# NATIONAL ELEPHANT HERITAGE STRATEGY FOR SOUTH AFRICA 2024-2034

# BACKGROUND DOCUMENT

**Jointly developed by SANBI, SANParks, LEDET, EZEMVELO-KZN WILDLIFE, UKZN and DFFE**


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The developments of strategic activities partially included input from stakeholders. Further engagement is planned. This document links to an extensive background document that provides details of the status of South Africa's elephants as well as the co-development process with South African citizens.

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- All government officials from various government departments including provincial authorities that attended and provided input into the strategy

# ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| CITES | Convention on the International Trade in Endangered Species of Wild Fauna and Flora |
| DFFE | Department of Forestry, Fisheries and the Environment, Government of South Africa |
| Elephant N&S | NEM: BA National Norms and Standards for the Management of Elephants in South Africa |
| GEF | The Global Environment Facility |
| HLP | High-Level Panel |
| NDP | National Development Plan |
| NEMA | National Environmental Management Act |
| NEM: BA | National Environmental Management Act |
| NEM: BA-TOPS | Threatened or Protected Species Regulations |
| NEM: PAA | National Environmental Management: Protected Areas Act |
| NGOs | Non-Governmental Organisations |
| PDIs | Previously Disadvantaged Individuals |
| SDGs | Sustainable Development Goals |
| SMMEs | The Small, Medium and Micro enterprises |
| WP | The White Paper on the Conservation and Sustainable Use of South Africa's Biodiversity |

# GLOSSARY OF DEFINITIONS, SCIENTIFIC AND TECHNICAL TERMS

In this Strategy, unless the context indicates otherwise, a word or expression defined in the White Paper on the Conservation and Sustainable Use of South Africa's Biodiversity (Government Gazette no. 48785, June 2023), National Environmental Management: Biodiversity Act (NEM: BA, 10 of 2004) or Protected Areas Act (NEM: PAA, 57 of 2003) has the same meaning.

# TABLE OF CONTENTS

## Contents

# LIST OF TABLES

# LIST OF FIGURES

# 1. INTRODUCTION

The African elephants (*Loxodonta africana and L. cyclotis*) are important in human history, religion, culture, consciousness, and economy. Elephants provide multiple overlapping socio-economic, cultural, and ecological benefits, and have intrinsic value as well. They evoke strong emotions, and fascinate, inspire, and attract attention from people globally. As iconic species, elephants are important for ecotourism, and through that local economies which rely on tourism (these include jobs in tourism, transport, research, anti-poaching, administration, education, media, art and crafts). Because of their ecological role, elephants are important as keystone species (van der Water *et al.* 2022)[1].

The African Savanna elephant (*L. africana*), which is the species that occurs in South Africa, is currently listed under the International Union for Conservation of Nature (IUCN) Red List as Endangered and nationally as Least Concern (Selier *et al*. 2016). The species is also currently listed as a protected species in terms of section 56(1) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) (NEM: BA). In addition, South Africa's African elephant population is included in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Appendix II; however, ivory is deemed to be included in Appendix I, for which international commercial trade is currently prohibited (ref). Because of its value and importance for people and the environment, and its dependence on conservation management, including protection against poaching, in order to survive, the African elephant warrants special attention as a species. Hence, the development of this National Strategy.

Recently, South Africa reported at the Elephant Summit in Zimbabwe during 2022 of having 43,884 to 44,775 elephants that continue to increase contrasting many trends elsewhere in Africa. State protected areas had 33,760 to 34,651 elephants, 4,156 elephants were living in contractual protected areas, 64 in communal protected areas while private protected areas had 5,904 (SANBI, 2022)[2]. Most of South Africa's elephants, however, form part of transfrontier conservation areas and many elephants move across international boundaries in northern KwaZulu-Natal, within the Greater Kruger Transfrontier Conservation Area as well as Mapungubwe Transfrontier Conservation Areas (Huang *et al*. 2022, Henley *et al.* 2023)[3]. Many elephants live in small, fenced properties with populations isolated from each other within landscapes and habitat fragmented by many different land uses in between.

## 1.1 The need for a national strategy for the African elephant

Currently, the management of individual elephant populations in South Africa at a site is informed by the National Norms and Standards for the Management of Elephants in South Africa (the Elephant Norms and Standards), which were published for implementation in the *Gazette* in 2008 (Government Gazette No. No. 30833) However, these norms and standards do not address broader strategic policy aspects, such as the management of elephants in South Africa as a meta-population.

[1] van de Water, A., Henley, M., Bates, L. and Slotow, R., 2022. The value of elephants: A pluralist approach. *Ecosystem Services*, *58*, p.101488.
[2] SANBI, 2022. SANBI elephant database.
[3] Huang, R.M., Van Aarde, R.J., Pimm, S.L., Chase, M.J. and Leggett, K., 2022. Mapping potential connections between Southern Africa's elephant populations. *Plos One*, *17*(10), p.e0275791; Henley, M.D., Cook, R.M., Bedetti, A., Wilmot, J., Roode, A., Pereira, C.L., Almeida, J. and Alverca, A., 2023. A Phased Approach to Increase Human Tolerance in Elephant Corridors to Link Protected Areas in Southern Mozambique. *Diversity*, *15*(1), p.85.

A process to amend the Elephant Norms and Standards was initiated in 2014. These amendments have been finalised, and the amended Elephant Norms and Standards was published for implementation in February 2023 (Government Gazette No. 47984). However, the Norms and Standards were withdrawn on 31 March 2023 (Government Gazette No. 48349), and so the 2008 version currently has standing.

As part of the development of a scientific rationale for these amendments to the Elephant Norms and Standards, workshops were held with scientists and managers to improve specific sections, especially the sections on elephant management plans and management interventions. In addition, the National Biodiversity Research and Evidence Strategy (NBRES) Indaba, hosted by the former Department of Environmental Affairs in 2018, included a specific work stream on the use of scientific evidence to improve the management of elephants.

During the above-mentioned workshops and the NBRES Indaba discussion, it was identified that there were areas of the Elephant Norms and Standards that would require further substantial consultation and amendment. Importantly, it was identified that there were aspects that are not covered by the current norms and standards, and which required a consolidated and coordinated national approach. Elephant populations are fragmented across a number of state, community, and privately owned areas, each of which may have different specific reserve objectives, as well as different reasons for having elephants. Given the complexities of conservation and sustainable use of elephants, it was identified that a consolidated and integrated framework, consistent across the country, should provide strategic guidance to improve policy, regulation, decision-making, and support owners and managers in the conservation and use of elephants.

The Parties to CITES approved the African Elephant Action Plan (AEAP), which provides the basis for conservation of elephants, and agreed that elephant range states should develop National Elephant Action Plans (NEAP), consistent with the AEAP. A NEAP could ensure a consistent national approach that ensures each range state contributes to the continental conservation of elephants. South Africa does not have a NEAP.

The above context highlights an urgent need to develop a national approach to and objectives for elephant conservation. This will have a different purpose to the Norms and Standards, and the 2014 Elephant Research Strategy. This national conservation approach should be focused on the conservation of the national elephant herd, and the various benefits which should flow from this. This National Elephant Heritage Strategy is intended to serve this purpose, as well as to provide a South African specific NEAP consistent with the AEAP.

Through historical processes, elephants are unique in South Africa in having a species-specific Norms and Standards for their management. Because of this, and together with this National Elephant Heritage Strategy, they jointly provide the basis of an Elephant Biodiversity Management Plan, as envisaged under NEM: BA, with the National Elephant Heritage Strategy intended to provide the primary instrument, with the Norms and Standards, when revised, responding to the National Elephant Heritage Strategy in a hierarchical manner. The Scientific Authority of South Africa has drafted a non-detriment finding for elephants that indicates that, at current levels, national and international trade in elephants, their products and derivatives is not detrimental to the survival of the species within South Africa. Ideally the National Elephant Heritage Strategy should have preceded the development of Norms and Standards. In addition, site level elephant management plans will effectively serve as implementations plans for the National Elephant Heritage Strategy, taking local context into consideration. South Africa is a signatory to a number of international conventions and it is important that this strategy align with, for example, the Global Biodiversity Framework and the Sustainable development goals.

The process of developing the National Elephant Heritage Strategy started before the report of the Ministerial High- Level Panel of Experts for the review of policies, legislation and practices on matters of elephant, lion, leopard and rhinoceros management, breeding, hunting, trade and handling which was released on 1 May 2021, and has taken the recommendations of that report into consideration. In addition, the White Paper on the Conservation and Sustainable Use of South Africa's Biodiversity has been approved by Cabinet for implementation (but still awaiting publication in the Government Gazette), and this National Elephant Heritage

Strategy is informed by, and aligned to, the White Paper. Part of the delay in the process of finalising the National Elephant Heritage Strategy for public participation was to ensure that it responded to both of these important guiding documents.

## 1.2 Alignment of the National Elephant Heritage Strategy with regional strategies

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## 1.3 What is in a word – Elephant Heritage relative to Conservation

Elephant contribute to a wide range of values and expectations of diverse stakeholders. Because of the different ways that elephants are important to, and have meaning for, people, and the long mutual association of elephants and people, there is a need to consider more than simply the conservation status of elephants. Conservation is here interpreted as the biological aspects of elephant persistence. Elephants are part of South Africa's history, traditions and culture. Heritage better encapsulates elephants' contribution to how South Africans perceive themselves, their history, and traditions, and elephants are important in how the citizenry develops an awareness of being South African. Elephant heritage is, thus, a key element of the South African culture and well-being and plays important roles in South Africa's politics, society, business and world view. South Africa, thus, should strive to enhance this elephant heritage, *i.e.,* the close connection between elephants and people, and not focus solely on the conservation of elephants in isolation. Hence, the approach is to develop a National Elephant Heritage Strategy, which includes key elements that would be considered in a conservation strategy such as a NEAP but ensures this is contextualized within South African society and societal aspirations, including promoting a sustainable intergenerational legacy.

## 1.4 Vision

*Healthy elephant populations help realise biodiversity goals and create fair and inclusive opportunities for sustainable ways of living, and dignified lives, for current and future generations.*

**Impact Statement:** Sustainable development catalysed by persistent elephant-based biodiversity

The emergent vision is based on the values expressed by the stakeholders. These have three core elements: environmental outcomes and the influence that elephants can have on these; economic outcomes and how elephants can contribute to these; and social outcomes that embrace all the values of elephants. The vision is aspirational, seeking to do better than just achieving sustainability (i.e., the ability to be maintained at a certain rate or level, or avoiding depletion), or only resilience (i.e., the ability to recover quickly after a disturbance), encompassing restorative and regenerative practices that build up the world's natural and social capital. This speaks to "Thriving People and Nature" reflecting thrivability, which is South Africa's path out of unsustainable

practices toward a world where all people have a high quality of life, a voice, and a nurturing earth supporting them, which elephants and their habitats can make a major contribution to.

The aspiration seeks to ensure that elephants contribute to improving the well-being of people and ecosystems simultaneously. Using whole systems approaches, it is imperative that the South African way of being together evolves, through collaborating, co-learning and co-working, so that our collective wisdom and actions bring forth a flourishing world and thriving life. Elephants play a significant role in maintaining a persistent intention to create more value than what we consume; this is particularly important for sustaining and increasing South Africa's social and natural capital which are fundamental for inclusive socio-economic development. Elephants ought to serve as a flagship for transformative change to achieve "Thriving People and Nature".

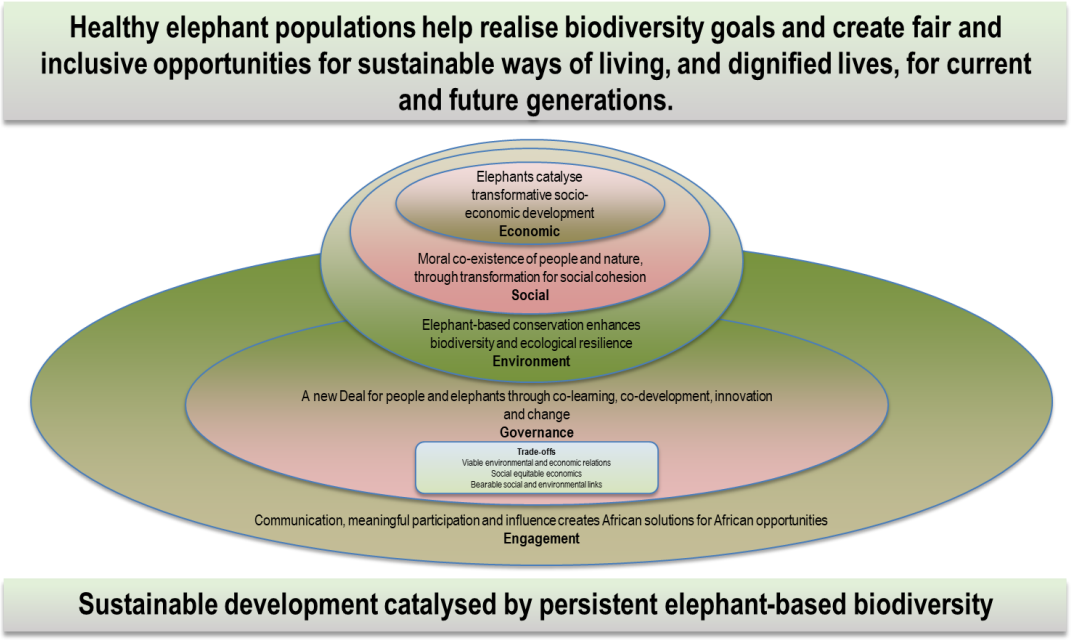


**Figure 1:** The Vision, Goals, and Impact Statement of South Africa's National Elephant Heritage Strategy embedded within a sustainable development systems approach.

## 1.5 Goals and Strategic Activities

The aspirations expressed by the stakeholders span three key elements – (a) environment, (b) social and (c) economic (Fig. 1). However, achieving these goals requires the establishment of (d) good governance and (e) stakeholder engagement that recognises key trade-offs particular to elephants. Navigating such trade-offs among the diverse aspirations of South African will substantially benefit from equitable and transparent engagement, ensuring the acknowledgement and inclusion of the values, needs, and aspirations of all stakeholders.

### *1.5.1 Environment*

**GOAL 1:** *Elephant-based conservation enhances biodiversity and ecological resilience.*

Elephants have evolved various features that enhance their ecological role in ecosystems. As integral components and drivers of ecological systems, they provide key elements of ecological resilience in areas they inhabit. As such, elephants also have an existence value on their own. Even so, their ecological influence depends on how intensely they use localities. Small areas available to elephants require more management.

Elephants require large spaces, or if in fragmented landscapes, ways to move between localities that have suitable habitats. When connections between places are constrained, interventions focus on mimicking elephant movement and dispersal dynamics through responsible translocations. Interventions focus on reducing the fragmentation of conservation areas and increasing linkages and/or corridors between conservation areas both within and between countries (transboundary conservation areas).

In addition, a metapopulation approach to the management of elephants could be adopted more broadly. South Africa could act as a reservoir for the rest of the continent and contribute elephants to range states within the continent where elephant populations have been extirpated or have decreased over time. Approaches thus focus on ensuring the persistence of elephants, even within a diverse landscape with multiple land uses. However, this will come with challenges as people have little exposure to free-roaming wildlife and there is potential for conflict and risks and challenges associated with this. Legal uncertainties, such as issues of ownership and user rights, are also likely to emerge.

Elephants are sentient, have cognition and consciousness and are highly social. They evolved coping strategies to deal with various stresses. Elephant management interventions, thus, embed within a principle of a duty of care, with case-by-case decisions guided by natural processes. This approach includes ensuring the maintenance of viable populations with natural family units and social dependencies, managed according to social structure and natural ways to cope with social disruption.

**Table 1:** Action table – Goal 1: Elephant-based conservation enhances biodiversity and ecological resilience.

| **GOAL 1: Elephant-based conservation enhances biodiversity and ecological resilience.** | | |
|---|---|---|
| **Environmental Values** | **Strategic Activity** | **Outcomes (linked to WP)** |
| **Existence Value:**<br><br>Elephants have intrinsic and existence value as they evolved within their landscapes. | Activity 1.1:<br><br>Provide a natural environment for elephants that allows them to thrive and cope with stressors. | • Well-being of nature and individual elephants and populations of animals is realised and considered.<br>• Expanded, connected, thriving, conservation areas conserve viable populations of elephants, including through co-ordinated partnerships.<br>• Resilience and adaptive potential of elephants, including their response to human disturbance, is maintained and elephant populations protected. |
| **Ecological Role:**<br><br>Elephants influence ecological resilience in how they use landscapes, which intensifies when habitats are fragmented or confined. | Activity 1.2:<br><br>Maintain, restore, or mimic the ecological role of elephants across landscapes. | |
| **Species persistence:**<br><br>Viable, healthy, and robust populations that improve the persistence of elephants while corridors connect expanded ranges. | Activity 1.3:<br><br>Expand connected space for elephants and minimise human influences, including illegal harvesting, trafficking, habitat fragmentation and human-wildlife conflict, on elephants and their environment. | |

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| **Integrated land-use:**<br><br>Opportunities for expansion options, management models and approaches including integration with a range of land uses. | Activity 1.4:<br><br>Coordinate inclusive partnerships to facilitate a dynamic viable elephant metapopulation that expands and connects healthy populations. | |

### *1.5.2 Economic*

**GOAL 2:** *Elephants catalyse transformative socio-economic development.*

Stakeholders with a high interest in elephant-related issues often influence how people can benefit from elephants, yet they are unaffected in terms of how elephants directly influence their livelihoods and survival. Contrary to this, some stakeholders that live adjacent to or amongst elephants have their livelihoods and survival affected by elephants. These carry the burden of responsibility associated with elephant management. More equitable economic benefits should go to stakeholders who are directly affected by elephants, and loss of access to natural resources due to the creation of fenced reserves. Benefits should also be aligned with responsibilities and vulnerability to ensure equitability. Recognising and using fair socio-economic values derived from the national elephant population could potentially contribute to the reduction of poverty (SDG 1), the reduction of hunger (SDG 2), decent work and economic growth (SDG 8), reduced inequalities (SDG 10), protection of biodiversity on land (SDG 15) etc. as part of the United Nations Sustainable Development Goals (SDG's) (https://sdgs.un.org/goals).

There are vast values, benefits and services of elephants, however, diverse sectors within society may value elephants differently. It is important that all sectors of society at least recognise all values ascribed to elephants even though some values may not necessarily be important or even acceptable to a particular sector of society. Benefits, services and values associated with elephants include eco-tourism, community development, hunting, tax beneficiation, conservation, carbon credits and accreditation amongst many others, including moral values. Elephants create jobs within and outside protected areas through local businesses associated with such areas. These economic opportunities can and need to be optimised to ensure equitable benefits to stakeholders mostly affected by elephants.

Socio-economic opportunities from elephants, their derivatives and their environment can only be optimised if there is fair access to these. Access is often limited because of legislative restrictions, ownership of elephants and land tenure, preventing optimisation of socio-economic opportunities. Where possible, access to elephants, in general, needs to be improved whilst ensuring that there is sustainable use of the species and its derivatives. Once equitable access to elephants and their derivatives is established, there will be potential to develop small business opportunities created directly around elephants themselves. Derivatives from elephants such as elephant art, curios, hair, leather, ivory, and meat, and elephant-based educational programs, cultural activities, etc., have the potential to promote small business opportunities, skill development, and local value-adding.

**Table 2:** Action table – Goal 2: Elephants catalyse transformative socio-economic development.

| **GOAL 2: Elephants catalyse transformative socio-economic development** | | |
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| **Economic Values** | **Strategic Activity** | **Outcomes (linked to WP)** |
| **Human-elephant co-existence:**<br><br>Humans and elephants use similar components of biodiversity and can co-exist in landscapes. | Activity 2.1:<br><br>Unlock social and economic opportunities and solutions that address challenges of living with elephants, that promote human-elephant coexistence | • Practices and activities that promote sustainable use and human-elephant co-existence enhance living in harmony with nature, with effective mitigation of human-elephant conflict,<br>• Reducing dis-services promotes support for conservation over alternative land uses.<br>• Barriers to entry and participation in the biodiversity economy significantly reduced, and PDIs, youth, women, and people with disabilities become owners and operators of their own businesses within the biodiversity economy value chain. |
| **Fair and inclusive benefits:**<br><br>Elephant landscapes stimulate socio-economic benefits through meaningful partnerships | Activity 2.2:<br><br>Empower communities most affected by elephants by apportioning responsibility, accountability, and associated benefits and costs of landscapes with elephants. | |
| **Fair and inclusive access:**<br><br>Equitable opportunities for access to elephants and the environment they live in. | Activity 2.3:<br><br>Provide opportunities for equitable and fair sharing of benefits, services, and values from elephants and their landscapes. | |
| **Localised socio-economic development:**<br><br>Localised, community-based enterprise based on elephants and their landscapes unlocked. | Activity 2.4:<br><br>Develop local value chains and markets while empowering local people as owners, partners and beneficiaries of elephants and their landscapes. | |

### *1.5.3 Social*

**GOAL 3:** *Moral co-existence of people and elephants, through transformation for social cohesion.*

South Africans have many non-monetary values linked to elephants. These link to respect for elephants based on moral obligations, ethical considerations and environments that enhance elephant well-being. This imposes a duty of care by South Africans to elephants. South Africans should recognise the importance of considering the diversity of relevant stakeholders, especially their needs and moral values, to ensure the upholding of people's dignity. Such respect for people and views is part of creating a social cohesion of citizenry and highlights a value linked to the importance of a unifying approach. A key element of social cohesion and a unifying approach to conservation and benefits linked to elephants is opportunities for equitable livelihoods, particularly to improve access to elephants and their environments. This can ensure the well-being of current and future generations of South Africans.

Broadscale consensus highlights that the broader value of elephants and their environments needs to be optimised to benefit all people, including obtaining support from global citizens. Benefits derived from elephants and their environments should be shared beyond the fenced boundaries of protected areas. Many local people have limited access to protected areas, which reduces the value of these areas and species within them (such as elephants). This is especially concerning where local people have lost access to land for conservation or where they are co-owners/managers without deriving benefits. Adjacent communities require access to conservation areas for education both to understand how the park works and for their children to see wildlife, learn to value conservation and learn about their local history.

Adjacent communities enjoy numerous traditional benefits provided by elephants and their environment, which should be accessible to local people. These include, for example, elephant dung, which has a multitude of medicinal uses varying between different communities, elephant maggots that also have medicinal value and certain plant species which elephants eat that assist in human milk production. In some communities, elephant by-products are used as traditional attire.

**Table 3:** Action table – Goal 3: Moral co-existence of people and elephants, through transformation for social cohesion.

| **GOAL 3: Moral co-existence of people and elephants, through transformation for social cohesion.** | | |
|---|---|---|
| **Social Values** | **Strategic Activity** | **Outcomes (linked to WP)** |
| **Global Benefits:**<br><br>Healthy elephant populations incur costs for South Africa and its people, while providing local and global intergenerational benefits. | Activity 3.1:<br><br>Use South Africa's national elephant conservation success to enhance its reputation and increase local beneficiation.<br><br>Activity 3.2:<br><br>Develop and implement mechanisms and tools for global stakeholders to enhance elephant conservation and its benefits locally. | • Financial support and incentives are harnessed and leveraged from all sources to ensure the biodiversity sector is adequately resourced, and transformed.<br>• A prosperous and equitable society living in harmony with nature.<br>• Improved livelihoods and well-being of previously disadvantaged communities, through meaningful participation and increased access and benefit sharing.<br>• The broad values of ecosystem services are realised and enhanced for designated groups |
| **Proudly South African:**<br><br>Pride and honour of diverse people in the elephant heritage of South Africa. | Activity 3.3:<br><br>Understand and share the diversity of cultural values of elephants and their importance, and communicate this proud South African heritage. | |

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| **Human well-being and social Cohesion**<br><br>Elephants contribute meaningfully to achieving the Sustainable Development Goals | Activity 3.4:<br><br>Develop mechanisms and opportunities promoting elephants as flagships in key areas of sustainable and equitable socio-economic development, thereby increasing human well-being and social cohesion | • The value and integrity of elephants as a key component of African traditional culture is restituted and restored. |
| **Diverse values**<br><br>People have a range of values associated with elephants. | Activity 3.5:<br><br>Create mechanisms to respect and include diverse stakeholder values from elephants, and ensure all can express and enjoy these.<br><br>Activity (c) 6<br><br>Harness the diversity of values of elephants to promote common purpose to sustain, conserve and use elephants in living landscapes for the well-being of people and elephants. | |

### *1.5.4 Governance*

**GOAL 4:** *A new deal for people and elephants through co-learning, co-development, innovation and change.*

The strategic objectives of environment, economic and social contributions inadvertently will require trade-offs linked to viable environmental and economic relations, socially equitable economics and bearable social and environmental links. It is acknowledged that the issue of responsibilities of government and their mandates, together with the ownership of elephants, is complex. A key aspect is meaningful participation. To effectively conserve, manage and use elephants, all the key role players i.e., communities, conservation managers, scientists, NGOs, industries should be consulted and involved in the process, albeit guided by different levels of participation. This promotes stakeholder buy-in and compliance in the implementation of this Strategy and other related tools. Considering the need to weight values by level of effectiveness of stakeholders, reflecting thereby different relative importance of values, devolved decision- making may be most effective, respecting principles of good governance and benefiting from an enabling, responsive regulatory framework. This is particularly important given South Africa's history of past and present social injustices, and transformation requirements to address resultant inequalities, including those linked to elephants and benefits of all values of them.

In this context, evidence from various sources embraces South Africa's principles of evidence-based decision making. This in particular requires integration of insights from various sources and cultures, and mutual respect in these. Even so, a key insight already is that elephants are integrated and part of ecosystems and do not act as a species in isolation. Governance of elephant management should thus incentivize a systemic approach rather than a symptomatic response.

**Table 4:** Action table – Goal 4: A new deal for people and elephants through co-learning, co-development, innovation and change.

| **GOAL 4: A new deal for people and elephants through co-learning, co-development, innovation and change.** | | |
|---|---|---|
| Governance Values | Strategic Activity | **Outcomes (linked to WP)** |
| **Adaptive co-learning**<br><br>Adopting evidence-based best practices, learning from approaches across socio-ecological systems promotes African solutions for African opportunities. | Activity 4.1:<br><br>Based on the African Elephant Action Plan, use this strategy to initiate an inclusive and participatory community of practice with African range states and stakeholders, allowing for innovative and adaptive co-learning.<br><br>Activity 4.2:<br><br>Create an enabling and adaptive environment whereby the decision-making and approaches to the conservation, management, and sustainable use of elephants integrates science, experience, indigenous and local knowledge systems and practices. | • Strengthened multilateralism and advocacy in global biodiversity governance enhance thriving biodiversity in Africa with a positive contribution to improve planetary health.<br>• Inclusive and equitable biodiversity economy with redress, full access, and beneficiation of ecosystem services.<br>• Improved governance and management, and contribution to the biodiversity economy, with meaningful community participation, influence and benefit. |

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| **Constitutional justice:**<br><br>South Africa embraces transformation redressing historical injustices, with equitable and fair environmental approaches that address inequalities. | Activity 4.3:<br><br>Develop appropriate mechanisms and processes which allow for inclusive and meaningful participation of all stakeholders in governance processes, which ensures environmental justice through co-developing, co-learning, co-management and shared decision-making processes, considering historical injustices.<br><br>Activity 4.4:<br><br>Develop an enabling regulatory framework which promotes the co-existence of elephants and people and ensures and facilitates equitable access and benefits.<br><br>Activity 4.5:<br><br>Ensure reasonable decision-making processes that are inclusive, justifiable and accountable through transparent mechanisms. | • Conservation areas provide access and benefit flows to communities, redressing past injustices.<br>• Sustainable use ensures inclusive and meaningful participation in the biodiversity economy, and catalyses rural socio-economic development.<br>• Designated groups are empowered as equal and influential participants, leading transformation of the biodiversity sector.<br>• Enhanced and effective biodiversity reporting and trend analysis enhances biodiversity conservation and sustainable use and prevents or mitigates threats. |
| **Systems focus:**<br><br>Elephants benefit socio-ecological systems and do not typically act as a species in isolation that creates problems | Activity 4.6:<br><br>Develop integrated, systems-oriented mechanisms and tools to balance the environmental, social and economic benefits of elephants. | |

### *1.5.5 Engagement*

**GOAL 5:** *Communication, meaningful participation and influence creates African solutions for African opportunities.*

Elephants are valued by people in many different ways, with ninety benefits, services, and values associated with elephants having been identified. Based on their culture, traditions, and how closely they are associated with, or

work with elephants, people prioritise different benefits, services, and values over others. Importantly in the South African context, the legacy of colonialism and Apartheid imposed a Western and discriminatory framing for elephant conservation and sustainable use, including restricting and limiting access to elephants, and the benefits that traditionally flowed from this.

Because of the importance of elephants to people and how their different world views influence their thinking and perspectives, decisions made around elephant conservation and sustainable use are contentious, especially when they involve trade-offs which are needed to achieve viable environmental and economic relations; social equitable economics; and bearable social and environmental risks.

Given the contention, the importance of meaningful engagement as a foundation to achieving the vision cannot be overemphasized. Such engagement has to be founded on effective communication with integrity, the ability for all stakeholders to participate in processes in an inclusive and equitable manner, which influences outcomes, and by building a shared, common purpose founded on co-learning with understanding. From this can emerge locally relevant solutions that respect both shared and unique values across stakeholders, and which can grow and sustain social cohesion.

Fundamental to this is the creation of the safe engagement space where people can co-learn about elephants and what they mean to diverse people in very different contexts, and the essential role that they play in the environment and society.

Importantly and uniquely, owners and managers of elephants are their custodians on behalf of society, and it is essential that their intentions are well-founded, and voiced. Practical solutions, honed to local conditions and circumstances, should emerge from the people closest to the challenges and opportunities. Such solutions, while locally grounded need to be forward looking and well considered, such that they collectively give effect to the aspirations and intent of this National Elephant Heritage Strategy. This can be achieved through harnessing the wisdom and knowledge of individuals, collective co-learning through sharing and referencing to the evidence base, and building a cohesive voice that is effectively communicated. Empowering these custodians of elephants is critical for effective engagement with them by all interested and affected stakeholders on whose behalf they act, providing enabling engagement mechanisms to achieve the broader strategy.

**Table 5:** Action table – Goal 5: Communication, meaningful participation and influence creates African solutions for African opportunities.

| **GOAL 5: Communication, meaningful participation and influence creates African solutions for African opportunities** | | |
|---|---|---|
| **Enabling values** | **Strategic Activity** | **Outcomes (linked to WP)** |
| **Let the locals lead:**<br><br>Ecological, social and economic benefits arise from elephants at local sites, where managers, owners, and people living with the costs of elephants, make daily decisions. | Activity 5.1:<br><br>Empower local managers and owners, and people living with elephants through an effective Elephant Management Forum that shares and influences best practice conservation, management, and use.<br><br>Activity 5.2:<br><br>Advocate for, and establish, meaningful and equitable participation and influence across stakeholders, including people living with the costs of elephants. | • Integrated and strengthened awareness for people to value, appreciate, and care for biodiversity conservation and sustainable use.<br>• Evidence-based best practice in conservation and sustainable use, with effective translation of knowledge into practice.<br>• Clear understanding of the intent and aspirations of South Africa, in promoting conservation for the well-being of people and nature. |
| **Co-learning:**<br><br>Education and learning about elephants span a range of sources of information shared across diverse cultures that respect and enjoy the elephant heritage of South Africa. | Activity 5.3:<br><br>Provide mechanisms for co-learning about elephants and their values, importance, and use across cultures. | |
| **Communication:**<br><br>Diverse stakeholders hold or share different perceptions, aspirations and values. | Activity 5.4:<br><br>Consider peoples' behaviour, attitudes, awareness, needs and aspirations related to elephants and the role that they play within the environment and society, for cohesive approaches. | |

### 1.6 Benefits and anticipated outcomes of the Strategy

This strategy aims to provide guidance reflecting the aspirations of South Africans with regard to elephants and how elephants can contribute to the well-being of people and nature alike. It anticipates recognising elephants as an integral part of South Africa's natural heritage valued for many reasons by diverse cultures. Elephant-based biodiversity and the landscapes within which elephants live could catalyse contributions to sustainable development and transformation within South Africa.

# 2. SPECIES BIOLOGY AND BACKGROUND INFORMATION

## 2.1 Species ecology and biology

### *2.1.1 Taxonomic description*

**Taxon name**: *Loxodonta africana*

**Common names**: African savanna elephant

**Taxonomic level**: Species

### *2.1.2 Distribution of the African elephant in South Africa*

At present, elephants occur in all the provinces of South Africa except for the Northern Cape and the Free State, in a total of 94 subpopulations of which 18 subpopulations are on state-owned land and 76 subpopulations on either private or communal owned land (SANBI elephant database) (Fig. 2). Land area currently available to elephant accounts for less than 2.8% of the total land area of South Africa and is estimated at 38 406 km$^2$ (end of 2020). Subpopulations on private properties, however, tend to be small and can range from as few as two to several hundred elephants (SANBI elephant database). Due to the presence of fences and other spatial constraints in the landscape, no migratory subpopulations of elephants exist in South Africa. Three transfrontier subpopulations however still exist on the borders of South Africa, namely those in the GMTFCA (with elephants moving between Botswana, South Africa and Zimbabwe), the GLTFCA (with elephants moving between South Africa, Mozambique, Zimbabwe and Eswatini) and the Lebombo TFCA (Fig. 3). Ithala Game Reserve in KwaZulu-Natal remains unfenced along the section of its boundary that is defined by the Pongola River, while the rest of the protected area is fenced. The KNP elephant population is connected to several private reserves in South Africa and a matrix of protected and rural areas in Mozambique and Zimbabwe (Chikadel *et al*., 2020). Elephants move freely across this GLTFCA (Cook *et al*., 2015). Elephants moving out of the KNP have been found to link the GLTFCA with the Lebombo TFCA, linking Tembe Elephant Park to the KNP and other reserves within Eswatini.

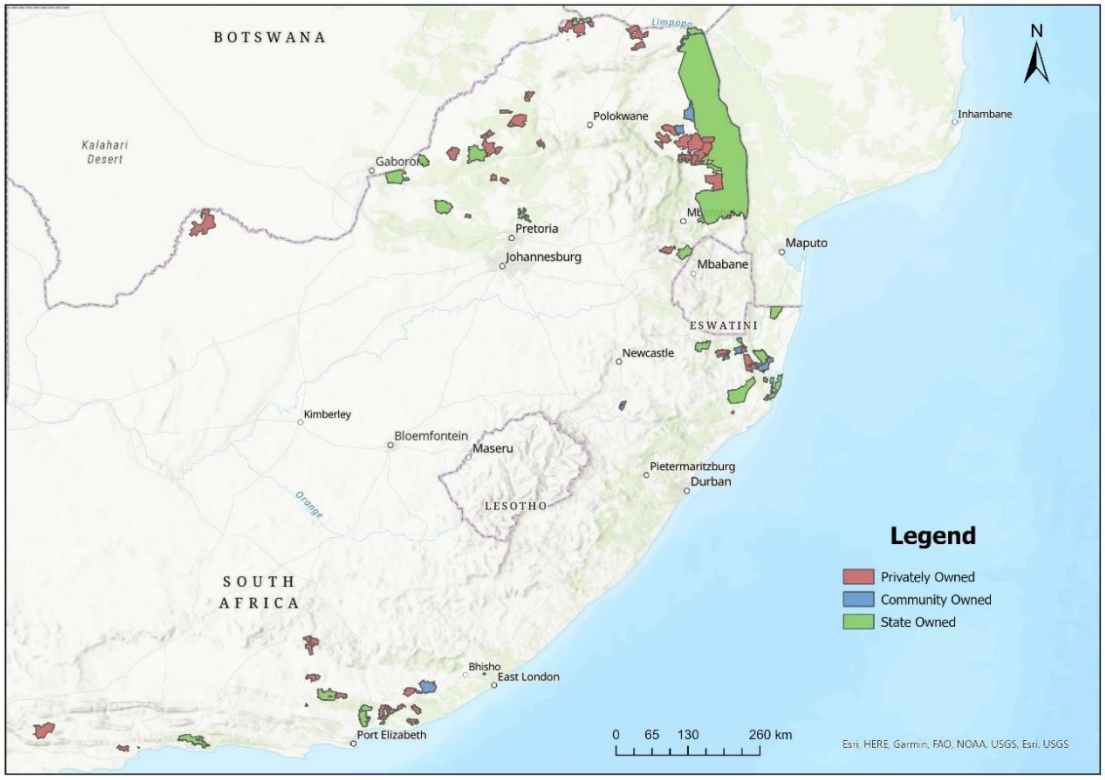


**Figure 2:** The distribution of elephants on state-owned and private land within South Africa (Mole *et al*., (In prep)).

### *2.1.3 Status of the African elephant*

The total national wild population is estimated at approximately 44,894 elephants of which 36,697 occur on state-owned land, and 8,197 on privately or communal owned land (SANBI database). Property sizes vary greatly from approximately 1,500 ha to 1,962 362 ha (including Kruger National Park (KNP)) and subpopulation size varies from 1 to 31,527 (95% CI: 31,085 – 31,976) (KNP) (SANBI elephant database; Louw *et al*., 2021). KNP recently developed new approaches to surveying elephants in the national park, because the traditional approach ignores biases (availability, observer and detectability) and sample error. The new technique, which only accounts for sample error, predicts an undercount of 15% (95% CI: 9% – 22%) by the historic counts. Using this approach, the KNP elephant population was estimated at 31,527 (95% CI: 31,085 – 31,976) individuals in 2020 (Louw *et al*. 2021). In addition, there seem to be net movements of elephants into KNP (drought and safety related) which may mask demographic responses to density and environmental variability (Smit *et al*., 2020). The KNP forms part of the GLTFCA where elephants move freely across borders, leading to population fluctuations (e.g. 27,992, 95% CI: 26,401 – 29,584 in KNP during 2021). Within the GLTFCA, the elephant population is estimated between 45,000 and 50,000 individuals, with the majority occurring within the Greater Kruger Area, followed by Gonarezhou National Park. While elephants may be considered common in certain areas, i.e. KNP, nationally elephants are considered uncommon given the restricted range and overall population estimate.

Currently, approximately 70% of all elephant populations in South Africa have less than 75 elephants and 22% of populations have less than 10 elephants (SANBI elephant database) (Fig. 3 & 4). There are four subpopulations with over 1 000 individuals, namely Madikwe Game Reserve (North West) (1 498), the collective elephant population of the KNP, the Associated Private Nature Reserves (APNR), Great Letaba Ranch, Makuya, Manyeleti and Sabi Sands adjoining KNP to the west (5,964) and the GMTFCA elephant population (approx. 1,970 individuals, as of end of 2017)(Fig. 4). Addo Elephant National Park in the Eastern Cape and Hluhluwe-iMfolozi Park (HiP) in KwaZulu-Natal each have large subpopulations of 705 and 789 elephants respectively (as of end of

2020). Most of the smaller subpopulations in small and medium-sized properties are intensively managed due to concerns about habitat degradation (Slotow *et al*., 2005), and several subpopulations are currently on contraception programs to maintain or reduce population growth (Bertschinger *et al*., 2008; Scholes & Mennell, 2008; Garai *et al*., 2018). A small captive industry that serves primarily the ecotourism sector (i.e. elephant back safaris, elephant interactions and conservation education) exists.

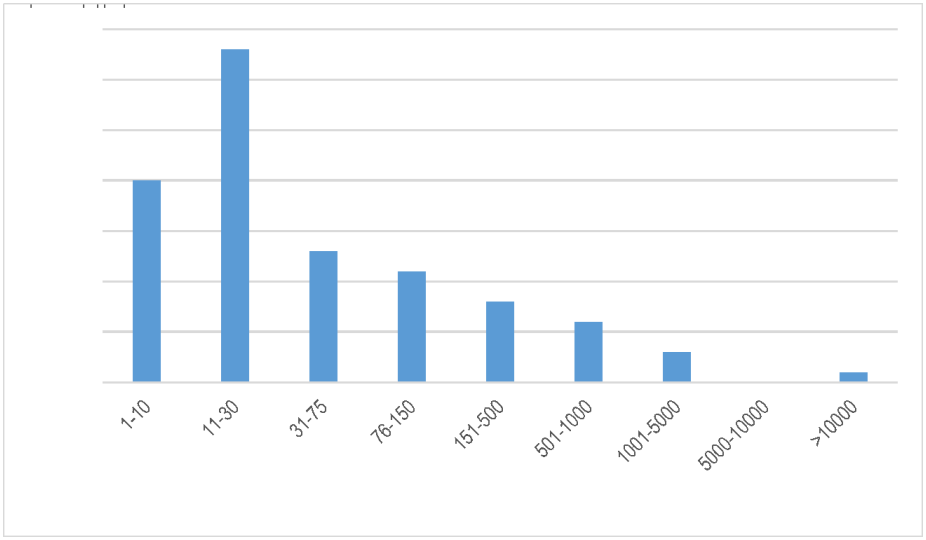


**Figure 3:** Number of elephant populations in South Africa within each of the population size classes (SANBI elephant database).

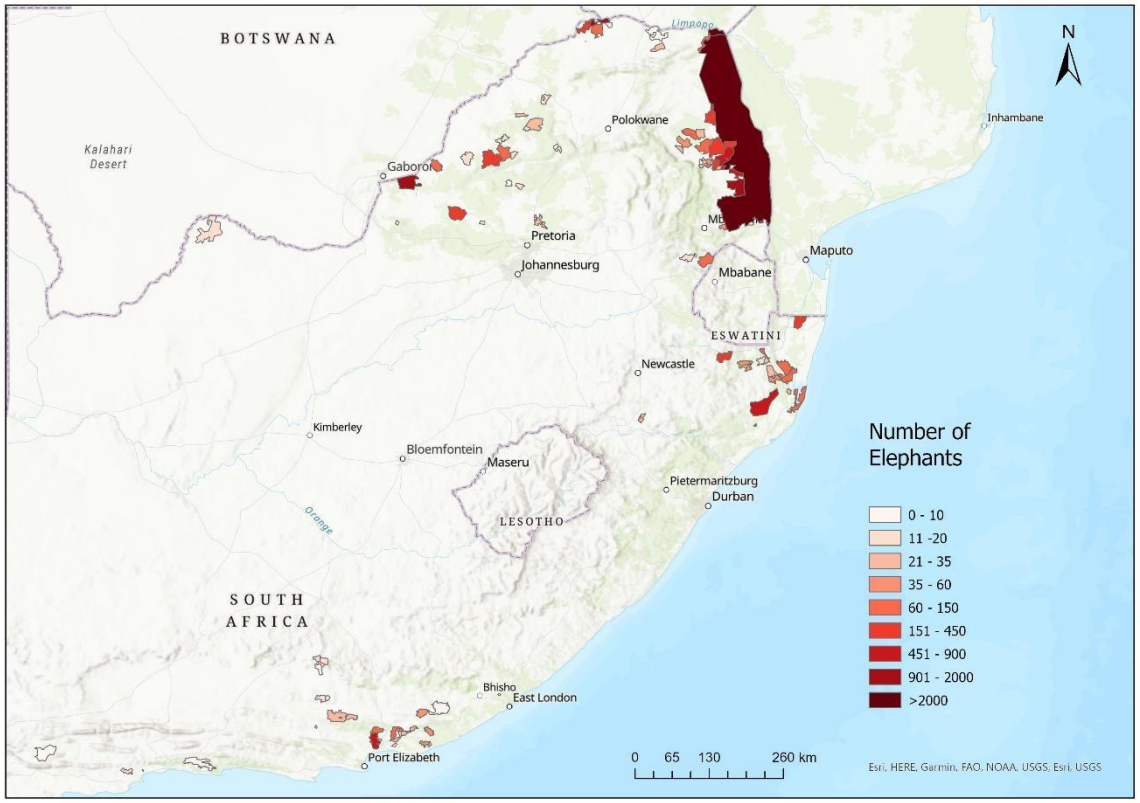


**Figure 4:** Population sizes and distribution of elephant subpopulations across South Africa (Mole *et al*., (In prep)).

### 2.1.4 Life history and reproduction

African elephants are long-lived with both sexes living to approximately 50-60 years in the wild (Owen-Smith 1988). Both sexes can reproduce on average to an age of 48 – 56 years (van Aarde *et al*., 2008). The number of calves a female will give birth to in her lifetime depends on the age at first calving (range 8.4 – 15.8 years) and the number of years between calves (range 1.8 – 13.5 years) (van Aarde *et al*., 2008). The 1.8 years noted for an elephant in Amboseli (Moss 2001) is exceptionally short and may be due to the early death of the previous calf. The mean age at first calving tends to be younger for South African populations, with cows having their first calves at an average age of 11.3 years (median = 11.9, SD = 1.8; n = 8) (van Aarde *et al*., 2008). Outside of South Africa cows have their first calves at an average age of 14.1 years (median = 13.5, SD = 3.0; n = 16) (van Aarde *et al*., 2008). The calving intervals of elephant cows across Africa range from 1.8 – 13.5 years (van Aarde *et al*., 2008), but within South Africa elephant cows calf on average every 4.2 years (median = 3.8, SD = 1.8; n = 22) (van Aarde *et al*., 2008) after a gestation period of approximately 22 months. Bulls become sexually mature at 15-18 years under natural conditions, but due to social constraints the majority of matings will be performed by bulls over the age of 35 years (Hollister-Smith *et al*., 2007; Poole 1989). African elephants thus have a low reproductive rate.

### 2.1.5 Habitat requirements and resource assessment

Elephants are mega-herbivores (herbivores exceeding 1,000 kg body mass - Owen-Smith 1988). They utilise a variety of food resources including grass, leaves and fruits (van Aarde *et al*., 2008). Elephants are very adaptable and occur in every biome, except for deserts, but are capable of spending short periods of time in desert environments, as can be seen in Namibia and by the presence of elephants in Kgalagadi Transfrontier Park. Within South Africa, elephants occur in most habitat types such as the bushveld regions of the Lowveld and Zululand (KwaZulu-Natal), as well as the Eastern Cape thicket habitats. Elephants have been translocated across several provinces within South Africa, and as a result, now occur in marginal habitat types that may not have formed part of their natural distribution range in the past (Ebedes, Vernon and Grundling 1995; Scholes and Mennell 2008; Landman and Kerley 2018). Historically they were not found year-round in certain habitats, such as within the Karoo and the Kalahari. Major river systems have been shown to be important for elephant distribution (Gaylard *et al*., 2003; Smit *et al*., 2007; Smit and Ferreira 2010) and thus there is some dependence on these linear habitats. Considering their relatively wide dietary requirements, and wide distribution across most mesic, and even some semi-arid landscapes, they can be considered a generalist.

### 2.1.6 Known diseases

Elephants are not generally carriers of diseases, however, they can assist greatly in the transmission of diseases by breaking fences and allowing the mixing of other wild animals with livestock either of which may be carriers or transmitters of diseases (Hopkinson et al. 2008). Elephants are also not vulnerable to diseases although anthrax and elephant myocarditis may cause sporadic deaths (Grant et al. 2008).

## 2.2 Population statistics and trends

While the growth rate may vary between elephant subpopulations, by far the majority of elephant subpopulations in South Africa are increasing. Mole *et al*., (In prep) indicated that out of the 39 elephant properties assessed in South Africa, none of the properties harboured a decreasing elephant population. Subpopulations were either increasing or no significant trend could be detected. Twenty-five out of the 39 subpopulations (64%) increased significantly. The linear model provided the best fit for 17 out of 39 (44%) subpopulations and indicate that these elephant subpopulations are increasing consistently every year. The logistic model provided the best fit for six

subpopulations (15%) which suggest that these subpopulations may be stabilising with their growth rates decreasing (although the overall trend is still increasing). In the South African context this is likely because a management intervention such as contraception or translocation has been implemented. Two subpopulations increased exponentially. Thus overall, the national elephant population of South Africa has been consistently increasing over the past 20 years.

The estimated annual population growth rate, particularly for small populations in South Africa, exceeds the maximum theoretical growth rate of 7% (Calef, 1988; van Aarde *et al*., 2008). Annual growth rates for South African subpopulations range from -0.6 to 25.5% per year (van Aarde *et al*., 2008). Of the 29 estimates of annual population growth rates in South Africa, only two were negative and 16 were higher than 7% per annum (van Aarde *et al*., 2008). There were a number of factors that have contributed to the high growth rate in introduced populations: 1) a female bias in translocated adults resulted in female biased adult sex ratios, and thus high growth potential; 2) the simultaneous maturation of the orphan animals (they were all approximately the same age when moved) resulted in spurts of growth as they all matured; 3) the abundant food in reserves from which elephants had been absent for extended periods; 4) in combination with (3) above, there had not been an intense drought in South Africa between 1992 and 2005, meaning that all populations have been experiencing favourable and unlimited environmental conditions; 5) management intervened to treat animals that were sick, snared or injured; 5) mortality of adults has been low as there are no individuals dying of old age and few fights to the death among adult males; 7) age at first reproduction and inter-calving intervals appear to be low in a number of reserves (van Aarde *et al*., 2008).

Elephant numbers in South Africa increased by approximately 26.8% between 2002 (14,071 elephants) and 2006 (17,847 elephants). Pretorius *et al*., (2018) estimated a population increase of nearly 89% from 15,744 elephants in 2001 to 28,168 elephants in 2015 (Fig. 5). In addition, the proportion of privately owned elephants increased from 17.5% (2,755) in 2001 to 22.8% (6,430) in 2015, with the actual number of privately-owned elephants more than doubling (Pretorius *et al*., 2018) (Fig. 5). The average annual growth rate for the South African elephant population is estimated at 6.90% for the period 2001 to 2013 (ESAG database, 2014) despite the KNP annual growth rate having dropped to 3.5% between 2006 and 2012. At the time when culling stopped in the mid-1990s the annual growth rate for KNP was estimated at 6.1% (Ferreira *et al*., 2012). The elephant subpopulation of GMTFCA is increasing at <2% per annum (Selier *et al*., 2014).

Elephant subpopulations on private land have been increasing at 7.2% per annum. As most private properties have, or are in the process of, implementing immuno-contraception and other measures to reduce reproduction (e.g. vasectomy), this increase is likely to stabilize in future.

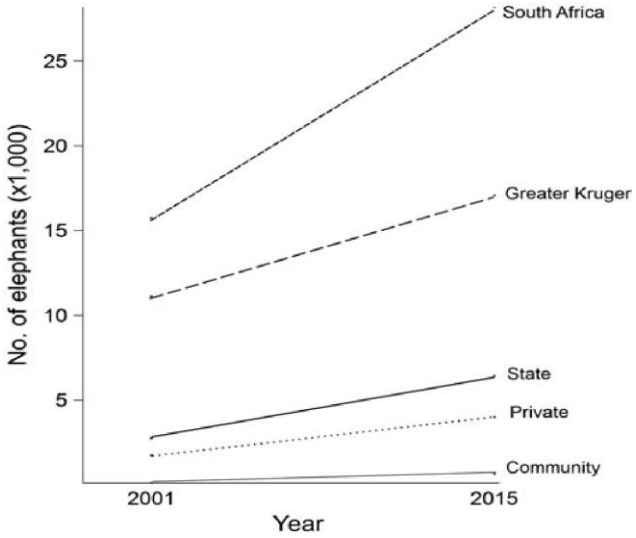


**Figure 5:** Increases in elephant *Loxodonta africana* numbers in the Greater Kruger area and on additional communal, state, and privately owned land across South Africa between 2001 and 2015 (Graph taken from Pretorius *et al*. 2018).

## 2.3 Major threats

At present the major threat to the elephant population of South Africa is the number of small fragmented subpopulations that are mostly managed in isolation. Approximately 70% of all elephant subpopulations in South Africa have less than 75 elephants and 22% of populations have less than 10 elephants. In addition, adequate fencing is a legislative requirement for the keeping of elephants in South Africa. Fencing reduces the level of human elephant conflict but at the same time confines elephants to specific areas preventing natural dispersal and linkages between subpopulations. The fragmented landscape within which elephant subpopulations exist as well as the number of small subpopulations is likely to lead to inbreeding and reduced genetic diversity within these subpopulations over time (Whitehouse & Harley, 2001). Traill, Bradshaw and Brook (2007) suggest that for most mammal species the mean viable population size is likely 4,169 individuals (95% CI = 3,577-5,129). Fortunately, elephants are long-living species, with genetic differentiation of populations taking a long time to occur (Lobora *et al*., 2018). This suggests that the effects of isolation on elephant subpopulations will take time to manifest, allowing for the creation of elephant corridors, or to use other management approaches to restore or mimic ecological processes.

In some cases elephants on small properties are intensively managed (e.g. through contraception) to control population sizes. This is a possible future because of an age bottleneck created by continued and prolonged contraception of females on small properties. While there currently seem to be no long term effects on the behaviour and spatial range use of contracepted elephant populations (Delsink *et al*., 2013; Druce *et al*., 2013) the long-term effects of radical changes in social structure, for example the complete absence of calves in some herds for long periods, have not yet been evaluated. While contraception can control population growth, one of the tools to reduce population sizes, namely translocation, is currently limited due to a lack of suitable new areas or reserves to which elephants can be introduced. Habitat degradation in small fenced properties in conjunction with severe droughts may affect these small fenced subpopulations if elephants cannot be relocated in time. Within South Africa, only three subpopulations of elephants, namely the GMTFCA elephant subpopulation, the GLTFCA elephant subpopulation and the Lebombo TFCA elephant subpopulation can move naturally as fences restrict movements elsewhere.

Meta-population management is not currently implemented among small and medium-sized properties, but is important for retaining the genetic diversity within the national population. A national coordinated approach for the translocation of elephants from areas with excess elephants is also required.

## 2.4 Research

A South Africa Elephant Research Strategy was developed and implemented in 2014. This South African Elephant Research Strategy constructs a summary of information needs that the application of the Norms and Standards for the Management of Elephants in South Africa generated. The South African Elephant Research Strategy also compares these with the needs defined by the Elephant Assessment (Scholes & Mennell 2009), as well as the African Elephant Action Plan (CITES, 2010). The Elephant Assessment has a large focus on societal expectations and values associated with elephant management, while the African Elephant Action Plan has focal areas in anti-poaching and human-elephant conflict mitigation. A key purpose of the document is to identify information gaps through collation of all published papers as well as summaries of completed, but unpublished work and ongoing projects since 2008. It includes an evaluation of how well research since 2008 addressed needs generated by the application of the Norms and Standards for the Management of Elephants in South Africa.

In association with a focused workshop directed at defining research programmes to fulfil these needs, the document provides a research strategy to support the implementation of the present as well as future revised Norms and Standards for the Management of Elephants in South Africa.

The Elephant Research Strategy identified research fields required to support the implementation of the National Norms and Standards for the Management of Elephants in South Africa. The strategy is structured into a suite of four broad research programmes, namely (1) the Scale Management Decisions Programme which focuses on relevant scales for managing the effects of elephants; (2) the Management Interventions Programme which has four themes including risks associated with techniques, animal health and welfare risks, responses by elephants and risks associated with unintended consequences; (3) the Management Trade-offs Programme which focuses on human perceptions and ethical trade-offs, strategic environmental optimization risk and benefit assessment, and policy and regulatory impact assessment; (4) the System Integrity Programme which focusses on biodiversity, tourism and stakeholder outcomes.

Several research projects addressing a number of the themes highlighted within the Research Strategy have been conducted and completed providing further insight into research gaps identified.

## 2.5 Utilisation and socio-economic context

By the 1890s, almost all of South Africa's elephants had been hunted, with only three, or possibly four, relict subpopulations remaining within the country (Carruthers *et al*., 2008). Since then, elephants in South Africa have undergone a period of sustained growth due to the proclamation and fencing of national parks and reserves. Between 1979 and 2001, over 800 elephants were translocated to approximately 58 reserves in South Africa (Garai *et al*. 2004). These newly introduced elephant populations have been characterized by high growth rates (Carruthers *et al*. 2008, van Aarde *et al*. 2008).

In South Africa elephants are utilised legally for hunting, photographic tourism, recreation (e.g. captive populations) and as a protein source, in accordance with the sustainable use policy environment prescribed by the National Environmental Management: Biodiversity Act 10 of 2004 (NEM: BA). Since 2008, elephants have been managed in accordance with the National Norms and Standards for the Management of Elephants in South

Africa (Government Gazette No. 30833, 29 February 2008). These norms and standards have recently been revised. The species is listed as protected in terms of Section 56 of NEM: BA and various provincial ordinances and acts provide further legislative protection. Permits are therefore required to undertake a variety of activities in relation to elephants, e.g. hunting and other forms of direct use. Since the implementation of the National Norms and Standards for the Management of Elephants in South Africa, no wild elephants have been exported to captive facilities abroad. In addition, at present no province permits the hunting of elephant cows.

The regulatory framework in place thus allows for sustainable offtakes. On a property level, managers and/or landowners have an interest in ensuring the stability of their subpopulations and manage their subpopulations and offtakes accordingly. The harvest of elephants is thus dually managed by both private landowners and government within an adaptive framework. In addition, all hunts by international clients must be recorded in the Professional Hunter's Register. The professional hunter accompanying the international client is responsible for completing and submitting the register to the provincial conservation authority. The Department of Forestry, Fisheries and the Environment (DFFE) collate the provincial registers into a national register on an annual basis.

Photographic tourism remains the predominant form of utilisation of elephants within South Africa. Hunting of elephants is limited, and it is unlikely to have a deleterious effect on the population as a whole. Between 2010 and 2020, according to provincial records (based on permits issued) approximately 541 elephants were hunted by international clients (Fig. 8). This is higher than what has been recorded in the Professional Hunting Register for the same time period (366 elephants) and is likely due to a number of permits not being executed. Between 2010 and 2020, approximately 70 elephants were exported from South Africa, the majority (77%) of the live exports were for reintroduction purposes. In 2018, 30 elephants from uMkhuze Game Reserve and 24 elephants from Ithala Game Reserve were translocated to Zinave National Park in Mozambique for reintroduction purposes.

Local trade involves mainly exchanges between properties through translocations, but is limited. Between 2010 and 2020 approximately 171 elephants were translocated between properties within South Africa (Fig. 6). Human elephant conflict incidences in general are low across the elephant range in South Africa, mainly because the majority of properties keeping elephants are fenced. Human elephant conflict incidents are however reported along the northern and eastern borders of South Africa where the two transboundary subpopulations occur, as well as along the KwaZulu-Natal boundary with Mozambique where elephants regularly enter South Africa into Tembe Elephant Park. Between 2010 and 2020, approximately 452 elephants were killed as damage-causing animals (DCAs) across all provinces, averaging approximately 45 elephants per annum (Fig. 6). These offtakes occur mainly along the Limpopo River and within the GLTFCA. Across all provinces and SANParks clear processes are in place to determine, manage and monitor offtakes of elephants (including DCAs).

Within Limpopo, the elephant population is divided into three categories namely 1) free-roaming elephant crossing the border from Botswana and Zimbabwe (around the GMTFCA), 2) elephant in the Greater Kruger System including the APNR (Reserves on the western boundary of KNP) and two State Managed Reserve (Makuya and Letaba Ranch) and 3) elephants in fenced reserves where movement is confined to a specific property or reserve by fencing. A conservative hunting quota of 3.7% of the total population is calculated for each of the mentioned categories. For the free-roaming elephant population of the GMTFCA, because there is no cooperative agreements in terms of establishing an off-take quota between South Africa, Botswana and Zimbabwe, and because the area of interest lies across these three countries, the calculated off-take quota is divided by three, irrespective of what Botswana and Zimbabwe take off. In addition, only 0.7% may be bulls over the age of 35 years. The offtake quota also takes into account elephants killed as DCAs.

Within KZN there is strong oversight from the provincial authority on the number of bulls that may be hunted on a specific property. The number is based on the size and structure of the population and captured within the

approved management plan for the property. There is thus little scope for deviation from the management plan in the number of elephants hunted per annum per property.

Mpumalanga province conducts DCA control actions through permitted hunting where revenues generated are utilised to support conservation actions within these reserves. Within both Limpopo and KwaZulu-Natal provinces, damage causing elephants can either be hunted by a local hunter or are destroyed by a provincial officer. DCA offtakes in both these provinces are included within the sustainable offtake quota calculated for the year. Elephant DCA reports within the Eastern Cape and Gauteng are very low (1-2 DCA removals over a 10 year period in Gauteng, one DCA in Eastern Cape in 2018).

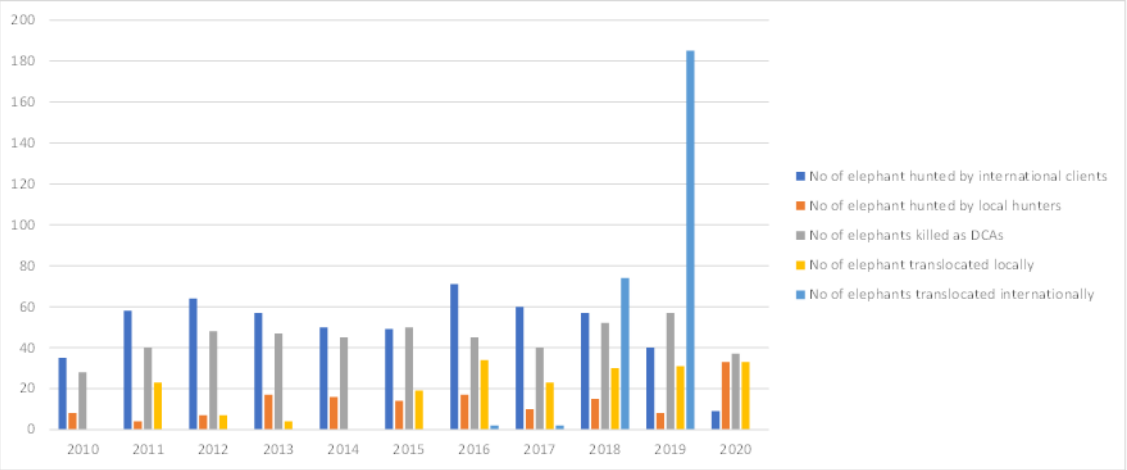


**Figure 6:** The number of elephants hunted by international clients and locally, killed as damage-causing animals and translocated between reserves within South Africa and internationally for reintroduction purposes between 2010 and 2020 (Information provided by provincial authorities).

## 2.6 Conservation measures

### *2.6.1 Meta-population management*

In South Africa elephants occur within large cross-border populations that require limited to no management and small- to medium-sized fenced populations that occur within a fragmented human-dominated landscape with, in most cases, unsuitable habitat between these populations.

The recent draft non-detriment finding (NDF) for elephants and processes related to the revision of the Elephant Norms and Standards and the development of the National Elephant Heritage Strategy has highlighted the need for a collective approach to managing these fenced small- and medium-sized elephant populations in South Africa.

The South African National Biodiversity Institute (SANBI) hosted a full-day in person workshop on 22 May 2023 in Pretoria to investigate the contribution of these small- and medium-sized elephant populations in South Africa to the vision and objectives of the National elephant heritage strategy and how these could be achieved or improved.

One of the outcomes of the workshop suggested that a Meta-population approach towards these small to medium sized fenced populations would ensure that a collective population unit will be established and that genetic resilience within such a Meta-population will be ensured therefore contributing to the suggested vision of a thriving elephant population.

### 2.6.2 Non-detriment Finding

The South African population of *Loxodonta africana* (African savanna elephant) is included in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), for the exclusive purpose of allowing international trade in live animals to appropriate and acceptable destinations and the export of hunting trophies. All other specimens, including ivory, are deemed to be specimens of species included in Appendix I, meaning that the export of specimens for commercial purposes is prohibited (Article III). In terms of Article IV of the Convention, an export permit shall only be granted for an Appendix II species when a Scientific Authority of the State of export has advised that such export will not be detrimental to the survival of that species. A NDF for *Loxodonta africana* (African savanna elephant) was compiled through a review of the relevant literature and deliberations held at a NDF workshop convened by the South African National Biodiversity Institute on 23 February 2022) and amended through various further consultations.

The NDF assessment (Fig. 7) undertaken for the African elephant (*Loxodonta africana*) demonstrates that local and international trade in elephant poses a low and non-detrimental risk for the species in South Africa (Fig. 8). The species is well managed in South Africa and the Scientific Authority does not have any current concerns relating to the export of elephants in accordance with Article IV of CITES.

The Scientific Authority is cognizant of the increased poaching of elephant and the illegal trade in ivory in other parts of Africa and will review this NDF assessment should the number of poaching incidents in South Africa increase to double the current rate.

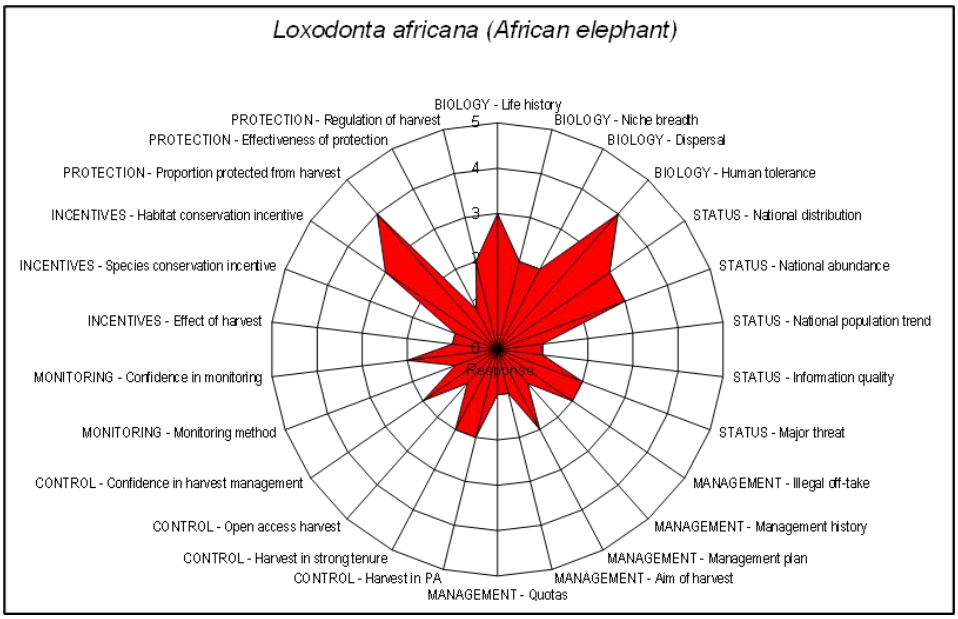


**Figure 7:** Radar chart summarizing the non-detriment finding assessment undertaken for *Loxodonta africana* (African savanna elephant) in South Africa accordance with the CITES NDF checklist. Explanations of scores given are detailed in Table 1. Higher scores are indicative of higher risks to the species. The limited shaded area in the radar chart demonstrates an overall low risk to the species.

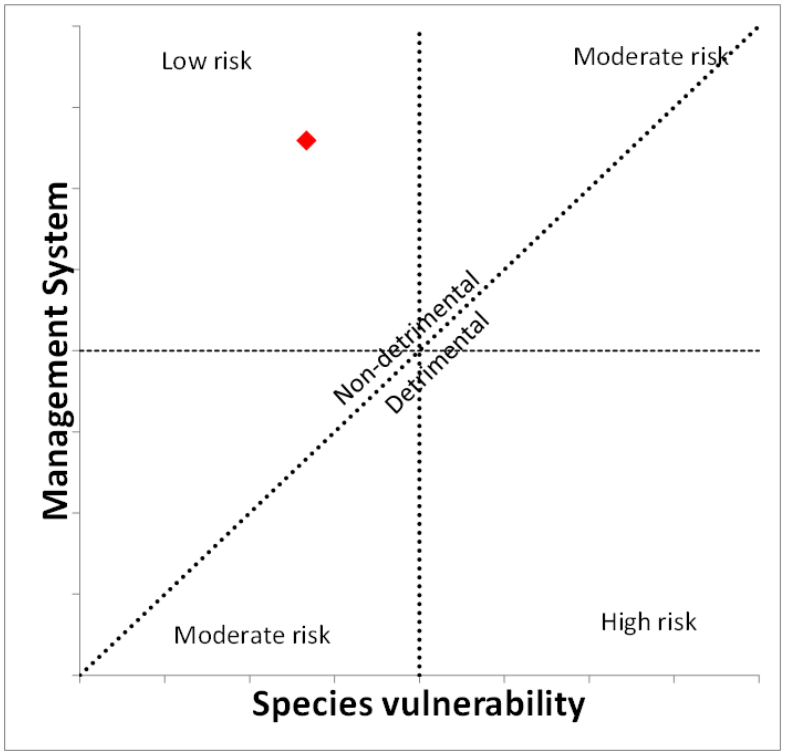


**Figure 8:** The risk of trading in *Loxodonta africana* (African savanna elephant) by South Africa as represented by the relationship between species vulnerability (biology and status) and the strength of the management system to which the species is subjected (management, control, monitoring, incentives and protection). The figure demonstrates that the species is assessed as at a low risk, and that trade is not detrimental.

## 2.7 Conservation status and legislative context

The South African population of *Loxodonta africana* (African savanna elephant) is included in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), for the exclusive purpose of allowing international trade in live animals to appropriate and acceptable destinations and the export of hunting trophies. All other specimens, including ivory, are deemed to be specimens of species included in Appendix I, meaning that the export of specimens for commercial purposes is prohibited (Article III). In terms of Article IV of the Convention, an export permit shall only be granted for an Appendix II species when a Scientific Authority of the State of export has advised that such export will not be detrimental to the survival of that species. Elephant is also currently listed as protected in terms of section 56 of the National Environmental Management: Biodiversity Act (NEMBA) No. 10 of 2004 and as Least Concern on the International Union for Conservation of Nature (IUCN) Regional Red List of Threatened Species (Selier *et al*., 2016).

### *2.7.1 International obligations*

#### 2.7.1.1 Convention on Biological Diversity (CBD)

South Africa is a Party to the CBD. Parties to the CBD adopted the Strategic Plan for Biodiversity 2011-2020, in 2010 in Nagoya, Japan, with the purpose of inspiring broad-based action in support of biodiversity over the following decade by all countries and stakeholders. In recognition for the urgent need for action the United Nations General Assembly also declared 2011-2020 as the United Nations Decade on Biodiversity. The Strategic Plan

comprises a shared vision, a mission, strategic goals and 20 targets and serves as a framework for the establishment of national and regional targets, promoting the three objectives of the CBD.

The development and implementation of this BMP-S addresses Strategic Goal C: Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity. This BMP-S specifically aims to contribute to the Target 12: By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly to those in decline, has been improved and sustained. This target specifically related to IUCN listed threatened species and has two components:

Preventing extinction. Preventing extinction entails that those species which are currently threatened do not move into the extinct category; and

Improving the conservation status of threatened species. An improvement in conservation status would entail a species increasing in population to a point where it moves to a lower threat status.

Progress towards this target would help reach other targets contained in the Strategic Plan, including Target 13. Further actions taken towards this target could also help to implement commitments related to the species focussed multilateral agreements such as CITES (2012).

Kunming-Montreal Global Biodiversity Framework, was adopted by the 15th COP at Montreal, Canada in December 2022, aims to catalyse, enable and galvanize urgent and transformative action by Governments, and subnational and local authorities, with the involvement of all of society, to halt and reverse biodiversity loss, to achieve the outcomes it sets out in its Vision, Mission, Goals and Targets, and thereby contribute to the three objectives of the Convention on Biological Diversity and to those of its Protocols. Its purpose is the full implementation of the three objectives of the Convention in a balanced manner.

The Kunming-Montreal Global Biodiversity Framework, including its Vision, Mission, Goals and Targets, is to be understood, acted upon, implemented, reported and evaluated, consistent with the following, amongst others:

(a) *Contribution and rights of indigenous peoples and local communities*: The Framework acknowledges the important roles and contributions of indigenous peoples and local communities as custodians of biodiversity and as partners in its conservation, restoration and sustainable use. The Framework's implementation must ensure that the rights, knowledge, including traditional knowledge associated with biodiversity, innovations, worldviews, values and practices of indigenous peoples and local communities are respected, and documented and preserved with their free, prior and informed consent, including through their full and effective participation in decision-making.

(b) *Different value systems*: Nature embodies different concepts for different people, including biodiversity, ecosystems, Mother Earth, and systems of life. Nature's contributions to people also embody different concepts, such as ecosystem goods and services and nature's gifts. Both nature and nature's contributions to people are vital for human existence and good quality of life, including human well-being, living in harmony with nature, and living well in balance and harmony with Mother Earth. The Framework recognizes and considers these diverse value systems and concepts, including, for those countries that recognize them, rights of nature and rights of Mother Earth, as being an integral part of its successful implementation;

(c) *Whole-of-government and whole-of-society approach*: This is a framework for all - for the whole of government and the whole of society. Its success requires political will and recognition at the highest level of government and relies on action and cooperation by all levels of government and by all actors of society;

(f) *Right to development*: Recognizing the 1986 United Nations Declaration on the Right to Development, the Framework enables responsible and sustainable socioeconomic development that, at the same time, contributes to the conservation and sustainable use of biodiversity;

(h) *Gender*: Successful implementation of the Framework will depend on ensuring gender equality and empowerment of women and girls, and on reducing inequalities;

(I) *Science and innovation*: The implementation of the Framework should be based on scientific evidence and traditional knowledge and practices, recognizing the role of science, technology and innovation;

(n) *Intergenerational equity*: The implementation of the Framework should be guided by the principle of intergenerational equity which aims to meet the needs of the present without compromising the ability of future generations to meet their own needs and to ensure meaningful participation of younger generations in decision-making processes at all levels;

The vision of the Kunming-Montreal Global Biodiversity Framework is a world of living in harmony with nature where "by 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people."

The mission of the Framework for the period up to 2030, towards the 2050 vision is: To take urgent action to halt and reverse biodiversity loss to put nature on a path to recovery for the benefit of people and planet by conserving and sustainably using biodiversity and by ensuring the fair and equitable sharing of benefits from the use of genetic resources, while providing the necessary means of implementation.

The Kunming-Montreal Global Biodiversity Framework has four long-term goals for 2050 related to the 2050 Vision for biodiversity:

GOAL A: The integrity, connectivity and resilience of all ecosystems are maintained, enhanced, or restored, substantially increasing the area of natural ecosystems by 2050; Human induced extinction of known threatened species is halted, and, by 2050, the extinction rate and risk of all species are reduced tenfold and the abundance of native wild species is increased to healthy and resilient levels; The genetic diversity within populations of wild and domesticated species, is maintained, safeguarding their adaptive potential.

GOAL B: Biodiversity is sustainably used and managed and nature's contributions to people, including ecosystem functions and services, are valued, maintained and enhanced, with those currently in decline being restored, supporting the achievement of sustainable development for the benefit of present and future generations by 2050.

GOAL C: The monetary and non-monetary benefits from the utilization of genetic resources and digital sequence information on genetic resources, and of traditional knowledge associated with genetic resources, as applicable, are shared fairly and equitably, including, as appropriate with indigenous peoples and local communities, and substantially increased by 2050, while ensuring traditional knowledge associated with genetic resources is appropriately protected, thereby contributing to the conservation and sustainable use of biodiversity, in accordance with internationally agreed access and benefit-sharing instruments.

GOAL D: Adequate means of implementation, including financial resources, capacity-building, technical and scientific cooperation, and access to and transfer of technology to fully implement the Kunming-Montreal Global Biodiversity Framework are secured and equitably accessible to all Parties, especially developing country Parties, in particular the least developed countries and small island developing States, as well as countries with economies in transition, progressively closing the biodiversity finance gap of $700 billion per year, and aligning financial flows with the Kunming-Montreal Global Biodiversity Framework and the 2050 Vision for biodiversity.

The Kunming-Montreal Global Biodiversity Framework has 23 action-oriented global targets for urgent action over the decade to 2030.

#### 2.7.1.2 World Heritage Convention

The World Heritage Convention[4] is also relevant, in particular due to the listing of iSimangaliso Wetland Park as a World Heritage Site in 1999, and Mapungubwe National Park as a cultural World Heritage site.[5] As parties to the Convention, Botswana, South Africa, and Zimbabwe are expected, as far as possible, to identify, protect, conserve, present, and transfer heritage sites within their territories.[6] Article 5 of the Convention stipulates that each party shall endeavour, in so far as possible, and as appropriate for each country[,]" "to integrate the protection of that heritage into comprehensive planning programmes[,]" and "to take the appropriate legal, scientific, technical, administrative[,] and financial measures necessary for the identification, protection, conservation, presentation[,] and rehabilitation of this heritage[.][7]

In general, those species whose habitat is situated within a listed World Heritage site are likely to benefit from the protection regime imposed by the Convention.[8] In some cases, however, conflict might arise between the conflicting objectives set out to conserve a cultural landscape and those species occupying the landscape. This is the situation with elephants occupying the Mapungubwe Cultural Landscape.[9] The gallery forest within the park is considered part of the ambience of the cultural heritage. At the same time, these forest areas are also favoured by elephants.[10] Over time, the impact of elephants on the forest has been significant and has become a bone of great contention. In an attempt to reduce the elephant impact, a section of the gallery forest in proximity to Mapungubwe Hill has been fenced to exclude elephants from this part of the park.

#### 2.7.1.3 Convention on international Trade of Endangered Species of Wild Fauna and Flora (CITES)

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) aims to ensure that international trade in CITES listed species is sustainable and not detrimental to the survival of the species in the wild. South Africa ratified to CITES in 1975 and is one of the 183 current signatories to the Convention. CITES works by subjecting international trade in specimens of selected species to certain controls. All import, export, re-export and introduction from the sea of species covered by the Convention has to be authorized through a licensing system. Each Party to the Convention must designate one or more Management Authorities in charge of administering that licensing system and one or more Scientific Authorities to advise them on the effects of trade on the status of the species.

The Conference of the Parties (CoP), which is the supreme decision-making body of the Convention and comprises all its Parties, has agreed in Resolution Conf. 9.24 (Rev. CoP17) on a set of biological and trade criteria

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[4] United Nations Educational, Scientific and Cultural Organisation (UNESCO), Convention Concerning the Protection of the World Cultural and Natural Heritage, 16 November 1972, 11 I.L.M. 1358, *available at* http://whc.unesco.org/archive/convention-en.pdf [hereinafter UNESCO Convention].

[5] GMTFCA Elephant Management Plan, *supra* note 76, at 13.

[6] UNESCO Convention, *supra* note 124, at art. 4.

[7] Convention on Biological Diversity, 5 June 1992, 1760 UNTS 79 [hereinafter CBD], at art. 5

[8] Trouwborst (2015), *supra* note 1, at 1575.

[9] SANParks, *supra* note 87, at 36.

[10] Simon Chamaille-Jammes et al., *Managing Heterogeneity in Elephant Distribution: Interactions between Elephant Population Density and Surface-water Availability*, 44 J.APPLIED ECOLOGY 625, 626 (2007); Graeme Shannon et al., *The Effects of Artificial Water Availability on Large Herbivore Ranging Patterns in Savanna Habitats: A New Approach Based on Modelling Elephant Path Distributions*, 15 DIVERSITY & DISTRIBUTIONS 776, 779, 781 (2009).

to help determine whether a species should be included in Appendices I or II. At each regular meeting of the CoP, Parties submit proposals based on those criteria to amend these two Appendices. Those amendment proposals are discussed and then submitted to a vote. The Convention also allows for amendments by a postal procedure between meetings of the CoP (Article XV, paragraph 2, of the Convention), but this procedure is rarely used. CITES listed species are categorized in three Appendices (Appendix I, II and III) according to the extent to which they are threatened. The South African population of *Loxodonta africana* (African savanna elephant) is included in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), for the exclusive purpose of allowing international trade in live animals to appropriate and acceptable destinations and the export of hunting trophies. All other specimens, including ivory, are deemed to be specimens of species included in Appendix I, meaning that the export of specimens for commercial purposes is prohibited (Article III).

Appendix II

Appendix II includes species not necessarily threatened with extinction, but in which trade must be controlled in order to avoid utilization incompatible with their survival. An export permit or re-export certificate issued by the Management Authority of the State of export or re-export is required. An export permit may be issued only if the specimen was legally obtained and if the export will not be detrimental to the survival of the species. A re-export certificate may be issued only if the specimen was imported in accordance with the Convention. In the case of a live animal or plant, it must be prepared and shipped to minimize any risk of injury, damage to health or cruel treatment. No import permit is needed unless required by national law. In the case of specimens introduced from the sea, a certificate has to be issued by the Management Authority of the State into which the specimens are being brought, for species listed in Appendix I or II.

In 1977, all populations of the African elephant were listed on Appendix II of the convention limiting the international trade in elephants and their products. In 1989, due to increased poaching levels and illegal trade in ivory and a resultant rapid decline in elephant numbers as derived from data in the Elephant Trade Information System (ETIS) and Monitoring the Illegal Killing of Elephants Programme (MIKE), all African elephant populations were uplisted to Appendix I, effectively banning all international trade in elephant. Many Southern African countries disagreed with the African elephant trade ban and continued to argue against it, indicating that international trade in ivory from their countries is justified (Stiles, 2004, Couzens, 2013). In 1997, at the 10th CITES Conference of the Parties (CoP) the populations of African elephant in Botswana, Namibia and Zimbabwe were downlisted to Appendix II with the following annotation:

*"Populations of Botswana, Namibia and Zimbabwe: For the exclusive purpose of allowing: 1) export of hunting trophies for non-commercial purposes; 2) export of live animals to appropriate and acceptable destinations (Namibia: for non-commercial purposes only); 3) export of hides (Zimbabwe only); 4) export of leather goods and ivory carvings for non-commercial purposes (Zimbabwe only). No international trade in ivory is permitted before 18 months after the transfer to Appendix II comes into effect (i.e. 18 March 1999). Thereafter, under experimental quotas for raw ivory not exceeding 25.3 tonnes (Botswana), 13.8 tonnes (Namibia) and 20 tonnes (Zimbabwe), raw ivory may be exported to Japan subject to the conditions established in Decision of the Conference of the Parties regarding ivory No. 10.1. All other specimens shall be deemed to be specimens of species included in Appendix I and the trade in them shall be regulated accordingly."*

In 2000, the South African elephant population followed those of the other three Southern African countries and was downlisted to Appendix II with the same annotation.
*"Populations of Botswana, Namibia and South Africa: For the exclusive purpose of allowing: 1) trade in hunting trophies for non-commercial purposes; 2) trade in live animals for in situ conservation programmes; 3) trade in hides; 4) trade in leather goods for non-commercial purposes; 5) trade in registered raw ivory (for Botswana and Namibia, whole tusks and pieces; for South Africa, whole tusks and cut pieces of ivory that are both 20 cm or*

*more in length and one kilogramme or more in weight) subject to the following: i) only registered government-owned stocks, originating in the State (excluding seized ivory and ivory of unknown origin) and, in the case of South Africa, only ivory originating from the Kruger National Park); ii) only to trading partners that have been verified by the Secretariat, in consultation with the Standing Committee, to have sufficient national legislation and domestic trade controls to ensure that the imported ivory will not be re-exported and will be managed in accordance with all requirements of Resolution Conf. 10.10 (Rev. CoP12) concerning domestic manufacturing and trade; iii) not before May 2004, and in any event not before the Secretariat has verified the prospective importing countries, and the MIKE programme has reported to the Secretariat on the baseline information (e.g. elephant population numbers, incidence of illegal killing); iv) a maximum of 20,000 kg (Botswana), 10,000 kg (Namibia) and 30,000 kg (South Africa) of ivory may be traded, and despatched in a single shipment under strict supervision of the Secretariat; v) the proceeds of the trade are used exclusively for elephant conservation and community conservation and development programmes within or adjacent to the elephant range; vi) only after the Standing Committee has agreed that the above conditions have been met. On a proposal from the Secretariat, the Standing Committee can decide to cause this trade to cease partially or completely in the event of non-compliance by exporting or importing countries, or in the case of proven detrimental impacts of the trade on other elephant populations. All other specimens shall be deemed to be specimens of species included in Appendix I and the trade in them shall be regulated accordingly."*

Southern African range countries have pleaded on more than one occasion for the sale of stockpiled ivory. At the 10th CITES CoP in 1997 the one-off experimental sale of 50 tonnes of raw ivory from Botswana, Namibia and Zambia was approved, while yet another one-off sale of 60 tonnes of ivory stockpiles, this time originating from Botswana, Namibia and South Africa after May 2004, was approved by the 12th CITES CoP (Stiles, 2004).

The agreement to develop a decision-making mechanism for a process of trade in ivory under the auspices of the Conference of the Parties was adopted at the CoP14 through Decision 14.77 (replaced by Decision 16.55) and formed part of a compromise that included an agreement by Botswana, Namibia, South Africa and Zimbabwe to a nine-year moratorium and the development of the African Elephant Action Plan. Despite substantial deliberations on the Decision Making Mechanism for a process of future trade in elephant ivory (DMM), there has been no progress made to date and the Standing Committee has not been able to finalize the development of the DMM as instructed by the Conference of Parties.

In an attempt to address the lack of progress made by the Standing Committee, Namibia, South Africa and Zimbabwe have prepared a Decision Making Mechanism for a process of future trade in ivory, for consideration by the 17th Conference of Parties to CITES in order to bring this matter to conclusion. However, the proposal by some SADC countries were rejected at CoP17. Similarly, the proposal from the Secretariat to extend the mandate to the CITES Standing Committee to continue the debate on the Decision-Making Mechanism failed to achieve the required two-thirds majority.

There is strong opposition to the legal trade in ivory with 28 countries supporting a ban on the trade in ivory. Bennett (2015) adds compelling evidence that corruption undermines legal sales of ivory, but some argue that the conservation strategy she advocates, namely banning the legal trade, is similarly vulnerable. This is because both legal trade and trade bans are undermined by the collusion of corrupt officials in the illegal killing of elephants and the smuggling of ivory from producer to consumer states (Stiles, 2014). Elephant conservation requires a range of approaches, and corruption could affect them all (Smith *et al.*, 2015).

#### 2.7.1.4 International Union of Conservation of Nature (IUCN)

Established in 1964, the International Union for Conservation of Nature's Red List of Threatened Species has evolved to become the world's most comprehensive information source on the global conservation status of animal, fungi and plant species. The IUCN Red List is a critical indicator of the health of the world's biodiversity. Far more than a list of species and their status, it is a powerful tool to inform and catalyse action for biodiversity conservation and policy change, critical to protecting the natural resources we need to survive. It provides information about range, population size, habitat and ecology, use and/or trade, threats, and conservation actions that will help inform necessary conservation decisions.

Globally, according to the IUCN, the African savanna elephant is listed as Endangered. However, according to Selier *et al*, the IUCN Regional Red List status for the South African population of the African savanna elephant is Least Concern. The IUCN Red List is set upon precise criteria to evaluate the extinction risk of thousands of species and subspecies. These criteria are relevant to all species and all regions of the world.

### *2.7.2 National legislation*

#### 2.7.2.1 White Paper on the Conservation and Sustainable Use of South Africa's biodiversity

South Africa's environmental management regime is underpinned by the environmental right in Section 24 of the Constitution with the following provisions:
24. Everyone has the right –
a) to an environment that is not harmful to their health or well-being; and
b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that –
(i) prevent pollution and ecological degradation;
(ii) promote conservation; and
(iii) secure ecologically sustainable development and the use of natural resources while promoting justifiable economic and social development.

The National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) guides environmental decision-making in South Africa, and provides mechanisms for monitoring compliance and enforcing environmental laws. All spheres of government and individuals have obligations and roles in terms of NEMA. The National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)(NEM: BA) and the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) (NEM: PAA) are the primary acts governing Biodiversity. The objective of the NEM: BA is to provide for the management and conservation of biodiversity. NEM: PAA has the overarching goal of providing for the protection and conservation of ecologically viable areas representative of biological diversity, and natural landscapes and seascapes, including providing for both terrestrial and marine protected areas. The National Environmental Management Laws Amendment Act (2022) (Act No. 2 of 2022) updated elements of NEM: BA, including to empower the Minister to prohibit certain activities that may negatively impact on the well-being of an animal.

In addition to these, some National regulatory documents are also especially applicable to elephant conservation and sustainable use. These include the NEM: BA: Threatened or Protected Species Regulations (2007) (ToPS), NEM: BA: Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES) Regulations (2010), and the NEM: BA National Norms and Standards for the Management of Elephants in South Africa (2008) (Elephant N&S).

In terms of the Constitution, the "environment" and "nature conservation" are functional areas of concurrent national and provincial legislative competence. Provinces may, therefore, also pass legislation dealing with the conservation and sustainable use of biodiversity.

Each province has legislation dealing with nature conservation. While some provincial legislation may be outdated, they still play an important role in biodiversity governance, especially in so far as species management is concerned. Certain provincial legislation makes provision for the establishment and governance of conservation authorities that are primarily responsible for the management of provincial state-owned protected areas, and the conservation of biodiversity outside of those protected areas. Some provinces have also adopted policies to help guide the implementation of provincial and national legislation, including provincial biodiversity spatial planning tools and protected area expansion strategies.

Legislation from other Spheres of Government also governs elements of elephant conservation and sustainable use, including the Game Theft Act, 1991 (Act No. 105 of 1991), Fencing Act, 1963 (Act No. 31 of 1963), Animal Diseases Act, 1984 (Act No. 35 of 1984), Animals Protection Act, 1962 (Act No. 71 of 1962), Meat Safety Act, 2000 (Act No. 40 of 2000), and Performing Animals Protection Act, 1935 (Act No. 24 of 1935).

The implementation of national legislation is guided by relevant policies, such as the National Development Plan: Our Future – Make it Work (NDP 2030). The primary objective of the NDP is to eliminate poverty and reduce inequality by 2030. Chapter 5 of the NDP envisions ensuring environmental sustainability and an equitable transition to a low-carbon economy.

The White Paper on the Conservation of the Sustainable Use of South Africa's Biodiversity was approved by Cabinet on 29 March 2023, and published under Government Notice No. 3537 in the Government Gazette, No. 48785, for implementation on 14 June 2023. The White Paper provides a foundation for conservation and sustainable use in terms of its four goals, namely:
1) Enhanced Biodiversity Conservation (All biological diversity and its components conserved);
2) Sustainable Use (The sustainable use of biodiversity enhances thriving living land- and seascapes and ecosystems, livelihoods, and human well-being, while a duty of care avoids, minimises, or remedies adverse impacts on biodiversity);
3) Equitable Access and Benefit Sharing (Benefits are derived and shared from the use and development of South Africa's genetic and biological resources, without compromising the national interests); and
4) Transformed Biodiversity Conservation and Sustainable Use (Effect is given to the environmental right as contained in Section 24 of the Constitution which facilitates redress, and promotes transformation).
As well as two cross-cutting Enablers:
1) Enabler 1: Integrated, Mainstreamed and Effective Biodiversity Conservation and Sustainable Use: Integrated policy and practice across government and the effective implementation of Multilateral Environmental Agreements; and
2) Enabler 2: Enhanced Means of Implementation: Expanded and developed ability to effectively conserve biodiversity, to manage its use and benefits, whilst addressing factors threatening biodiversity.
The White Paper identified the following broad challenges:
1) Fragmented conservation responsibilities, duplication of efforts and underfunded conservation mandates that hamper the effective conservation and sustainable use of South Africa's biodiversity;
2) Lack of transformation in the sector, where a majority of the population are disadvantaged and disenfranchised from contributing to conservation and sustainable use;
3) Inadequate efforts in addressing the global challenges of biodiversity loss, land degradation, and climate change in the context of sustainable development;

4) Proliferation of biodiversity and conservation legislation, uneven governance, limited capacity and declining allocation of resources in the management of biodiversity and inadequate revenue generation efforts; and

5) Practices within the sector that have brought the country into disrepute.

In addressing these challenges, the White Paper emphasises the importance of the biodiversity sector to South Africa's economy, underpinned by strengthened conservation, sustainable use and access, and fair and equitable sharing of benefits arising from the utilisation of biodiversity and its components.

The White Paper, therefore, set out the vision: "An inclusive, transformed society living in harmony with nature, where biodiversity conservation and sustainable use ensure healthy ecosystems, with improved benefits that are fairly and equitably shared for present and future generations", with the Mission: "To conserve and manage South Africa's biodiversity, and ensure healthy ecosystems, ecological integrity and connectivity, with transformative socio-economic benefits to society for current and future generations through ecologically sustainable, and socially equitable use of what people values from nature."

As part of the implementation of the White Paper, legislation, including NEM: BA, NEM: PAA, ToPS, and the Elephant Norms and Standards, amongst others, will be reviewed for alignment; as will other mechanisms and tools such as Biodiversity policies, strategies, plans, and guidelines.

In seeking to give effect to the White Paper it explicitly recognizes that the responsibility rests with a range of stakeholders, including, but not limited to, the state, traditional leaders, traditional health practitioners, communities, private landowners, industry, academia, non-government organisations and civil society. Building partnerships, particularly community – private partnerships, between these constituencies will be important.

#### 2.7.2.2 National Environmental Management Biodiversity Act 10 of 2004 (NEM: BA)

The NEM: BA gives effect to the constitutional commitment to take reasonable legislative measures that promote conservation by providing for the management and conservation of biological diversity and the sustainable use of indigenous biological resources.

Section 60 (1) of NEM: BA makes provision for the establishment of the Scientific Authority for the purpose of assisting in regulating and restricting the trade in specimens of listed threatened or protected species, and CITES-listed species. The functions of the Scientific Authority include making non-detriment findings on the impact of actions relating to the international trade in specimens of listed threatened or protected species. "Non-detriment findings" means the determination of the non-detrimental impact of an action on the survival of a species.

#### 2.7.2.3 National Environmental Management: Protected Areas Act, 57 of 2003 (NEM: PAA)

NEM: PAA provides for the protection and conservation of ecologically viable areas representative of South Africa's biodiversity and natural landscapes and seascapes in protected areas. Protected areas in South Africa offer a viable tool for habitat protection and the protection and maintenance of ecologically viable numbers of the bontebok and their associated species and habitats. NEM: PAA also provides for the continuation of the South African National Parks Board.

#### 2.7.2.4 Threatened or Protected Species Regulations, 2007 (ToPS)

The Threatened or Protected Species (ToPS) Regulations promulgated in terms of NEM: BA came into force in February 2008. The regulations provide for the protection of species that are threatened or in need of protection

to ensure their survival in the wild and give effect to the Republic's obligations. Elephant are currently listed as "Protected".

#### 2.7.2.5 Convention on International Trade in Endangered Species of Wild Fauna and Flora Regulations, 2010 (CITES Regulations)

On 05 March 2010, the Minister of Environmental Affairs published CITES Regulations, 2010 in the *Government Gazette* No. 33002, for implementation. These regulations were published in terms of section 97 of the NEMBA, and give effect to the Republic of South Africa's obligations in terms of a ratified international agreement as far as it relates to international trade in endangered species.

Regulation 6(3)(c) of the CITES Regulations, 2010 states that an export permit may only be granted if the following condition (amongst others) is met:

*"(c) In the case of a specimen of a species listed in Appendix I or II, the Scientific Authority has made a non-detriment finding and advised the Management Authority accordingly*".

#### 2.7.2.6 Norms and Standards for the management of elephants in South Africa

Since 2008 elephants have been managed in accordance with the National Norms and Standards for the Management of Elephants in South Africa (Government Gazette No. 30833, 29 February 2008). In terms of Section 9(1) of the Biodiversity Act, the Minister may, by notice in the *Gazette* issue norms and standards for the achievement of any of the objectives of this Act, including for the (i) management and conservation of South Africa's biological diversity and its components; (ii) restriction of activities which impact on biodiversity and its components; and set indicators to measure compliance with those norms and standards.

The purpose is to set national norms and standards to ensure that elephants are managed in the Republic in a way that (i) ensures the long term survival of elephants within the ecosystem in which they occur or may occur in future; (ii) promotes broader biodiversity and socio-economic goals that are ecologically, socially and economically sustainable; (iii) does not disrupt the ecological integrity of the ecosystems in which elephants occur; (iv) enables the achievement of specific management objectives of protected areas, registered game farms, private or communal land; (v) ensures the sustainable use of hair, skin, meat and ivory products; and (vi) is ethical and humane and (vii) recognises their sentient nature, highly organised social structure and ability to communicate, and secondly that the management of elephants is regulated in a way that (a) is uniform across the Republic; and (b) takes into account the Republic's international obligations in terms of international agreements on biodiversity management binding on the Republic; and in accordance with national policies on biodiversity management and sustainable development.

These norms and standards are informed by the principles contained in paragraph 3. The provisions of these norms and standards apply to the management of elephants wherever they occur within the Republic or where a permit to import is applied for. The provisions of these Norms and standards must be read with the Threatened and Protected Species Regulations, 2007.

### *2.7.3 Other relevant South African legislation and policies*

Apart from the National Environmental Management Act, 107 of 1998 (NEMA) and its related Acts and Regulations, the nine provincial conservation ordinances / acts are the major regulatory instruments for the regulation of wild animal species in South Africa.

- Transvaal Nature Conservation Ordinance, 12 of 1983 (implemented in Gauteng, North West and Mpumalanga Provinces) and augmented by:
- Gauteng Nature Conservation Ordinance, 1983 – Gauteng Nature Conservation Act, 2014;
- Limpopo Environmental Management Act 7 of 2003;
- Mpumalanga Ordinance, 1983 - Mpumalanga Nature Conservation Act, 10 of 1998;
- North West Nature Conservation Ordinance, 1983; Bophuthatswana Nature Conservation Act, 1973;.
- Cape Province Nature Conservation Ordinance, 19 of 1974 (implemented in the Western Cape; Eastern Cape including Ciskei and Transkei; Northern Cape and North West Provinces) and augmented by:
- Western Cape Nature Conservation Ordinance, 19 of 1974 – Western Cape Biodiversity Bill *in prep*.
- Northern Cape Nature Conservation Act, 9 of 2009.
- Eastern Cape Nature Conservation Ordinance, 19 of 1974; Ciskei Nature Conservation Act, 10 of 1987; Transkei Decree, 9 of 1992.
- Natal Nature Conservation Ordinance, 15 of 1974 (implemented in KwaZulu-Natal Province, including KwaZulu)
- KwaZulu Nature Conservation Act, 29 of 1992 – KwaZulu-Natal Nature Conservation Management Act, 9 of 1997; KwaZulu Nature Conservation Act, 8 of 1975.
- Free State Nature Conservation Ordinance, 1969 (implemented in the Free State Province, including QwaQwa) and augmented by:
- Free State Nature Conservation Ordinance, 8 of 1969; QwaQwa Nature Conservation 5 of 1976.
- Supporting decision making instruments include National Norms and Standards and Provincial Conservation and Regulatory Policies.

- Other Acts such as the Animals Protection Act, 71 of 1962 as amended, which regulates animal welfare in South Africa is also applicable to wildlife.

- The Game Theft Act, 105 of 1991; the Fencing Act, 31 of 1963; the Animal Health Act, 7 of 2002; Animals Diseases Act, 35 of 1984; Medicines and Related Substances Control Act, 101 of 1965; and the Animal Matters Amendment Act, 42 of 1993, may also be relevant to elephant conservation as it plays a significant role in veterinary care of animals, as well as their translocation.

- The World Heritage Act, 49 of 1999, makes provision for the management of natural and cultural heritage and provides for the establishment of the iSimangaliso Wetland Park Authority.

The National Biodiversity Framework (NBF), required in terms of the NEM: BA, provides for an integrated, co-ordinated, and uniform approach to biodiversity management by organs of state in all spheres of government, non-governmental organisations, the private sector, local communities, other stakeholders, and the public. The NBF identifies priority areas for conservation action and the establishment of protected areas; and reflects regional co-operation on issues concerning biodiversity management in Southern Africa.

The National Biodiversity Strategy and Action Plan is required in terms of the CBD and sets out a strategy and action plan to fulfil the objectives of the CBD; the conservation and sustainable use of a country's biodiversity, and the equitable sharing of benefits derived from this use.

Other relevant national policies include:

a) The National Protected Areas Expansion Strategy, which guides decisions on the declaration of protected areas in terms of NEM: PAA and other legislated forms of protection;

b) The National Biodiversity Economy Strategy, which is a strategy for developing and growing businesses and economic activities that either directly depend on biodiversity for their core business or that contribute to conservation of biodiversity.

# 3. DEVELOPMENT OF THE NATIONAL ELEPHANT HERITAGE STRATEGY

## 3.1 The planning context

A societal consultation process was followed by a number of stakeholder engagements to ensure that all relevant stakeholders were included in the process. The team responsible for the drafting of the National Elephant Heritage Strategy consists of the members appointed to the task team tasked to consider all comments received through the public consultation process on the revisions proposed within the Elephant Norms and Standards.

## 3.2 Development of the vision, goals and key activities

### *3.2.1 Stakeholder engagement*

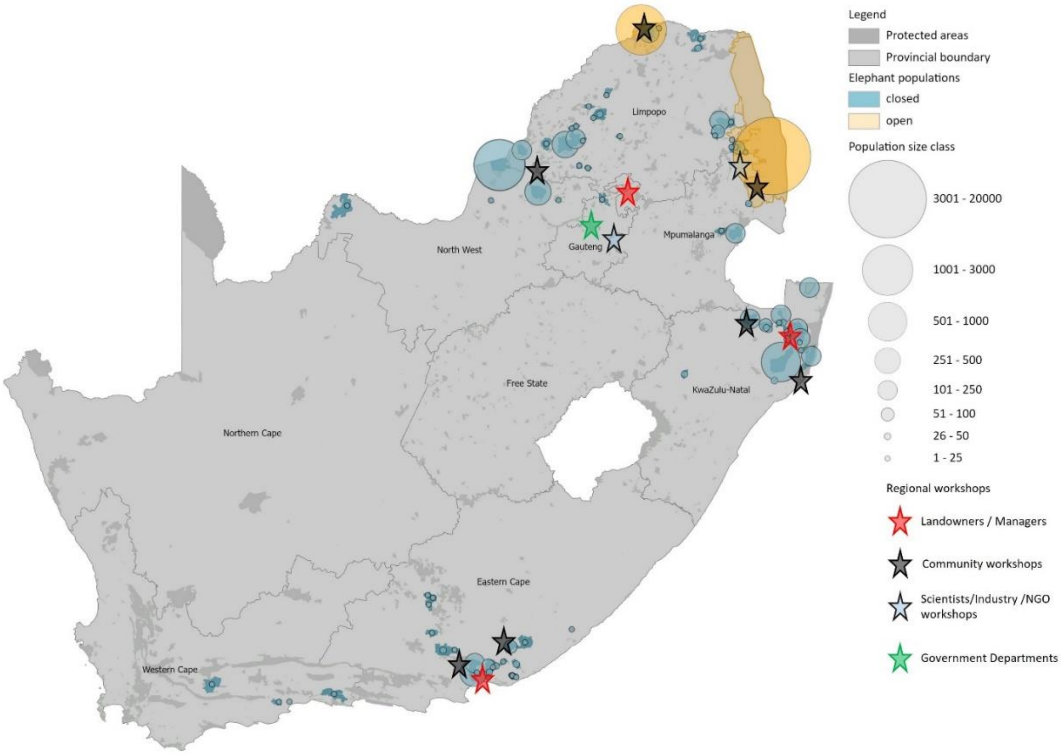



**Figure 9:** The distribution of stakeholder engagements in relation to the key elephant populations within South Africa, highlighting that stakeholder engagements were conducted in the same areas of the key elephant populations.

The following workshops have been conducted to inform the vision of the Strategy (Fig. 9):

1.1 Regional visioning workshops with elephant managers and owners. During these workshops, held in Limpopo, KwaZulu-Natal and Eastern Cape, elephant owners and managers shared and learned from each other what their

challenges are with regard to the management of elephants, including with the Elephant Norms and Standards. The role of elephants, including mores and values, beneficiation, and economics were discussed (See Addendums 1 and 2 for the agenda and invitation letter respectively).

- 19 March 2019 Limpopo regional workshop – Mongena Lodge, Dinokeng Game Reserve
- 20 May 2019 KwaZulu-Natal regional workshop – Hluhluwe-iMfolozi Park
- 22 May 2019 Eastern Cape regional workshop – Nelson Mandela University, Port Elizabeth

1.2 Visioning workshops for all relevant expert stakeholders, including elephant specialists and relevant Non-Governmental Organisations (NGOs) concerned with elephant conservation, was held in Pretoria and at the South African Wildlife College, Limpopo. As part of the workshop, stakeholders considered the role of elephants as natural capital and the role they are likely or are currently playing in human well-being. A few key outcomes included that elephants are a flagship species, charismatic, ecological keystones or modifiers, economically valuable, and culturally important and that there is a need to move from a focus on elephants as a species, to a broader contextualisation of the role of elephants for society.

- Elephant Specialist Advisory Group (ESAG) workshop, 5-6 June 2019, South African Wildlife College, Limpopo.
- Scientist / NGO workshop, 25 June 2019 SANBI Pretoria

1.3 A visioning workshop with the senior leadership of relevant sections within the Department of Forestry, Fisheries and the Environment (DFFE), South African National Biodiversity Institute (SANBI) and within SANParks, to provide the national mandated agency perspective on the role of elephants in society as discussed above.

- 4 September 2020

1.4 Intergovernmental workshop with the various relevant spheres of government to discuss the role of elephants in society. Government departments included DFFE (Wildlife Economy, Biodiversity Management, Threatened or Protected Species and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (ToPS and CITES), Transfrontier Conservation Areas (TFCA), Department of Agricultural, Rural Development and Land Reform, Department of Tourism, and Department of International Relations and Cooperation (DIRCO).

- 9 February 2022

1.5 Community engagement workshops to discuss the role of elephants, including mores and values, beneficiation, economics, and concerns of Human-Elephant Conflict (HEC). Such communities include those that own reserves and elephants on those reserves, those that own reserves, but do not own the elephants on the reserve (the state still owns them), those that have shares or rights on reserves with elephants as partners, those that carry the brunt of the costs of living with elephants emanating from off their land (HEC), or those living with their neighbour's elephants. The workshops were developed in partnership with state agencies responsible for those community interactions, including:
KwaZulu-Natal

- Ithala and Thembe co-management committee members and Ezemvelo KwaZulu Natal Wildlife (EKZNW) staff – 22 October 2019
- HiP community members – 17 March 2022 North West
- Pilanesberg community members – 26 November 2022 Kruger National Park
- Community representatives and People and Parks – 18 November 2021 Addo Elephant National Park
- Addo community – 21 February 2022
- Besheba community – 22 February 2022 Limpopo
- Mapungubwe community workshop – 26 January 2022

1.6 Conservation Symposium. As part of a special session at the conference, the justification and role of a national elephant strategy, the process followed, feedback from stakeholder engagements to date, as well as some reflections on the process were presented from the perspective of the steering committee members, followed by a facilitated discussion on the way forward and further inputs from the stakeholders and participants attending the session.

- Howick KZN, November 2019

### 3.2.2 Stakeholder values

Stakeholder engagements were conducted through the above participatory workshops. Each workshop targeted a specific type of stakeholders (*e.g.*, elephant managers, elephant owners, scientists and NGOs, environmental management agencies, other government bodies and several stakeholder engagements focused on local communities neighbouring large elephant populations and most affected by elephants). At each workshop, stakeholders were asked to list the values and elements of value associated with elephants. This include a "feedback" document submitted by the EMS Foundation to the 25 June 2019 workshop, and other feedback received after the meetings. In line with the White Paper, which emphasises the need for transformation and for the voice of communities living with wildlife to be heard, the High- Level Panel Report on their engagements with communities (p553 – 571 of that report) was evaluated for values expressed.

In total, 430 people were engaged in the workshop process, which consisted of a representative sample of each of the stakeholder groups. The process collated all values expressed by stakeholders during the stakeholder engagements, and from the HLP report, which resulted in a list of 45 (elements of) values. These were then listed per engagement and summed across the engagements to indicate which values were more (or less) widely expressed across stakeholders (Table 6).

**Table 6:** Key stakeholder values, ranked by number of groups that scored each value, and then weighted by level of impact of elephants on stakeholder groups: (Top Ten of each process indicated)

| Values | Sum | Weighted by stake-holder group | Sum Rank | Weighted rank |
|---|---|---|---|---|
| Access to elephants & their derivatives and the environment of elephants | 7 | 13.7 | 15 | 1 |
| Global service by saving or looking after elephants (World saying thank you) | 2 | 13.5 | 38 | 2 |
| Learning from other countries / systems / Indigenous knowledge, African solutions | 6 | 13.3 | 21 | 3 |
| Devolution of decision-making (principle) | 5 | 13.2 | 27 | 4 |
| Education and awareness | 7 | 13 | 16 | 5 |
| Existence value | 5 | 12.8 | 28 | 6 |
| The need to change our thinking & approaches; respect different thinking (think about a range of land uses and approaches) | 7 | 12.4 | 17 | 7 |
| Co-existence between elephants and people (compensation) | 10 | 12.4 | 4 | 8 |
| Equality of benefits, costs, responsibility & reduce gender inequality (Communities as co-managers/partners/co-existence of people/ co-ownership) | 10 | 12.2 | 5 | 9 |
| Elephants not a problem | 1 | 12 | 41 | 10 |
| Benefit communities (local farming communities, rural, etc.); local context, tenure | 13 | 11.5 | 1 | 15 |
| Communication & messaging | 13 | 11.5 | 2 | 16 |
| Pride and honour in our elephant heritage | 11 | 11.6 | 3 | 14 |
| Constitutional mandate (Transformation, and fair environmental justice (Equitability)) | 10 | 11.9 | 6 | 11 |
| Speak to SDGs (Careers associated with elephants; social economic development) | 10 | 11.5 | 7 | 17 |
| Viable, thriving populations that incl persistence of species, range expansion & development of corridors | 10 | 11.5 | 8 | 18 |

| | | | | |
|---|---|---|---|---|
| Recognising all values associated with elephants | 10 | 11.5 | 9 | 19 |
| Converting from problem to benefit (elephants) (Species focus vs system focus) | 10 | 9.9 | 10 | 37 |

### *3.2.3 Weighing stakeholder importance*

Stakeholders' input should not be weighted equally as for example some people carry costs of managing elephants or are negatively impacted by elephants or management approaches. In addition, some stakeholders, that are directly invested, should receive greater benefits than others, for example private elephant owners or people negatively affected by elephants. However, existing stakeholder assessments only assess the current state of stakeholder relations and are not designed to assess the desired state. South Africa's vision of a transformation towards equitable and inclusive conservation and sustainable use (as per the White Paper) requires an approach that accounts for current marginalisation (*i.e.*, vulnerability) and power imbalances. At this stage, the values are presented with equal weighting across stakeholders as a starting point. However, we have identified the need for a collective process to develop consensus weightings of different stakeholder inputs.

Based on existing frameworks of mapping stakeholders[11], we will assess each stakeholder's weight by scoring:

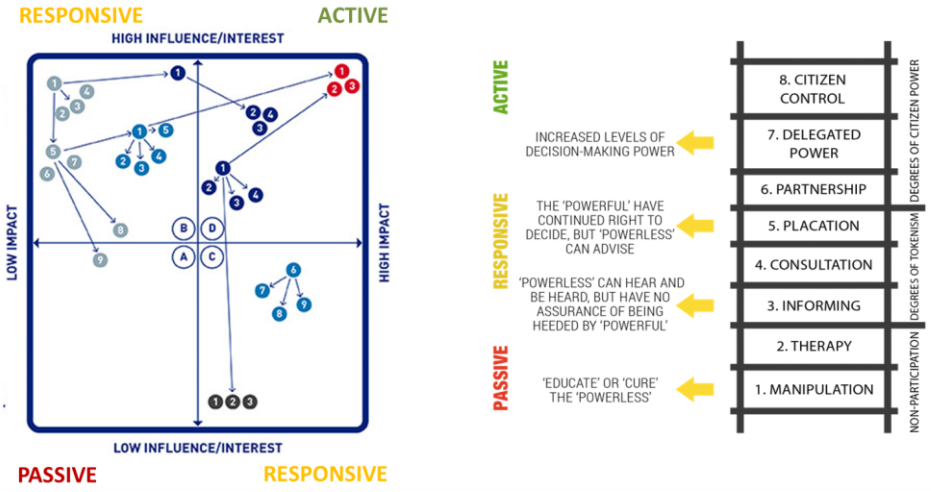
(i) The impact (positive or negative) of conservation actions on the well-being of the stakeholder, and the stakeholder sensitivity to certain impacts (considers **vulnerability**).

For instance, a person in a marginalised position will be more severely impacted by a conservation decision (*e.g.*, restricted access to natural resources) and will experience a more significant increase in well-being through job creation and skill development, as compared to a person in a privileged position. We will distinguish between stakeholders in which conservation or use greatly impacts their well-being versus those minimally affected, recognising that when people are in a vulnerable position, a negative impact of management can have more severe consequences.

(i) The influence of the stakeholder group on conservation actions or the management or sustainable use of elephants (considers **power imbalances**).

In assessing the influence of the stakeholder on conservation actions, management or sustainable use of elephant, we recognise that the current state may represent power imbalances (*e.g.*, certain stakeholders are currently not included in decision-making processes or benefit sharing) which should not determine future strategies and does not align with the vision of South Africa's White paper. Therefore, we will distinguish stakeholders that have or should have a high influence on elephant management, and those that have or should have low influence or interest.

[11] Adapted from https://socialway.angloamerican.com/en/toolkit/engagement-and-analysis/stakeholder-engagement/guidance/plan/task-3-map-stakeholders and Arnstein, S.R., 1969. A ladder of citizen participation. *Journal of the American Institute of Planners*, *35*(4), pp.216-224.




https://socialway.angloamerican.com/en/toolkit/engagement-and-analysis/stakeholder-engagement/guidance/plan/task-3-map-stakeholders

Arnstein, S.R., 1969. A ladder of citizen participation. *Journal of the American Institute of planners*, 35(4), pp.216-224.

**Figure 10:** Example of a stakeholder mapping matrix which can provide insight into the current and desired position of stakeholders and the ladder of citizen's participation (Arnstein, 1971)[12].

# 4. IMPLEMENTING THE STRATEGY: REFLECTION AND ADAPTATION

South Africa embraces evidence-based elephant management and seeks to adapt approaches upon reflection and identifying new lessons learned. As part of the process of implementation SANBI will host a dynamic guiding document, which will capture the process as it unfolds. This is envisaged to include management options and responses as identified by stakeholders as part of a suite of innovations to help address various aspects of managing elephants.

The strategy emphasises the importance of engagement, participation, influence, co-developing and co-learning. As such, processes and opportunities for dynamic engagement will occur periodically, and systematically, either in terms of the implementation of the overall strategy, or for specific activities envisaged within the strategy.

This process will ensure that there is strong reflection on the process as it unfolds, which will enable adaptive learning, and refinement of the details necessary to successfully implement the process.

It is important that the implementation of the strategy is co-owned by all stakeholders, and initiatives by different stakeholders to lead processes will be supported and encouraged. A key element is establishing transparent reporting mechanisms with responsibility and accountability to all relevant stakeholders.

These approaches provide the basis of implementing the strategy within an adaptive management framework and having regular reflection to improve outcomes for South Africa linked to elephants and the contributions they make to environmental, social and economic benefits for its people.

[12] Arnstein, S.R., 1969. A ladder of citizen participation. *Journal of the American Institute of Planners*, *35*(4), pp.216-224.

# 5. APPENDICES

All documents related to the development of the Strategy including the workshop agendas, workshop reports, etc. will be included as appendices to this document on finalisation of the Strategy.