



General Management Plan

2024 - 2034



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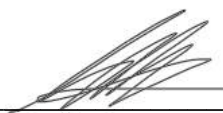
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APPROVAL

The Board of Directors of Wilfried Pabst GmbH, Sango Re Mhuka (Pvt) Ltd aka Sango Wildlife Conservancy and the Directors and Senior Management of Pabst Holdings (Zimbabwe) Pvt Ltd have approved the implementation of this General Management Plan for Sango Wildlife Conservancy, Zimbabwe.

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FOREWORD

This General Management Plan for Sango Wildlife Conservancy is a product of extensive consultation and the review of several management plans from similar areas. Sango has a long history that dates back to 1992. This General Management Plan address the management issues and threats facing the Sango Wildlife Conservancy through six interlinked sub-plans.

These comprise a Business Plan, Ecological Management, Sustainable Tourism Management, Operations including Administration, Natural Resource Protection Management and Stakeholder Management. Together, these facilitate a holistic approach to the management of the conservation area. All plans were formulated over two years through a consultative process with the departments, its stakeholders and where applicable, with different external experts. The plan has a working life of ten years, and it is supported by 2-year action plans that can be rolled forward with new activities being added as required.

This management plan attempts to support the greater Savé Valley Conservancy as well as the Greater Limpopo Transfrontier Conservation Area (GLTFCA) in facilitating larger ecosystem connectivity.

Through its objectives, targets, actions and monitoring programmes, the management plan pays particular attention to the protection of the Exceptional Resource Values for Sango Wildlife Conservancy which includes a unique combination of flora, large population of fauna, including critically and endangered species, rivers and wetlands and threatened bird species as natural values. The ecosystem service values are carbon storage, hydrology and ecotourism, whilst the rock art represents an important cultural value.

Our mission statement underwrites our commitment to ensure the protection of the fauna and flora of Sango Wildlife Conservancy for the benefit of present and future generations (Chapter 6).



Mr W Pabst
Executive Director

EXECUTIVE SUMMARY

This edition of the 10-year (2024-2034) General Management Plan (GMP) for Sango Wildlife Conservancy, Zimbabwe, was developed through a consultative process. The major stakeholders were included during the public review process. The GMP is structured so that it is relevant to the day-to-day management functions and uses a logical framework approach within each management plan.

Site Purpose, Significance and Exceptional Resource Values (ERV)

Location

Sango Wildlife Conservancy (SWC) is, according to cadastral information, a 57,299.35ha privately owned game reserve located in the northern part of the Savé Valley Conservancy (SVC), situated in the south-eastern Lowveld of Zimbabwe. The conserved area comprises 4 sections of land, namely Musawesi, Sabi, Chanurwe, and Chapungu. It forms part of the greater Savé Valley Conservancy, stretching across approximately 243,900ha.

Site Purpose

The purpose of Sango Wildlife Conservancy is to conserve an area of wilderness, biodiversity, and ecological processes within the Savé River Valley, with large populations of wildlife, including critically endangered and endangered species, for the benefit of present and future generations.

The Company is governed to achieve a positive and sustained long-term impact on climate-affecting issues and generally engages in any activities towards these goals which include the conservation of wildlife, habitats, and biodiversity (wellbeing of fauna and flora), with associated ecosystem functions and services for cultural, educational and socioeconomic as well as other locally relevant values. The Company, by pursuing its purpose, shall, through its business and operations, strive for a material positive impact on society and the environment and to combat climate change.

Exceptional Resource Values (ERV) and Significance

Exceptional resource values, which together provide global significance, are those natural, ecosystem-services and cultural attributes that are part of the special character of Sango Wildlife Conservancy as listed in Table 1.



Table 1: Exceptional resource values of SWC

Natural	Ecosystem service	Cultural
Unique combinations of flora	Hydrology - wetland and river system (24km of Savé River) - acting as a biofilter, water flow regulation, and supports biodiversity	Rock Art / Cultural paintings
High population densities of fauna. There are large populations of wildlife, including African buffalo, lion, and leopard, as well as endangered and rare species such as the black rhino and African wild dog	Carbon storage - calculated at 9.2 million tons of CO ₂ and verified by TUV NORD (Germany).	
River drainage and Wetlands, including a substantial ephemeral pan (Branchiopod hot spot)	Tourism - aesthetic value, inspiration, education and research, spiritual and religious experience, mental well-being and health, peace and stability	
Threatened birds - vultures & ground hornbills		

Management Category

The conservation area falls under the IUCN management category VI:

“VI Protected areas with sustainable use of natural resources” which is defined as

“Areas which conserve ecosystems, together with associated cultural values and traditional natural resource management systems. Generally large, mainly in a natural condition, with a proportion under sustainable natural resource management and where low-level non-industrial natural resource use compatible with nature conservation is seen as one of the main aims.”¹

Primary Objective of Category VI

To protect natural ecosystems and use natural resources sustainably, when conservation and sustainable use can be mutually beneficial.

As per definition, other objectives may include:

- To promote sustainable use of natural resources, considering ecological, economic and social dimensions;
- to promote social and economic benefits to local communities where relevant; to facilitate inter-generational security for local communities’ livelihoods - therefore ensuring that such livelihoods are sustainable;
- to integrate other cultural approaches, belief systems, and world-views within a range of social and economic approaches to nature conservation; to contribute to developing and/or maintaining a more balanced relationship between humans and the rest of nature;

¹ IUCN Guideline for Applying Management Categories, Dudley 2008

- to contribute to sustainable development at national, regional, and local level (communities depending on protected natural resources);
- to facilitate scientific research and environmental monitoring, mainly related to the conservation and sustainable use of natural resources;
- to collaborate in the delivery of benefits to people, mostly local communities, living in or near to the designated protected area; and
- to facilitate recreation and appropriate low-impact exclusive tourism.

Governance Type

The governance type is defined as Private governance, which includes individual owner, non-profit organizations (NGOs, universities, cooperatives); and for-profit organizations (individuals or corporate) as per IUCN guidelines².

The conservation area is privately and directly owned by Wilfried Pabst (Zimbabwe) GmbH, with local ownership incorporated in the company Sango-Re-Mhuka (Pvt) Ltd, registered in Zimbabwe. The German company is further owned by Sango Wildlife AG and the Bateleur Foundation.

Sustainable Development Goals

Sango Wildlife Conservancy, through its actions, supports the Sustainable Development Goals (SDGs) 1, 2, 13 and 15.

Zonation

A management scheme has been introduced that provides a framework for securing the protection of the area and its exceptional resource values by reconciling the need for tourism access to generate revenue and create economic opportunities for communities. The conservation of biodiversity, ecosystem processes and the wilderness character is a primary objective for SWC.

Four zones were developed as follows and are expanded on in Chapter 4:

- a. Sustainable Use / Semi-Wilderness Zone:** 75% of the area allows for the sustainable, scientifically determined use of game to create revenue for the conservation area and its activities. Sango Ingwe Lodge is situated in this zone.
- b. Photographic / Eco-tourism Zone:** 25% of the area has been allocated exclusively to photographic tourism, although the whole conservation area is available for game drives. The Dadiso and Expedition camps are situated in this zone. No sustainable use activities are allowed in this zone.
- c. Development Zone:** The headquarters/operational center and security base area are situated in this zone, as well as the primary airfield and its facilities. The development zone is marked by a lot of activity towards the management of the conservation area.
- d. Special Protection Zone:** Consideration is given to develop an Intensive protection area for the support of injured/orphaned special endangered species which will have limited and exclusive visitor use. Vulnerable species considered for the Intensive Care Unit (ICU) complex are rhino, pangolin and cheetah.

² IUCN Governance of Protected Areas - from understanding to action

Management Plans

The GMP is supported by six management sub-plans, the Code of Ethics and numerous policies.

1. Business Plan (BP)
 2. Operational Management Plan (OMP)
 3. Ecological Management Plan (EMP)
 4. Tourism Provision and Management Plan (TMP)
 5. Natural Resource Protection Management Plan (NRP-MP)
 6. Stakeholder Engagement & Development Plan (SMP)
- A. Code of Ethics

1. Business Plan

The SWC business plan will be treated as commercially confidential and will not be shared on public platforms.

2. Operational Plan

The SWC Operational Plan lays out a vision for an efficiently run conservation area that has sufficient resources for effective, efficient and adaptive management. Continued infrastructure development and maintenance (staff and tourism accommodation, outposts, road improvement, etc) is a high priority. The purchase and regular replacement of sufficient equipment is also a priority for management and important for staff working conditions and, thus morale.

SWC will continue to improve its administration, financial and human resource management systems to build up a motivated, appropriately trained and professional staff team. The adaptive management system will be improved with better planning and review so that information from managers and threat monitoring is more regularly fed back, and thus that information can be used to fine-tune actions on the ground.

3. Ecological Management Plan

This plan is based on an adapted ecological management and monitoring approach using international biodiversity methods and best practices. Conservation Targets (CT) were identified through collaboration between the technical consultant and the in-house ecological team and capture the unique biodiversity and ecological processes of SWC. If the CTs are all conserved, then the long-term health of the conservancy's ecosystem will remain intact.

The Ecological Management Plan has identified and prioritised the threats to these CTs and has devised strategies for their reduction or mitigation. The major cross-cutting threat of poaching for high-value species such as black and white rhino, elephant, lion and pangolin are dealt with in the Natural Resource Protection Management Plan. Other prioritised threats are addressed in this EMP. These include actions to reduce the threat of fire, improve water management and ensure active disease management. Alien species identification and control will also be instigated.

This plan also recommends actions to maintain the framework for management orientated monitoring and research of the CTs, their key ecological attributes and threats - a crucial stage in adaptive management. Information on the status of the CTs and their threats will be fed back to enable the design and implementation of appropriate future management actions in this and other programmes. Key monitoring

priorities are documented with data collected, analysed and fed back to management. The monitoring plan should also identify ecological indicators for monitoring the achievement of the conservancy's purpose, which is a key component of the overall monitoring and evaluation of GMP implementation. Priority research topics should be articulated, and research on priority topics may be facilitated by management and promoted within the wider research community, both nationally and internationally, subject to available funding.

4. Tourism Management Plan

The Tourism Management Plan aims to further develop, diversify and manage tourism in SWC, whilst preserving its wilderness values. Tourism is a growth area internationally and nationally and SWC management will work with local stakeholders and private sector tourism partners to provide a diverse visitor experience. Limited seasonal access is not as substantial a challenge at SWC, as at many other conservation areas. Tourism administration will improve through training, improving management systems and ensuring the impact of tourism in SWC is monitored and evaluated.

5. Natural Resource Protection Management Plan

SWC has an effective long-standing protection system in collaboration with an outsourced Special Species Unit (ATS). A Memorandum of Understanding governs the relationship. The unit includes a quick reaction force and canine unit to increase its efficiency. The IUCN Law Enforcement - Review of Best practices³ and various international and regional guidelines were consulted to assess the capacity of the current systems and to identify priorities for action.

The SWC NRP Management Plan aims to ensure the area is a safe and secure environment for the natural resources. An efficient patrolling and ranger/scout deployment system is in place and may be improved with efficient monitoring and evaluation feedback. Recruitment procedures should include priority for local community members. The plan supports international human rights statements, arrest procedures and the SVC Safeguarding Policy, and follows the Zimbabwe Parks and Wildlife Act 20:14.

Intelligence and investigation units are operating at a high standard but also require constant input and resource allocation. The main priority for development is working with prosecutors to improve case handling and following cases in court to minimize opportunities for corruption. An additional analysis of data should be used to try to obtain prosecutions higher up the trade chains, both nationally and internationally.

6. Stakeholder Engagement & Community Development Plan

The Stakeholder Engagement and Community Development Plan (SMP) is designed to enhance stakeholder interaction for SWC and to reduce pressure on its exceptional resource values. It will do this by building effective relationships for management through regular interaction with local communities and other stakeholders, which will further develop mechanisms and forums for dialogue with SWC-associated communities and improve cooperative mechanisms with other stakeholders.

SWC will continue to directly and indirectly support communities through employment, livelihood and empowerment projects, funding permitted. This type of support will be as enhanced as possible through transparent schemes that may also harness donor contributions.

³ IUCN Law Enforcement in Sub-Saharan African Protected Areas (Henson *et al*, 2016)

Human-wildlife conflict is an unfortunate problem in the areas bordering wildlife zones, particularly in the face of expanding elephant populations. Most of the interaction is with elephants, lions, buffalo and hippopotamuses, and it will be assessed, and communities supported in developing mitigation measures. The current environmental education programs focuses on school children in western communities and will be reviewed and enhanced as part of developing a clear education strategy for groups.

A. Code of Ethics

The Sango Code of Ethics serves to underpin all actions within the SWC, ensuring a transparent and best-practice business environment.

Objectives Summary

The 10-year objectives determined for each function are listed in Table 2 and further discussed in each management plan.

Table 2: Main objectives for each management plan

Plan	Main Objectives
Operational Management	• Infrastructure and equipment developed and maintained • Modern, efficient, and adaptive management and administration operational • Emission management developed and maintained
Ecological Management	• Biodiversity and ecological processes are conserved through an adaptive management approach • Human-associated threats to the Conservation Targets mitigated through active management • Review, update, and implement species management guidelines • Management-orientated monitoring and research carried out • Protection of cultural values • Transparent management of local sustainable use center
Natural Resource Protection Management	• Ground field patrols and aerial surveillance enhanced • Natural resource protection management improved • Intelligence and investigation systems strengthened • The canine unit maintained and expanded
Tourism Management	• Tourism facilities and activities developed and maintained • Management and administration of tourism improved • SANGO brand promoted
Stakeholder and Community Development	• Coordination of stakeholders to improve management knowledge and capabilities • Community well-being projects maintained • Human-wildlife conflict understood and mitigated • Environmental education program focussed, expanded, and maintained • Clear Grievance and Feedback Process available to stakeholders • Development and outreach strategies that reduce threats facilitated in adjacent communities

Plan Structure and Management Action Plan (MAP)

At the highest level, the plan has a life span of 10 years. This level defines the exceptional resources, the management programs, and their purposes, the objectives, and the targets for each of these objectives.

In the mid-term, the plan adopts a two-year cycle and defines an adaptive action and activity plan. The management plan stops at this level, however, managers will be compiling annual work plans and budgets, which will be based on the two-year planning cycle.

The 2-year Management Action Plan (MAP) is developed for five of the six plans (excluding the business plan) and sets out to prioritize actions. Budgets will be outlined in support of these activities. These action plans provide a clear and consolidated summary of the management actions to be carried out under this GMP, details on specific activities required, the sequential time frame over which they could be put in place, and responsibility for implementation. Where appropriate, each action described under the management plan has been broken down into a series of 2-year activities to aid managers in incorporating them into the Annual Work Plans. This MAP will be subject to review every two years.

Feedback mechanisms will allow changes to be monitored and adaptive changes to be made.

Monitoring and Evaluation Framework (KPIs)

An indicator monitoring framework was developed to guide the regular assessment of the impacts, positive and negative, resulting from the implementation of the major actions laid out in this GMP. The framework includes easily assessable indicators for measuring these impacts. These indicators are included in each management plan. Long-term lead indicators supporting strategic goals will be developed based on the monitoring processes.



TABLE OF CONTENTS

	Approval Page	1
	Foreword	2
	Executive Summary	3
	Site Purpose, Significance and Exceptional Resource Values (ERV)	3
	Management Category	4
	Governance Type	5
	Sustainable Development Goals	5
	Zonation	5
	Management Plans	6
	Objectives Summary	8
	Plan Structure and Management Action Plan (MAP)	9
	Monitoring and Evaluation Framework (KPIs)	9
	Table of Contents	10
	List of Abbreviations and Acronyms	12
	List of Tables and Figures	14
	Definitions	15
Chapter 1:	The Dream of Sango - Strategic Plan	19
Chapter 2:	Plan Introduction	21
	1. Background and Processes	21
	2. Location and General Description	23
	3. General Management Plan (GMP) Purpose	25
	4. GMP Structure	27
Chapter 3:	Area Description	30
	1. History	30
	2. Biophysical Environment	30
	3. Biological Environment	35
Chapter 4:	Area Purpose, Exceptional Resource Values and Significance	42
	1. Area Purpose	42
	2. Exceptional Resource Values	42
	3. Significance	42
Chapter 5:	Zonation	45
	1. Overview and Rationale	45
	2. Limits of Acceptable Use (LAU)	45
	3. Zone Descriptions	45
	4. General Prescriptions and Codes of Conduct	47
	5. Zone Activities and Prescriptions	47

TABLE OF CONTENTS

Chapter 6:	Governance	49
	1. Mission & Engagement	49
	2. Ethics & Transparency	50
	3. Governance Metrics	52
	4. Mission Lock	52
Chapter 7:	Legislation & Use	54
	1. Legislation	54
	2. Use	55
Chapter 8:	Environmental Considerations	57
Chapter 9:	Management Action Plans	59
	1. Levels of authority	59
	2. Capacity for implementation	59
	3. Action Plans	60
Chapter 10:	Monitoring and Evaluation	67
	1. Corporate data sets	67
	2. Adaptive Management and QA&QC	67
	3. Indicators	68
	References	74
	List of contributors	76
	Planners	76
	Authors	77
	Stakeholder review	77
	List of meetings held & attendees	78
	Addendums	79

LIST OF ABBREVIATIONS AND ACRONYMS

APIs	Areas of Particular Importance for biodiversity and ecosystem services
ATS	Anti-poaching and Tracking Specialists
AWCF	African Wildddog Conservation Fund
AWP	Annual Work Plan
BECVOL	Browse Estimate from Canopy Volume
BIPPA	Bilateral Investment Promotion and Protection Agreement
BMZ	German Federal Ministry for Economic Cooperation and Development
BoD	Board of Directors
CA	Conservation Area
CBD	Convention on Biological Diversity
CDF	Community Development Fund
CEESP	IUCN Commission on Environmental, Economic and Social Policy
CID	Crime Investigation Department
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CT	Conservation Target
EMA	Environmental Management Act
EMP	Ecological Management Plan
EMF	Ecological Monitoring Framework
ERV	Exceptional Resource Value
GCF	Grievance Close-out Form
GHG	Greenhouse Gas
GHG-P	Greenhouse Gas Protocol
GIR	Grievance Investigation Report
GLTFCA	Greater Limpopo Transfrontier Conservation Area
GMP	General Management Plan
GPS	Geographical Positioning System
GRAA	Game Rangers Association of Africa
GRF	Grievance Registration Form
HR	Human Resources
JOC	Joint Operations Committee
HWC	Human Wildlife Conflict
IBA	Important Bird Area
ICU	Intensive Care Unit
IIU	Intelligence and Investigations Unit
IPA	Important Plant Area
IPZ	Intensive Protection Zone
IUCN	International Union for Conservation of Nature and Natural Resources
IWT	Illegal Wildlife Trade
JOC	Joint Operations Committee
KBA	Key Biodiversity Area
KEA	Key Ecological Attribute

KPI	Key Performance Indicator
LAU	Limits of Acceptable Use
LE	Law Enforcement
MECTHI	Ministry of Environment, Climate, Tourism and Hospitality
METT	Management Effectiveness Tracking Tool
MFFU	Police Mineral, Fauna and Flora Unit
MOU	Memorandum of Understanding
NECO	Natural, Ecosystem Service, Cultural Outcomes
NGO	Non-governmental organisations
NRA	Natural Resource Assessment
NRI	Natural Resource Inventory
NRM	Natural Resource Management
NRP	Natural Resource Protection
NRP-MP	Natural Resource Protection Management Plan
OMP	Operational Management Plan
PA	Protected area
PAC	Problem Animal Control
QRF	Quick Reaction Force
RBM	Ranger Based Monitoring
RMPU	Rhino Monitoring and Protection Unit
RS	Remote Sensing
SASS	South African Scoring System
SATIB24	Satib Medical Insurance
SBS	Smart Building Solutions
SCBD	Secretariat of the Convention on Biological Diversity
SDGs	UN Sustainable Development Goals UN United Nations
SGM	Stakeholder Grievance Mechanism
SI	Statutory Instrument
SMP	Stakeholder Management Plan
SOAZ	Safari Operators Association Zimbabwe
SVC	Savé Valley Conservancy
SWC	Sango Wildlife Conservancy
TFCA	Transfrontier Conservation Area
TMP	Tourism Management Plan
TPC	Thresholds of Potential Concern
UNEP	United Nations Environment Programme
WCPA	IUCN World Commission on Protected Areas
WDPA	World Database on Protected Areas
ZESA	Zimbabwe Electricity Supply Authority
ZINWA	Zimbabwe National Water Authority
ZPGA	Zimbabwe Professional Guides Association
ZPWMA	Zimbabwe Parks and Wildlife Management Authority
ZTA	Zimbabwe Tourism Authority

LIST OF TABLES AND FIGURES

The tables and figures included in the GMP are listed below. Each management sub-plan lists its tables and figures in the respective plans.

TABLES

- Table 1:** Exceptional Resource Values of SWC
- Table 2:** The main objectives of each management plan
- Table 3:** CBD goals and targets 2030
- Table 4:** The relevant Sustainable Development Goals
- Table 5:** Soil types of SWC associated with the vegetation management units.
- Table 6:** Large animal species numbers as per recent surveys
- Table 7:** ERVs of SWC
- Table 8:** Zone activities and prescriptions
- Table 9:** Subsidiaries to Sango Re Mhuka (Pvt) Ltd
- Table 10:** Operational Action plan (=table O7)
- Table 11:** Tourism Action Plan (= table T2)
- Table 12:** Natural Resource Protection Action Plan (= table NRP3)
- Table 13:** Ecological Action Plan (= table E5)
- Table 14:** Stakeholder Action Plan (= table S4)
- Table 15:** Adaptive management phases and QAQC
- Table 16:** Operational KPIs (= table O8)
- Table 17:** Tourism KPIs (=table T3)
- Table 18:** Natural Resource Protection KPIs (= table NRP4)
- Table 19:** Ecological KPIs (=table E7)
- Table 20:** Stakeholder KPIs (= table S5)
- Table 21:** Participants in planning process
- Table 22:** Authors of the GMP and its sub-plans
- Table 23:** External reviewers of the GMP
- Table 24:** List of consultative meetings held

FIGURES

- Figure 1:** Location of SWC in SVC
- Figure 2:** The Greater Limpopo Transfrontier Conservation Area
- Figure 3:** The road network and infrastructure of SWC
- Figure 4:** Tiered planning structure
- Figure 5:** Rainfall oscillation cycles and three-year moving average cycles for 1922 to 2009
- Figure 6:** Drainage systems of SWC and the larger landscape
- Figure 7:** The vegetation communities of SWC
- Figure 8:** The identified vegetation management units as per the natural resource inventory (NRI)
- Figure 9:** The identified vegetation management units (strata) as per remote sensing (2023)
- Figure 10:** The new species of branchiopod discovered at SWC
- Figure 11:** SASS-5 river health results
- Figure 12:** Map indicating eco-tourism zones in red and the semi-wilderness zone
- Figure 13:** Map with the development zones indicated

DEFINITIONS

Biodiversity: The variability among living organisms from all sources, including, inter alia, terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part: this includes diversity within species, between species, and of ecosystems. (CBD Article 2)

Bed-night levy is a payment demanded from an operator by the Zimbabwe Tourism Authority for the nights spent by clients calculated based on the number of beds available.

Bush Camp is a small-scale integration of a site, accommodation units, and minimum equipment to service tourists. The accommodation units are semi-permanent structures.

Camp is an integration of a site, accommodation units, offices, or equipment for tourism. Although the term is comprehensively used, it mainly means the site of accommodation units for tourists (refer to “Lodge and Camp”) unless an additional word such as “wildlife”, “gate” or “staff” is accompanied with it.

Conservation Target is an ecological component of an ecosystem that management has prioritized for conservation action. Together, the CTs represent the whole ecosystem, its biodiversity, and its ecological processes and functions.

Cultural values: These include recreational, religious, aesthetic, historical and social values related to tangible and intangible benefits that nature and natural features have for people of different cultures and societies, with a particular focus on those that contribute to conservation outcomes and intangible heritage, including cultural and spiritual practices.

Ecosystem: A dynamic complex of plant, animal, and microorganism communities and their non-living environment interacting as a functional unit. (CBD Article 2).

Ecosystem approach: The ecosystem approach is a strategy for the integrated management of land, water, and living resources that equitably promotes conservation and sustainable use. The application of the ecosystem approach will help to reach a balance of the three objectives of the Convention. It is based on the application of appropriate scientific methodologies focused on levels of biological organization which encompass the essential processes, functions, and interactions among organisms and their environment. It recognizes that humans, with their cultural diversity, are an integral component of ecosystems⁴.

Fly Camp is a site providing accommodation units to tourists for a period not exceeding two nights. The structures are removable tents only, sometimes based on stamped mud and fenced by grass. Two types are sub-defined. ‘Seasonal fly camp’ is settled at a place through a season and ‘temporary fly camp’ is set in a shorter time for walking or canoeing safari.

Geodiversity: The natural range (diversity) of geological (rocks, fossils, minerals), geomorphological (landform, physical processes), and soil features, and includes their assemblages, relationships, properties, relationships and systems (Gray, 2004).

⁴ <https://www.cbd.int/ecosystem>

Governance authority: The institution, individual, indigenous peoples, communal group or other body acknowledged as having authority and responsibility for decision-making and management of an area.

Habitat: The place or type of site where an organism or population naturally occurs. (CBD Article 2).

Indigenous peoples and local communities: This report follows the Convention on Biological Diversity's uses of the terms "indigenous peoples" and "local communities" as defined by the ILO 169.

Important Plant Areas: Key sites for exceptional botanical richness; rare, threatened, and socio-economically valuable plant species; and rare and threatened habitats.

In-situ conservation: The conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties. (CBD Article 2).

Key Biodiversity Area: Sites qualify as global KBAs if they meet one or more of 11 criteria, clustered into five higher-level categories: threatened biodiversity, geographically restricted biodiversity, ecological integrity, biological processes, and irreplaceability. The KBA criteria can be applied to species and ecosystems in terrestrial, inland water, and marine environments and may be applied across all taxonomic groups (other than micro-organisms).

Lodge is an integration of a site, accommodation units, offices, and equipment to service tourists. The accommodation units are permanent structures. A safari lodge refers to a large-scale tourist unit with full catering services.

Management authority: The organization or entity responsible for the ongoing management of a site. The management authority may or may not be the same as the governance authority, the organization or entity that holds legal or customary authority and responsibility for the site.

OECM: A geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ conservation of biodiversity with associated ecosystem functions and services and, where applicable, cultural, spiritual, socio-economic, and other locally relevant values. (CBD, 2018).

Permanent Structure is a building structure whose base and walls are made of stone or concrete.

Picnic Site is a site provided to day visitors for temporary rest and has sitting facilities to allow visitors to take quick meals or snacks. No cooking facilities are provided.

Private governance: By individual owner; by non-profit organizations (NGOs, universities, cooperatives); by for-profit organizations (individuals or corporate)

Protected area: The CBD defines a protected area as "A geographically defined area, which is designated or regulated and managed to achieve specific conservation objectives" (Article 2 of the Convention on Biological Diversity). This definition is further expanded upon under Article 8 of the same convention."

IUCN defines a protected area as: “A protected area is a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.” (Dudley 2008)

The CBD and IUCN recognize the two as being equivalent in practice (Lopoukhine and Dias, 2012) as in both cases, these areas are intended to achieve in-situ conservation.

Sustainable use: The use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations. (CBD Article 2).

Tourism refers to photographic and sustainable use safaris.

Threat is, for the purposes of this GMP, defined as any factor, resulting either directly or indirectly from human activities (legal or illegal), that has the potential to destroy, degrade, or impair a CT or its KEAs in the next 10 years.

Visitor is a person who temporarily enters legally, for example, a tourist or government employee on business or a person passing through the area.



Chapter 1:

The Dream of Sango - Strategic Plan



CHAPTER 1: THE DREAM OF SANGO - STRATEGIC PLAN

In conversation with the executive director and founder of Sango Wildlife Conservancy, Mr W Pabst, he outlined his dream, which started as long ago as 1965 whilst on safari in Botswana. The following were described as the long-term goals for the CA.

- For the conservation of the Exceptional Resource Values to take precedence in all management actions and decisions.
- To attain the go-to address for a wildlife success story, based on sustainable utilisation as a responsible model.
- To ensure ecological management to the best standards, with science being practical, implementable, and appealing environmentally.
- To never create revenue at the expense of the fauna and flora.
- To improve the tourism aspect to a 5-star level, even if official grading is not obtained.
- To be seen on the same level as some of the globally known private conservation areas.
- In 10 years, to be recognized as a tourism destination, both photographic and sustainable use, overcoming the political and ecological challenges.
- To become an example within the nature financing arena, adding revenue to the betterment of biodiversity and communities.
- To expand the footprint to protect biodiversity and carbon storage, contributing positively to climate change.
- To support communities through climate and ecologically compliant projects.
- To ensure that all CA activities fit into the Climate Goals.
- To ensure benefits for generations to come.

Chapter 2:

Plan Introduction



CHAPTER 2: PLAN INTRODUCTION

1. Background and Processes

The planning process for the review of the Sango Wildlife Conservancy General Management Plan (GMP) started in July 2023 and included several consultations with internal stakeholders. Public consultation includes input from various external stakeholders (Table 21).

The GMP supports the goals of the Convention of Biological Diversity 2030 as listed in Table 3. The full table with the targets outlined is included in Addendum 1.

Table 3: CBD goals and targets 2030

Goal #	Goal
Goal A	Reducing threats to Biodiversity
Goal B	Meeting people's needs through sustainable use and benefit-sharing
Goal C	Tools and solutions for implementation and mainstreaming

Sustainable Development Goals

The Sustainable Development Goal 15 of the 2030 Agenda for Sustainable Development is devoted to “protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss”.

In addition to Goal 15, SWC also supports goals 1, 2 and 13.

Table 4: Sango Wildlife Conservancy, through its actions, supports the following Sustainable Development Goals (SDGs)

Goals	Targets	Indicators	Net Impact on SDG Indicator	Current Project Contribution	Lifetime Contribution
Goal 1 End poverty in all its forms everywhere	1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	Positive through employment activities	170+ employees are employed, of which 80+% are from local communities	Employment will be provided for the lifetime of the SWC
Goal 2 End hunger, achieve food security and improved nutrition and promote sustainable agriculture	2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round	2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)	Positive through ration provision and community donations	Employees receive meat rations (game/ beef/fish) through the year, and vegetables when in season. Supporting ZimParks field officials with rations (via SVC).	Rations will be provided subject to ecologically sustainable management of the conservancy.

	2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, help maintain ecosystems, strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and progressively improve land and soil quality	2.4.1 Proportion of agricultural area under productive and sustainable agriculture	Positive through training and support of community-based vegetable gardens	Water provision has been secured and fencing provided for the Village 26 community and support is given continuously as requested. The Mafuane vegetable garden is being developed. Borehole and weir maintenance is ongoing.	Community vegetable gardens go a long way to provide food security and expansion of this project will be considered.
Goal 13 Take urgent action to combat climate change and its impacts	13.2 Integrate climate change measures into national policies, strategies and planning	13.2.2 Total greenhouse gas emissions per year	Positive through carbon storage and operational emission control	The forests and woodlands of SWC act as a carbon sink for 8.5+mio t CO ₂ e. Facilities are mostly powered by solar energy.	Natural resource protection and ecological management will continue to secure the carbon sink, and operational emission management will be implemented.
Goal 15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	15.1.1 Forest area as a proportion of total land area	Positive through conservation and research activities	Forests/woodlands form 98 % of the project area.	Natural resource protection and ecological management will continue to secure the vegetation units of SWC, including forests, woodlands, wetlands and rivers.
	15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	15.5.1 Red List Index	Positive through ecological and resource protection management.	Black rhino, hooded vulture and white-backed vultures are critically endangered, with African wild dog as Endangered. Continuous habitat protection via ecological and resource protection management ensures the protection of these species.	Active habitat and specific species protection will continue to provide safety for the Red List Species and the full ecosystem at SWC
	15.7 Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products	15.7.1 Proportion of traded wildlife that was poached or illicitly trafficked	Positive through resource protection management.	Illegal Wildlife Trade and bushmeat trade are a real threat, and on average, 40 rangers (scouts) are employed to protect these species, combined with a canine unit and aerial surveillance.	Resource Protection will continue within SWC throughout its lifetime.

*Based on the 2022 review of the Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development

2. Location and General Description

Location

Sango Wildlife Conservancy (SWC) is, according to cadastral information, a 57,299.35ha privately owned game reserve located in the northern part of the Savé Valley Conservancy (SVC), situated in the south-eastern Lowveld of Zimbabwe. The conserved area comprises 4 sections of land, namely Musawesi, Sabi, Chanurwe, and Chapungu. It forms part of the greater Savé Valley Conservancy, approximately 243,900ha. The Savé Valley Conservancy (SVC) consists of private, government, and community-owned properties working together to manage biodiversity populations on a landscape scale and remains a stronghold for conservation in Zimbabwe amidst a challenging political and economic climate. The SWC is part of the larger Savé Valley ecosystem, with many contrasting attributes, including granite inselbergs, floodplains, wetlands, vegetation complexes, and the Savé River. It lies between southern latitudes 20° 10' and 20° 23' and eastern longitudes 32° 00' and 32° 20'⁵.

The uniqueness of the ecological composition of Sango lies in its main orientation being east-west, running from the Savé River, of which it has 24km within its eastern border, westwards through the valley to the higher-lying catchment area on its western side. The Savé River is the biggest river in Zimbabwe with a catchment area covering 84,550km². The river is in certain places 1,8km wide. The altitude varies from around 400m above sea level in the east to around 700m in the west. An interesting feature is the extensive alluvium of the mid-Savé River area, where deposits from the Save and Msaizi rivers have combined to form a plain 20km and wider. In the alluvium, the banks of the Savé River are slightly higher than the surrounding country, forming numerous seasonal pans on the adjacent floodplain. The Gunundwe and Msaize rivers and other smaller seasonal streams discharge via these pans and small drainage channels instead of directly into the Savé River.

The area is situated within the Agro-ecological Region V, which is best suited for wildlife due to the region's low and erratic rainfall.

Sango Wildlife Conservancy is acknowledged by UNEP as a protected area, as part of the Savé Valley Conservancy and is registered on the World Database of Protected Areas with parcel ID 303714_B.

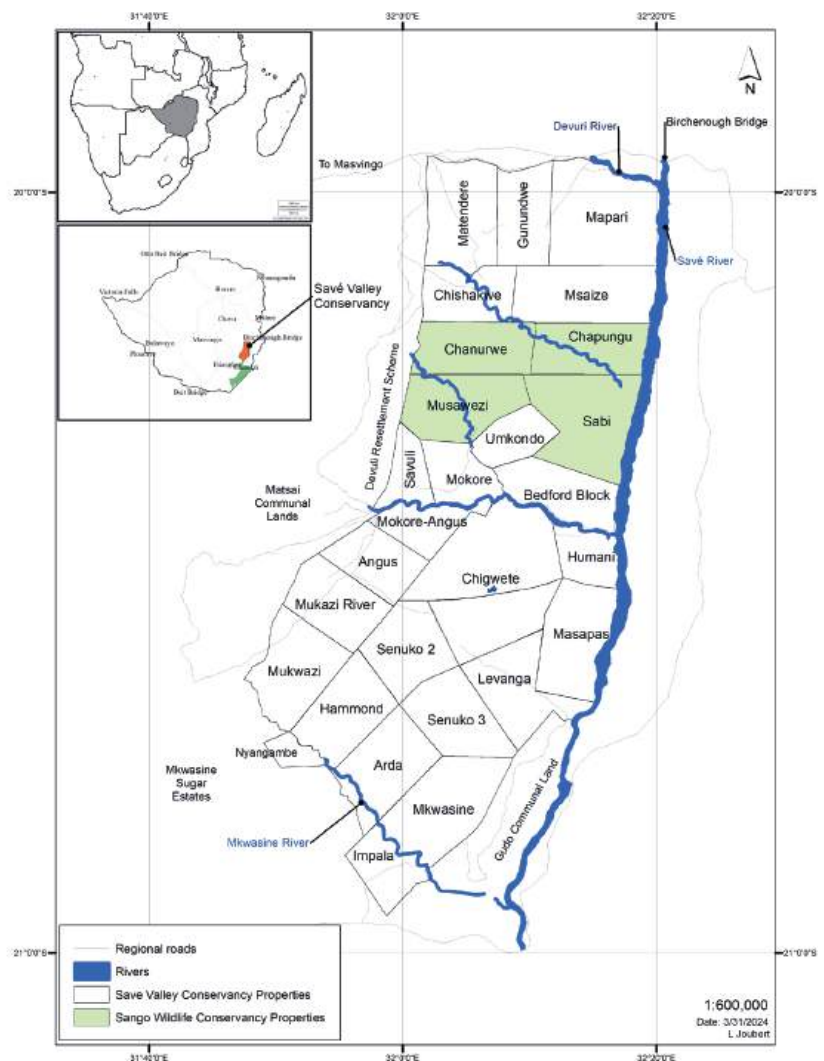


Figure 1: The location of SWC within the Savé Valley Conservancy

5 Hinn,H., 2000. A natural resource inventory of Sango Ranch, Save Valley Conservancy, Zimbabwe



Figure 2: The Greater Limpopo Transfrontier Conservation Area (Pomme, as adopted from Boundless Southern Africa, Transfrontier Destinations in Southern Africa, 2018)

Landscape Connectivity

The SVC forms the northernmost extent of the Great Limpopo Transfrontier Conservation Area (GLTCA, Figure 3), which covers an area of ~80,000 km² across Zimbabwe, South Africa, and Mozambique. There are two key corridors linking the Save Valley Conservancy to the GLTCA. Firstly, the Fair Range corridor links the conservancy to Malilangwe to the south, which has open borders with Gonarezhou National Park. Secondly, the Sengwe-Tshipise corridor links Gonarezhou National Park to the Kruger National Park in South Africa and the Limpopo National Park in Mozambique. The location of the SVC highlights its conservation importance to the greater area.

The conserved area is acknowledged as a protected area in Zimbabwe's Sixth National Report to the Convention on Biodiversity⁶ as well as in the IUCN 2020 ESA SoPACA Country Profile⁷. It is defined as a Sanctuary by national legislation, which is defined as: "Sanctuaries are reservoirs of animal species that are threatened with extinction and therefore require safe breeding habitats".

Ecosystems - global typology

The following ecosystems have been identified at Sango Wildlife Conservancy based on the global IUCN typologies classification:⁸

T4.1 Trophic savanna

F1.2 Permanent lowland river

F1.5 Seasonal lowland rivers

F2.5 Ephemeral freshwater lakes.

6 Zimbabwe's Sixth National Report to the Convention on Biodiversity. Ministry of Environment, Tourism and Hospitality Industry, Republic of Zimbabwe.

7 State of Protected and Conserved Areas Report Series No. 1

8 Keith, D.A., Ferrer-Paris, J.R., Nicholson, E. and Kingsford, R.T. (eds.) (2020). The IUCN Global Ecosystem Typology 2.0: Descriptive profiles for biomes and ecosystem functional groups. Gland, Switzerland: IUCN.

Roads and Infrastructure

SWC has a well-established road network consisting of main roads and bush tracks. Infrastructure further includes

- A developed headquarters providing workshops, a warehouse, cold rooms, offices, employee housing, a vegetable garden, a reservoir, and a guest house,
- Battery storage inverter system with extensive solar energy capturing units,
- A natural resource protection base providing employee housing, offices, and kennels,
- Sango Ingwe Lodge,
- Dadiso Tented camp,
- Expedition seasonal camp,
- Homesteads, Chapungu and Maera
- Scout and fence guard bases

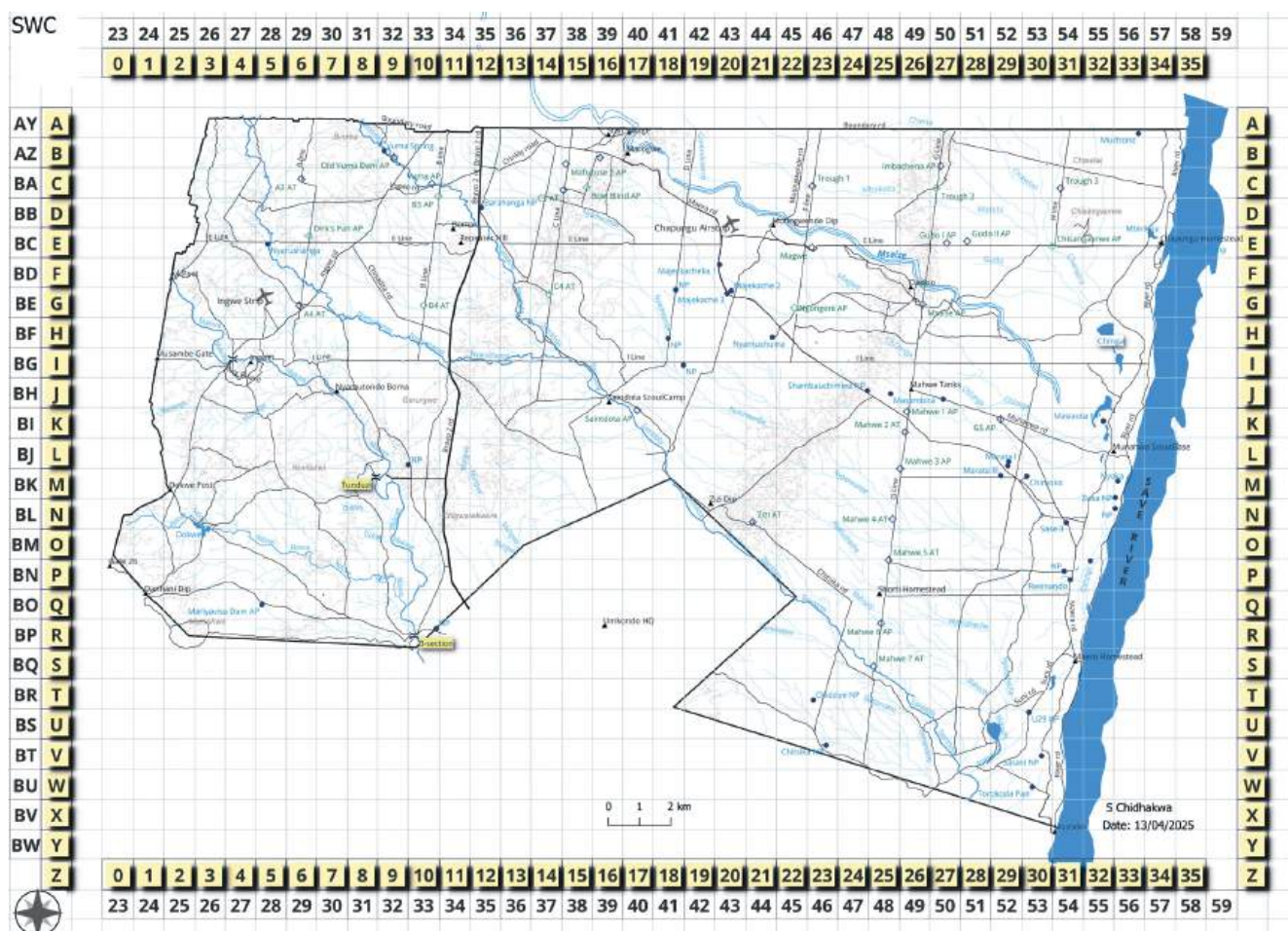


Figure 3: Road network and infrastructure map of SWC

3. General Management Plan (GMP) Purpose

This document has been prepared to inform decision-making at all levels of management and should be used as a guideline to ensure that the objectives and goals of Sango Wildlife Conservancy (aka Sango) are achieved. Good quality management can only be achieved through good quality planning. Therefore, the management plan must be continuously revised and updated to ensure it is a useful, practical, and

dynamic guideline with a clear plan of action. The planning and decision-making should recognize relevant conditions, issues, and goals at the national and regional levels. A copy should be found on each manager's desk, and progress reports should be reviewed annually. A major benefit of this management plan is that it allows for an easy transition of responsibility. Furthermore, it ensures everyone is on the same page and working towards the same vision and mission.

The primary purpose of this GMP is to lay out the vision and philosophy for the 10-year development and management of SWC.

In addition to its primary purpose, this GMP has other functions.

Secondary purposes:

- To outline strategies by which the vision can be achieved,
- To lay out the roles and responsibilities of implementers,
- To function as a public relations document by providing a written description of SWC's management outlook,
- To act as a mainline document in applications for certifications,
- To solicit donor funding by clearly laying out the management framework, priorities, and input requirements,
- To provide continuity in management as managers, policymakers, or partner projects change,
- To provide a framework for the participation and coordination among all stakeholders, including local communities, government, projects, and donors, and
- To provide support for the objectives of the Savé Valley Conservancy, as outlined below^{9 10}:
 - 3.1 To develop and maintain opportunities for the conservation and sustainable utilization of natural resources in the Conservancy area and its environs, through coordinated, cooperative, mutually supportive and respectful interactions between landowners, involving:
 - 3.1.1 the specification of, and strict adherence to, sound ecological management policies aimed at preventing:
 - i. degradation of the natural resources (declines in biological productivity and diversity);
 - ii. exploitation of the natural resources by any user at the expense of other users;
 - 3.1.2 re-introduction of wildlife species that have either been eradicated or reduced to low numbers within the Conservancy area, provided:
 - i. any such species can be managed through fencing or other means to an extent sufficient to preclude unreasonable risk to neighbouring communities or their property;
 - ii. the founder population of any such species can be made large enough to constitute a viable breeding group, according to demographic and genetic criteria;
 - iii. any such species are ecologically suitable.

9 SVC Constitution

10 Save Valley Conservancy, Draft Framework Management Plan 2021 (Games)

- 3.1.3 construction and maintenance of perimeter game fencing to a specified standard while limiting game fencing within the Conservancy to the minimum amount required for the protection of crops, construction of holding bomas, or other basic management needs, as may be approved by the Committee, thereby ensuring that:
 - i. small populations do not become fragmented and isolated, thus creating inbreeding problems;
 - ii. species with narrow habitat preferences can move seasonally between areas that are temporarily suitable for them;
- 3.1.4 promotion of schemes, through either consumptive means (e.g. game cropping and safari) or non-consumptive means (e.g. tourism) as may be reasonably necessary or incidental to the attainment of the objectives of the Conservancy;
- 3.1.5 development of a programme to enhance communication with neighbouring communities and to stimulate the economic and social advancement of such communities through durable linkages with the Conservancy's wildlife industry;
- 3.1.6 development of an effective anti-poaching system;
- 3.1.7 full liaison between elected representatives or employees of the Conservancy and relevant local authorities and government agencies (such as the Department of National Parks and Wildlife Management and the Zimbabwe Republic Police) and non-government agencies (such as funding bodies, conservation organizations, and community development organizations).
- 3.2 To assist where possible in the attainment of national objectives for wildlife conservation, notably the protection and breeding of endangered species, in the hope that these species shall become components of a sustainable land-use system; however, the conservation of endangered species within the Conservancy would not be necessarily dependent upon economic incentives, and conditions outlined in 3.1.2 above shall also apply to endangered species.
- 3.3 To promote bona fide research into ecological and economic aspects of natural resource management (both to guide the development of the Conservancy and to yield information of relevance to land-use in similar areas) and to develop monitoring systems appropriate to the needs of Conservancy management.

4. The GMP Structure

10-year Strategic and 2-year Action Plan Structure

This GMP has adopted the “Logical Framework Approach”, which has proven to be the most effective approach for development and conservation project planning. This approach ensures that explicit and logical linkages are established between all components of the GMP. This provides an efficient, accountable and logical rationale for planning and facilitates GMP implementation, monitoring and evaluation. This GMP incorporates both 10-year strategic objectives and 2-year action planning to ensure that the GMP retains a long-term strategic vision while providing the required flexibility and responsiveness to changing needs and situations. The 2-year action plan also lays out roles and responsibilities, identifies external support required and potential partners, and prioritizes actions for implementation. Each management action also includes specific activities to guide day-to-day implementation. Ultimately, there should be a strong link between the actions and activities prescribed by this GMP and the Annual Work Plans (AWPs) and associated budgets developed by management.

The GMP is structured by management sub-plans that break down overall management into coherent themes. This allocation of responsibility helps to build a sense of ownership and accountability for GMP implementation and success among all staff. The GMP and its sub-plans are supported by the Code of Ethics and numerous policies.

- Business Plan
- Operational Management Plan
- Ecological Management Plan
- Tourism Management Plan
- Natural Resource Protection Management Plan
- Stakeholder Engagement & Development Management Plan

The supportive documents underpinning these plans:

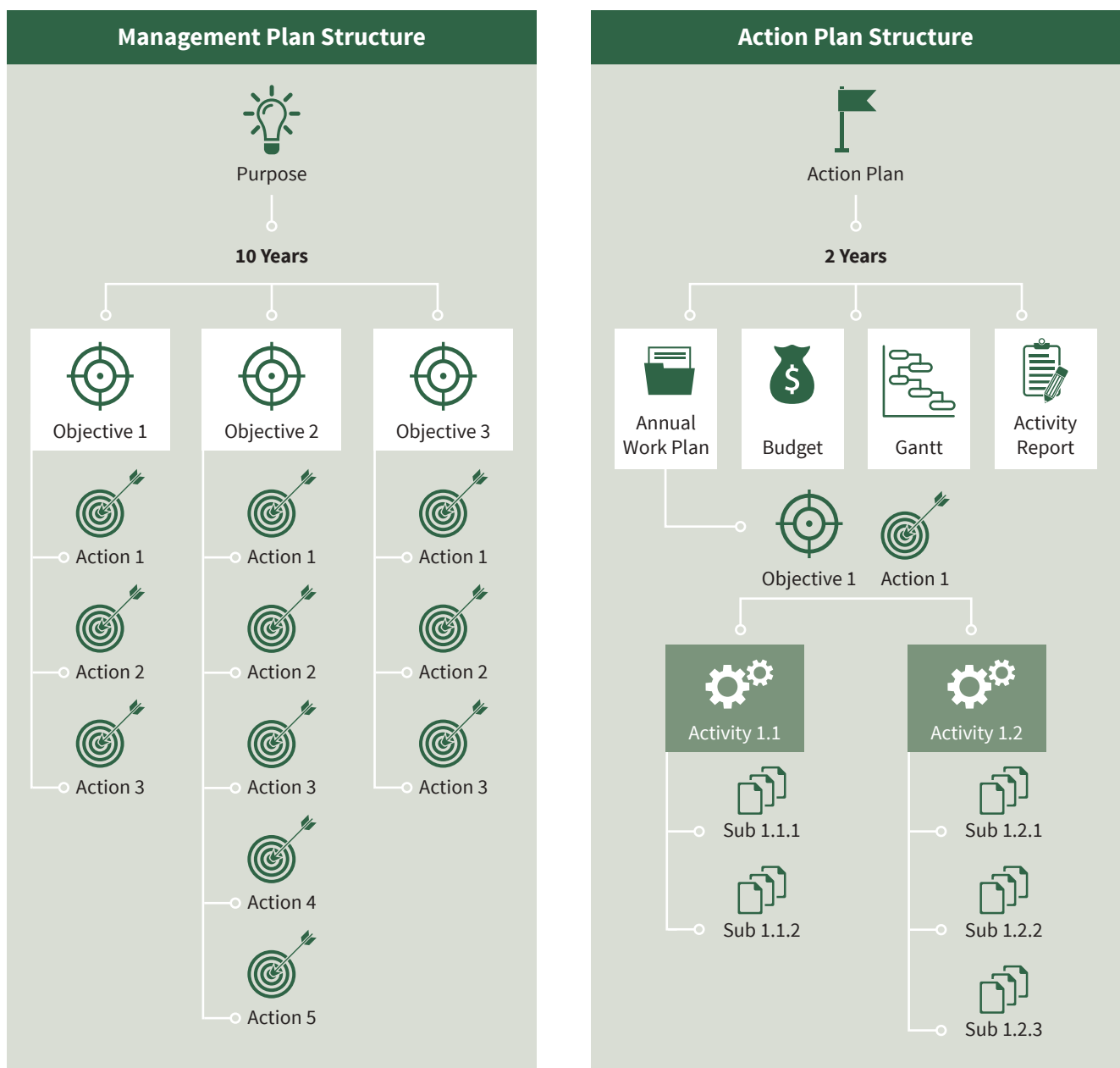


Figure 4: Tiered planning structure

Chapter 3:

Area Description



CHAPTER 3: AREA DESCRIPTION

1. History

Sango Wildlife Conservancy (or then Sango Ranch) was established in 1993 and expanded in 2002 with the purchase of the Chapungu wildlife area.

Evidence of human occupation during the Late Stone Age suggests that hunter-gatherer occupation was sparse until approximately 2000 years ago. The first report on hunter-gatherer peoples known as “Masarwas” in the southeastern Lowveld of Zimbabwe mentions that few of these “Masarwas” or Bushman still inhabited the Sabi districts in the early 1900s. However, ceramic evidence and radiocarbon dating from excavations at Dombozanga and Mtanye suggest that hunter-gatherers survived as distinct groups amongst farming communities as recent as the fifteenth century¹¹. The Umkondo mines were pegged in 1899 and can be viewed as the first European involvement in the area known as the SVC.

Despite early traders and hunters, human impact in the Savé Valley remained virtually nonexistent until the 1920s, with only the Umkondo mine and a few transport footpaths that tell a tale of the presence of man. In 1918, Lucas Bridges, accompanied by Ally Hammond, visited the Savé Valley intending to buy a large piece of land from the British South African Company. The establishment of Devuli Ranch in 1920 and the Angus and Humani Ranches shortly afterward marked an end to an era of complete wilderness and the start of considerable changes in the Savé River Valley. The infrastructure for cattle management on Devuli Ranch (Devuli Ranching Company) was created in the form of roads, water infrastructure, and fences. Apart from cattle ranching, crops such as maize and cotton were cultivated on the alluvium adjacent to the Savé River. By the late 1980s, the landowners in the Savé River Valley had realized that cattle production was losing its viability, the incidence of drought was escalating, and the importance of the wildlife industry was increasing. The productivity of the land was declining, and the soils were eroded. The formation of the Save Valley Conservancy came in June 1991 with the signing of the first constitution by the various members. However, the following 1991/1992 rainy season proved to be the driest season ever recorded. The drought proved to be a deciding factor for the landowners of the Savé Valley Conservancy to determine the future land use. At a workshop held in November 1992, a decision was taken that wildlife would be the primary land use option and that all cattle still owned within the conservancy would be disposed of. The formation of the SVC was a collaborative endeavour between the Department of National Parks and Wildlife Management, the World Wide Fund for Nature, the Beit Trust, and participating property owners.

2. Biophysical Environment

a. Relief and Topography

The Sabi-Limpopo depression occupies the southeastern corner of Zimbabwe and extends towards the highveld regions in the north and northwest (Michie & Hawkridge, 1961). The basin was formed by an initial sinking of the land between the southern and eastern Zimbabwean Highlands and the Soutpansberg in the Transvaal (now Limpopo province, South Africa). The subsequent erosion that followed gave rise to the major drainage channels, namely the Savé, Rundi, Odzi and Limpopo rivers and their tributaries.

The Savé Valley Conservancy is situated between southern latitudes 19.95° and 20.95° and eastern longitudes 31.79° and 32.37° and originally comprised 24 management units that together covered an area of 350 196 hectares. The Masvingo to Birchenough Bridge road and the Devure River form the northern

11 Joubert, CJ, 2013. A Natural Resource Assessment of Chapungu Ranch, Save Valley Conservancy, Zimbabwe

boundary of the SVC. The Mkwesine River and Mkwesine Sugar Estate mark the southern boundary. The Save River and the Gudo Communal Lands form the eastern boundary, and the Devure Resettlement Area and the Matsai Communal Lands mark the boundary to the west⁵. The properties, Musawezi, Chanurwe, Chapungu and Sabi Ranches, constitute the Sango Wildlife Conservancy.

b. Climate

Zimbabwe is classified into two climate zones: (a) a tropical climate zone that includes the low-lying areas bordering the Zambezi and the Limpopo valleys and (b) the sub-tropical zone that reigns over the uplands. The climate is continental as the nearest coastline is approximately 320 km from the eastern border of Zimbabwe (Vincent *et al.*, 1958a & b). According to the Köppen-Geiger climate map, the region of the Savé Valley Conservancy falls within the hot, arid steppe climate zone (BSH) (Ketteck *et al.*, 2006) which implies that the climate of the SVC is a dry climate or desert where the annual evaporation is higher than the precipitation, the annual rainfall is between 380 and 760 mm and the annual mean temperature is above 18°C.

Based on rainfall, the climate of a single year is divided into a dry season and a wet season, but when temperature is also taken into account, four seasons are distinguished (Vincent *et al.*, 1958a). These four seasons are the hot season, the main rainy season, the post-rainy season, and the cold season. Hin (2000) mentions that the highest temperature recorded over a 26-year period for the Middle Sabi River weather station was 38.6°C, and the lowest temperature was 7.4°C.

Hin (2000) reported that the Middle Save River Valley has a mean rainfall of 526 mm per annum measured over a 77-year period. However, the mean rainfall for the Middle Savé Valley is highly variable ($cv=30.2\%$)¹¹.

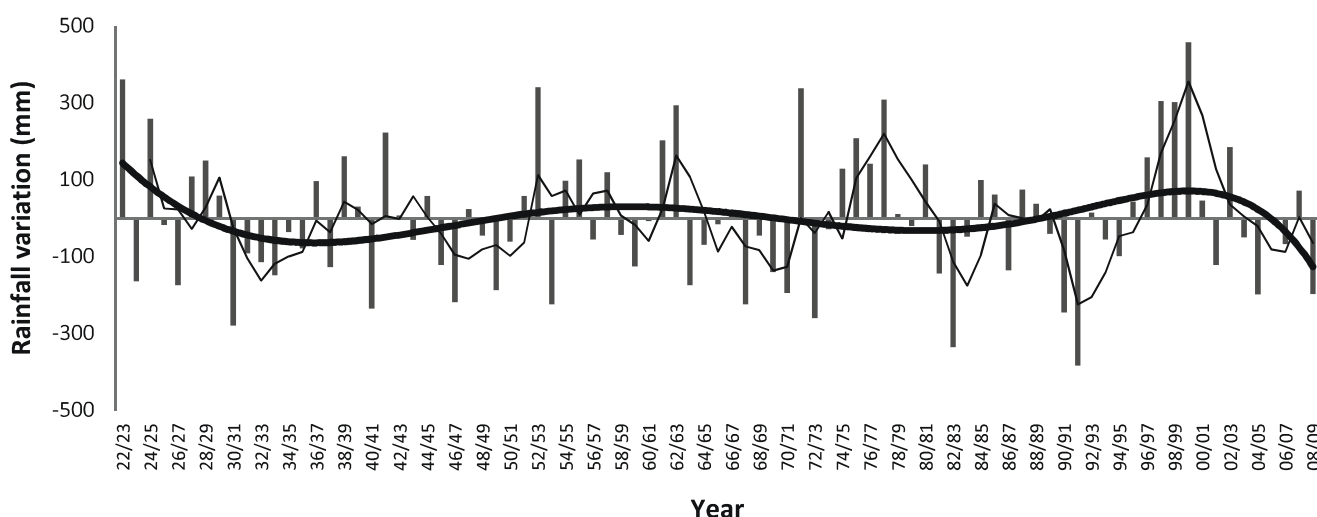


Figure 5: Rainfall oscillation cycles and 3-year moving average cycles for the period 1922 to 2009 (Devuli Headquarters rainfall station)

c. Hydrology and Drainage

The Savé, Mokore, and Msaize are the major drainage channels within the SWC, with the Saintdota, Nyarushanga, and Chinengo rivers forming secondary drainage channels (Figure 6). The Savé River has a catchment area that covers 84.550 km² and is the only perennial river. This formidable river is up to 1,8 km wide in places. Along the banks of the Savé River, alluvial deposits have formed levees and as a consequence, many tributaries such as the Msaize and Chenjera rivers are unable to reach the Savé River

directly resulting in large pan formations along the length of the Savé River of which the largest are the Chinga and Suni wetlands (Michie & Hawkrige, 1961; Broderick, 1997).

The Chenjera River and several smaller tributaries drain into the Chinga pans south of Chisangaurwe Hill. The Chinga pans formed as a result of an extended raised levee of fine-grained overbank alluvial deposits (Broderick, 1997). During high rainfall years, excess water from the Chinga pans flows along a series of smaller pans into Masiauta Pan which is situated on Sango. The Msaize River, which enters the Chapungu section on its northwestern boundary, has a catchment area of 368 km² (Broderick, 1997) and flows in a southeasterly direction until it leaves the property in the southeast. The Msaize River channel narrows down and at approximately 2.5 km from the Savé River splays into several streams that drain into the Masiauta, Mazewe and Chitoramazani pans. Excess water in the Masiauta, Mazewe and Chitoramazani pans spill into the Chi'honga River at approximately 1 km south of the end of the main Msaize River channel. The Chi'honga River originates on the Chapungu section and initially flows in a southeasterly direction parallel to the Msaize River. At approximately 1 km from the Save River and just after the major pans drain into the Chi'honga River, the river turns south and flows south further for approximately 6 km before it enters into the Save River (Broderick, 1997). The Chi'honga River is the only drainage channel, out of a potential eight drainage channels on Sango Wildlife Conservancy, that flows directly into the Save River from the west.

All along the length of the Save River, from the northern boundary with Msaize Ranch to the southern boundary with Sango Ranch, a raised levee series occurs, from 500 and 1000 m from the bank¹¹.

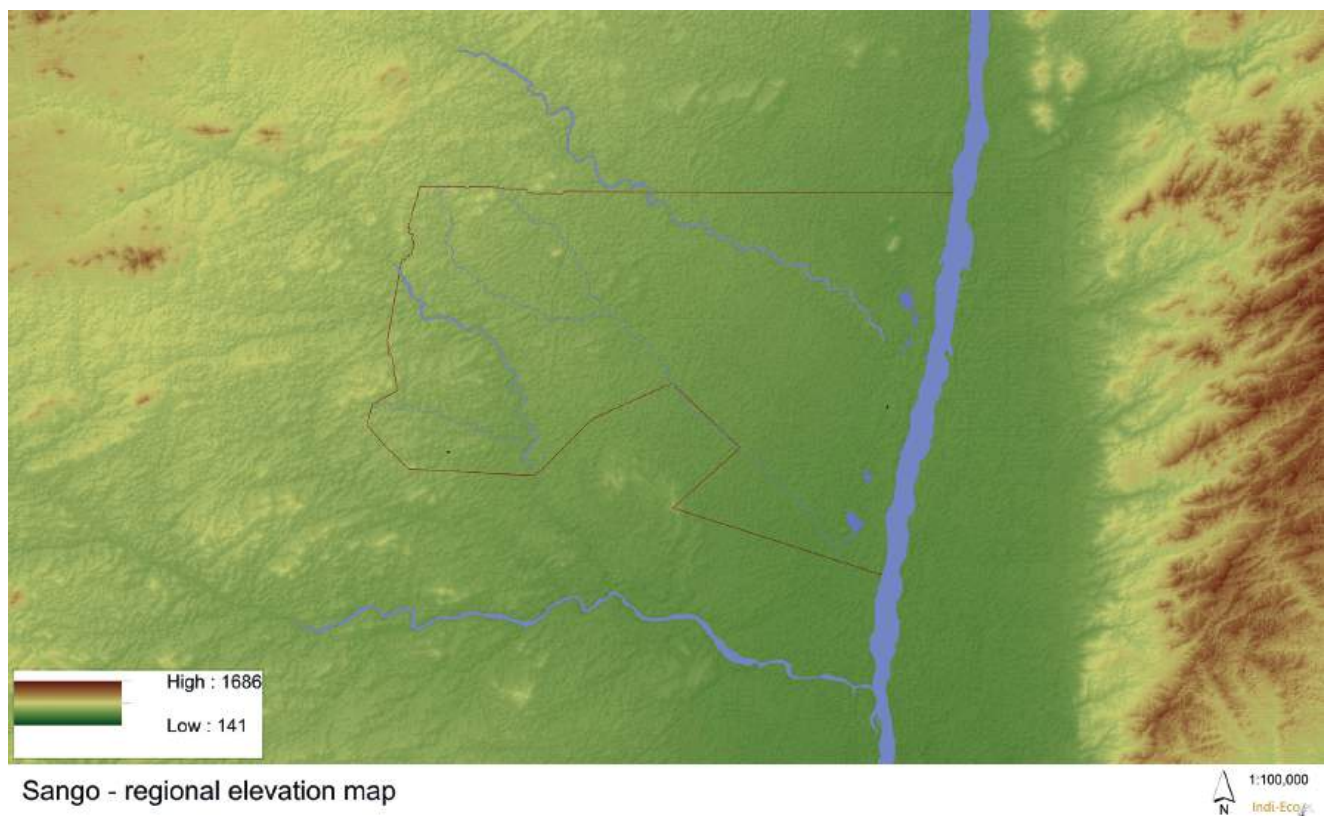


Figure 6: Drainage system of SWC and the larger landscape

d. Geology

Swift (1962) tabled the major geological formations that cover the Save Valley Conservancy as follows:

- the recent formations of calcareous tufa and alluvium,
- two ring complexes consisting of igneous rocks,

- the Karoo System consisting mainly of sandstone, intrusive igneous rocks (dolerite), and a second sandstone formation referred to as the Mapari Series,
- the Umkondo System includes basic lava, shale, arkose and limestone, and
- older Precambrian groups of paragneiss, gneiss, schist and granite.

Soils derived from the paragneisses, gneisses, and granites are mainly shallow, medium-grained siallitic loamy sands. Soils from the mafic paragneisses are more fertile and more heavily textured than the lighter, sandier soils of the gneisses and granites. Deep siallitic soils occur on the extensive mid-Save alluvial deposits. The soils found on the Karoo and Umkondo Systems are similar to those on the granites, although these soils usually contain less weatherable minerals and are very shallow in places (Du Toit & Price Waterhouse, 1994).

Hin (2000) identified all four of the soil orders described in Nyamapfene (1991) for Sango Wildlife Conservancy, i.e. Amorphic Order, Calcimorphic Order, Kaolinitic Order, and Natric Order⁵.

The soil types are from these orders and varied considerably in terms of depth, texture and chemical composition. Most soils were fertile and supported a herbaceous layer generally referred to as sweetveld¹¹.

e. Soils

The soils of Zimbabwe generally fall into two main categories. There are lightly textured sandy soils and there are medium to heavy textured loams and clays. Sandy soils with low fertility are derived either from acidic rocks such as granite or from sedimentary sandstones or paragneiss. The heavier loams and clays originate from basic igneous rocks such as dolerites or various other sedimentary sediments. Black vleis are widespread and possess high fertility. The soils of the Savé River Valley have been named Mopani soils due to their association with *Colophospermum mopane* (Ellis 1950). The Mopani soils on the west bank of the Savé River are of three types: alluvial soils derived from granite and the Umkondo System, fine, clinging Pennian soils derived from quartzites and sandstones, and black, heavy basalt soils. Mopani soils generally have a sandy eluviated A-horizon, which may vary from 25 mm to 150 mm or more in depth.

The soils of the SVC are strongly related to the underlying geology (Du Toit & Price Waterhouse 1994). Soils derived from the paragneisses, gneisses, and granites are mainly shallow, medium-grained siallitic loamy sands. Soils from the mafic paragneisses are more fertile and more heavily textured than the lighter, sandier soils of the gneisses and granites. Deep siallitic soils occur on the extensive mid-Save alluvial deposits. The soils found on the Karoo and Umkondo Systems are similar to those on the granites, although these soils usually contain less weatherable minerals and are very shallow in places (Du Toit & Price Waterhouse 1994). The three main soil orders covering the SVC are the Calcimorphic Order, Kaolinitic Order, and Halomorphpic Order (Thompson 1965).

On Sango, four soil orders have been described: Amorphic Order, Calcimorphic Order, Kaolinitic Order, and Natric Order (Hin 2000). These four soil orders give rise to seven Vegetation Management Units (Table 5). The soils of Sango are highly variable, ranging from deep, fertile, alkaline soils to shallow and infertile acidic soils. The fertile alkaline siallitic soils support a sweeter veld than the shallower, more leached acidic soils of the fersiallitic and Lithosol Groups. Most of the soil is vulnerable to erosion, especially where the vegetation is removed on steep slopes. Care should be taken when constructing gravel roads in the upland areas of the *Colophospermum mopane* Woodland and *Combretum apiculatum* Woodland Management Units. The midslope and footslope soils of the *Colophospermum mopane* Woodland Management Unit are also susceptible to erosion, especially in areas with a low ground cover and in saline-sodic areas.

Soil type can also have a great influence on man-made structures. Therefore, it must be considered during the planning and placing of buildings, dams, sewage pipes, water pipes and roads (Du Toit and van Rooyen 1995; Van Rooyen *et al.* 1996).

Table 5: The soil types of Sango associated with the Vegetation Management Units

Vegetation unit	Soil Order	Soil Group	pH	Texture	Soil depth (m)	Characteristics
<i>Combretum apiculatum</i> Woodland	Calcimorphic	Siallitic	Acidic	Sandy loam	> 1.2 m	High fertility.
	Kaolinitic	Fersiallitic	Acidic	Sandy loam	0.6 m	Low fertility, poor water holding capacity.
	Natric	Saline-sodic	Neutral	Clay loam	0.25 m	Sensitive area, high erosion risk.
	Amorphic	Lithosol	Acidic	Sandy loam		Acidic, leached, low fertility.
<i>Acacia (Valchellia) tortilis</i> Open Woodland	Calcimorphic	Siallitic	Acidic	Sandy loam	> 1.2 m	Sweetveld, highly palatable grass. Poor water holding capacity. Susceptible to sheet erosion.
	Natric	Saline-sodic				
<i>Kirkia acuminata</i> Woodland Unit	Calcimorphic	Siallitic	Neutral	Sandy loam	0.8m	Sweetveld, palatable grasses.
	Amorphic	Lithosol	Neutral	Sandy loam	0.25m	
<i>Colophospermum mopane</i> Woodland	Calcimorphic	Siallitic	Acidic	Sandy loam	> 1.2 m	High fertility, sheet erosion.
	Amorphic	Lithosol	Basic	Sandy clay	0.2m	Uplands & koppies, high erosion risk. Poor water holding capacity.
<i>Acacia (Valchellia) tortilis</i> Closed Woodland	Calcimorphic	Siallitic	Acidic	Sandy loam	> 1.2 m	Deep, moist fertile soils, herbaceous layer dominated by highly nutritious <i>Panicum maximum</i> .
<i>Diospiros mispiliiformes</i> Riverine	Calcimorphic	Siallitic	Acidic	Sandy loam	> 1.2 m	High fertility, high water holding capacity, palatable vegetation.
<i>Echinochloa colona</i> Wetland	Calcimorphic	Siallitic	Acidic	Sandy loam Clay loam	> 1.2 m	High fertility, high water holding capacity, highly palatable vegetation.

3. Biological Environment

a. Flora

The plant communities of SWC are the following (Figure 7)¹¹:

1. ***Hibiscus ovalifolius* – *Albizia brevifolia* Short Closed Woodland**
 - 1.1 *Barleria meyeriana* – *Phyllanthus pinnatus* Short Closed Woodland
 - 1.2 *Strychnos decussata* – *Grewia gracillima* Short Closed Woodland
2. ***Millettia usamarensis* subsp *australis* – *Brachiaria deflexa* Short Koppie Thicket**
3. ***Combretum apiculatum* – *Digitaria milanijana* Tall Closed Woodland**
 - 3.1 *Dalbergia melanoxylon* – *Combretum apiculatum* Closed Woodland
 - 3.2 *Commiphora africana* – *Digitaria milanijana* Tall Closed Woodland
 - 3.3 *Kirkia acuminata* – *Panicum maximum* Tall Closed Woodland
4. ***Kirkia acuminata* – *Colophospermum mopane* Short Closed Woodland**
 - 4.1 *Commiphora schimperi* – *Colophospermum mopane* Short Closed Woodland
 - 4.2 *Endostemon tenuiflorus* – *Grewia villosa* Short Closed Woodland
 - 4.3 *Terminalia prunioides* – *Kirkia acuminata* Closed Woodland
5. ***Seddera suffruticosa* – *Colophospermum mopane* Closed Woodland**
 - 5.1 *Indigofera praticola* – *Colophospermum mopane* Closed Woodland
 - 5.2 *Ximenia africana* – *Colophospermum mopane* Closed Woodland
 - 5.3 *Boscia foetida* – *Colophospermum mopane* Closed Woodland
 - 5.4 *Commiphora viminea* – *Colophospermum mopane* Closed Woodland
 - 5.5 *Ruellia cordata* – *Colophospermum mopane* Closed Woodland
6. ***Albizia anthelmintica* – *Acacia tortilis* Open Woodland**
 - 6.1 *Tephrosia purpurea* – *Albizia anthelmintica* Open Woodland
 - 6.2 *Tephrosia rhodesica* – *Acacia tortilis* Open Woodland
 - 6.3 *Lycium shawii* – *Diospyros quiloensis* Tall Open Woodland
7. ***Xanthocercis zambesiaca* – *Acacia tortilis* Closed Woodland**
8. ***Dalbergia arbutifolia* – *Diospyros mespiliformis* Tall Closed Riverine Forest**
 - 8.1 *Faidherbia albida* – *Acacia galpinii* Tall Closed Riverine Forest
 - 8.2 *Cardiogyne africana* – *Acacia schweinfurthii* Tall Closed Riverine Forest
 - 8.3 *Albizia glaberrima* – *Acacia schweinfurthii* High Closed Riverine Forest
9. ***Hyperbolius bowkeri* – *Sporobolus nitens* Open Grassland**
10. ***Echinochloa colona* – *Cyperus digitatus* Open Wetland**
 - 10.1 *Paspalidium obtusifolium* – *Echinochloa colona* Open Wetland
 - 10.2 *Acacia xanthophloea* – *Echinochloa colona* Tall Closed Woodland
11. ***Phragmites australis* – *Ficus capreifolia* Short Closed Thicket**

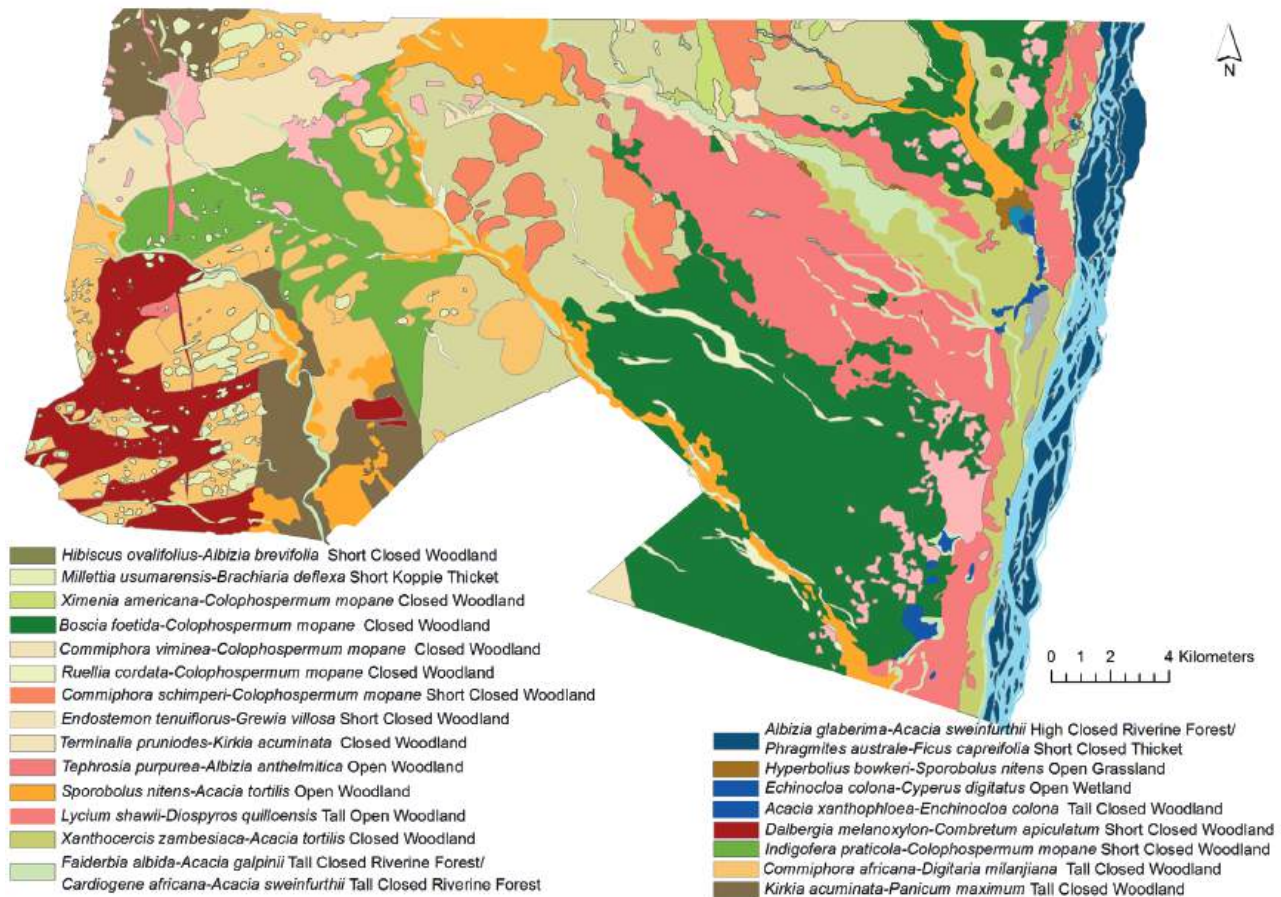


Figure 7: The vegetation communities of SWC

Seven management units have been determined (Figure 8):

1. *Combretum apiculatum* Woodland Unit
2. *Kirkia acuminata* Woodland Unit
3. *Colophospermum mopane* Closed Woodland Unit
4. *Acacia tortilis* Open Woodland Unit
5. *Xanthocercis zambesiaca* Closed Woodland Unit
6. *Diospyros mespiliformis* Riverine Unit
7. *Echinochloa colona* Wetland Unit

The identification of management units is essential in wildlife management as it forms the basis of resource management. Factors such as the size and type of available habitat, condition, and structure of vegetation, utilization of plant communities, distribution of watering points, and trends in veld condition can only be evaluated in a meaningful way if management units are known¹¹.

A list of flora species is available as Addendum 5.

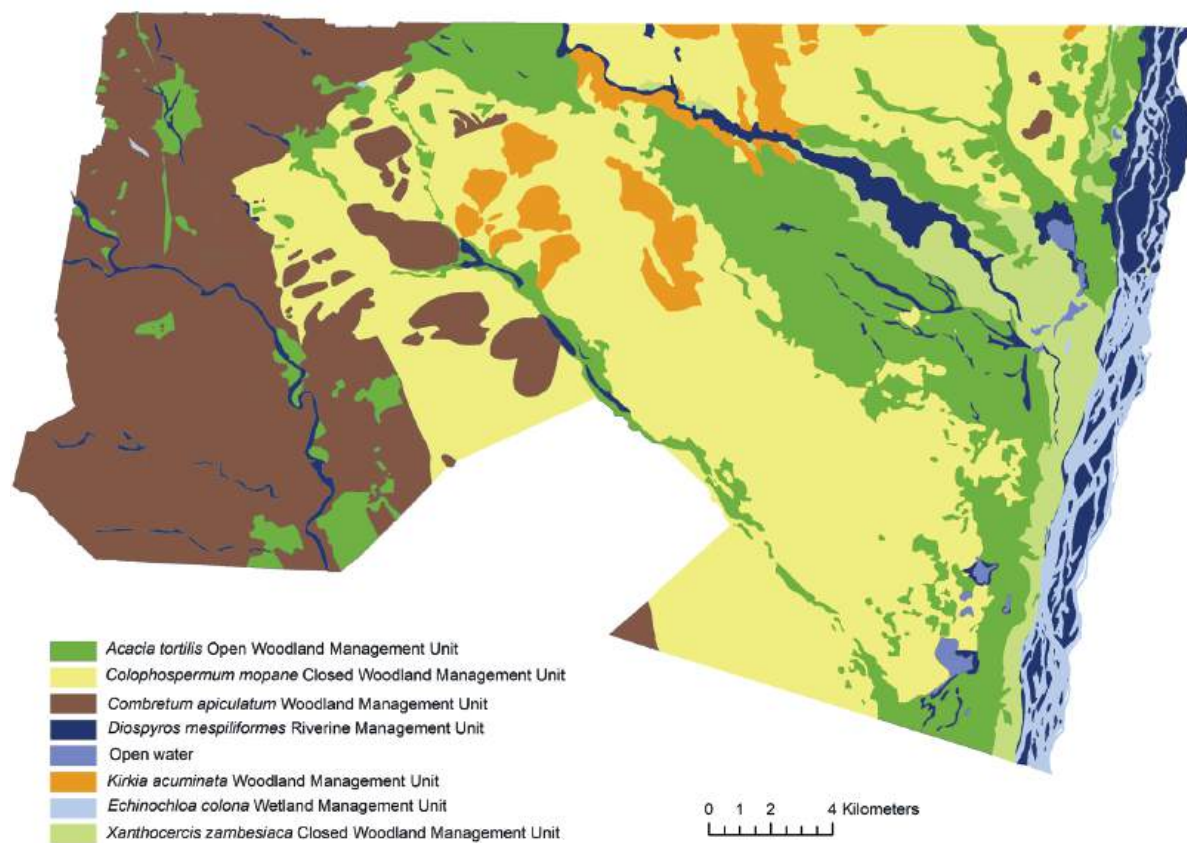


Figure 8: The identified vegetation management units as per the natural resource inventory

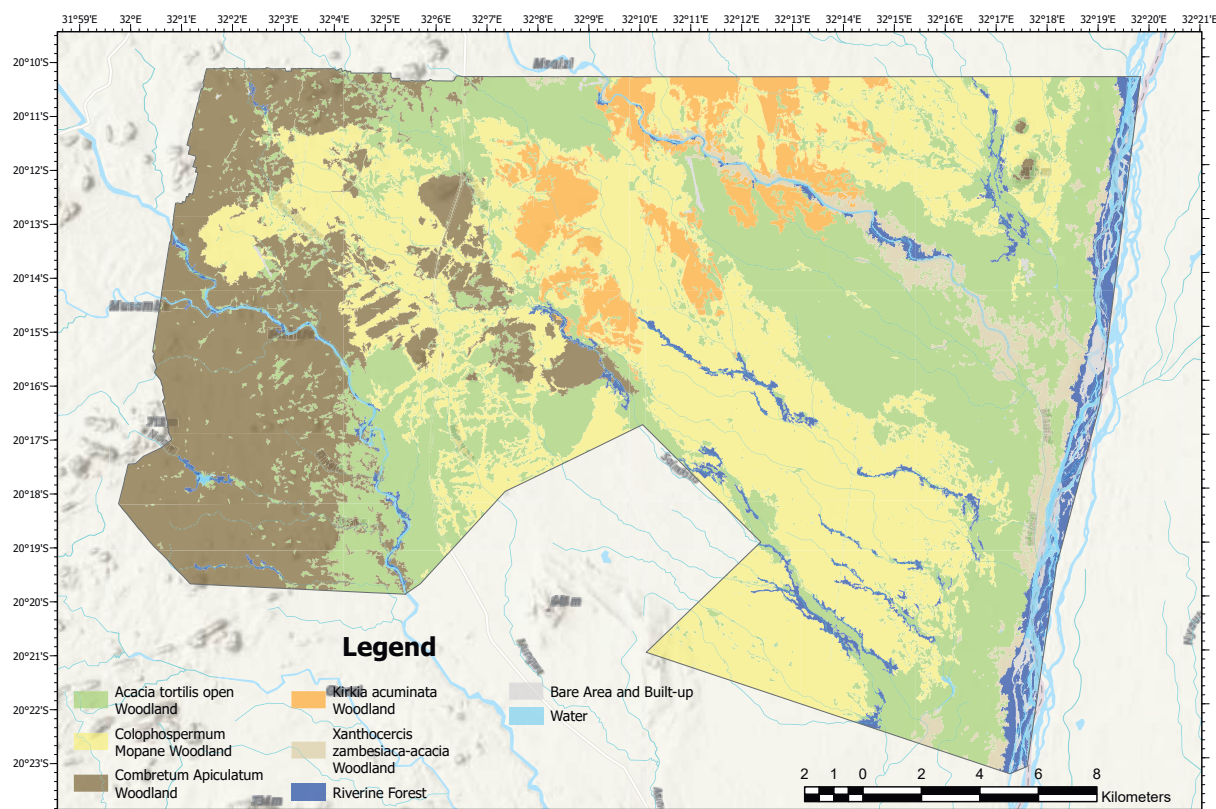


Figure 9: The identified management units (strata) as per remote sensing (RSS 2024)

b. Fauna

i. Mammals

The SWC is home to, amongst others, elephant, lion, buffalo, leopard and both black and white rhino species, as well as wild dog, cheetah, and hippo. It also boasts a full suite of the smaller predators and all the antelopes historically known to have inhabited the area.

Conservative population estimates are determined annually using ecological aerial surveys¹², road strip surveys, and spoor surveys¹³. The numbers presented are, therefore, the minimum observed for the major species. At least 52 mammal species have been identified at SWC. The information obtained from surveys, studies, and observations allows SWC to develop and implement sound ecological management strategies. The full mammal list is available as Addendum 2.

Table 6: Large animal species numbers as per surveys completed

Species	Sango Estimated Population (source 2023 aerial survey report and known groups)	SVC Population (source 2023 spoor count report)
HCV		
Black and white rhino	100+	
African wild dog		63
Cheetah	5	
African lion		102
Brown hyena		69 estimated
Spotted hyena		150
Leopard		106 estimated
Hooded & white-backed vulture nests	43 for all vultures	
Southern ground hornbill	8	
Other major species		
Buffalo	882	
Crocodile	52	
Eland	104	
Elephant, savanna/african	910	
Giraffe, southern	435	
Impala	4 264	
Kudu, southern	96	
Warthog	52	
Wildebeest, blue	210	
Zebra, Burchell's	427	

¹² SWC Ecological Aerial Survey Report 2023

¹³ Carnivore Densities In The Save Valley Conservancy 2022

Total aerial surveys were found to be the most practical, reliable, and repeatable method for determining population size and trends for the major large herbivore types on SWC. Animal species for which trend information was obtained by aerial surveys included black rhinoceros, African buffalo, Livingston's eland, African elephant, giraffe, impala, greater kudu, sable antelope, warthog, waterbuck, white rhinoceros, blue wildebeest, and Burchell's zebra. Investigations towards applicable new technology are ongoing.

Population estimates for these species were found to be sufficiently reliable for effective population management decisions.

The grid square method (ranger-based monitoring) was initially introduced to determine population estimates for all herbivore species, including the “cryptic” ones. “Cryptic” herbivore species for which population trend data were established using only the grid square method included bushbuck, bushpig, common duiker, hippopotamus, klipspringer, Sharpe's grysbok, and nyala. Earthranger has subsequently been implemented and will be further expanded under the EMP.

Road strip counts are conducted to estimate population size for smaller cryptic herbivores such as bushbuck and bushpig. The size of the large carnivore populations is estimated using the spoor-transect count, whilst the spoor-transect count and grid square method gave insight into carnivore population trends. Spoor transects, sighting and track frequencies, and relative density estimates are used to determine trends for cheetah, lion, leopard, spotted hyena, and wild dog. Wild dog is monitored in conjunction with AWCF.

ii. Birds

SWC's diverse landscape sets the stage for impressive avifauna, with more than 330 species recorded. Included are thirty-four species of vultures, hawks, and eagles, and eight species of owls. The list of bird species recorded is available as Addendum 3.

iii. Reptiles and Amphibians

The reptile and tortoises list contains 85 identified species, whilst 27 species of frogs and toads have been identified. The list of species is available as Addendum 4.

iv. Fish and water organisms

Sixteen large branchiopod species were found on Sango, comprising eight Anostraca, one Notostraca, two Laevicaudata, four Spinicaudata, and one cycletherid species, representing 33% of all species known in southern Africa. Overall, at least a third of all species known to occur in southern Africa could be found in this region. Since regional diversity and coexistence levels in the Savé Conservancy were high compared to other regions, this area is considered a hotspot of large branchiopod diversity. *Streptocephalus wirminghausi*, a species endemic to Zimbabwe, was also recorded¹⁴.

Nhiwatiwa et al, 2014 states “We consider certain large branchiopod species in the Savé Valley Conservancy to be of high conservation priority, based on the small number of their populations and/or IUCN Red Data criteria, including *Streptocephalus* (Parastreptocephalus) *zuluensis*, which is classified as ‘Endangered’ (IUCN 2013).”

14 Nhiwatiwa, A Waterkeyn, BJ Riddoch & L Brendonck (2014) A hotspot of large branchiopod diversity in south-eastern Zimbabwe, African Journal of Aquatic Science, 39:1, 57-65 [<http://dx.doi.org/10.2989/16085914.2014.892869>]

A new large branchiopod species was discovered at SWC and named after Sango. *Streptocephalus sangoensis* n. sp. was collected from ephemeral habitats along the Msaize and Save Rivers¹⁵. SAS5 analysis is used to determine and monitor river health in the Savé and Mokore rivers.



Figure 10: New species of branchiopod discovered at SWC

SASS-5 Scores				
	2002	2006	2008	2024
Save River				
Sampling Score	71.1	59.0	79.0	98.0
No. of families	14.7	10.0	14.0	12.0
ASPT	4.8	5.9	5.6	7.9
Air breathing score	16.7	12.0	n/r	26.6
Air breathing families	3.3	4.0	n/r	3.0
Condition	Seriously modified	Seriously modified	Seriously modified	Largely modified
Mokore River				
Sampling Score	114.3	88.0	103.0	113.0
No. of families	17.3	16.3	18.0	12.0
ASPT	6.6	5.3	5.7	9.2
Air breathing score	20.7	28.7	n/r	40.3
Air breathing families	4.3	6.0	n/r	4.3
Condition	Largely modified	Seriously modified	Largely modified	Largely modified

Figure 11: SASS-5 river health results

¹⁵ Nhiwatiwa T, Dalu T, Brendonck L, 2017. *Streptocephalus sangoensis* n.sp. (Anostraca, Streptocephalidae), a new large branchiopod species for Southern Africa.

Chapter 4:

Area Purpose, Exceptional Resource
Values and Significance



CHAPTER 4: AREA PURPOSE, EXCEPTIONAL RESOURCE VALUES AND SIGNIFICANCE

1. Area Purpose

The purpose of Sango Wildlife Conservancy is to conserve an area of wilderness and high biodiversity in the Savé River Valley, with large populations of elephants, lion, buffalo and rhino, for the benefit of present and future generations.

SWC also has several supplementary purposes, including conservation education, ecological research, cultural and historical site conservation, and the promotion of appropriate tourism.

2. Exceptional Resource Values

Exceptional resources and values, which together provide global significance, are those attributes that are part of the special character of Sango Wildlife Conservancy.

Table 7: Exceptional Resource Values of SWC

Natural	Ecosystem service	Cultural
Unique combinations of flora	Hydrology - wetland and river system (24km of Savé River) - acting as a biofilter, water flow regulation, supports biodiversity	Rock Art / Cultural paintings
High population densities of fauna. There are large populations of wildlife, including African buffalo, lion, and leopard, as well as endangered and rare species such as the black rhino and African wild dog	Carbon storage - calculated at 9.2 million tons of CO ₂ and verified by TUV NORD.	
River drainage and Wetlands, including a substantial ephemeral pan (Branchiopod hot spot)	Tourism - aesthetic value, inspiration, education and research, spiritual and religious experience, mental well-being and health, peace and stability	
Threatened birds - vultures & ground hornbills		

3. Significance

SWC is a pristine wilderness area in Zimbabwe where:

- It protects 24km of river system and riverine forest along the Savé River,
- It protects an area high in density and biodiversity of flora with 10 vegetation communities,
- It harbors significant populations of fauna, either by supporting its full life cycle, or a critical phase thereof,

- It is a habitat for endangered, threatened, and endemic species, which include among others the black rhino, the African wild dog, the southern pangolin, hippopotamus and cheetah, the *Vitellariopsis* plant and the *Streptocephalus wirminghausi* branchiopod,
- It is well connected with the greater landscape to enable ecosystem functioning,
- It aims to obtain internationally recognized certification standards,
- It acts as a source population for other depleted wildlife areas, and
- It supports the mixed Combretum and Mopane communities of the Zambezian Centre Regional Centre of Endemism.



Chapter 5:

Zonation



CHAPTER 5: ZONATION

1. Overview and Rationale

Zones are geographical areas within which similar land uses shall be practiced. Zoning is used to provide a framework for securing the protection of the area by reconciling the primary management aim of protecting SWC's resources whilst allowing limited visitor use of these resources, whether by employees or tourists.

Some factors were taken into account when defining zones, including:

- Protection of all identified ERV and sensitive habitats,
- Provides a diversity of appropriate visitor experience and visitor use levels within set limits.

2. Limits of Acceptable Use (LAU)

As conservation is the primary objective of the area, limits on use and development are required so that both management and tourists do not have an overly negative impact on the resources they are protecting or visiting. There is an overall principle to generate a low volume of high-paying tourists to minimize impact and maximize revenue generation. Each zone, therefore also has prescriptions of what type of activities are allowed and what type and extent of development can be permitted.

These are further discussed in the Tourism Management Plan.

3. Zone Descriptions

- a. Sustainable Use / Semi-Wilderness Zone:** 75% of the area allows for the sustainable, scientifically determined use of game to create revenue for the conservation area and its activities. Sango Ingwe Lodge is situated in this zone.
- b. Photographic / Eco-tourism Zone:** 25% of the area has been allocated to photographic tourism only, although the whole conservation area is available for game drives. Dadiso and Expedition camps are situated in this zone. No sustainable use activities are allowed in this zone. This area is also named the Dadiso Conservation Area.
- c. Development Zone:** The headquarters/operational center and security base area are situated in this zone, as well as the primary airfield and its facilities. The development zone is marked by a lot of activity towards the management of the conservation area.
- d. Special Protection Zone:** Consideration is given to develop an Intensive protection area for the support of injured/orphaned special endangered species which will have limited and exclusive visitor use. Vulnerable species considered for the Intensive Care Unit (ICU) complex are rhino, pangolin, and cheetah.

4. General Prescriptions and Codes of Conduct

The following General Prescriptions are applicable in all zones.

- No littering: all biodegradable and non-biodegradable litter items must be removed and disposed of at designated sites,
- ZPGA (Zimbabwe Professional Guides Association) rules apply to both Vehicle, Walking and Adventure safaris,
- 30-ton trucks to HQ only; other zones not accessible,
- 10-ton limit for trucks to access camps,
- Firewood collection is limited for employees and camp use - in all zones other than the special protection zone (ICU).

5. Zone Activities and Prescriptions

The zone activities and prescriptions are discussed in the Tourism Management Plan.

	Photographic	Sustainable Use	Development	Special Protection
Purpose	Conservation of the ERVs while allowing a wide variety of non-consumptive visitor activities	Conservation of ERVs and wilderness with limited visitor use and sustainable use activities	Conservation of the ERVs while allowing managerial and development activities	Intense protection of endangered species with limited and exclusive visitor use
Activities	Game viewing by vehicle; Walking safaris; Commercial filming; Research; Picnicing; Camping; Seasonal bush camp; Night drives Other adventure activities	Game viewing by vehicle; Walking safaris; Sustainable use safaris; Commercial filming; Research; Camping; Night drives	Warehouse, workshops, processing centers, data centers, vegetable gardens, management housing, and offices. Airfield and NRP base	Veterinary care of injured animals Filming
Access and Use Prescriptions	Access by guests and management - no offtake allowed	Access by guests and management - coordination between guides required	All-season access, trucks allowed	Limited access to authorized staff
Infrastructure Prescriptions	Limited impact game viewing roads; Tented camp/seasonal bush camp blending into nature; Picnic sites; Primary airfield	Limited impact game viewing roads; Lodge settled within boulders - 4 villas, 2 tents, main, staff buildings; Fly camps; Blinds; Hides Secondary airfield	Building materials must blend into the environment	
Limits of Acceptable Use	1 x 8-bed Dadiso camp plus staff tents with 1 six-bed tent; Expedition seasonal camp on the Msaize river with temporary tents and facilities; picnic sites; hides	1 x 16-20 bed lodge on the Mokore River. Potential for further development on Save River and Chisangaurwe Hill, hides, and picnic sites	No high-rise buildings	Boma with support buildings

Table 8: Zone activities and prescriptions

Chapter 6:

Governance



CHAPTER 6: GOVERNANCE

1. Mission & Engagement

Mission Statement

“To maintain and safeguard the natural biodiversity of the area through the application of sound and scientific ecological management practices, as well as to maximize the area’s economic viability, social upliftment, and development through the sustainable utilization of its natural resources on a consumptive and non-consumptive basis, subject to accepted business principles and without deriving said benefits at the expense of Sango’s fauna and flora.”

Level of Impact Focus

SWC considers our social and environmental impact as a primary measure of success for our business and prioritizes it even in cases where it may not drive profitability, as per the mission statement.

Social and Environmental Decision-Making

The Board of Directors and General Manager review the social and environmental performance of the company based on ecological and other monitoring reports, which allows for adaptive management.

Stakeholder Engagement

The SWC has been under its current private ownership for more than 30 years. The conservation area utilizes private financing for its implementation. All properties included in the CA are under the same ownership and are bordered to the north and south by similar conservation-focused areas. There are no communities directly within the CA as stakeholders other than those that are actively employed by the project.

The SWC implements an annual stakeholder management plan that targets key sectors, including those identified by neighbouring communities themselves as priorities. The SWC has a formal and regular process in place to gather information from community stakeholders via the liaison manager. It also works hand-in-hand with the SVC community liaison officer to broaden open channels of communication. As such, mechanisms have been created to engage with traditionally underrepresented stakeholder groups. Other interested stakeholders, such as the SVC members, ZimParks officials, NGOs, and employees, are consulted from time to time. The stakeholder map and improvement to this strategy are dealt with in the Stakeholder Management Plan.

Management of Material Social and Environmental Issues

Impact metrics that have been chosen based on the company’s mission are tracked through the various monitoring KPIs supporting each management plan. These are listed in each of the management plans.

2. Ethics & Transparency

Governance Structures

The conservation area is privately and directly owned by Wilfried Pabst (Zimbabwe) GmbH, with local ownership incorporated in the company Sango-Re-Mhuka (Pvt) Ltd, registered in Zimbabwe. The German company is further owned by Sango Wildlife AG and the Bateleur Foundation.

Table 9: Subsidiaries to Sango Re Mhuka (Pvt) Ltd

Operating Company	Land Holding Company
Pabst Holdings Zimbabwe (Pvt) Ltd	Chanurwe Ranch Properties (Pvt) Ltd
	Musawezi River Ranch (Pvt) Ltd
	Sabi River Ranch (Pvt) Ltd
	Lowveld Marketing Services (Pvt) Ltd (Chapungu)

A ratified Bilateral Investment Promotion and Protection Agreement (BIPPA) between the Republic of Zimbabwe and the Federal Republic of Germany Concerning the Encouragement and Reciprocal Protection of Investments further protects the land tenure of Sango Wildlife Conservancy¹⁶.

The opportunity to implement management activities in the area east of the Savé River is provided via a lease contract via Msaize (Shungu Safaris), who is the present leaseholder with Chipinge RDC. This contract is renewable at the end of 2026. Land ownership is under the Agricultural and Rural Development Authority (ARDA), and the agreement is recognized by communities and ZimParks.

Code of Ethics

- The company's Code of Ethics deals with:
- Ethical values
- Ethical decision-making
- Compliance with laws and regulations
- Sustainability
- Human rights
- Fair labour practices and working conditions
- Discrimination and harassment
- Health, Safety and Environment
- Anti-corruption
- Anti-fraud
- Gifts and hospitality

¹⁶ <https://www.zimfa.gov.zw/index.php/bippas/list-of-ratified-bippas>

- Security, protection and proper use of company assets
- Confidentiality, information security, proprietary information and intellectual property
- Bookkeeping, true reporting and financial integrity
- Privacy, personal data protection
- Whistleblower policy

The Code of Ethics is supported by various policies, including those related to

- Anti-bribery and anti-corruption
- Equality, diversity & inclusion
- Human Resource Manual

Management leads and supervises the adherence to responsible and legally correct behaviour of all SWC's activities.

Instruction on Code of Ethics

The Board of Directors is reminded of the Code at least annually, whilst managers are instructed on an ongoing basis where an incident may occur. Changes to the Code are communicated whenever it is updated.

Anti-Corruption Practices

The company's Code of Ethics, Anti-Bribery & Anti-Corruption Policy, and Employee Handbook guide on anti-corruption practices. Regular training will be provided, including the whistle-blowing policy. Anonymous mechanisms to report concerns and grievances are in place via the website's Contact Us page as well as via the workers' committee. The Grievance Mechanism Framework further guides on any stakeholder grievances.

Due to the nature of the business, which includes the protection of natural resources, an informant system with rewards exists for information given regarding the poaching of endangered species.

Monitoring Ethics and Corruption

Any grievances raised or whistle-blowing via the Sango-Wildlife Contact Us webpage are sent to the General Manager. The Executive Director, Mr W Pabst, Director Mr Goosen and the General Manager are available directly for any reporting on malpractices. As such, the responsibility for the monitoring has been clearly assigned, and resources are available.

Financial Reporting Standards

Local accounting standards are applied to the financial processes, following the national authority ZIMRA's regulations.

Reviewed / Audited Financials

Financial statements are compiled annually and are audited when required.

Financial Controls

Financial control activities are documented and, at a minimum, cover controls around cash disbursement, accounts receivable, accounts payable, and inventory management. The procurement policy further describes the Levels of Authority.

Company Transparency

The list of Board Members is publicly available on the Sango-Wildlife website, under the Privacy Policy. An executive summary of the General Management Plan will be available on the website, and consideration should be given to listing annual reports, which include the social and environmental performance/impact reports.

3. Governance Metrics

Governance Metrics should include any payments made to the Government, including various taxes, any donations made, and social development expenditures.

4. Mission Lock

The mission statement is supported by governance and legal structures that preserve the mission over time but do not require consideration of all the stakeholders in its decision-making.

The conservation area investment is registered under the Bilateral Investment Promotion and Protection Agreement (BIPPA) and remains constantly governed by those terms. This ensures long-term land tenure security to allow for social and environmental performance.

The SVC is a universitas with a constitution embracing strict environmental objectives.



Chapter 7:

Legislation & Use



CHAPTER 7: LEGISLATION & USE

1. Legislation

The national legal framework of the Government of the Republic of Zimbabwe applies to the project activities. All the legislation is available in the public domain.

Legislation and policy relevant to the project area

Parks and Wild Life Act Chapter 20:14: The act defines the conservation area as a sanctuary under the category of protected areas.

Zimbabwe Protected Places and Areas Act Chapter 11:12: This act refers mostly to practices with national parks and national reserves.

Natural Resources Act 20:13: The act was created to give general guidelines on the management of natural resources within Zimbabwe and refers to other acts to deal with specific respective resources.

National Museums and Monuments Act Chapter 25:11: The act guides actions on the history of Zimbabwe, including the rock art (relics) found in Zimbabwe, which has relevance to the project.

Environmental Management Act 20:27: This act was designed to oversee all other acts that refer to matters of the environment, such as the Natural Resources Act or the Mines and Minerals Act.

Police Act 11:10: This act under the Ministry of Home Affairs guides all law enforcement.

Protection of Wild Life (Indemnity) Act Chapter 20:15: This act clarifies the powers of rangers involved in wildlife protection.

Trapping of Animals (Control) Act Chapter 20:21: Guides which traps and nets are allowed under which conditions.

Companies and Other Entities Act Chapter 24:31: Guides business practices within Zimbabwe.

Labour Act Chapter 28:01 and relevant Statutory Instruments: Guides human resources practices within Zimbabwe, in conjunction with the Labour (National Employment Code of Conduct) Regulations, 2006, and various sector Statutory Instruments.

Legislation and policy relevant to communal areas outside of the area

The following legislation is relevant to the areas neighbouring the SWC, outside the conservation area, where community development and support activities are conducted.

The Forest Act and the Communal Lands Forest Produce Act 19:04 (CLFPA) are the principal pieces of legislation that govern the exploitation and protection of forest and woodland resources in Zimbabwe. The CLFPA was established in 1987 and gives inhabitants of communally-owned land (such as RDCs) the right to use the forest products. It is also explicitly referred to in the Rural District Council Act. Community members of respective Chiefdoms have customary land tenure through the land provisions of the Communal Land Act 20:04.

Forestry Act 19:05: This act was created specifically to deal with Zimbabwe's forests and was designed with the intention of preserving such forests, aiming to deal with issues such as sustainability, agriculture, and settlement and creating penalties for any breaches of its regulations. The act applies to forestry reserves only; it is, therefore, not of relevance to the conservation area.

Rural District Councils Act 29:13: This act contains information that states that the Rural District Councils have complete mandate over any proceedings that occur within their lands. The act is only of relevance to the project in terms of community development projects outside the boundaries of the conservation area.

Traditional Leaders Act 29:17: This act was implemented to ensure that the various indigenous tribes and leadership thereof maintained their cultural identity and authority. The act is only of relevance in terms of community development projects outside the boundaries of the project area.

Communal Land Act 20:04: This act was developed for the communal areas that are overseen by the Chiefs and Headmen; the act operates in conjunction with the Traditional Leaders Act and the Rural District Council Act.

Background to Zimbabwe's international participation

Zimbabwe was one of the first countries to sign and ratify the United Nations Framework Convention on Climate Change (UNFCCC) at the United Nations Conference on Environment and Development, held in Rio de Janeiro in June 1992. Zimbabwe acceded to the Kyoto Protocol on 28 September 2009. Zimbabwe is a member of the United Nations Convention on Biological Diversity (UNCBD). National Biodiversity Strategies and Action Plans (NBSAPs) are the principal instruments for implementing the convention at a national level. In line with this provision, Zimbabwe developed its first national biodiversity strategy and action plan (NBSAP) in 1998, which covered the period 2000-2010. In 2013, Zimbabwe became a member of UN_REDD and embarked on a process of reviewing the NBSAP and aligning it with the UNCBD Strategic Plan 2011-2020 and the Aichi Targets. Zimbabwe ratified the Paris Agreement in 2017 and published its first National Determined Contribution (NDC). Zimbabwe's Sixth National Report to the Convention of Biodiversity reports on the NBSAP. Zimbabwe's 2017 National Climate Policy aims to build a climate-resilient and low-carbon economy. In 2021, Zimbabwe developed a Low Emission Development Strategy (LEDS), which includes mitigation measures across all sectors of the economy. The National Development Strategy (NDS1) for the period 2021 - 2025 was published in November 2020. The crafting of Zimbabwe's revised Nationally Determined Contribution (NDC) was informed by the NDS1 2021-2025, which seeks to transform Zimbabwe into an upper-middle income economy by 2030.

2. Use

Sango Wildlife Conservancy forms part of the greater Savé Valley Conservancy and is situated almost in the centre on the north-south axis. Both entities offer tourism as a primary product but in an exclusive and guided manner. Public access to the Conservancy is limited to public transport, which may use the north-south dirt road connecting Birchenough Bridge with Mkwesine¹⁷.

Use of public road

The north-south road, also called the main road, is monitored via entry and exit boom gates manned with security personnel. Particulars of the vehicle and drivers are collected at both gates. Users of this road are well aware that it is a wildlife area, and this is supported by the entrance signs.

Use of the site as a private CA, is limited to tourism guests, contractors, employees and approved NGOs.

Access to the site is further discussed in the Tourism Management Plan.

¹⁷ Access_Use of Protected Area

Chapter 8:

Environmental Considerations



CHAPTER 8: ENVIRONMENTAL CONSIDERATIONS

Environmental Impact Area

Consideration for environmental impact from business activities includes:

- **Type of activities**
 - » Company-owned offices, home, and virtual offices,
 - » Workshops, vehicles, tourism facilities.
- **Environmental Business Model**
 - » The company's products/services or processes are structured to restore or preserve the environment through a product/service that preserves, conserves, and restores the environment or resources.
- **Facility Environmental Efficiency**
 - » includes energy-saving strategies such as energy use monitoring, energy-saving appliances and lighting, and renewable energy use,
 - » include water use monitoring, and
 - » new construction sites are chosen based on sustainability considerations,
 - » operational emissions are determined annually with reduction targets.
- **Virtual Office Stewardship**
 - » A policy is in place for the safe disposal of e-waste and other hazardous materials purchased for employee home offices.
- **Environmental Management System**
 - » A policy documenting our company's commitment to the environment, and
 - » ecological management plan including an extensive monitoring framework.

Mitigation Measures for Potential Negative Environmental Impacts

A few mitigation measures are mentioned below:

- a. siting of septic tanks to avoid river systems,
- b. siting of roads considers soil and vegetation type to avoid erosion, and the
- c. siting of wildlife watering points considers soil and vegetation type to avoid erosion and risk to the natural resource.

Chapter 9:

Management Action Plans



CHAPTER 9: MANAGEMENT ACTION PLANS

1. Levels of authority

1. International Boards of Directors
2. Board of Directors for Sango Re Mhuka (Pvt) Ltd
3. Board of Directors for Pabst Holdings Zimbabwe (Pvt) Ltd
4. General Manager

2. Capacity for implementation

The organizational chart and human resource assessment are included in the Operational Management Plan. The area management and employees are sufficiently skilled to implement the GMP and its sub-plans.

The management team is supported by a consultant Land Asset Management (LAM), which has a long-term contractual agreement with SWC and includes individuals with significant experience in project implementation, biodiversity, community development, carbon storage and emission accounting, and reporting.

Furthermore, it has several technical advisors and outsourced service providers to further complement the team.



3. Action Plans

The various management action plans are included below and in each management sub-plan.

Operational Management Plan

Table 10 (07): Action plan for the 2024-2025 cycle

#	Objectives and 2-year management actions	Responsibility	2024	2025
1	Infrastructure and equipment developed and maintained			
1.1	Construct and maintain buildings, housing and water provision	OMP	X	X
1.2	Plan, construct and maintain management and game viewing road network	OMP, EMP	X	X
1.3	Re-construction of artificial water points	OMP, EMP		X
1.4	Maintain and improve airstrips	OMP	X	X
1.5	Procure and maintain vehicles, motorbikes, trucks, plant, aircraft	OMP	X	X
1.6	Procure and maintain sufficient field equipment	OMP, NRP-MP	X	X
1.7	Procure and maintain sufficient office equipment	OMP	X	X
1.8	Procure and maintain the radio and other communication	OMP	X	X
1.9	Procure, maintain, and install fire prevention and fighting equipment	OMP, EMP	X	X
1.10	Manage waste disposal	OMP, EMP	X	X
1.11	Procure and maintain sufficient power/solar systems to be energy-efficient	OMP	X	X
2	Modern, efficient, and adaptive management and administration operational			
2.1	Human resource structures and capacity in place for GMP implementation			
2.1.1	Review and revise staffing structure for GMP implementation	OMP - GM	X	X
2.1.2	Assess, develop and implement strategy to fill gaps	OMP - GM	X	X
2.1.3	Improve and maintain good employee benefits/staff welfare	OMP	X	X
2.1.4	Implement transparent and effective human resource management	OMP	X	X
2.1.5	Implement best practice health and safety standards	OMP	X	X
2.1.6	Develop a gender policy (diversity)	OMP	X	
2.1.7	Employee training and career development	OMP	X	X
2.2	Effective and secure administration systems operational			
2.2.1	Ensure regulations, policies, and SOPs are up to date	OMP, all	X	X
2.2.2	Implement and maintain an effective store system, including procurement principles	OMP	X	
2.2.3	Maintain regular and ad hoc senior management meetings, including partners where needed	OMP - GM	X	X
2.2.4	Improved financial and management accountability	OMP - GM	X	X
2.2.5	Internal reporting systems improved	OMP	X	X
3	Emission management developed and maintained			
3.1	Establishment of inventory boundaries - organizational and operational	OMP, LAM	X	
3.2	Identification and calculation of GHG emissions	OMP, LAM	X	X
3.3	Reporting, quality management, and verification of GHG emissions	OMP, LAM		X
3.4	Emission reduction strategies developed	OMP, LAM		X

Tourism Action Plan

Table 11 (T2): Action Plan for the 2024-2025 cycle

#	Objectives and 2-year management actions	Responsibility	2024	2025
1	Objective 1: Tourism facilities and activities developed			
1.1	Permitted tourism activities further defined	TMP		X
1.2	Zone development plan compiled	TMP		X
1.3	Accommodation sites and facilities developed and maintained	TMP, OMP	X	X
1.4	Biodiversity, cultural and community projects included in safari strategy & communication	TMP, EMP, SMP		X
1.5	Road network suitable	TMP, OMP	X	X
1.6	Scenic points such as waterholes and viewpoints suitable	TMP, EMP, OMP		X
1.7	Establishment of picnic sites	TMP, EMP, OMP		X
1.8	Airstrips suitable	TMP, OMP	X	X
1.9	Catering and guest services of top quality standard	TMP	X	X
1.10	In-house and freelance guides scheduled and managed	TMP	X	X
2	Objective 2: Management and administration of tourism improved (sustainable use, photographic)			
2.1	Tourism statistics collected and analyzed	TMP	X	X
2.2	Booking and feedback systems appropriate	TMP	X	X
2.3	The impact of tourism is monitored and adaptively managed	TMP, EMP		X
2.4	Visitor behaviour is appropriate	TMP	X	X
2.5	Waste is dealt with appropriately and monitored	TMP, OMP		X
2.6	Wood and water systems are maintained and monitored	TMP, OMP		X
2.7	Supplier/procurement and inventory system in place	TMP, OMP	X	X
2.8	Offtake quotas administered	TMP, EMP	X	X
2.9	Manage emissions from tourism operations	TMP, OMP		X
3	Objective 3: Sango brand promoted			
3.1	Visitor information material available	TMP		X
3.2	Sango brand material for sale	TMP		X

Natural Resource Protection Action Plan

Table 12 (S3): Two-year action plan cycle

#	Objectives and 2-year management actions	Responsibility	2024	2025
1	Ground field patrols and aerial surveillance enhanced			
1.1	Standardise and improve patrol effort and reach, including biodiversity monitoring	NRP-MP, EMP	X	X
1.2	Maintain and improve patrol staff aptitude and skills	NRP-MP	X	X
1.3	Maintain and improve patrol equipment and rations	NRP-MP, OMP	X	X
1.4	Maintain and improve patrol staff standards	NRP-MP	X	X
1.5	Maintain and improve patrol staff job satisfaction	NRP-MP	X	X
1.6	Aerial surveillance maintained	NRP-MP	X	X
1.7	Drone surveillance maintained	NRP-MP		X
2	Natural resource protection management improved			
2.1	Marketing, fundraising, and grant reporting	NRP-MP	X	X
2.2	Improve the capacity and operations of NRP managers	NRP-MP	X	X
2.3	Maintain and improve NRP operations	NRP-MP	X	X
2.4	Improve inter-agency cooperation	NRP-MP	X	X
2.5	Law enforcement systems and infrastructure	NRP-MP, OMP	X	X
2.6	Maintain and enhance NRP monitoring	NRP-MP	X	X
3	Intelligence and investigations systems strengthened			
3.1	Improve and maintain intelligence and investigations staff complement, staff skill levels, and resources available	NRP-MP	X	X
3.2	Maintain Intelligence and Investigations Unit (IIU) equipment and resources	NRP-MP	X	X
3.3	Maintain intelligence Information collection systems	NRP-MP	X	X
3.4	Improve intelligence information management	NRP-MP	X	X
3.5	Improve evidence handling and management	NRP-MP	X	X
3.6	Improve inter-agency cooperation, including collaborative actions with communities	NRP-MP	X	X
3.7	Improve procedures and prosecution rates	NRP-MP	X	X
4	The canine unit improved and maintained			
4.1	Develop canine unit staff capacity	NRP-MP		X
4.2	Maintain the number of dogs in the unit and build dogs' skills	NRP-MP		X
4.3	Improve inter-agency cooperation for dog unit operations	NRP-MP	X	X

Ecological Action Plan

Table 13 (E5): Two-year action plan

#	Objectives and 2-year management actions	Responsibility	2024	2025
1	Biodiversity and ecological processes of Sango conserved through an adaptive management approach			
1.1	Vegetation layers are monitored effectively	EMP		
1.1.1	Herbaceous layer		X	X
1.1.2	Woody layer			
1.1.3	Climate		X	X
1.2	Animal populations managed effectively	EMP		
1.2.1	Carrying capacity/stocking density		X	X
1.2.2	Elephant impact		X	X
1.2.3	Translocation data monitoring	EMP		X
1.3	The threshold of potential concern developed	EMP		
1.3.1	Prioritisation of categories and identification of measurable components		X	
1.3.2	Amend monitoring plan to encase the TPCs			X
1.4	Conservation of rivers and wetlands improved	EMP	X	X
1.4.1	River health monitoring program improved			
1.4.2	Amphibian monitoring implemented			
1.4.3	African water bird census			
1.4.4	Control tourism and road development on wetlands			
1.4.5	Develop a picture of what is happening in the catchment/outside the reserve			
1.4.6	Submit the report on the state of rivers and wetlands			
1.5	Threatened birds - vultures, eagles, southern ground hornbill	EMP	X	X
1.5.1	Nest survey			
1.5.2	Drone river nest transects			
1.5.3	Earthranger nest reports verify			
1.5.4	Ground hornbill data sharing			
1.5.5	Annual threatened bird report			
2	Human-associated threats to the Conservation Targets mitigated through active management			
2.1	Update and implement the fire management plan	EMP/OMP		
2.1.1	Fire monitoring applied		X	X
2.1.2	Fire prevention and control measures implemented		X	X
2.1.3	Collaboration with neighbors and communities		X	X
2.2	Develop and implement a wildlife disease/injury management policy and action plan	EMP/OMP	X	X
2.3	Establish the level of threat from alien species and action plan	EMP/OMP		X
2.3.1	Extend of problem assessed			
2.3.2	Exotic species strategy developed			
2.3.3	Control measures implemented			
2.4	Manage surface water supply	EMP/OMP/TMP	X	X
2.4.1	Monitoring of natural pans to determine natural water availability during the dry season			

2.4.3	Monitoring of overall water usage & quality	EMP/OMP		
2.5	Management of soil erosion	EMP/OMP	X	X
2.5.1	Rehabilitate erosions sites due to human intervention			
2.6	Provide sustainable use data and proposals annually	EMP/TMP	X	X
2.7	Human impact on the reserve mitigated	EMP/TMP		
2.7.1	Reduce the impact of tourists			
2.8	Waste disposal	EMP/TMP/OMP		
2.8.1	Facilities			
2.8.2	Processing			
3	Human-associated threats to the Conservation Targets mitigated through active management			
3.1	Develop, update, and implement the Rhino Management Plan as part of the larger ecosystem approach	EMP/NRP-MP/ SVC/ ZPWMA	X	X
3.2	Develop and implement the Elephant Management Plan as part of the larger ecosystem approach	EMP/ SVC/ ZPWMA	X	X
3.3	Review National Species Action Plans for SWC-specific actions and implementation	EMP	X	X
3.4	Management strategies for species of special concern	EMP		X
3.5	Vitellariopsis protection strategy developed	EMP		
3.6	Monitoring of the Sango shrimp - tbc	EMP		
4	Management-oriented monitoring and research carried out			
4.1	Develop, document, and maintain an Ecological and threat Monitoring Framework	EMP	X	X
4.1.1	Assess goals and methodology			
4.2	Implement EMF and ensure reports are provided to management	EMP	X	X
4.2.1	Data collection, storage, and backup storage improved			
4.2.2	Staff skills improved			
4.3	Support, maintain, and further develop scout-based monitoring	EMP, NRP-MP	X	X
4.4	Develop a list of priority research topics for management	EMP	X	X
4.4.1	Update and share research priorities			
4.4.2	Electronic bibliography improved			X
4.5	Promote and facilitate research by national and international institutions and persons	EMP	X	X
4.5.1	Collaboration expanded and documented prior to action			
4.6	Manage ecology scouts effectively	EMP	X	X
4.7	Provide guides with the latest news/results	EMP	X	X
5	Protection of Cultural Values			
5.1	Develop a register of rock art and other cultural relics	EMP	X	X
5.1.1	Compile historical and current data			X
5.2	Ensure registration of selected relics with National Museum	EMP	X	
5.3	Compile information material for guides, tourism staff, and other interested parties	EMP		X
5.4	Develop a monitoring plan for rock art	EMP	X	
6	Transparent management of local sustainable use center			
6.1	Ensure hygienic environment		X	X
6.2	Reporting		X	X

Stakeholder Engagement Action Plan

Table 14 (S4): 2-year action items

#	Objectives and 2-year management actions	Responsibility	2024	2025
1	Coordination of stakeholders to improve management knowledge and capabilities			
1.1	Identify stakeholders and categories	GM, SMP	X	X
1.2	Maintain SWC Stakeholder list and maintain good communication	GM, SMP, all		X
1.3	Communication channels with communities formalised	SMP		X
1.4	Improve communications with RDC/ZPWMA/Veterinary/JOC/Police Unit	GM, SMP, NRP-MP	X	X
1.5	Improve communications with partner agencies	GM	X	X
1.6	Expand information on the website	GM		X
2	Community involvement and participation in well-being projects developed			
2.1	Identify and quantify current and potential direct and indirect benefits	SMP		X
2.2	Implement and maintain mechanisms to raise funds from visitors and other donors	GM		X
2.3	Community access to non-timber resources reviewed	GM, SMP, EMP		X
2.4	Tourism market access for curios made in surrounding communities	SMP, TMP	X	X
2.5	Employment of local community members	SMP, OMP	X	X
2.6	Provide continued support for the vegetable gardens in Village 26, Mafuane	SMP, OMP	X	X
2.7	Maintain soccer fields and playgrounds in communities	SMP, OMP	X	X
2.8	Grade community access roads	SMP, OMP	X	X
3	Human- wildlife conflict understood and mitigated			
3.1	Collect information on types, extent, specific areas and cost of HWC	SMP, EMP	X	X
3.2	Develop, implement, review, and refine a HWC management and mitigation strategy	SMP		X
3.3	Problem animal mitigation - reactive response to reports	SMP	X	X
3.4	Research into alternative methodologies - proactive	SMP		X
4	Environmental education programme focussed, expanded, and maintained			
4.1	Develop a clear environmental education strategy based on the current programme evaluation	GM, SMP	X	X
4.2	Implement a revised environmental education strategy	SMP		X
5	Clear grievance and feedback process available to stakeholders			
5.1	Develop and finalize the grievance process	GM	X	X
5.2	Implement and share the grievance process	SMP		X
5.3	Develop a monitoring system for grievance reporting	GM, SMP		X
6	Development and outreach strategies that reduce threats facilitated in adjacent communities			
6.1	Conservation-compatible livelihood diversification and agricultural technologies promoted			
6.1.1	Promote and develop market chains for small and medium enterprises	GM, SMP, TMP	X	X
6.1.2	Promote conservation-compatible small business development	OMP, TMP, SMP	X	X
6.1.3	Support the introduction and expansion of conservation farming, crop varieties, etc.	GM, SMP		X
6.2	Population, health, and environment linkages understood and health improvements facilitated			
6.2.1	Increase logistical and material support for health initiatives	SMP, OMP	X	X
6.3	Health, environmental, and clean water linkages understood and water conservation facilitated			
6.3.1	Provision of clean drinking water via boreholes/wells	SMP, OMP	X	X
6.3.2	Increase logistical and material support for water storage	SMP, OMP	X	X

Chapter 10:

Monitoring and Evaluation



CHAPTER 10: MONITORING AND EVALUATION

1. Corporate data sets

Principles

Corporate data systems are taken to mean data collected in the course of official duties, as well as the analytical programs operating on this data and the results thereof. These systems should each be formally placed in the care of the relevant person(s) who must take prescribed steps to maximize as far as it is feasible their security, utility/compatibility, and productive usage. Each data set should carry adequate and regular documentation which includes an outline of all processes acting on the data (**Standard Operating Procedures**). In joint projects, data and system ownership must be defined, and sharing policies must be developed in the best interest of the company. Data sets and their related analytical systems must be seen as scientific tools for achieving the organization’s goal and mission and not as an end in themselves. Data system custodianship and sharing policies should be realistic, and should also take into account the aspirations and enormous individual efforts of participants.

Policies

1. All corporate data systems should be assigned to a custodian, which can change from time to time where necessary. Regular long-term backups need to be made.
2. The responsibility for the collation of reports rests with each manager. The IT clerk also has an advisory function in terms of optimizing the structure, documentation, storage, optimal integration, and usage of data sets. A regular listing of all data systems with contact addresses of the custodians should be centrally compiled. Passwords to systems should be shared with the GM / Directors for safekeeping.
3. Protocol for data sharing with third parties should be determined from time to time, options being considered for different categories, such as online data depositories (Google Drive, OneDrive, Earthranger, Wildbook, etc.) or stakeholders for whom a Non-Disclosure Agreement may be signed.
4. From time to time, the collection of data sets must be evaluated in terms of the original objectives they were meant to serve and the feedback loop used to apply adaptive management.
5. The ownership of all data collected during the period of employment is, unless otherwise agreed upon, vested in the Board (ref HR Handbook).

2. Adaptive Management and QA&QC

The continuous revaluation of management processes and the establishment of a sound monitoring system that produces credible data for the KPIs is at the core of an adaptive management system. As a base, a stronger linkage of Quality Assurance (QA) and Quality Control (QC) measures in phases of the adaptive management system is recommended.

Quality Assurance (QA) and Quality Control (QC) are critical to ensure that the data used for decision-making is reliable, accurate, and actionable—which is essential when management actions are adjusted based on performance trends or threat indicators.

Table 15: Adaptive Management phases and QA/QC

Adaptive Management Phase	QA/QC Contribution
1. Planning and Goal Setting	QA ensures indicators are clearly defined and measurable from the outset- SOPs for KPI monitoring are developed and validated.

Adaptive Management Phase	QA/QC Contribution
2. Implementation and Data Collection	QA ensures consistent methods and trained personnel. QC begins with early-stage validation and error flagging during collection.
3. Review and Analysis	QC ensures that analysis is based on verified, clean data. Confidence in findings enables stronger justification for adaptive changes.
4. Adjustment and Learning	QA/QC findings inform improvements in future monitoring design. Reduces the risk of making wrong decisions due to faulty data. Improves institutional memory by documenting data quality issues.

3. Indicators

- Monitoring is the orderly collecting, analyzing, and interpreting of all data to determine whether the management aims have been achieved or are in the process of being achieved and whether management practices must be adapted.
- Adaptive management needs to be evidence-based, which includes reports, activity reports, and/or KPIs.
- Monitoring applies to all management plans.

Development of Strategic Indicators

Long-term lead indicators supporting strategic goals will be developed based on the monitoring processes. These strategic indicators will comprise overall targets linked to the SDGs and goals of CBD, but also departmental strategic targets that use the metrics of the operational indicators to estimate successful implementation of the GMP. The action plans outline activities in the SWC departments and the success could be estimated through the monitoring results of the KPIs.

The KPIs in the context of Sango are specific, measurable values used to track and assess the performance of various ecological, tourism, operational, natural resource protection and community engagement objectives. They should help the management board determine whether Sango is meeting its strategic goals and provide an evidence base for adaptive management. There has been significant effort made to come up with a comprehensive list of concrete operational indicators and corresponding metrics which will overtime provide the base for the stronger alignment of refined indicators with the strategic management targets of Sango.

The monitoring of the Exceptional Resource Values and its conservation targets, forms an integral part of the active adaptive management process. It provides a basis not only for scientific decision-making but also for maximizing the understanding of changes. Thresholds of potential concern (TPCs) are a set of operational goals that together define the spatial and temporal variation in ecological conditions for which an ecosystem is managed. The thresholds represent the upper and lower limits along a continuum of change in selected environmental indicators and define the summary of desired conditions within which the ecosystem may vary. When the upper or lower thresholds are reached or will soon be reached, an assessment of the cause of change is implemented. This assessment provides the basis for determining whether management action is warranted and/or whether the TPCs should be adjusted in light of new knowledge and/or understanding. The thresholds for the conservation targets have been identified and are outlined in the NECO table (Natural, ecosystem service, and cultural value outcomes) and need to be maintained (Addendum 6). The identification of measurable components of the system needs to be completed as practical, cost-effective, and meaningful.

Operational Indicators

A comprehensive indicator monitoring framework is included in each sub-plan, including the stated

requirements on data collection. These frameworks comprise of the 1) value of the variable, 2) unit of variable, 3) method/tool of data collection, 4) time interval / frequency, 5) required QA/QC task for data quality management (treatment of missing and odd values, cross-checks, remeasurement etc), 6) data storage system used (e.g. GIS DB, Cloud platforms, backup protocols) and 7) data use.

The table number in brackets refers to the indicator table within each sub-plan. Data points may be amended annually to ensure that they remain applicable to adaptive management and keep the need for trend data in mind.

Indicator data points - operations

Table 16 (O8): Key Performance Indicators for Operations during this action cycle

HR and Finance		Operations	
H1	# of employees on payroll full-time	O1	Roads cleared (measured in km)
H2	# of employees on payroll part-time	O2	Roads dragged/repared (measured in km)
H3	# of females on payroll (%)	O3	Roads dragged/repared (measured in km)
H4	# of females in management positions	O4	Number of artificial water points altered vs planned
H5	# of differently-abled persons (%)	O5	Cubic m of water pumped - domestic
H6	# of females under third-party mgmt	O6	Cubic m of water pumped - game
H7	# of employees over 70y of age	O7	# of diesel vehicles
H8	# of employees hired from local communities	O8	# of petrol vehicles
H9	Turnover %	O9	# of motorbikes
H10	Kg of meat issued for rations per month	O10	Liters of diesel used by vehicles per month
H11	# of trainings conducted	O11	Liters of diesel used by generators/other per month
H12	# of employees receiving training	O12	Litres of petrol used by vehicles per month
H13	# of clinic visits provided	O13	Liters of petrol used for motorbikes per month
H14	# of grievances raised at the workplace	O14	Km traveled by diesel vehicles per month
F1	USD spent on community support	O15	Km traveled by petrol vehicles per month
F2	USD spent on charitable donations	O16	Km travelled by motorbike per month
F3	USD spent on community suppliers	O17	Average km/L for diesel vehicles
		O18	Average km/L for petrol vehicles
		O19	Average km/L for motorbikes
		O20	Hours of generator usage on all sites
		O21	Hours of tractor/CAT usage
		O22	Number of international/Harare flights (seats)
		O23	Number of vehicle care/mechanic training conducted
		O24	Number of ZESA units used
		O25	kVa of green energy used per month
		O26	Cooking gas kg used per month (issued from stores)
		O27	Tractor loads of firewood collected (cubes)
		O28	Kg of refrigerant gas used in air conditioning and refrigeration (per gas: HFC, etc, from purchased minus discarded/returned appliances)
		O29	Kg of fire suppression gas used per year (per gas: CO2, HFC, PFC, from purchased minus discarded/returned appliances)
		O30	Kg of purchased gas for welding

Indicator data points - tourism

Table 17 (T3): Key Performance Indicators for Tourism during this action cycle.

Indicator	Description
T1	Number of photographic tourists
T2	Number of photographic bed nights
T3	Percentage of planned bed nights
T4	Number of sustainable use tourists
T5	Number of sustainable use bed nights
T6	Number of differently abled tourists hosted
T7	Of total, # from the Americas
T8	Of total, # from Europe
T9	Of total, # from Asia
T10	Of total, # from Australasia
T11	Of total, # from Africa
T12	Number of feedback surveys received
T13	Satisfaction rate achieved
T14	Number of guest incidences - safety/complaints
T15	Number of employees trained
T16	Litres of water pumped - domestic use Ingwe
T17	Litres of water pumped - garden Ingwe
T18	Litres of water pumped - domestic use Dadiso/Expedition
T19	Hours of generator use - Ingwe
T20	Litres of fuel used for generator - Ingwe
T21	Hours of generator use - Dadiso/Expedition
T22	Litres of fuel used for generators - Dadiso/Expedition
T23	Tractor loads of firewood received - Ingwe
T24	% for geysers
T25	% for cooking
T26	% for fireplaces
T27	Tractor loads of firewood received - Dadiso/Expedition
T28	% for geysers
T29	% for cooking
T30	% for fireplaces

Indicator data points - natural resource protection

Table 18 (NRP4): Key Performance Indicators for Natural Resource Protection during this action cycle.

Quarterly	
Number of scouts employed	Number of women community rangers related to Sango
Number of scouts deployed on SWC	# Man days in the field (patrol days) = Average number of men actively patrolling (not on leave)
Total area/effective manpower (manpower density as km ² /man)	Average man-days per scout = man-days spent on patrol
Km patrolled by foot	# hours of drone surveillance
Km average per scout	# of Canines in operation
Km patrolled by vehicle	# of training conducted - basic SWC scouts
# hours of aerial surveillance, fixed wing	# of training conducted - refresher SWC scouts
# of firearms recovered	# of training conducted - dog handler
# of snares recovered	# incursions detected - tracks
# incursions intercepted whilst underway	# of convictions (% of arrests)
# of arrests	# of logging/deforestation incidences
# of animals poached (excl rhino, elephant)	# of fishing incidences
# of rhino carcasses	% effectiveness of radio system
# of elephant carcasses	% of incursions reported by community
Annually	
Rhino/elephant poaching incursions/attempts	Rhino/elephant poachers arrested or killed per incursion
Rhino/elephant poachers arrested during the year	% of arrests resulting in sentences
Of these, how many were given jail sentences	% of arrests resulting in mandatory sentences
Number of rhino/elephant poachers awarded bail	% of arrested rhino/elephant poachers awarded bail
Number of horns recovered from rhino carcasses	Number of rhinos wounded by bullets in the year but not killed
Number of rhinos translocated	Number of rhinos snared during the year but not killed

Indicator data points - ecology

The ecological management plan largely reports by narrated, quantitative documentation on the completion of surveys or actions, either seasonally or annually. In addition several key indicators are used to track certain trends. The development and implementation of several species management will further provide specific guidance on certain species.

Table 19 (E7): Key Performance Indicators for the Ecological Management Plan

#	Indicator
E1	Ha firebreaks & management burns - preventative
E2	Ha bush burnt - reactive & accidental
E3	Ha bush deforested due to illegal timber harvesting
E4	Ha or # of erosion sites rehabilitated
E5	Biological Population growth rate black rhino (Q4 annual)
E6	Net Population growth rate black rhino (Q4 annual)
E7	Non-poaching mortality rate black rhino (Q4 annual)
E8	Biological Population growth rate white rhino (Q4 annual)
E9	Net Population growth rate white rhino (Q4 annual)
E10	Non-poaching mortality rate white rhino (Q4 annual)
E11	# of elephants as surveyed from aerial survey (Q4 annual)
E12	Biological Population growth rate elephant (annual)
E13	Net Population growth rate elephant (annual)
E14	# Vulture nests active (in Q when survey is conducted)
E15	# Wilddog sightings - Earthranger
E16	# of wilddog seen in above sightings
E17	# Cheetah sightings - Earthranger
E18	# of cheetah seen total in above sightings
E19	#Lion sightings - Earthranger
E20	# of lion seen total in above sightings
E21	#Pangolin sightings - Earthranger
E22	# of pangolin seen total in above sightings
E23	# of rock art sites monitored
E24	Waste - kg glass processed
E25	Waste - kg plastic processed
E26	Waste - kg cans processed
E27	kg of meat used for rations (management and rations)
E28	kg of meat used for tourism (supplied to warehouse)
E29	kg of meat to stakeholder & community support (school trips, communities, chiefs)
E30	# of training conducted (please add short info in footnote)
E31	# of people trained during above trainings

Indicator data points - stakeholders

Table 20 (S5): Key Performance Indicators during this action cycle

#	Indicator
S1	# of meetings held with third parties - AWCF, ATS
S2	# of meetings held with stakeholders - local authority, SVC, etc
S3	# of meetings held with research institutions, NGOs
S4	# of meetings held with communities
S5	# of community members attending meetings (total)
S6	# of females attending meetings
S7	# of community capacity training held
S8	# of community members attending training (total)
S9	# of females attending training
S10	# of grievances raised by stakeholders and communities
S11	# of grievances resolved this month
S12	# of boreholes repaired/drilled
S13	# of beneficiaries for borehole action (total)
S14	# of female beneficiaries
S15	# of school projects
S16	# of beneficiaries for school project (total)
S17	# of female beneficiaries
S18	# of clinic projects
S19	# of beneficiaries for clinic (total)
S20	# of female beneficiaries
S21	# of educational trips
S22	# of beneficiaries for school trips (total)
S23	# of female beneficiaries
S24	# of agricultural projects - veg gardens, fields
S25	# of beneficiaries for agriculture (total)
S26	# of female beneficiaries
S28	Kg of seed provided
S29	Kg of other inputs provided
S30	Tractor hours in communities

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LIST OF CONTRIBUTORS

Planners

Table 21: Participants in participatory planning process

Name	Role
W Pabst	Executive director
A Pabst	Director
D Goosen	Director
W Young	General Manager
L Gross	LAM SLU
M Seitz	Forest Solutions
Dr M Krausse-Besan	MKB Consulting
L Joubert	Indi-Eco Conservation Ltd
S George	Wetland biologist, BCORP
H Bornstein	Sustainability consultant and marketer
CJ Joubert	Senior Ecological Consultant
B Giddey	Ecologist 2023
B Miles	Ecologist 2023
A Taylor-Freeme	Ecologist 2024
T Nemabwe	Community Liaison Manager
J Erasmus	Workshop Manager 2023
S Van	Warehouse Manager 2023
T Olivier	Workshop Manager 2024
S Addison	Warehouse Manager 2024
Leewayne	Clerk 2024
H French	Clerk 2024
B Wolhuter	Ingwe Lodge Manager
A Goosen	Guesthouse Manager
L Young	Dadiso Camp Manager
B Judge	Professional Guide
B Clemence	ATS Manager
M Mutemeri	ATS Ecologist
A Seeliger	ATS Data coordinator
H (Kim) Wolhuter	Wildhoot Productions

Authors

Table 22: Authors of the Management Plans

Name	Role
Lourette Joubert	Indi-Eco Conservation Ltd
William Young	General Manager, SWC

Stakeholder review

Table 23: External reviewers of the management plan

Name	Role
L Gross	LAM
M Seitz	Forest Solutions
Dr M Besan-Krausse	MKB Consulting
N Dellile	Sustainability consultant and marketer
S Knight	Halsteds - significant supplier
B James	Member of Parliament
T Labat	T Labat Safaris - significant customer
B Clemence	ATS
J Watermeyer	AWCF
Jobst von Kirchmann	EU Ambassador to Zimbabwe
Udo Voltz	German Ambassador to Zimbabwe
Dr Albrecht Conze	Previous German Ambassador to Zimbabwe
Martin Schröder	Koordinator - WALD Initiative, KfW Bankengruppe

List of meetings held & attendees

Table 24: The following is a list of consultative meetings held with the management group. Attendance sheets are available as separate documents. These site meetings have been augmented with continuous email communications and online meetings.

Date	Purpose	Summary
18/09/2023	Introduction to Project	Open introduction explaining terminology, monitoring, emissions, verifications
18/09/2023	B-CORP Assessment	First assessment on general criteria
19/09/2023	Management Plan Framework	Principle, structure, and need for GMP
08-21/09/2023	Measurement of PSPs, SOP	Forest monitoring SOP development
21/09/2023	IUCN Exceptional Values (NECO) Table	Exceptional resource values explained and the first draft of table populated
22/09/2023	Vision and Strategic Plan 2034	Obtained the vision as seen by the owner Mr W Pabst, which forms the base for the 10-year strategic plan. A dream that started in 1965 whilst on safari in Botswana.
28/04/2024	Overview of ecosystem service - carbon storage audit	Opening meeting for audit procedures TUV NORD
29/04/2024	GMP and Business plan review	
30/04/2024	Natural Resource Protection plan review	
30/04/2024	Stakeholder and Community plan review	
01/05/2024	Operational plan review	
03/05/2024	Ecological plan review	
16/08/2024	Online OMP and KPI training meeting	Presentation given
29/08/2024	Online Carbon footprint/emissions training meeting	Presentation given, data formats
18/09/2024	Online TMP and KPI training meeting	Presentation given
11/11/2024	Overview of site visits and progress	
11/11/2024	Ecological plan review with AWP	
12/11/2024	Operational plan review with AWP	
12/11/2024	Tourism plan review with AWP	
12/11/2024	Emissions, carbon footprint review	
13/11/2024	Natural resource protection plan with AWP	
13/11/2024	Stakeholder/community plan with AWP	
14/11/2024	Business plan and BCORP review	
14/11/2024	Group consultation feedback	

ADDENDUMS

Addendum 1 - CBD Targets 2030

Strategy #	Strategy	Target #	Target
Goal A	Reducing threats to Biodiversity	Target 1	Ensure that all areas are under participatory, integrated and biodiversity inclusive spatial planning and/or effective management processes addressing land- and sea-use change, to bring the loss of areas of high biodiversity importance, including ecosystems of high ecological integrity, close to zero by 2030, while respecting the rights of indigenous peoples and local communities.
		Target 2	Ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and marine and coastal ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity.
		Target 3	Ensure and enable that by 2030 at least 30 per cent of terrestrial and inland water areas, and of marine and coastal areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories.
		Target 4	Ensure urgent management actions to halt human induced extinction of known threatened species and for the recovery and conservation of species, in particular threatened species, to significantly reduce extinction risk, as well as to maintain and restore the genetic diversity within and between populations of native, wild and domesticated species to maintain their adaptive potential, including through in situ and ex situ conservation and sustainable management practices, and effectively manage human-wildlife interactions to minimize human-wildlife conflict for coexistence.
		Target 5	Ensure that the use, harvesting and trade of wild species is sustainable, safe and legal, preventing overexploitation, minimizing impacts on non-target species and ecosystems, and reducing the risk of pathogen spillover, applying the ecosystem approach, while respecting and protecting customary sustainable use by indigenous peoples and local communities.
		Target 6	Eliminate, minimize, reduce and or mitigate the impacts of invasive alien species on biodiversity and ecosystem services by identifying and managing pathways of the introduction of alien species, preventing the introduction and establishment of priority invasive alien species, reducing the rates of introduction and establishment of other known or potential invasive alien species by at least 50 per cent by 2030, and eradicating or controlling invasive alien species, especially in priority sites, such as islands.
		Target 7	Reduce pollution risks and the negative impact of pollution from all sources by 2030, to levels that are not harmful to biodiversity and ecosystem functions and services, considering cumulative effects, including: (a) by reducing excess nutrients lost to the environment by at least half, including through more efficient nutrient cycling and use; (b) by reducing the overall risk from pesticides and highly hazardous chemicals by at least half, including through integrated pest management, based on science, taking into account food security and livelihoods; and (c) by preventing, reducing, and working towards eliminating plastic pollution.
		Target 8	Minimize the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions, including through nature-based solutions and/or ecosystem-based approaches, while minimizing negative and fostering positive impacts of climate action on biodiversity.

Strategy #	Strategy	Target #	Target
Goal B	Meeting people's needs through sustainable use and benefit-sharing	Target 9	Ensure that the management and use of wild species are sustainable, thereby providing social, economic and environmental benefits for people, especially those in vulnerable situations and those most dependent on biodiversity, including through sustainable biodiversity-based activities, products and services that enhance biodiversity, and protecting and encouraging customary sustainable use by indigenous peoples and local communities.
		Target 10	Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably, in particular through the sustainable use of biodiversity, including through a substantial increase of the application of biodiversity friendly practices, such as sustainable intensification, agroecological and other innovative approaches, contributing to the resilience and long-term efficiency and productivity of these production systems, and to food security, conserving and restoring biodiversity and maintaining nature's contributions to people, including ecosystem functions and services.
		Target 11	Restore, maintain and enhance nature's contributions to people, including ecosystem functions and services, such as the regulation of air, water and climate, soil health, pollination and reduction of disease risk, as well as protection from natural hazards and disasters, through nature-based solutions and/or ecosystem-based approaches for the benefit of all people and nature.
		Target 12, 13	N/A
Goal C	Tools and solutions for implementation and mainstreaming	Target 14	Ensure the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes, poverty eradication strategies, strategic environmental assessments, environmental impact assessments and, as appropriate, national accounting, within and across all levels of government and across all sectors, in particular those with significant impacts on biodiversity, progressively aligning all relevant public and private activities, and fiscal and financial flows with the goals and targets of this framework.
		Target 16	Ensure that people are encouraged and enabled to make sustainable consumption choices, including by establishing supportive policy, legislative or regulatory frameworks, improving education and access to relevant and accurate information and alternatives, and by 2030, reduce the global footprint of consumption in an equitable manner, including through halving global food waste, significantly reducing overconsumption and substantially reducing waste generation, in order for all people to live well in harmony with Mother Earth.
		Target 19	Substantially and progressively increase the level of financial resources from all sources, in an effective, timely and easily accessible manner, including domestic, international, public and private resources, in accordance with Article 20 of the Convention, to implement national biodiversity strategies and action plans, mobilizing at least \$200 billion per year by 2030, including by: [a-c] (d) Stimulating innovative schemes such as payment for ecosystem services, green bonds, biodiversity offsets and credits, and benefit-sharing mechanisms, with environmental and social safeguards; [e-g]
		Target 20	Strengthen capacity-building and development, access to and transfer of technology, and promote development of and access to innovation and technical and scientific cooperation, including through South-South, North-South and triangular cooperation, to meet the needs for effective implementation, particularly in developing countries, fostering joint technology development and joint scientific research programmes for the conservation and sustainable use of biodiversity and strengthening scientific research and monitoring capacities, commensurate with the ambition of the goals and targets of the Framework.
		Target 21	Ensure that the best available data, information and knowledge are accessible to decision makers, practitioners and the public to guide effective and equitable governance, integrated and participatory management of biodiversity, and to strengthen communication, awareness-raising, education, monitoring, research and knowledge management and, also in this context, traditional knowledge, innovations, practices and technologies of indigenous peoples and local communities should only be accessed with their free, prior and informed consent,[2] in accordance with national legislation.

Strategy #	Strategy	Target #	Target
		Target 22	nsure the full, equitable, inclusive, effective and gender-responsive representation and participation in decision-making, and access to justice and information related to biodiversity by indigenous peoples and local communities, respecting their cultures and their rights over lands, territories, resources, and traditional knowledge, as well as by women and girls, children and youth, and persons with disabilities and ensure the full protection of environmental human rights defenders.
		Target 23	Ensure gender equality in the implementation of the Framework through a gender-responsive approach, where all women and girls have equal opportunity and capacity to contribute to the three objectives of the Convention, including by recognizing their equal rights and access to land and natural resources and their full, equitable, meaningful and informed participation and leadership at all levels of action, engagement, policy and decision-making related to biodiversity.
		Target 15, 17, 18	N/A

Addendum 2 - List of Mammals

Aardwolf	Hare, Scrub	Nyala
Aardvark	Hippopotamus	Otter, Cape Clawless
Baboon, Chacma	Hyaena, Spotted	Pangolin, Grant's
Badger, Honey	Hyaena, Brown	Porcupine, South African
Buffalo, African	Impala	Rhinoceros, Black
Bushbuck	Jackal, Side-striped	Rhinoceros, White
Bushpig	Jackal, Black-backed	Sable Antelope
Caracal	Klipspringer	Serval
Cheetah	Kudu, Greater	Springhare
Civet, African	Leopard	Squirrel, Bush
Duiker, Common	Lion	Waterbuck
Eland, Livingston's	Mongoose, Banded	Warthog
Elephant, African	Mongoose, Dwarf	Wild Cat, African
Galago, Lesser	Mongoose, Meller's	Wild Dog, African
Galago, Thick-tailed	Mongoose, Selous	Wildebeest, Blue
Genet, Large spotted	Mongoose, Slender	Zebra, Burchell's
Giraffe	Mongoose, White-tailed	
Grysbok, Sharpe's	Monkey, Vervet	

Addendum 3 - List of Birds

Apalis Bar-throated
Apalis Yellow-breasted
Babbler Arrow-marked
Barbet Acacia Pied
Barbet Black-collared
Barbet Crested
Bateleur
Batis Chinspot
Bee-eater Blue-cheeked
Bee-eater European
Bee-eater Little
Bee-eater Southern Carmine
Bee-eater Swallow-tailed
Bee-eater White-fronted
Bishop Yellow-crowned
Bishop Southern Red
Bittern Dwarf
Bittern Little
Boubou Tropical
Brownbul Terrestrial
Brubru
Bulbul Dark-capped
Bunting Cinnamon-breasted
Bunting Golden-breasted
Bustard Black-bellied
Bustard Kori
Buttonquail Small
Buzzard European Honey
Buzzard Lizard
Buzzard Steppe
Camaroptera Green-backed
Camaroptera Grey-backed
Canary Yellow-fronted
Chat Arnott's
Chat Boulder
Chat Mocking Cliff
Cisticola Desert
Cisticola Zitting
Cisticola Rattling
Cisticola Red-faced

Cormorant Reed
Cormorant White-breasted
Coucal Burchell's
Coucal Senegal
Courser Bronze-winged
Courser Temminck's
Courser Three-banded
Crake African
Crake Black
Crake Corn
Crombec Long-billed
Crombec Red-faced
Cuckoo African
Cuckoo African Emerald
Cuckoo Black
Cuckoo Common
Cuckoo Diderick
Cuckoo Great Spotted
Cuckoo Jacobin
Cuckoo Klaas's
Cuckoo Levallant's
Cuckoo Red-chested
Cuckoo Thick-billed
Cuckooshrike Black
Cuckooshrike White
breasted
Darter African
Dove Cape Turtle
Dove Emerald-Spotted
Wood
Dove Laughing
Dove Namaqua
Dove Red-eyed
Dove Rock
Dove Tambourine
Drongo Fork-tailed
Duck African Black
Duck Comb
Duck Maccoa
Duck White-backed

Duck White-faced
Duck Yellow-billed
Eagle African Crowned
Eagle African Fish
Eagle African Hawk
Eagle Black-chested Snake
Eagle Brown Snake
Eagle Lesser Spotted
Eagle Long-crested
Eagle Martial
Eagle Southern Banded
Snake
Eagle Steppe
Eagle Tawny
Eagle Verreaux's
Eagle Wahlberg's
Egret Cattle
Egret Great
Egret Little
Egret Yellow-billed
Eremomela Burnt-necked
Eremomela Yellow-bellied
Falcon Amur
Falcon Lanner
Finch Cut-throat
Finch Scaly-feathered
Firefinch African
Firefinch Jameson's
Firefinch Red-billed
Flamingo Lesser
Flufftail Red-chested
Flycatcher African Paradise
Flycatcher Ashy
Flycatcher Southern Black
Flycatcher Spotted
Francolin Crested
Francolin Natal
Gallinule Allen's
Garganey
Go-away-bird Grey

Goose African Pygmy
 Goose Egyptian
 Goose Spur-winged
 Goshawk African
 Goshawk Dark Chanting
 Goshawk Gabar
 Grebe Little
 Greenbul Sombre
 Greenbul Yellow-bellied
 Greenshank Common
 Guineafowl Helmeted
 Hamerkop
 Harrier Montagu's
 Harrier Pallid
 Hawk African Cuckoo
 Hawk African Harrier
 Hawk Bat
 Helmet-Shrike Retz's
 Helmet-Shrike White crested
 Heron Black
 Heron Black-crowned Night
 Heron Goliath
 Heron Green-backed
 Heron Grey
 Heron Squacco
 Hobby African
 Hobby Eurasian
 Honeybird Brown-backed
 Honeyguide Greater
 Honeyguide Lesser
 Honeyguide Scaly-throated
 Hoopoe African
 Hornbill African Grey
 Hornbill Crowned
 Hornbill Red-billed
 Hornbill Southern Ground
 Hornbill Southern Yellow
 billed
 Hornbill Trumpeter
 Ibis African Sacred
 Ibis Hadedda
 Indigobird Dusky

Indigobird Purple
 Indigobird Village
 Jacana African
 Kestrel Dickinson's
 Kingfisher African Pygmy
 Kingfisher Brown-hooded
 Kingfisher Giant
 Kingfisher Grey-headed
 Kingfisher Malachite
 Kingfisher Pied
 Kingfisher Striped
 Kingfisher Woodland
 Kite Black-shouldered
 Kite Yellow-billed
 Korhaan Red-crested
 Lapwing African Wattled
 Lapwing Blacksmith
 Lapwing Crowned
 Lapwing Senegal
 Lapwing White-crowned
 Lark Dusky
 Lark Monotonous
 Lark Rufous-naped
 Lark Sabota
 Malkoha Green
 Mannikin Bronze
 Martin Brown-throated
 Martin Common House
 Martin Rock
 Moorhen Common
 Mousebird Red-faced
 Mousebird Speckled
 Neddicky
 Nicator Eastern
 Nightjar European
 Nightjar Fiery-necked
 Nightjar Freckled
 Nightjar Pennant-winged
 Nightjar Rufous-cheeked
 Nightjar Square-tailed
 Openbill African

Oriole African Golden
 Oriole Black-headed
 Oriole Eurasian Golden
 Owl African Scops
 Owl African Wood
 Owl Barn
 Owl Marsh
 Owl Southern White-faced
 Scops
 Owl Spotted Eagle
 Owl Verreaux's Eagle
 Owlet African Barred
 Owlet Pearl-spotted
 Oxpecker Red-billed
 Oxpecker Yellow-billed
 Palm-Thrush Collared
 Parrot Grey-headed
 Parrot Meyer's
 Petronia Yellow-throated
 Pigeon African Green
 Pigeon Speckled
 Pipit African
 Pipit Buffy
 Pipit Bushveld
 Plover Three-banded
 Plover White-fronted
 Prinia Tawny-flanked
 Puffback Black-backed
 Pytilia Green-winged
 Quail Common
 Quail Harlequin
 Quelea Red-billed
 Rail African
 Raven White-necked
 Robin Bearded Scrub
 Robin White-browed Scrub
 Robin-Chat Red-capped
 Robin-Chat White-browed
 Robin-Chat White-throated
 Roller Broad-billed
 Roller European
 Roller Lilac-breasted

Roller Purple
 Roller Racket-tailed
 Sandgrouse Double-banded
 Sandpiper Common
 Sandpiper Marsh
 Sandpiper Wood
 Saw-wing Black
 Saw-wing Eastern
 Scimitarbill Common
 Secretarybird
 Shikra
 Shrike Grey-headed Bush
 Shrike Lesser Grey
 Shrike Magpie
 Shrike Orange-breasted Bush
 Shrike Red-backed
 Shrike Southern White-crowned
 Snipe Greater Painted
 Sparrow Southern Grey-headed
 Sparrowhawk Black
 Sparrowhawk Little
 Sparrowhawk Ovambo
 Spinetail Mottled
 Spoonbill African
 Spurfowl Swainson's
 Starling Greater Blue-eared
 Starling Meves's
 Starling Red-winged
 Starling Violet-backed
 Starling Wattled
 Stilt Black-winged

Stork Abdim's
 Stork Black
 Stork Marabou
 Stork Saddle-billed
 Stork White
 Stork Woolly-necked
 Stork Yellow-billed
 Sunbird Collared
 Sunbird Marico
 Sunbird Miombo Double-collared
 Sunbird Purple-banded
 Sunbird Scarlet-chested
 Sunbird White-bellied
 Swallow Barn
 Swallow Lesser Striped
 Swallow Mosque
 Swallow Red-breasted
 Swallow White-throated
 Swallow Wire-tailed
 Swampphen African Purple
 Swift African Black
 Swift African Palm
 Swift Common
 Swift Horus
 Swift Little
 Swift Mottled
 Tchagra Black-crowned
 Tchagra Brown-crowned
 Teal Hottentot
 Teal Red-billed
 Thick-knee Spotted
 Thick-knee Water
 Thrush Groundscraper

Thrush Kurrichane
 Tinkerbird Yellow-fronted
 Tit Grey Penduline
 Tit Southern Black
 Trogon Narina
 Turaco Purple-crested
 Vulture Cape
 Vulture Hooded
 Vulture Lappet-faced
 Vulture White-backed
 Vulture White-headed
 Wagtail African Pied
 Warbler Olive-tree
 Warbler Stierling's Wren
 Warbler Willow
 Wattle-eye Black-throated
 Waxbill Blue
 Waxbill Common
 Weaver Lesser Masked
 Weaver Red-billed Buffalo
 Weaver Red-headed
 Weaver Southern Masked
 Weaver Spectacled
 Weaver Village
 Wheatear Capped
 White-eye African Yellow
 Whydah Long-tailed Paradise
 Widowbird White-winged
 Wood-Hoopoe Green
 Woodpecker Bearded
 Woodpecker Bennett's
 Woodpecker Cardinal
 Woodpecker Golden-tailed

Addendum 4 - List of amphibians and reptiles

Snakes

Bibron's burrowing asp
 Black file snake
 Black mamba
 Boomslang

Boulenger's garter snake
 Brown house snake
 Cape centipede eater
 Cape file snake
 Cape wolf snake

Common/Rhombic egg-eater
 Delalande's beaked blind snake
 Dwarf sand snake
 East African shovel-snout snake

Eastern Bark/Mopane snake
 Eastern tiger snake
 Green water snake
 Gunther's garter snake
 Long-tailed thread snake
 Marbled cat-eyed tree snake
 Mole snake
 Mozambique spitting cobra
 Olive grass snake
 Olive marsh snake
 Peters' thread snake
 Puff adder
 Red-lipped herald snake
 Reticulated centipede eater
 Rufous beaked snake
 Semiornate smooth snake
 Shield-nose snake
 Snouted cobra
 Snouted night adder
 Southern African python
 Spotted bush snake
 Striped skaapsteker
 Striped-bellied sand snake
 Sundervall's shovel-snout snake
 Twig/Vine snake
 Two-striped shovel-snout snake
 Western green snake

Reptiles

Kirk's rock agama
 Peter's ground agama
 Southern tree agama
 Flap-neck chameleon
 Nile crocodile
 Cape dwarf gecko
 Flat headed tropical house gecko
 Moreau's tropical house gecko
 Speckled thick-toed gecko
 Tasman's tropical house gecko

Tiger thick-toed gecko
 Turners thick-toed gecko
 Van Son's thick-toed gecko
 Wahlberg's velvet gecko
 Black-lined plated lizard
 Bushveld lizard
 Cape rough-scaled lizard
 Common flat lizard
 Common rough-scaled lizard
 Giant plated lizard
 Holub's sandveld lizard
 Kalahari round-headed worm lizard
 Large-scaled grass lizard
 Ornate sandveld lizard
 Nile/water monitor lizard
 Rock monitor lizard
 Rough-scaled plated lizard
 Spotted sandveld lizard
 Tropical girdled lizard
 Yellow-throated plated lizard
 Zimbabwe girdled lizard
 Bronze rock skink
 Cape skink
 Five-lined/Rainbow skink
 Spotted-neck snake-eye skink
 Striped skink

Sundervall's writhing skink
 Variable skink
 Wahlberg's snake-eye skink
 Marsh/Helmeted terrapin
 Pan hinged terrapin
 Serrated hinged terrapin
 Bell's hinged tortoise
 Leopard tortoise
 Speke's hinged tortoise

Frogs and Toads

Bull Frog, African
 Caco, Common

Frog Banded Rubber
 Frog, Broad-banded Grass
 Frog, Brown-backed Tree
 Frog, Bushveld Rain
 Frog, Common River
 Frog, Dwarf Puddle
 Frog, Foam Nest
 Frog, Knocking Sand
 Frog, Mottled Shovel-nosed
 Frog, Natal Sand
 Frog, Painted Reed
 Frog, Plain Grass
 Frog, Russet-backed Sand
 Frog, Sharpe-nosed Grass
 Frog, Snoring Leaf-folding
 Frog, Snoring Puddle
 Frog, Tremolo Sand
 Frog, Water Lily
 Kassina, Bubbling
 Kassina, Red-legged
 Platanna, Tropical
 Toad, Flat-backed
 Toad, Northern Pygmy
 Toad, Olive
 Toad, Red

Scorpions

Hottentotta trilineatus
Lychas burdoi
Parabuthus mossambicensis
Parabuthus transvaalicus
Uroplectes planimanus
Uroplectes olivaceus
Uroplectes carinatus
Uroplectes vittatus
Uroplectes formosus
Opistacanthus asper
Chelotonus jonesii
Hadogenes troglodytes
Opisthophthalmus glabrifrons

Addendum 5 - List of trees and shrubs

Lists of grass and forbs species are available on the 2013 Natural Resource Inventory¹¹.

<i>Acacia abyssinica</i>	Nyanga-flat top
<i>Acacia erubescens</i>	Blue thorn
<i>Acacia galpinii</i>	Monkey thorn
<i>Acacia gerrardii</i>	Red thorn
<i>Acacia grandicornuta</i>	Horned thorn
<i>Acacia karroo</i>	Sweet thorn
<i>Acacia nigrescens</i>	Knob thorn
<i>Acacia nilotica</i>	Scented thorn
<i>Acacia schweinfurthii</i>	River climbing thorn
<i>Acacia tortilis</i>	Umbrella thorn
<i>Acacia xanthophloea</i>	Fever tree
<i>Adansonia digitata</i>	Baobab
<i>Adenium multiflorum</i>	Impala lily
<i>Afzelia quanzensis</i>	Pod mahogany
<i>Albizia amara</i>	Bitter false-thorn
<i>Albizia anthelmintica</i>	Wormbark false-thorn
<i>Albizia brevifolia</i>	Rock false-thorn
<i>Albizia forbesii</i>	Broad-pod false-thorn
<i>Albizia glaberrima</i>	Lowveld false-thorn
<i>Albizia harveyi</i>	Common false-thorn
<i>Albizia tanganyicensis</i>	Paperbark false-thorn
<i>Albizia versicolor</i>	Large-leaved false-thorn
<i>Allophyllus alnifolius</i>	Lowveld false current
<i>Anisotes formosissimus</i>	
<i>Annona senegalensis</i>	Wild custard-apple
<i>Antidesma venosum</i>	Tassel-berry
<i>Artabotrys brachypetalus</i>	Purple hook-berry
<i>Azanza garckeana</i>	Snot apple
<i>Azima tetraacantha</i>	Needle-bush
<i>Balanites aegyptica</i>	Simple-thorned torch-wood
<i>Balanites maughamii</i>	Green thorn
<i>Bauhinia galpinii</i>	Pride-of-de Kaap
<i>Bauhinia tomentosa</i>	Yellow bauhinia
<i>Berchemia discolor</i>	Brown ivory
<i>Boscia angustifolia</i> var. <i>Corymbosa</i>	Rough-leaved shepherd's tree
<i>Boscia foetida</i> var. <i>rehmanniana</i>	Sandveld shepherd's tree
<i>Boscia mossambicensis</i>	Broad-leaved shepherd's tree
<i>Brachylaena rotundata</i>	Mountain silver oak

<i>Brachystegia spiciformis</i>	Mountain acacia
<i>Bridelia cathartica</i>	Blue sweetberry
<i>Bridelia mollis</i>	Velvet sweetberry
<i>Cadaba termitaria</i>	Grey-leaved wormbush
<i>Canthium glaucum subsp. frangula</i>	Pink-fruited rock elder
<i>Capparis tomentosa</i>	Wooly caper-bush
<i>Cardiogyne africana</i>	African osage orange
<i>Cassia abbreviata</i>	Sjambok pod
<i>Cissus cornifolia</i>	Ivy-grape
<i>Cissus rotundifolia</i>	
<i>Cleistochlamys kirkii</i>	Purple cluster-pear
<i>Clerodendrum glabrum</i>	Tinderwood
<i>Colophospermum mopane</i>	Mopane
<i>Combretum adenogonium</i>	
<i>Combretum apiculatum</i>	Red bushwillow
<i>Combretum hereroense</i>	Russet bushwillow
<i>Combretum imberbe</i>	Leadwood
<i>Combretum microphyllum</i>	Flame climbing bushwillow
<i>Combretum molle</i>	Velvet bushwillow
<i>Combretum mossambicense</i>	Knobbly climbing bushwillow
<i>Combretum padoides</i>	Thicket bushwillow
<i>Combretum zeyheri</i>	Large-fruit bushwillow
<i>Commiphora africana</i>	Poison-grub corkwood
<i>Commiphora edulis</i>	Rough-leaved corkwood
<i>Commiphora glandulosa</i>	Tall common corkwood
<i>Commiphora marlothii</i>	Paperbark corkwood
<i>Commiphora mollis</i>	Velvet corkwood
<i>Commiphora mossambicensis</i>	
<i>Commiphora schimperi</i>	Glossy-leaved corkwood
<i>Commiphora viminea</i>	Zebra-bark corkwood
<i>Cordia grandicalyx</i>	Large-fruit saucer-berry
<i>Cordia monoica</i>	Sandpaper saucer-berry
<i>Cordia ovalis</i>	Satin-bark saucer-berry
<i>Cordia sinensis</i>	Grey-leaved saucer-berry
<i>Cordyla africana</i>	Wild mango
<i>Croton damarensis</i>	
<i>Croton megalobotrys</i>	Feverberry
<i>Dalbergia arbutifolia</i>	River flat-bean
<i>Dalbergia melanoxylon</i>	Zebrawood
<i>Deinbollia xanthocarpa</i>	Northern soap-berry
<i>Dichrostachys cinerea subsp. africana</i>	Sickle bush

<i>Diospyros lycioides</i>	Bluebush
<i>Diospyros mespiliformis</i>	Jackal-berry
<i>Diospyros quiloensis</i>	Crocodile-bark jackal-berry
<i>Dombeya kirkii</i>	River dombeya
<i>Drypetes mossambicensis</i>	Lowveld ironplum
<i>Ehretia amoena</i>	
<i>Ehretia obtusifolia</i>	Hairy puzzle-bush
<i>Ekebergia capensis</i>	Cape-ash
<i>Elephantorrhiza burkei</i>	Broad-pod elephant-root
<i>Entandrophragma caudatum</i>	Wooden banana
<i>Euclea divinorum</i>	Magic guarri
<i>Euphorbia confinalis</i>	Lebombo euphorbia
<i>Euphorbia espinosa</i>	
<i>Euphorbia guerichiana</i>	
<i>Euphorbia ingens</i>	Naboom
<i>Euphorbia tirucalli</i>	Rubber-hedge euphorbia
<i>Faidherbia albida</i>	Ana-tree
<i>Ficus abutilifolia</i>	Large-leafed rock fig
<i>Ficus capreifolia</i>	Sandpaper fig
<i>Ficus sanzibarica</i>	Knobbly fig
<i>Ficus sycomorus</i>	Sycamore fig
<i>Ficus tettensis</i>	Small-leaved rock fig
<i>Flacourtia indica</i>	Governor's-plum
<i>Flueggea virosa</i>	White-berry bush
<i>Friesodielsia obovata</i>	Northern dwababerry
<i>Garcinia livingstonei</i>	African mangosteen
<i>Gardenia resiniflua</i>	Gummy gardenia
<i>Gardenia volkensii</i>	Bushveld gardenia
<i>Grewia bicolor</i>	White-leaved raisin
<i>Grewia flavescens</i>	Sandpaper raisin
<i>Grewia gracillima/caffra</i>	Silver square-stemmed raisin
<i>Grewia inaequilatera</i>	False silver raisin
<i>Grewia monticola</i>	Grey raisin
<i>Grewia sulcata</i>	Stellar raisin
<i>Grewia villosa</i>	Mallow raisin
<i>Gymnosporia buxifolia</i>	Common spikethorn
<i>Gymnosporia putterlickioides</i>	Large-flowered spikethorn
<i>Gymnosporia senegalensis</i>	Red spikethorn
<i>Gyrocarpus americanus</i>	Propeller tree
<i>Hippocratea indica</i>	Mopane-paddle-pod
<i>Hymenocardia ulmoides</i>	Small red-heart

Hyphaene petersiana
Julbernardia globiflora
Keetia venosa
Kigelia africana
Kirkia acuminata
Lannea schweinfurthii
Lantana camara
Lantana rugosa
Lycium shawii
Maerua angolensis
Maerua decumbens
Maerua juncea
Manilkara mochisia
Markhamia zanzibarica
Millettia usamarensis
Monodora junodii
Mundulea sericea
Ochna inermis
Ormocarpum trichocarpum
Pappea capensis
Peltophorum africanum
Philenoptera violacea
Phyllanthus pinnatus
Phyllanthus reticulatus
Rhigozum zambesiicum
Salvadora australis
Salvadora persica
Spirostachys africana
Stadmannia oppositifolia
Steganotaenia araliacea
Sterculia rogersii
Strophanthus kombe
Strychnos decussata
Strychnos madagascariensis
Strychnos potatorum
Syzygium guineense
Tabernaemontana elegans
Teliacora funifera
Terminalia prunioides
Terminalia sericea
Thilachium africanum

Northern lalapalm
 Munondo
 Turkey-berry
 Sausage tree
 White seringa
 False marula
 Christmas berry
 Bird's brandy
 White honey-thorn
 Bean-bead tree
 Blue-leaved bush-cherry
 Rough-skinned bush-cherry
 Lowveld milkberry
 Maroon bell-bean
 Lowveld panga-panga
 Green-apple
 Cork-bush
 Stunted plane
 Hairy caterpillar-pod
 Jacket-plum
 African-wattle
 Apple-leaf
 Lebombo potato-bush
 Potato-bush
 Mopane rhigozum
 Narrow-leaved mustard tree
 Mustard tree
 Tamboti
 Silky-plum
 Carrot-tree
 Common star-chestnut
 Large-leaved poison-rope
 Cape-teak
 Black monkey-orange
 Black bitterberry
 Bushveld waterberry
 Toad tree

 Lowveld cluster-leaf
 Silver cluster-leaf
 Cucumber-bush

Tinnea rhodesiana

Tricalysia junodii

Trichilia emetica

Vepris zambesiaca

Vitellariopsis ferruginea

Vitex isotjensis

Xanthocercis zambesiaca

Xeroderris stuhlmannii

Ximenia americana

Xylopiia parviflora

Zanthoxylum capense

Ziziphus mucronata subsp. mucronata

Brown tinnea

Northern fluffy-flowered jackal coffee

Natal mahogany

Rare woodland vepris

Gourd bush milkwood

Golden vitex

Nyala berry

Wing-pod

Blue sourplum

Forest red-fingers

Small knobwood

Buffalo thorn

Addendum 6 - NECO table

Conservation Outcomes Table			Threshold = state before any action is taken						
Natural, Eco-system and Culture Values			Root cause analysis; preventative action; corrective action						
Value	Conservation objective	Which factors are measured to monitor the "health" of the value?	Threshold of potential concern per measurement	Threshold per measurement	Briefly describe the current monitoring program for measures and thresholds	Link to report on value performance	Assessment of the values (Good, Low concern, high concern, critical)	Trend of the value (decreasing, stable or increasing)	Trend of the conservation target (value) regarding the threshold levels
Natural value									
Protection of unique combinations of flora [IPA -v.f]	Maintaining the diversity and structure of the vegetation	Quantitative and qualitative monitoring of the herbaceous layer - annually. Structural and compositional monitoring of woody layer every 5 years	The relationship between stocking density and ecological capacity will be maintained within 75% of one another.	0% tolerance to degradation. The relationship exists between stocking density and ecological capacity, whereas the stocking density exceeds the ecological capacity by 50% for 5 years.	Herbaceous layer - Disc pasture & step point methods. Woody layer - PCQ (point centre quartile). Rainfall data collected. Fauna data based on animal monitoring surveys. Elephant-specific impact measurement.				
High population densities of fauna. There are large populations of African buffalo, lion and leopard as well as endangered and rare species such as black rhino and African wild dog	Maintaining populations within the constraints of the ecological equilibrium	Lion & leopard - annual assessment of lion and leopard numbers with spoor surveys. Panthera leopard passive camera trapping technique every two years. AWCF data collection methodology for wild dog (known groups). Black and white rhino data and large herbivore survey data. Annual assessment of the ecological capacity and stocking density.	Species-specific population declines of 25% or above, rare and endangered species 5%	>50% under/over stocked.	Rhino - Continuous in field monitoring of individual animals. Health status & reproductive status. Leopard, Lion & African wild dog - annual population assessment through spoor surveys. General game, including buffalo - annual population assessments through ecological aerial surveys				

Conservation Outcomes Table			Threshold = state before any action is taken						
Natural, Eco-system and Culture Values			Root cause analysis; preventative action; corrective action						
Value	Conservation objective	Which factors are measured to monitor the "health" of the value?	Threshold of potential concern per measurement	Threshold per measurement	Briefly describe the current monitoring program for measures and thresholds	Link to report on value performance	Assessment of the values (Good, Low concern, high concern, critical)	Trend of the value (decreasing, stable or increasing)	Trend of the conservation target (value) regarding the threshold levels
Protection of River drainage and Wetlands. Substantial ephemeral pan (Brachiopod hot spot)	Protection of the natural drainage systems	River health status biodiversity monitoring - annually. Wetland & ephemeral pan monitoring. S.sangoensis shrimp	River health - decrease of SAS5 score by 1, pan monitoring decrease of score by 1	SAS 5 score result of 2 for 3 years	River Health status - SASS 5 - Macroinvertebrate assessment. Wetland & ephemeral pan status - indicator pans - amphibian & brachiopod biodiversity assessment. (acoustic sensors)				
Threatened birds - vultures and eagle population	Protection of breeding sites	Vultures & Eagles - nesting sites.	20% decline in nest sightings	Consistent decline of 20% over 3 years	Predetermine strip counts along Msaize and Save River vegetation; Annual Global Bird Day count - species focussed Birdlife Zimbabwe surveys.				
Ecosystem service									
Eco-Tourism [aesthetic value, inspiration, education and research, spiritual and religious experience, mental well-being and health, peace and stability]	To provide recreational satisfaction and revenue opportunities for conservation	Tourism feedback surveys, tourism numbers. Tourism is focused on high-quality, low-impact safaris	The number of bed nights declined by 10% [includes photographic and hunting]	The number of bed nights declines by 50%	Tourism department KPIs				
Carbon Storage	Protection of stored carbon	Carbon storage. Forest monitoring.	Baseline value pending. Every 5-year monitoring indicator	Baseline value pending. A baseline decline of 10% or above	Annual monitoring of catastrophic events.				
Hydrology - wetland and river system (24km) [biofilter, water flow regulation, support biodiversity] [supporting service = ecosystem process maintenance, lifecycle maintenance, biodiversity maintenance] [regulating services = climate, water flow, purification, natural hazards]	Protection of river and wetland biodiversity and resulting ecosystem services	Waterfowl population (wetland), SAS5 (river)	SAS5 decline in score by 1, 25% decline in species diversity and/ or 25% in specific species numbers	Compounded decline of 25% over 3 years	Waterfowl bi-annual census. [falls under African Waterbird census]				

Conservation Outcomes Table			Threshold = state before any action is taken						
Natural, Eco-system and Culture Values			Root cause analysis; preventative action; corrective action						
Value	Conservation objective	Which factors are measured to monitor the “health” of the value?	Threshold of potential concern per measurement	Threshold per measurement	Briefly describe the current monitoring program for measures and thresholds	Link to report on value performance	Assessment of the values (Good, Low concern, high concern, critical)	Trend of the value (decreasing, stable or increasing)	Trend of the conservation target (value) regarding the threshold levels
Cultural value									
Bushman Paintings/Rock art	Protection of the cultural value of historical sites	Condition assessment - visibility score	Vandalism of 5% of sites	Vandalism of 20% of sites	Fixed point photograph monitoring every 5 years [limit access, general area NRP patrols]				

Addendum 7 - Document History

Version	Date	Comments
v1.1	15 February 2024	Initial version
v1.2	20 November 2024	Version shared for external stakeholder review
v1.3	12 June 2025	Amended version after external stakeholder review. The amendments are outlined in the document SWC Feedback on GMP Public Consultation Comments_12062025