Media support and social media awareness raising
OPPORTUNITIES • Availability of expertise to coordinate the implementation of plans • Development of PPCPs • Greater involvement of local leadership and the community • Engage legal hunters in the region through a hunters association • Establish a regional elephant management committee for the Sebungwe	• Use IT for meetings to cut costs – skype etc • To improve marketing and dissemination of information regarding the plan – pr aspect • Traditional leadership to lobby higher up in govt. • Develop Sebungwe ecosystem forum • Sebungwe management plan • Integrated Land use planning
CORE COMPETENCIES • Maintaining and cultivating relationships with b/w agencies and stakeholders	

10.2 Discussions and Questions

The following describes and records some of the discussion following these presentations.

PROTECTION AND LAW ENFORCEMENT
- Judiciary training perhaps should be an output?
- Should policing outside national parks be done in a different way to inside?
- Forestry needs to be part of any enforcement team
- Heavy military approach may not be the best way to tackle the problem. Usually is only partially successful. How best to involve the community in law enforcement? Village scout systems?
- Need to proactively involve communities in protection. The communities must want to support. But will only start supporting if there are benefits. Currently there are perceived to be few benefits
- Various ways of addressing communication issues with communities. ZRP has outreach and crime awareness campaigns. Perhaps awareness outreach should also become an output?
- There is a need to reduce the number of firearms in the area

- There might be a need for an output directly addressing the role of communities in law enforcement.

BIOLOGICAL MONITORING AND MANAGEMENT
- We need to cut the size of the areas for aerial survey. Possibility of migration of elephants out of the small areas so the survey may not be complete
- Is Sebungwe a closed elephant population?
- Initially the Kavira area (Forest Reserve and adjacent land) was outside the veterinary/tsetse fence and therefore elephants were excluded. Now there is a resident population and lots of PAC work
- Hwange connectivity is important for KAZA. We need to take cognizance of how internal fencing causes problems for connectivity.
- There is a source/sink effect. If elephants feel unsafe they will move
- Comments on the MAXIMUM trophy size. Want avoid shooting the really big trophy animals so that these genes are maintained within the population. Perhaps collar the big bull elephants and put them off limits for hunting?
- Area based quotas based on area population estimates? Usually quotas are based on the Sebungwe population as a whole rather than on areas. Therefore elephant quota is 0.5% or 0.3% of the total Sebungwe population.
- The possibility of fluctuating quotas should be considered based on available habitat, given that habitat throughout the Sebungwe is not homogenous
- There is a need to define the Sebungwe more correctly. Also to perhaps exclude the densely settled parts of Gokwe North (for example).

SOCIAL, ECONOMIC AND CULTURAL FRAMEWORK
- Firstly, thanks to the Chief's for their valuable contribution to the working group.
- Discussion of corridors at the local level. What incentives can be provided to keep the corridors open? Perhaps a payment for ecosystem services type of approach?
- How to improve the benefits realized from elephants. Possibly increase the % return via CAMPFIRE?
- People move into new areas to graze cattle. Perhaps improving returns from livestock in existing areas may help to slow the spread of settlement?
- Promotion of cultural tourism, especially with regard to Tonga culture?
- Incentive based approach to get communities to become "informers" with regard to wildlife crime.
- Traditional leaders should be deciding who benefits from human-elephant control. They know best who suffered the most. There needs to be a transfer of decision making down to the traditional leadership.
- Community needs to be educated trophy hunting. What constitutes a trophy, who wants to buy it etc?
- Although communities don't legally own wildlife there should be a sense of ownership
- One needs to consider the cost of the 12,000 lost elephants. The value of these animals is considerable when considering the returns though tourism and trophy hunting. It will be a significant cost to protect the areas and re-establish the numbers but this cost is certainly likely to be less that the value of loosing them in the first place.

CAPACITY and COORDINATION
- Do we need a consultant for developing the ToR. Consensus was yes, we do
- How to best build capacity? It needs to be clearly focused.
- Discussion about whether infrastructure should be a part of this. Comments were that a reasonable infrastructure needed to be in place so that all the other activities could be carried out.

11   Sebungwe Elephant Conservation Action Plan

11.1   Action Plan Summary

The table below summarises the outputs for all five components of the Strategic Elephant Conservation Policy and Management Plan Framework before the full text of the Action Plan in the following section.

PROTECTION AND LAW ENFORCEMENT

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)
2. Informer network, Investigation and intelligence system strengthened
3. Zambezi Valley deployment tactics revisited and implemented
4. Ranger patrols strengthened
5. Training of staff enhanced
6. Conviction rates improved

BIOLOGICAL MONITORING AND MANAGEMENT

1. Viable population, geographical distribution, and habitat connectivity targets established.
2. Monitoring system for population trends, habitat, and impacts designed and implemented.
3. Direct and indirect causes of decline (2006-2014) researched.
4. Viable population, geographical distribution, and habitat connectivity achieved and maintained.
5. Sustainable offtakes established through participatory quota setting and monitored through adaptive management.
6. Robust and comprehensive research program enhanced and maintained.

SOCIAL, ECONOMIC AND CULTURAL FRAMEWORK

1. Transparent and equitable distribution of benefits established
2. Economic management of consumptive and non-consumptive tourism of elephants in Sebungwe improved.
3. Land use strategies to mitigate human elephant conflicts (HEC) established
4. Investment of wildlife revenue in income generating community projects established
5. Relationship and communication mechanism established
6. Education on elephant conservation in the community increased

BUILDING CONSERVATION CAPACITY

1. Capacity needs for elephant management in Parks and CAMPFIRE areas analysed and identified
2. Training provided
3. Best practice standards for elephant management in place
4. Research and monitoring capacity strengthened
5. Funding secured
6. Infrastructure refurbished and functioning
7. Communications

COORDINATION AND PROGRAMME MANAGEMENT

1. Sebungwe Management Committee with an Elephant Working Task Force and Project Coordinator established
2. Coordination and communication between Traditional Authorities, their communities and the elephant management programme and plan strengthened
3. Coordination between Sebungwe safari operators and implementation of the elephant management plan strengthened
4. Links with neighbouring states established – shared elephant management

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11.2   Protection and Law Enforcement Component

PROTECTION AND LAW ENFORCEMENT COMPONENT						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Timeframe**	**Indicative costs US$**	**Lead agency**
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) *Manpower* *Vehicles* *Aircrafts* *Communication – eg radios* *Equipment eg firearms, boats* *Training* *Central database* *Intelligence networks*	**Manpower** – Draw up 20 man reaction team from law enforcement agencies and other stakeholders from the whole Sebungwe sub-region. (Prioritise Bumi, Sengwa) **Refurbish main base** **Training** – Initial database training Refresher course **Transport and Equipment** Procurement of 3 vehicles (land cruisers) Procurement of 3 boats (speedboats – 1 mothership and 2 patrol boats) **Communications** – establish an independent inter-agency communication network	• Number of arrests • Number of cases detected • Number of recoveries made (eg ivory, firearms etc) • Number of patrols conducted • Number cases finalized (convictions) • Number of carcasses detected • Number of joint operations carried out • Number of refresher courses carried out • Number of failed cases	• 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	1 year June 2015 to May 2016 and then ongoing	• 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	ZRP/ZPWMA

PROTECTION AND LAW ENFORCEMENT COMPONENT

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative costs US$	Lead agency
2. Informer network, Investigation and intelligence system strengthened	• 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	• 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	• Validation of informer record • Records and reports of training session • Whistle blower system reports	• 1 year and then ongoing	• Transport – $132,000 • Rewards and payments to informers – $40,000 • Telecommunications costs -$60,000 • Repair and Maintenance, fuel - $66,000 Total $298,000	ZRP/ZPWMA
3. Zambezi Valley deployment tactics revisited and implemented	• 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	• Resource books • Number of successes on detections • Number of contacts • Number of recoveries • Patrol effort (surveillance)	• Exhibits register • Crime register • Reports • Briefing and debriefing register	3-4 months	• Field allowance – $30,000 • Specialised equipment costs – $80,000 • Aircraft hire and maintenance - sunk • Staff dry rations costs $100,000 pa • Camping equipment costs – $60,000 Total $270,000	ZRP/ZPWMA

PROTECTION AND LAW ENFORCEMENT COMPONENT

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative costs US$	Lead agency
4. Ranger patrols strengthened	• Establish effective patrolling force of deployable rangers • Establish (or review) standard operating procedures • Establish well-equipped reaction teams • Honorary Warden system re-established to support ranger patrols	• 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	• Monthly reports • Subsistence claims • Number of approved honorary wardens	• SOPs to be established in 3 months • Staffing established within 6 months • Ongoing	Salaries Equipment Vehicles	ZPWMA
5. Training of staff enhanced	• 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)	• Number of training and retraining sessions carried out	• Individual training records	Immediate and ongoing	$100,000	ZRP/ZPWMA

PROTECTION AND LAW ENFORCEMENT COMPONENT

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative costs US$	Lead agency
5. Conviction rates improved	• 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	• Number of successful prosecutions • Decrease in number of crimes committed • Number of workshops or meetings held	• Crime records • Dockets	Ongoing	$50,000	ZPWMA/ZRP

11.3 Biological Monitoring and Management Component

BIOLOGICAL MONITORING AND MANAGEMENT COMPONENT						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Timeframe**	**Indicative costs US$**	**Lead agency**
1. Viable population, geographical distribution, and habitat connectivity targets established.	• 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.	• Viable population target of minimum 5,000 with minimum and maximum thresholds in different land categories • Updated geographical distribution map and spatial datasets • Number of conservancies approved/ green-lighted by communities	• Censuses of elephants • Distribution and records of elephant movement • Records of meetings to establish conservancies	One year, then ongoing	Computers and software, staff transport for ground surveys and ground-truthing, and staff time for analyses, $50,000 Meeting arrangements, logistics, and transport, $15,000	ZPWMA with participation from the Tashinga Initiative, WWF HSBCP, and the private sector

BIOLOGICAL MONITORING AND MANAGEMENT COMPONENT

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative costs US$	Lead agency
2. Monitoring system for population trends, habitat, and impacts designed and implemented.	• Establish regional database for data on population, habitat, HEC, patrolling, poaching, and trophies (for trophies, see also Output 5). • The database to incorporate available information and methodology, including outputs from the SMART database. • Design and adopt standardized reporting formats. (i.e. MOMS) • Collect, enter, and analyze data. • 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).	• Regional database operational • Number of reporting formats designed and distributed • Number of persons, patrols, and sectors submitting data • Quarterly reports • Quarterly reviews	• 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

BIOLOGICAL MONITORING AND MANAGEMENT COMPONENT						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Timeframe**	**Indicative costs US$**	**Lead agency**
3. Direct and indirect causes of decline (2006-2014) researched.	• 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 process?)	$25,000	ZPWMA

BIOLOGICAL MONITORING AND MANAGEMENT COMPONENT

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative costs US$	Lead agency
4. Viable population, geographical distribution, and habitat connectivity achieved and maintained.	• Establish wildlife-based land-use system with community conservancies acting as corridors. *Some worry from the team that "land-use system" implied a land use plan, another activity (with likely a different time scope), but it was intended to reference conservancies' function.* *Also a discussion in terms of costs/ approaches, that the work here would be to support the community so they could then approach the investors with the plan, rather than the investors working with the community through all the steps.* • 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	• 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)		Unknown, but large expenditure	ZPWMA, conservancies, etc.

BIOLOGICAL MONITORING AND MANAGEMENT COMPONENT						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Timeframe**	**Indicative costs US$**	**Lead agency**
5. Sustainable offtakes established through participatory quota setting and monitored through adaptive management.	• 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.	• 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

BIOLOGICAL MONITORING AND MANAGEMENT COMPONENT						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Timeframe**	**Indicative costs US$**	**Lead agency**
6. Robust and comprehensive research program enhanced and maintained.	• 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 long-term	Annual budget: $200,000	ZPWMA, local government, and academic institutions

11.4   Social, Economic and Cultural Framework Component

SOCIAL, ECONOMIC AND CULTURAL FRAMEWORK COMPONENT						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Timeframe**	**Indicative costs US$**	**Lead agency**
1.Transparent and equitable distribution of benefits established	• 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.	• Instrument approved. • CAMPFIRE guidelines revised and approved • Revenue accountability system established • Number of audits	• Publication of instruments and guidelines. • Audit documents	One year		ZPWMA/ CAMPFIRE
2. Economic management of consumptive and non-consumptive tourism of elephants in Sebungwe improved.	• Preventing human settlement in protected areas • Review length of concession leases to encourage greater investment. • Rehabilitate the depleted Safari areas • Promote PPCPs	• Number of eviction notices issued. • Number of reviewed leases • Number of safari areas under proper management/concessions • Record of PPCPs established.	• Records and reports of the points (6)KPI	Over a year		ZPWMA/ CAMPFIRE, Safari/ tour operators

SOCIAL, ECONOMIC AND CULTURAL FRAMEWORK COMPONENT

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative costs US$	Lead agency
3. Land use strategies to mitigate human elephant conflicts (HEC) established	• 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	• Reports • Link with activity 1 and 2 output1(benefits) • Compensation scheme functioning and record of HEC in place. • Land use plans supported	• Reports endorsed at local level • Revenues increased. • Records of HEC available • Plans approved and published.	1 to 3 years		ZPWMA/ CAMPFIRE
4. Investment of wildlife revenue in income generating community projects established	• 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	• Technical support services established through proper instrument. • Participatory business plan adopted.	• Micro finance projects • Record of business plan • Inventory of support services	Ongoing		CAMPFIRE Private Sector

SOCIAL, ECONOMIC AND CULTURAL FRAMEWORK COMPONENT

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative costs US$	Lead agency
5. Relationship and communication mechanism established	• Sebungwe WG to include Traditional leaders and RDCs • Methodologies for regular communication with communities and their leaders established		•			
6.Education on elephant conservation in the community increased	• 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?)		•			

11.5   Building Conservation Capacity Component

BUILDING CONSERVATION CAPACITY COMPONENT						
Output	**Activities**	**Key Performance Indicators**	**Means of Verification**	**Timeframe**	**Indicative costs US$**	**Lead agency**
1. Capacity needs for elephant management in Parks and CAMPFIRE areas analysed and identified	• Draw up TOR • Appoint consultant	• Report produced	Report	3 months	10,000	Sebungwe WG
2. Training provided	• Analyse training needs • Prioritise and develop training curricula if not already available • Implement in-service training and re-training	Numbers of people trained and certified	Training reports	Ongoing over 5 years	500,000	Sebungwe WG
3. Best practice standards for elephant management in place	• 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	• MIKES PIKE database • SMART database	• CITES MIKE Reports • SMART Reports	Minimum 5 years	10,000	Sebungwe WG

BUILDING CONSERVATION CAPACITY COMPONENT

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative costs US$	Lead agency
4. Research and monitoring capacity strengthened	• Provide appropriate tertiary level training for ZPWMA • Engage universities to establish in-service 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	• 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)
5. Funding secured	• 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
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
7. Communications Duplication	• Procure and install radio communications systems	• System installed and operational	• Effective repeater linked radio communication throughout Sebungwe	1 year	500,000	Sebungwe WG

11.6   Coordination and Programme Management Component

COORDINATION AND PROGRAMME MANAGEMENT COMPONENT

Output	Activities	Key Performance Indicators	Means of Verification	Timeframe	Indicative costs US$	Lead agency
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 (Further discussion required) To liaise with national coordinator
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	•				
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	• KAZA Secretariat aware of Sebungwe elephant management plan • TBNRM established and functional • Reduced illegal trade	• Correspondence • Records of minutes meetings held	Ongoing	Nominal	SEMG JOC Permanent Commissions etc ZPWMA

12   Next Steps

Prior to closing the next steps for the development of the Sebungwe elephant management action plan were agreed.

1. Write up of workshop proceedings and sent to Facilitator   29 May
2. Facilitator Review and proceedings sent to participants   1 June
3. Comments by participants   5 June
4. Final report   12 June
5. Incorporation into National Plan   30 June

13   Meeting Close

The closing address was given by Hardwork Chikumba and the text is as follows:

On behalf of the ZPWMA and indeed on my own behalf as A/RM of hosting reg I would like to take this opportunity to thank everybody who attended this workshop.

I feel humbled by the wide representation at this workshop. It has been a great pleasure to have been honoured by the presence and participation of our Chiefs: Chief Nenyunka, Chief Mola, Chief Siabuwa, Chief Negande and Chief Msampakaruma.

May I also take this opportunity to acknowledge the initiative taken by our principals in ZPWMA to organise and plan towards this workshop. The presence of our Acting Director General Olivia Mufute is an indication of the ZPWMA's commitment and dedication to conservation and, in particular, to the African elephant.

A warm thank you to our ever-supportive and dedicated NGOs
*   Thanks to Conservation Force, John J. Jackson III for responding to this need through the funding of this workshop and for the presence of the Conservation Force representative Marco Pani, having travelled from Italy for this workshop. We are deeply indebted to Conservation Force for this.

*   To Padenga Holdings CEO Gary Sharp for responding to the co-funding request as well as providing considerable in-kind support through significant transportation from Harare to the venue, board and lodging and support through his staff attending the meeting.

*   Special thanks to Dr Russell Taylor having travelled from Namibia and to the IUCN African Elephant Specialist Group representative Tara Daniels for having travelled from Nairobi, Kenya to attend this workshop.

*   To the Zambezi Societies Richard Maasdorp for convening the first initial meeting in respect of the Sebungwe workshop and for his significant ongoing inputs and support in the workshop arrangements.

*   To The Tashinga Initiative Lynne Taylor for organising the workshop

To hosts Steve and Wendy Edwards of Musango Safari Camp and their staff, our sincere thanks for their generous hospitality

We are also grateful for the unwavering support of our tour operators: African Bush Camps Foundation, African Conservancies, Rhino Safari Camp, Safrique Safaris, Changa Safri Camp and Spurwing Island. Also special thanks to Paradzai and Thys from Lodzi Hunters for their dedication and support.

Special thanks also goes to our academia. Prof Edson Gandiwa (CUT) and Prof Dzingirai (UZ CASS). We are also honoured by the presence of the Public Prosecutor, Gokwe, the Presidents Office, Gokwe and the ZRP as represented by the OIC Siakobvu and his team.

Special thanks also goes to the Director of the CAMPFIRE Association Mr Charles Jonga and all the Sebungwe RDCs (Binga, Gokwe, Nyaminyami) and their representatives.

I also wish to thank the presence of Regional Manager Mr Chimeramombe and the representatives for Regional Managers Western and Southern Regions. To my colleagues in the Central Region Principal Ecologist Tenda Moyo, Ashley AMS and investigations officer

Also special thanks to Mr Chris Packenham and the coxswain Mr Dennis Kapandwa for the logistics provided

I strongly feel that I would not have done justice in my closing remarks if I don't mention the facilitators professionalism of Dr David Cumming who excellently led and directed the workshop from the beginning and his rapporteur, Dr Ian Games

We are grateful that the workshop was an eye opener hence let us all bear in mind that **"together we make a difference in conserving our God given resources".**

Wish you a safe journey back home
Thank You

Apologies from
- Gary Duckworth
- Chris Moore and Steve Wentzel (represented by Ken Worsley)
- Martin Pieters
- Nick Milne (represented by Mark Brightman)
- Dr Enos Shumba
- Phillip Kuvawoga
- Ray Townsend
- Corris Ferreria
- Charles Ndondo
- Chap Masterson
- Peter Lindsey
- Tapera Chimuti
- Holly Dublin (represented by Tara Daniel)

ZPWMA
SEBUNGWE ELEPHANT
MANAGEMENT PLAN WORKSHOP

ANNEXES

19-22 May, 2015
Musango Safari Camp, Kariba

ANNEX 1 – LIST OF PARTICIPANTS

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ANNEX 2 – AGENDA

A G E N D A
SEBUNGWE ELEPHANT MANAGEMENT ACTION PLAN WORKSHOP
Venue: Musango Safari Camp **Date:** 19th to 22nd May, 2015

Day 1 - Tuesday 19th May
1600: Arrivals, registration and settle in
1900: Welcome Dinner

Day 2 - 20th May
0745: Welcome and Opening Remarks - DG - ZPWMA
0800: Introductions
0815: Law enforcement and anti-poaching in the Sebungwe - H. Chikumba and V. Mkhwebu
0840: Research on law enforcement - G. Moyo and A. Mudungwe
0900: Community perspectives - J. Miyozi
0920: Elephants and people in the Sebungwe - D. Cumming
0945: Objectives and purpose of the workshop - Facilitator
1000: TEA/COFFEE
1030: **1st Working Session**: Stakeholder Analysis - who are the key stakeholders and actors and what are the links between them? (Plenary)
1145: **2nd Working Session** - Initial Problem Analysis - What are the key issues and the cause effect relationships between them? (Plenary - within the 5 Key Components of the Framework)
1245: LUNCH
1400: **3rd Working Session** - Strengths, opportunities and core competencies within each of the 5 Key Components of the framework and key stakeholder inputs (e.g. Hunting, Photo-tourism, Communities, ZRP/ZPWMA, NGOs) (Working Groups)
1530: TEA/COFFEE
1600: Report back from Working Groups
1730: Break for the evening
1900: DINNER
2030: Synthesis working group on problems and opportunities

Day 3 - Wednesday 21st May
0800: Report back from synthesis working group
0830: **4th Working Session:** Develop Draft Strategic Action Plan with Indicators - Working Groups
1030: TEA/COFFEE
1200: Report back from Working Groups
1245: LUNCH
1400: **5th Working Session:** Activities, responsibilities and Costs - Working Groups
1530: TEA/COFFEE
1600: Report back to plenary by Working Groups and development of Action Plan, Indicators and responsibilities
1745: Break for the evening
1900: DINNER

Day 4 - Thursday 22nd May
0730: **6th Working Session**: Final Development of Draft Strategic Action Plan with performance indicators, responsibilities and Next Steps
0945: Closing Remarks - DG – ZPWMA

ANNEX 3 - Zimbabwe Strategic Elephant Conservation Policy and Management Plan Framework

The logic and layout of the framework was aimed at a strategic level (see table below) with detailed local annual adaptive management plans being developed each year at regional or local levels (see figure below).

|	
Long-term Vision	The long term vision adopted by the workshop retained the essential components of the 1997 plan
Targets	The three targets included in the 1997 policy were retained but the provision to maintain or increase elephant range not linked to a specific benchmark as it was in 1997
Key Components	The 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 are included within these headings
Strategic Objectives	The strategic objectives reflect briefly but more explicitly the policy intention for the respective components
Outputs	The outputs are statements that reflect the expected result that will be realized during the time the plan. Outputs are therefore expressed in the past tense
Key Activities	Key activities represent the necessary and sufficient actions that need to be carried out effectively and efficiently to achieve the Outputs. They may be a subset of a wider range of activities that can be added but, as key activities, they are those that are vital to achieve the Outputs and are those on which the major emphasis should be placed.
Key performance indicators (KPI)	The Key Performance Indicators 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	Means of verifying the KPIs were not developed during the Workshop and will need to be included in the Management Plan. A preliminary draft for verifying these is included in this report, as discussed at the workshop. It is important that KPIs and means of verification are standardised across the regions and areas of the country and that they can be combined in an unbiased way to reflect national progress in the implementation of the strategic plan.
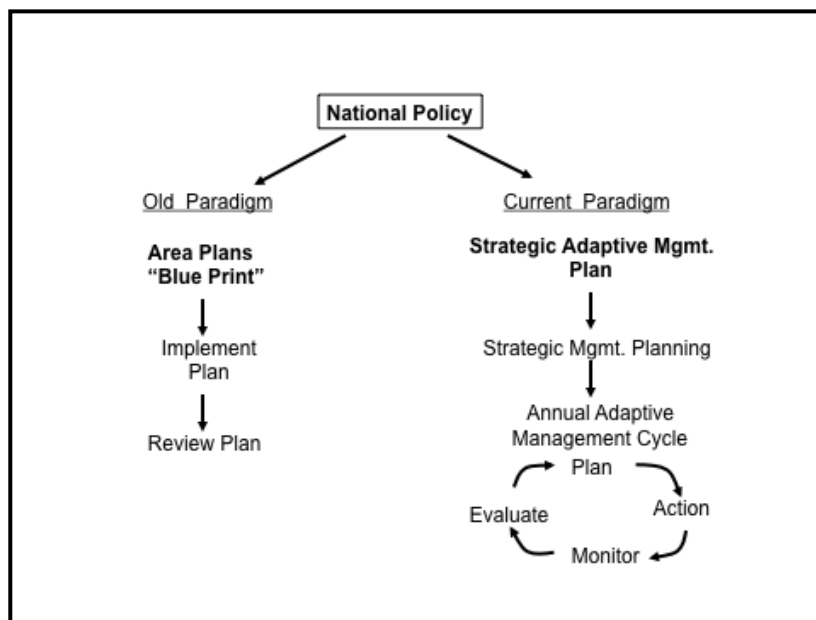
Figure: Resource management plans answer to national policy and legislation but in recent years have shifted from "blue print plans" to strategic adaptive management and planning. The strategic level plan developed in this workshop provides the basis for regional and local planning that includes action, monitoring and evaluation on an annual basis.

(As agreed at Hwange Safari Lodge Workshop on 4 December 2014)

> *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 elephant range 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

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 to change 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

Key ACTIVITIES that are required to achieve the OUTPUTS, Key performance indicators (KPIs), and means of verifying KPIs

	Output#1: *Law enforcement*	Output #2: *Biological monitoring and management*	Output #3: *Social, Economic and Cultural Framework*	Output #4: *Building conservation capacity*	Output #5: *Coordination and programme management*
Key Activities	• For each key population establish a highly trained rapid response anti-poaching unit for deployment to areas under threat • Appropriate informer systems established and supported at regional, national and local levels • Improve investigation and prosecution of crimes (collection and preservation of evidence, ballistics evidence, professional prosecution of cases, information for legal profession) • Set up National and local intelligence databases • Enhance international and transboundary collaboration in law enforcement • Enhance social (community) involvement in law enforcement • Reduce illegal settlements in all wildlife areas • Revisit the appointment of Honorary Officers to assist in law enforcement • Ensure full compliance with hunting regulations and quotas set	• Monitor elephant populations and elephant impacts on biodiversity through aerial, ground and ranger-based methods, among others • 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 for protected areas • Carry out appropriate management actions when populations exceed, or are projected to exceed, TPCs • Monitor trophy quality and adjust quotas to maintain desired levels of trophy quality • Define current elephant range and explore options for extending the range and maintaining connectivity between fragmented populations • Recognising the long response time of elephants to management interventions, use modelling to project alternative outcomes of management.	• Provide incentives and promote partnerships and joint venture opportunities to strengthen elephant management, including across boundaries • Explore additional elephant-based tourism and sustainable utilization opportunities. • Facilitate the transparent distribution of the benefits and costs of elephant management and conservation • Implement effective techniques and land use strategies to mitigate human-elephant conflict. • Promote effective recovery and use of all products from dead elephants • Include information on elephants and their conservation in school curricula and promote environmental education in rural areas adjacent to key elephant populations • Develop and implement an effective communication strategy for local regional and international audiences	• Secure funding to initiate the implementation of the elephant management plan • Establish sustainable funding programs to build and maintain necessary human resources and strengthen elephant conservation and management capacity • Analyse current capacity and identify needs. • Initiate and/or maintain continuity in research and monitoring necessary for the conservation and adaptive management of elephants and habitats • Strengthen research capacity in ZPWMA and collaborate with other research institutions • Establish training and in-service retraining of personnel in law enforcement, research and monitoring, education and awareness, community elephant management, management. • Strive to achieve best standards for elephant management, including any forms of utilization. • Engage available expertise and capacity within Zimbabwe.	• Establish a national elephant conservation & management task force / steering committee that includes stakeholders meets at least bi-annually to review progress and to develop an annual implementation plan • Establish four regional management committees to meet at least twice each year and implement sub-regional plans • Strengthen links with neighbouring states to confer on the management of shared elephant populations, particularly in relation to TFCA populations. • Establish a full-time elephant management position to be responsible for coordinating the implementation of the elephant management plan. • Strengthen coordination between the hunting industry and the elephant management programme. • Establish and implement an effective information dissemination and communication strategy, including regular progress reports on the implementation of the plan.

	Output#1: *Law enforcement*	**Output #2:** *Biological monitoring and management*	**Output #3:** *Social, Economic and Cultural Framework*	**Output #4:** *Building conservation capacity*	**Output #5:** *Coordination and programme management*
Key Performance Indicators	• Number of dead elephants located each year • Number of dead elephants killed illegally • Percentage of animals from which tusks were recovered • No elephant poachers arrested • No of successful convictions • No of poachers sentenced (and record of sentence severity) • Patrol effort and effectiveness indices (see sample reporting form) • No of infringements of hunting regulations • ETIS law enforcement effort ratio • No of ivory seizures (including number of tusks and weight) • No of joint operations	• Elephant population estimates and distribution from aerial surveys at least every three years for each of the four sub-populations • Records 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), age, sex, tusk size. • Trophies taken as % of quota and trend in trophy quality • Thresholds of potential concern established for each area and selected indicators of change monitored • Management actions taken in relation to TPCs being exceeded • Range expansion/contraction estimated from all available data • Use and effectiveness of corridors assessed, inter alia, from aerial surveys, ground sightings and reports, satellite collared animals • Reporting into international monitoring systems as required (e.g. AED, ETIS and MIKE)	• Policy instruments that demonstrate and establish incentives to conserve elephants • Levels of private and community investment in elephant conservation measures • Annual record of distribution of elephant derived benefits (revenue, development projects, products received by beneficiaries) • Record of Human-Elephant conflict incidents (in HEC Database) • Record of mitigation measures taken to reduce HEC (in HEC Database) • Levels of investment (funds and manpower) in mitigating HEC by ZNPWA, communities and partners • Number of poaching incidents/arrests based on prior information and leads from communities / land holders. • Trends in elephant numbers in non-protected areas	• Annual funds and resources available for elephant conservation • Record of staff training and re-training • Manpower density for protection of elephant (No of km^2/operational field person) • Effective deployment of field staff (e.g. % of available man days spent on patrol in the field) • Research person days spent on monitoring elephant population parameters in each population • Number of research person days spent on monitoring / assessing elephant impacts in relation to TPCs • No of researchers, programs and reports • Number of vehicle months available during the year • % of area that has secure VHF radio capacity • % of the year that the secure VHF radio system was functional • Number (or %?) of ranger stations in key population areas fully functional • Number of operational research facilities	• National and regional committees functional and meeting at specified intervals • Committee meeting minutes with actionable points approved and circulated within one month of meeting • Record of attendance at and reporting to regional and international elephant conservation bodies of which Zimbabwe is a member • Elephant management position appointed with full terms of reference • Regular reports from elephant management position on implementation

	Output#1: *Law enforcement*	Output #2: *Biological monitoring and management*	Output #3: *Social, Economic and Cultural Framework*	Output #4: *Building conservation capacity*	Output #5: *Coordination and programme management*
Means of verifying KPIs	• Numbers of dead elephants in various categories recorded at field stations, conservancies, and CAMPFIRE District Offices, compiled at regional and national levels and presented to the Regional and National Coordinating Committees (R&NCC) bi-annually • Arrests and convictions from Station and Area records and reports compiled and submitted to R&NCC • Patrol effort Indices - see under Component #4 • Hunting regulation infringements derived from SOAZ/ZPHGA reports and from field station reports complied and presented to R&NCC • ETIS law enforcement effort ratio available from TRAFFIC • Ivory seizure details from ivory stockpile records	• Elephant population numbers, distribution, carcass ratios and trends from aerial survey reports • Elephant deaths and trophy quality - as for records under Law Enforcement with additional analysis of data and trends reported to the R&NCC bi-annually • Reports on Thresholds of Potential Concern where these have been established • Research and monitoring reports of elephant impacts in selected sights in relation to TPCs • Reports on elephant locations from ground and aerial sightings • Use of corridors based on field reports and studies of elephant movements using tracking devices • Copies of required reports sent to international monitoring systems	• Documented policies and list of operating partnerships / joint ventures that promote elephant conservation & management • Record of investments in elephant conservation measures assembled by elephant programme manager/coordinator • Summaries from Human-Elephant Conflict database reported at Annual Meeting of R&NCC • Records and annual summary of arrests and poaching incidents intercepted based on leads provided by communities • Elephant censuses that have covered non-protected areas	• Record of funds available (USD) and investment by ZNPWMA, Private sector, NGOS, and CAMPFIRE in elephant conservation measures (Compiled annually by Elephant Manager / Coordinator) • Consolidated record of number of field personnel and days operational (law enforcement, research & monitoring, elephant management) for each area in the elephant range compiled and reported on at annual planning meetings • Research reports and papers on elephant conservation and management • 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 R&NCC bi-annually	• Record of meetings, minutes actions completed, attendance at national and regional committee meetings • Record of when minutes of meetings were completed and circulated • Date on which terms of reference for elephant management position were completed, date the position was filled and operational • Record of reports by the person in the elephant management position

Note: It will be necessary to design record sheets that serve to standardise the manner in which records are maintained at field station, area, and regional levels so that they can be combined and summarised in a consistent manner to provide clear and transparent national level indicators of progress in the conservation and management of elephant from year to year. . An example of one such form for law enforcement effort is provided below. The forms being used at MIKE sites may also be used more widely.

Elephant mortality and law enforcement annual reporting form - a draft example of data that may be required from each station

		2015	2016	2017	2018	2019
SEE NOTES BELOW	Name of person completing this data form					
	Date on which this data from was completed					
	Name of area covered					
	Size of area in km²					
	YEAR	2015	2016	2017	2018	2019
	Date of aerial census population estimate					
	Aerial census elephant population estimate (number)					
	Aerial census carcass ratio (%)					
	Number of natural mortalities					
	Number of tusks recovered					
	Number killed illegally					
	Number killed on PAC					
	No killed for rations					
	Number killed on trophy hunts					
	Number of carcasses found that died in previous years					
	Total mortalities					
1	Number of elephant poaching incursions/attempts detected					
	Number 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 VHF 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.