
TITLE:
**DEVELOPMENT OF A FRAMEWORK
STRATEGY FOR A SADC WILDLIFE-
BASED ECONOMY**

**Final Draft SADC Wildlife-based Economy Strategy
Framework**

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EXECUTIVE SUMMARY

Biodiversity, particularly the biodiversity of Member States of the Southern African Development Community (SADC), is gaining increased recognition for its contribution to economic and sustainable development of the individual Member States and the region as a whole. The SADC Member States have set aside large tracts of forests, wildlife and wetlands as protected areas, to conserve and protect these valuable biodiversity resources.

Although the SADC region is richly endowed with natural resources, it is also characterised by high levels of poverty. Many of the people of the Member States are directly dependent on the rich biodiversity for survival and to sustain their livelihoods, particularly in the rural areas of the region. The biodiversity of the region also contributes to local human health and wellbeing through the provision of clean air, potable water, medicinal plants and food, and providing crucial resources for the sustainable socio-economic development of the region.

The ability of the Member States to sustainably utilise natural resources and effectively protect the environment through the sustainable use, development, manufacturing and marketing of the exceptional biodiversity resources of the region, particularly wildlife resources, can support the SADC region in achieving their social and economic imperatives of improved quality of life, job creation, local business growth and development, inclusive economies, and poverty reduction. Strategic interventions for the sustainable use of biological resources, while ensuring conservation of these resources, can also facilitate gender mainstreaming in the biodiversity sector and the strengthening of historical, social and cultural affinities within the region.

The sixteen Member States that are party to the 1992 Treaty of the Southern African Development Community (the SADC Treaty) have agreed to act within the regional principles of, amongst other, human rights, equity, balance and mutual benefit. This implies that the biodiversity of the region needs to be conserved, managed and sustainably utilised within these principles for human rights, equity in access and use, and balance in access and use for mutual benefits. The SADC Regional Biodiversity Strategy of 2006 notes the crucial role that the region's biodiversity plays in achieving this objective, highlighting that the biological resources of the region support the tourism (particularly ecotourism), forestry, wildlife, and fisheries sub-sectors of Member States' economies, and provides vital ecosystem services and other wildlife economy activities to the people of these States.

The biodiversity goal of the region is pursued through the Member States' commitments to international biodiversity agreements and through their commitments to the various environmental protocols that have been developed for the SADC region. The SADC Member States are, and continue to be, actively involved in a range of international policies that guide, directly and indirectly, the sustainable use, protection and conservation of biodiversity. These international policies and strategies play an important role in relations between the SADC Member States and between these States and other countries across the globe. They also provide a context for wildlife-related international trade and finance both within the continent and globally. The collective SADC environmental-related protocols provide the enabling environment for the growth and development of the Wildlife-based Economy of the region.

The objectives of the SADC strategies and frameworks clearly demonstrate the commitment of the Member States to the sustainable use of wildlife resources for the benefit of their populations. While recognising the vital ecosystem services provided by these wildlife resources and the need to protect and conserve biodiversity of the region, the strategies and frameworks support the increased level of production and trade in goods and services from the wildlife resources to benefit poor communities and create economic development. Sustainable use of wildlife resources is thus an underlying principle of the Wildlife-based Economy Strategy, particularly for the equitable and mutual sharing of the benefits that accrue from the use of these resources within poor and rural communities.

The Wildlife-Based Economy for SADC is defined in the strategy as that sector of the Member States' and region's economy that uses marine and terrestrial wildlife as an economic asset to create value that aligns with conservation objectives and delivers sustainable growth and economic development. The sustainable use of biodiversity within the wildlife-based economy may be both consumptive and non-consumptive.

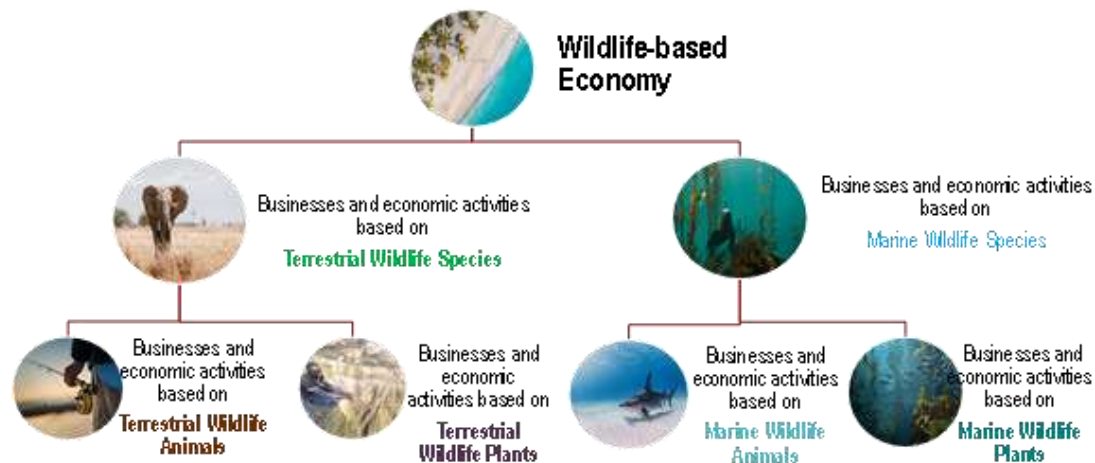


Figure 1: Diagrammatic depiction of the definition of a Wildlife-based Economy

The estimate of the wildlife-based economy's contribution to the SADC region's GDP is currently limited to two sub-sectors, namely the terrestrial and marine wildlife plant sub-sector; and the terrestrial and marine wildlife animal sub-sector. Contribution of the wildlife-based economy to the SADC region's economy was measured in terms of the Gross Domestic Product (GDP), demonstrating that the GDP calculated for the wildlife-based economy was approximately USD 33,9 billion in 2018 and USD 31,5 billion in 2019 (or 4.6 percent of total GDP for SADC). This comprised:

- the wildlife plant sub-sector - GDP ~ USD 12.8 billion (2018); USD 10,9 billion (2019 est.); and
- the wildlife animal sub-sector - GDP ~ USD 21.1 billion (2018); USD 20.5 billion (2019 est.).

Contribution to the SADC wildlife-based economy in 2019 was dominated by South Africa, which was estimated to have contributed USD 9,5 billion, followed by Democratic Republic of Congo (~USD 7,7 billion), Tanzania (~USD 3 billion), Madagascar (~USD 2,2 billion) and Angola (~USD 2,1 billion)

The development of the wildlife-based economy requires a positive link between the environmental, the economic, and the socio-cultural sustainability on the one side and financial stability on the other. It provides opportunity to grow niche markets and product offerings, as well as address the perceived growth potential associated with:

- the global trend indicating that anything that focuses on the Green Economy and the trend towards sustainability does matter;
- the world is becoming more open to sustainability issues given the awareness around climate change;
- the potential for growth is rapid, however, political instability can affect this growth potential negatively; and
- growth has traditionally focused on what is in a protected area and not what is around it.

The opportunity exists to expand the wildlife-based economy beyond the borders of conservation and protected areas.

The scope and purpose of the SADC Wildlife-based Economy Strategy is to provide strategic direction for the growth and expansion of sustainable use of wildlife resources in SADC Member States, while simultaneously conserving and protecting the indigenous biodiversity that the region has been so richly endowed with.

The **vision** of the strategy is: An abundant SADC wildlife-based economy is actively contributing to transformative economic growth, employment creation and generating equitable opportunities, that enhances the sustainable quality of life for all within the region.

The **goal** of the strategy is: By 2030, the SADC Wildlife-based economy is globally recognised for the sustainable utilisation of biodiversity resources to grow the region's economy.

The vision and goal of the Wildlife-based Economy Strategy recognise the core **principles** that underpin the sector, the value chains, the strategic objectives and the actions within the Wildlife-based Economy in the region:

- Conservation and Maintaining of Biodiversity Abundance
- Ensuring Sustainable Utilisation of Wildlife Resources
- Fair and equitable sharing of benefits derived from the use of wildlife resources
- Inclusivity
- Supporting Socio-economic Sustainability
- Compliance with national and international legislation
- Respecting The Right to Use and Access Natural Resources.

The strategic objectives of the Strategy, each with strategic outcomes, actions, and measures of success, are the following:

- **Strategic Objective 1:** Globally competitive utilisation of wildlife resources drives the development of innovative, transformative, and sustainable wildlife-based value chains that contribute to employment and economic development in the region – This Strategic Objective focusses on the wildlife-based value chains as the mechanism for achieving Member States' and the SADC region's socio-economy imperatives.
- **Strategic Objective 2:** The SADC Wildlife-based economy drives inclusive socio-economic development and poverty alleviation in its member states and the region – This Strategic Objective focusses on the development and growth of the wildlife-based economy for the socio-economy and poverty alleviation benefits of Member States and the SADC region, with a focus on growth of the value chains and wildlife-based economy for sustainable livelihoods, poverty alleviation and households' incomes.
- **Strategic Objective 3:** The SADC and its member states are enabled to implement the Wildlife-based economy strategy in a cooperative manner through international, regional, and national alliances – This Strategic Objective aim to ensure that the SADC region's and the Member States' enabling environment is in place to facilitate the growth and development of the wildlife-based economy in the region and within the Member States.
- **Strategic Objective 4:** The SADC Wildlife-based Economy Strategy is recognised by the Member States and globally - This Strategic Objective focusses on highlighting the importance and benefits of the SADC Wildlife-based Economy, and in doing so, demonstrate the adoption and implementation of the Strategy.

The Wildlife-based Economy Strategy thus aims to contribute to the conservation and sustainable use of biodiversity and wildlife species through the promotion of trade and investment in wildlife-based economy products and services.

The success of the implementation of the Wildlife-based Economy Strategy is dependent on the various stakeholders understanding and playing their roles actively in the wildlife-based economy and the relevant value chains. The SADC Secretariat, in collaboration with the institutions/structures responsible for the wildlife-based economy in Member States, as well as regional and international partners, will be expected to guide the implementation of the Wildlife-based Economy Strategy as appropriate. Equally important and for the sake of continuity is that responsible Ministers, in all Member States, appoint member country wildlife-based economy focal points.

The institutional arrangement proposed for implementation of the Wildlife-based Economy Strategy will require definition, agreement and formulation in the SADC and in many of the Member States. The Strategy recognises that the biodiversity and biodiversity economy strategies of the Member States are necessary to advance the development of cross-border value chains that better enable the utilisation of wildlife biological resources within the region and to grow and expand the products and services of the wildlife-based economy. Member States and value chain sectors within the wildlife-based economies in these Member States may opt to develop and implement wildlife-economy strategies that are in line with the SADC Strategy. This should domesticate the regional strategy to the local context. Existing sectoral and cross-sectoral policies and action plans that link to the wildlife-based economy should be reviewed and reshaped, when needed, to include the provisions of the regional strategy.

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LIST OF ACRONYMS

ABS	Access and benefit-sharing
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DSI	Digital sequence information
IMF	International Monetary Fund
M&E	Monitoring and Evaluation
PM,R&E	Performance monitoring, reporting and evaluation
SADC	Southern African Development Community
SDGs	Sustainable Development Goals
SWOT	Strengths, Weaknesses, Opportunities, Threats
UNCTAD	United Nations Conference on Trade and Development

GLOSSARY OF TERMS FOR THE WILDLIFE-BASED ECONOMY

Term	Recommended Definition
Access and benefit-sharing (ABS)	Process through which, as a result of accessing biodiversity components (e.g. specimens, samples, biochemicals), genetic resources and related traditional knowledge, and using them in research and development or value chains, the different types of benefits generated thereby are shared fairly and equitably between the provider and user (UNCTAD, 2020, UNCTAD, 2017).
Adaptive management	Adaptive management allows for the implementation of corrective measures in systems on an ongoing basis, based on a process of continued monitoring. This type of management allows for the appropriate adjustment of the productive processes, including modification or suspension of activities that are affecting the populations and their habitat (UNCTAD, 2017).
Aquaculture	According to the FAO definition, means the farming of aquatic organisms, including fish, molluscs, crustaceans and aquatic plants, with some sort of intervention in the rearing process to enhance production, such as regular stocking, feeding and protection from predators (SADC, 2016).
Biodiversity	Means the variation between ecosystems and habitats; the variation between different species; and the genetic variation within individual species. It is a system of interactions between genes, species, and the ecosystems they form, influencing and influenced by ecological and evolutionary processes. The processes help to sustain biological systems and to ensure their productivity (CBD, 1996).
Biodiversity prospecting (or Bioprospecting)	The systematic search for biochemical and genetic information in natural sources that can be developed into commercially-valuable products for pharmaceutical, agricultural, and other applications (CBD, 2001)
Biological Resources	Include genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity (CBD, 1996).
BioTrade	Refers to those activities of collection, production, transformation, and commercialisation of goods and services derived from biodiversity under the criteria of environmental, social and economic sustainability (UNCTAD, 2017).
BioTrade products and services	BioTrade activities are generally oriented towards the production, transformation and commercialisation of products derived from the sustainable use of biological resources, or the provision of services derived from such resources (UNCTAD, 2017). BioTrade products may include those coming from wild collection or from cultivation practices. The latter refers to products derived from cultivation of native species (domesticated and wild varieties) through activities such as agriculture or aquaculture. Products derived from wild collection include products such as animals (e.g. ornamental fish), animal derivatives (e.g. crocodile leather or meat) and plants (e.g. medicinal plants, flowers and foliage). Services include, for example, carbon sequestration and sustainable tourism (UNCTAD, 2017).
Conservation	Means protection, maintenance, rehabilitation, restoration and enhancement of wildlife and includes management of the use of wildlife to ensure sustainability of such use (SADC, 1999).
Fish	Means any native/indigenous aquatic plant or animal species, whether piscine or not, and any mollusc, crustacean, coral, sponge, holothurian or other echinoderm, and reptiles, and includes their eggs, larvae and all juvenile stages.
Game farming	Comprises enterprises that confine indigenous animal species in demarcated areas, in a semi-domestic state, with the animals being fed. Game farming includes for example, ostrich and crocodile farming, and their related value chains.
Game ranching	Comprises enterprises that manage indigenous wildlife animals in defined areas delineated by fences, similar to cattle ranching, where the animal has access to and roam freely in the natural vegetation (Snyman et al., 2021). The animals are under the custodianship (ownership) of the ranch owner, as long as they remain on the property.
Genetic material	Any material of plant, animal, microbial or other origin containing functional units of heredity (CBD, 1992).
Genetic resources	Genetic material of actual or potential value (CBD, 1992).
Indigenous people	Peoples in independent countries who are regarded as indigenous on account of their descent from the populations that inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonisation, or the establishment of present state boundaries, and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions (ILO Convention 169).
Indigenous species	Indigenous species = native species (ICES, 2003).
Introduced species	(= non-indigenous species, = exotic species) (ICES, 2003).

Term	Recommended Definition
	Any species transported intentionally or accidentally by a human-mediated vector into aquatic habitats outside its native range. Note: Secondary introductions can be transported by human-mediated or natural vectors (ICES, 2003).
Local community	The human population in a distinct ecological area who depend directly on its biodiversity and ecosystem goods and services for all or part of their livelihood and who have developed or acquired traditional knowledge as a result of this dependence, including farmers, fisher folk, pastoralists, forest dwellers and others.
Marine species	Any aquatic species that does not spend its entire life cycle in fresh water.
Native species	A species or lower taxon living within its natural range (past or present) including the area that it can reach and occupy using its natural dispersal systems (modified after CBD, GISP) (ICES, 2003).
Natural ecosystem	An ecosystem where human impact has been of no greater influence than that of any other native species (EEA Glossary).
Natural habitat	Land and water areas where the ecosystem's biological communities are formed largely by native plant and animal species and human activity has not essentially modified the area's primary ecological functions (EEA Glossary).
Providers	Countries, persons, institutions or communities from where biodiversity components and genetic resources are accessed and obtained (UNCTAD, 2017).
Sustainable Use of Biodiversity	Means the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations. And Means use in a way and at a rate that does not lead to long-term decline of wildlife species (SADC, 1999).
Traditional knowledge	Knowledge, know-how, skills and practices that are developed, sustained and passed from generation to generation within a community, often forming part of its cultural or spiritual identity (UNCTAD, 2017).
Users	Countries, persons or institutions that access and utilise biodiversity components, genetic resources and related traditional knowledge (UNCTAD, 2017).
Utilisation of genetic resources	Means to conduct research and development on the genetic and/or biochemical composition of genetic resources, including through the application of biotechnology as defined in Article 2 of the Convention (Secretariat of the Convention on Biological Diversity, 2011).
Value chain	A value chain involves alliances among producers, processors, distributors, traders, regulatory and support institutions, whose common starting point is the understanding that there is a market for their products and services. They then set out a joint vision to identify mutual needs and work cooperatively in the achievement of goals. They are willing to share the associated risks and benefits, and invest their time, energy, and resources into realising these goals (UNCTAD, 2017).
Wildlife	Means animal, plant and micro-organism species occurring within natural ecosystems and habitats or in delineated areas that allows free roaming in the natural ecosystem and habitat (adapted from SADC (1999).
Wildlife-Based Economy	Means that part of the sector of the economy that uses marine and terrestrial wildlife as an economic asset to create value, which aligns with conservation objectives and delivers sustainable growth and economic development. The sustainable use of biodiversity within the wildlife-based economy may be both consumptive and non-consumptive.

1 INTRODUCTION

1.1 Background

Biodiversity, particularly the biodiversity of Member States of the Southern African Development Community (SADC), is gaining increased recognition for its contribution to economic and sustainable development of the individual Member States and the region as a whole. The region is globally recognised for its rich endowment of biological resources and its large and diverse heritage of plant and animal, including domesticated crops. These biodiversity resources can be found across a range of environments that are recognised for their high species richness (e.g. in Angola and South Africa) and for their globally renowned high level of endemism (i.e. Lake Malawi, Succulent Karoo, Cape Floristic Region) (IUCN et al., 2006). Of the 82 sites noted for their species richness and endemism in sub-Saharan Africa, 26 fall within the SADC region, with more than 40% of the species found in southern Africa being endemic (IUCN et al., 2006). The SADC Members States have set aside large tracts of forests, wildlife and wetlands as protected areas, to conserve and protect these valuable biodiversity resources, with Zambia and Tanzania having the highest proportion of protected areas at 31% and 28% respectively, followed by Botswana (18%), Namibia (14%) and Zimbabwe (12%) (SADC Secretariat, 2019). These protected areas are increasingly being combined across borders through creation of Transfrontier Conservation Areas.

Although the SADC region is richly endowed with natural resources, it is also characterised by high levels of poverty. Many of the people of the Member States are directly dependent on the rich biodiversity for survival and to sustain their livelihoods, particularly in the rural areas of the region (IUCN et al., 2006). The biodiversity of the region also contributes to local human health and wellbeing through the provision of clean air, potable water, medicinal plants and food, and providing crucial resources for the sustainable socio-economic development of the region (Snyman et al., 2021, IUCN et al., 2006).

The sixteen Member States that are party to the 1992 Treaty of the Southern African Development Community (the SADC Treaty) have agreed to act within the regional principles of, amongst other, human rights, equity, balance and mutual benefit (SADC, 2014). This implies that the biodiversity of the region needs to be conserved, managed and sustainably utilised within these principles, to ensure that the natural resources of the region are sustainably utilised for human rights, equity in access and use, and balance in access and use for mutual benefits. The SADC Treaty recognised a suite of objectives that have direct links the sustainable use and conservation of the biodiversity, including, amongst others, the following:

- SADC Objective (a): promote sustainable and equitable economic growth and socio-economic development that will ensure poverty alleviation with the ultimate objective of its eradication, enhance the standard and quality of life of the people of Southern Africa and support the socially disadvantaged through regional integration.
- SADC Objective (e): achieve complementarity between national and regional strategies and programmes.
- SADC Objective (f): promote and maximise productive employment and utilisation of resources of the Region.
- SADC Objective (g): achieve sustainable utilisation of natural resources and effective protection of the environment.
- SADC Objective (h): strengthen and consolidate the long standing historical, social and cultural affinities and links among the people of the Region.
- SADC Objective (j): ensure that poverty eradication is addressed in all SADC activities and programmes.
- SADC Objective (k): mainstream gender in the process of community building.

Related to Objective (a) of Members States promoting sustainable and equitable economic growth and socio-economic development for poverty alleviation/eradication and to enhance the standard and quality of life, the SADC

Regional Biodiversity Strategy of 2006 notes the crucial role that the region's biodiversity plays in achieving this objective, highlighting that the biological resources of the region support the tourism (particularly ecotourism), forestry, wildlife, and fisheries sub-sectors of Member States' economies, and provides vital ecosystem services and other wildlife economy activities to the people of these States (IUCN et al., 2006, Snyman et al., 2021). In fact, the same SADC Regional Biodiversity Strategy indicated that over half of the Gross Domestic Product (GDP) of SADC Member States, in 2006, emanated from primary production sectors that were based on the region's biodiversity, in its broadest sense (IUCN et al., 2006).

The ability of the Member States to sustainably utilise natural resources and effectively protect the environment, outlined in Objective (g) above, through the sustainable use, development, manufacturing and marketing of the exceptional biodiversity resource of the region, particularly wildlife resource, can support the SADC region in achieving their social and economic imperatives of improved quality of life, job creation, local business growth and development, inclusive economies, and poverty reduction.

Strategic interventions to the sustainable use of biological resources, while ensuring conservation of these resources, can also facilitate gender mainstreaming in the biodiversity sector and the strengthening of historical, social and cultural affinities within the region.

The biodiversity of the SADC region is also vital to the Member States achieving national and international developmental and biodiversity goals and targets, such as the Sustainable Development Goals, and other international agreements, such as the Aichi Targets of the Convention on Biological Diversity (CBD) (IUCN et al., 2006). The Convention on Biological Diversity (CBD) calls on countries to "*conserve biodiversity, use it sustainably, and equitably share benefits therefrom*" (IUCN et al., 2006). The CBD thus recognises the value of sustainable use of biodiversity, together with the value of the Member States' biodiversity for conservation and benefit sharing purposes (IUCN et al., 2006).

1.2 Policy Framework for the SADC Wildlife-based Economy Strategy

The 16 SADC Member States that are party to the 1992 Treaty of the Southern African Development Community (the SADC Treaty) are collectively and cooperatively working towards the region's goal of economic, social and political prosperity. In striving for this goal, Article 5 of the SADC Treaty outlines the need to ensure the sustainable use and conservation of natural resources of the region and specifies the necessity for effective environmental protection of the valuable biodiversity resources of Member States.

The biodiversity goal of the region is pursued through the Member States' commitments to international biodiversity agreements and through their commitments to the various environmental protocols that have been developed for the SADC region. These international commitments and regional protocols and strategies are outlined below.

1.2.1 International Biodiversity Commitments of SADC Member States

The SADC Member States are, and continue to be, actively involved in a range of international policies that guide, directly and indirectly, the sustainable use, protection and conservation of biodiversity. These international policies and strategies play an important role in relations between the SADC Member States and between these States and other countries across the globe. They also provide a context for wildlife-related international trade and finance both within the continent and globally (Snyman et al., 2021). A few of the key international policies that can enable or constrain the SADC Wildlife-based Economy Strategy Framework are highlighted below.

Table 1: Summary of participation of SADC Member States in international biodiversity-related conventions (acs = accession; rtf = ratification)

Convention	Convention on International Trade in Endangered Species of Wildlife animal and Plant (CITES)	Convention on Biological Diversity	Nagoya Protocol on ABS
Angola	Acs- 2013	Rtf- 1980	Acs-2017
Botswana	Acs- 1977	Rtf- 1995	Acs- 2013
Comoros	Acs- 1994	Rtf- 1994	Acs- 2013
Democratic Republic of Congo	Acs- 1976	Rtf- 1994	Acs- 2015
eSwatini	Acs- 1997	Rtf- 1994	Acs- 2016
Lesotho	Acs- 2003	Rtf- 1995	Acs- 2014
Madagascar	Rtf- 1975	Rtf- 1996	Acs- 2014
Malawi	Acs- 1982	Rtf- 1994	Acs- 2014
Mauritius	Rat-1975	Rtf- 1992	Acs-2012
Mozambique	Acs- 1981	Rtf- 1995	Rtf- 2011
Namibia	Acs- 1990	Rtf- 1997	Acs- 2014
Republic of South Africa	Rtf-1975	Rtf- 1995	Rtf-2013
Seychelles	Acs- 1977	Rtf- 1992	Rtf-2012
United Republic of Tanzania	Rat-1979	Rtf- 1996	Acs- 2018
Zambia	Acs- 1980	Rtf- 1993	Acs- 2016
Zimbabwe	Acs- 1981	Rtf- 1994	Acs- 2017
Purpose	CITES has the purpose of regulating the trade of endangered species to conserve these species, recognising “ <i>that international cooperation is essential for the protection of certain species of wildlife animal and plant against over-exploitation through international trade</i> ” (Conference of the Parties, 1973). CITES has established a system of permitting for the trade in species “ <i>to ensure that international trade in specimens of wildlife animals and plants does not threaten their survival</i> ”.	The Convention on Biological Diversity, has three global biodiversity goals (CBD, 1992): a) Conservation of biological diversity. b) Sustainable use of biological resources. c) Fair and equitable sharing of benefits arising from the use of genetic resources. The Convention seeks to address Objective b) through the adoption of the 14 Addis Ababa principles for sustainable use of biological resource and Objective c) through the Nagoya Protocol.	The Nagoya Protocol builds on the ABS provisions of the CBD, supporting the third objective of fair and equitable benefit sharing. The objective of the Protocol is the fair and equitable sharing of the benefits arising from the utilisation of genetic resources (Secretariat of the Convention on Biological Diversity, 2011).
Relevance to the SADC Wildlife-based Economy	CITES has a crucial role to play in the SADC Wildlife-based Economy as it regulates, through a permit system, the trade in a number of biological resources in the value chains. It also provides an internationally agreed framework to ensure that the export of listed wildlife and wildlife products from SADC Member States is responsible and sustainable.	The CBD provide the principles that underpin the Wildlife-based Strategy, of sustainable use of biological resources while conserving biodiversity and recognising the need for fair and equitable sharing of the benefits from this sustainable use. The Zero Draft of the Post-2020 Global Biodiversity Framework has been shared for comment. The Post-2020 framework will need to be considered in the implementation of this strategy, once adopted.	The Nagoya Protocol guides the sharing of benefits of the sustainable use of wildlife resources in the wildlife-based economy and value chains.

1.2.1.1 The Sustainable Development Goals (SDGs)

Sustainable use of natural resources is central to global commitments of sustainable development and achieving global goals and targets, such as the United Nation's (UN) Sustainable Development Goals (SDGs) of eradicating poverty, ensuring basic human rights are met (i.e. health, education water, sanitation, housing) and protecting and conserving biodiversity. The 2030 Agenda for Sustainable Development was adopted by the UN General Assembly in 2015 through Resolution 70/1.

SDG 14, that calls on all humanity to “*conserve and sustainably use the oceans, seas and marine resources for sustainable development*” relates directly to the SADC strategic objective of sustainably utilising the marine biological resources of the region. Similarly, SDG 15, that calls for countries to “*protect, restore and promote sustainable use of terrestrial ecosystems...*” also relates directly to the strategic objectives of the SADC Treaty. Hence, reading the two SDGs together with the SADC Treaty, it is clear that global and regional biodiversity commitments call for sustainable utilisation of biological resource, such as envisaged in a Wildlife-based Economy, within the bounds of conservation of the biodiversity resources for current and future generations. The concept of a wildlife-based economy is an articulation of the conservation of nature through its sustainable use for human benefit (Snyman et al., 2021).

1.2.2 The SADC Wildlife-based Economy Enabling Protocols

Since inception, the SADC Treaty has given rise to several protocols that deal with the wildlife resources (Table 2). However, no one protocol, or piece of sub-regional legislation, exists that is dedicated to a wildlife-based economy. Instead, a number of protocols, such as SADC Protocol on Fisheries, Protocol on Forestry and Protocol on Wildlife Conservation and Law Enforcement may assist with sustainable use of wildlife resources and biodiversity conservation within the SADC region. The collective SADC environmental-related protocols provide the enabling environment for the growth and development of the Wildlife-based Economy of the region.

Table 2: SADC Protocols the enable the Wildlife-based Economy

	Year Published	Year In Force	Ratified
Protocol on Development of Tourism (SADC Secretariat, 1998)	1998	2002	All except Angola ratified the Protocol
Protocol on Wildlife Conservation and Law Enforcement (SADC, 1999)	1999	2003	All except Botswana ratified the Protocol
SADC Protocol on Fisheries (SADC, 2001)	2001	2003	All except DRC, Madagascar, Seychelles, and Zimbabwe ratified the Protocol
SADC Protocol on Forestry (SADC, 2002)	2002	2009	As of August 2018, all except Angola, DRC, Madagascar and Seychelles have ratified the Protocol
Protocol on Environmental Management for Sustainable Development	2014		By 2019 only the Kingdom of Eswatini and Namibia had ratified the protocol

Since the Wildlife-based Economy Strategy would only address wildlife species that are endemic/indigenous to the SADC region, application of the protocols and strategies will only be within the context of these species and their related value chain and markets. For example, the SADC Protocols for Fisheries and Forestry may cover the exotic forests of the region and fish species that are not indigenous/endemic to the region, where the Wildlife-based Economy Strategy would only focus on the natural forests and forest products from these, and the indigenous fish species utilised for food, products and aquaculture in the Member States. Similarly, the wildlife-based tourism that would be addressed in this strategy would only focus on tourism related to indigenous wildlife resource, while the SADC Protocol on Development of Tourism would focus on the broad tourism sector.

Figure 2 demonstrates the SADC protocols, in chronological order, that guide and enable the regions Wildlife-based Economy.

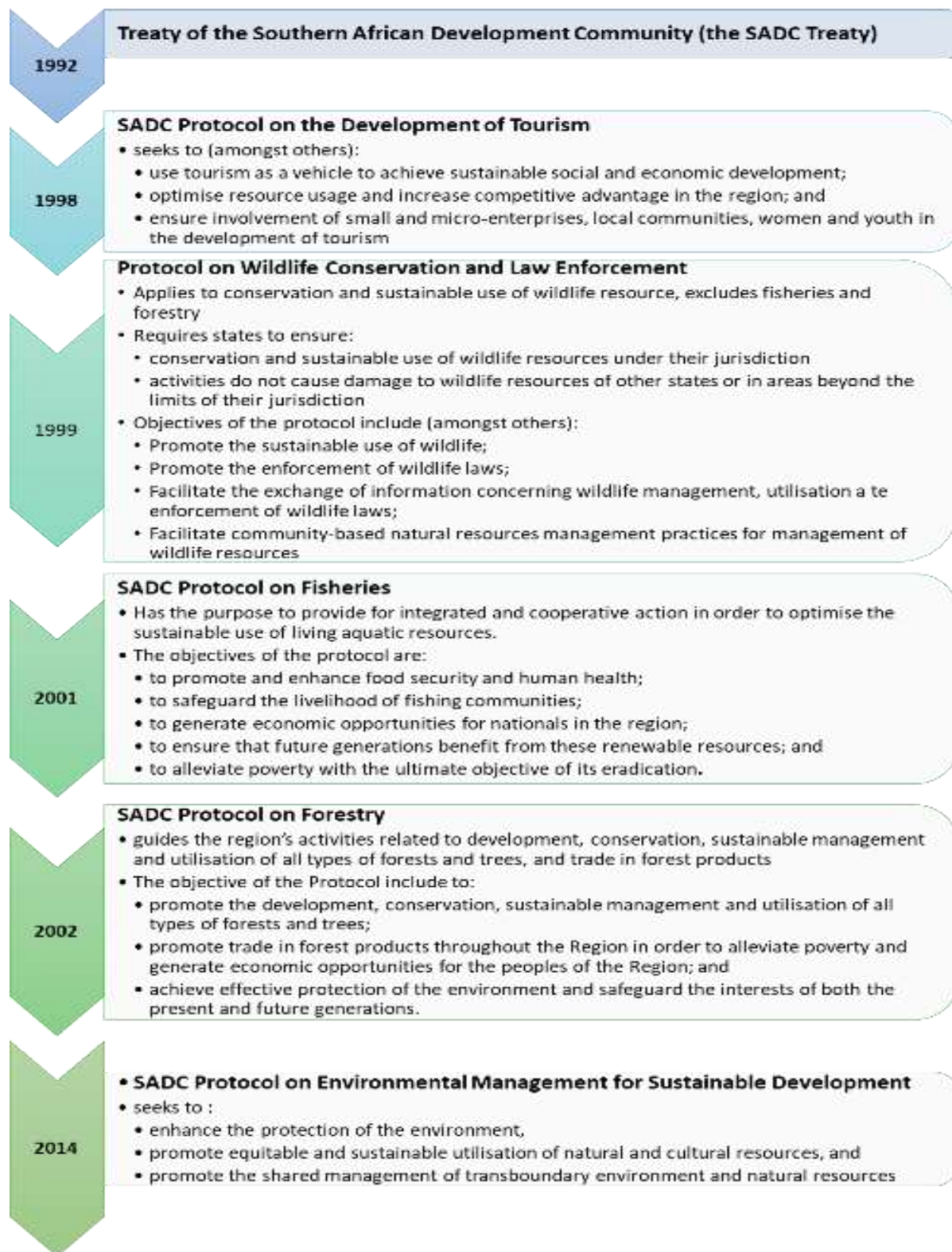


Figure 2: Chronology of SADC protocols that enable the wildlife-based economy of the region

The figure outlines the purpose and objectives of the protocols, clearly demonstrating that equitable and sustainable utilisation of natural and cultural wildlife resources, to generate economic opportunities, to contribute to alleviating poverty and to creating equitable beneficiation, was a common theme within these protocols. For example, the sustainable utilisation of indigenous and endemic fish species can promote and enhance food security and provide nutrition to improve human health; subsistence capture of these species can contribute to sustainable livelihoods within the region; a thriving and growing fishing value chain based on sustainable use of indigenous and endemic species of fish can generate economic opportunities in Member States and within the region; and applying the Nagoya ABS Protocol to share benefit from the use of these indigenous and endemic resources can contribute to alleviating poverty and creating equitable beneficiation from the use of fish resources within the region. The SADC Protocol does, however, recognise that this sustainable use of the region's wildlife resources must be within the constraints of ensuring the resources are conserved for future generations. The Protocol requires that measures are adopted by parties to ensure sustainable use of wildlife that are based on adequate safeguards to prevent over-exploitation and to prevent the decline or extinction of species.

1.2.3 The SADC Wildlife-based Economy Guiding Strategies

Where SADC protocols are legally binding instruments necessary to ensure cooperation between Member States in implementing the SADC's agenda, providing codes of procedure and practise on various issues, the SADC strategies provide the guidance and actions required to give effect to the SADC protocols. Noting the protocols shown in Figure 2, which enable the SADC wildlife-based economy, Figure 3 shows the strategies that guide implementation of these protocols.

The objectives of the strategies and frameworks clearly demonstrate the commitment of the Member States to the sustainable use of wildlife resources for the benefit of their populations. While recognising the vital ecosystem services provided by these wildlife resources and the need to protect and conserve biodiversity of the region, the strategies and frameworks support the increased level of production and trade in goods and services from the wildlife resources to benefit poor communities and create economic development. Sustainable use of wildlife resources is thus an underlying principle of the strategies, particularly for the equitable and mutual sharing of the benefits that accrue from the use of these resources within poor and rural communities.



Figure 3: Chronology of the SADC strategies and frameworks that enable the wildlife-based economy of the region

Particularly note is taken by the Wildlife-based Strategy of the SADC Green Economy Strategy and Action Plan For Sustainable Development (GE Strategy), developed in 2015 (UNDP et al., 2015). The GE Strategy provides a framework to guide the integration of resilient economic development, environmental sustainability and poverty eradication for a more sustainable future in the SADC region for green economy policy implementation (UNDP et al., 2015). The Wildlife-based Economy recognises that many of the actions outlined in the GE Strategy would

support achieving the strategic objectives and actions of this strategy. To avoid confusion and duplication in the two strategies, Table 3 below outlines the GE Strategy actions that are relevant to the Wildlife-based Economy strategy.

Table 3: Strategic areas and actions in the GE Strategies that have relevance to the Wildlife-based Economy Strategy

Sector	Strategic Focus	Actions
Forestry and biodiversity	FO1: Sustainable Forest Management	<ul style="list-style-type: none"> • F01.3. Conduct regional training programmes on sustainable forest harvesting practices. • F01.4. Support the establishment of a regional inventory through forest measurements, assessments, and mapping.
	FO4: Support the development of Bio Trade	<ul style="list-style-type: none"> • F04.2. Support capacity building programmes on sustainable extraction and processing of biodiversity products. • F04.3. Support credit mechanisms and fiscal incentives for the establishment of community-based Bio Trade cooperatives, giving central role to vulnerable groups including women. • F04.4. Establish regional institutions to support research and the development of Bio Trade value chains.
Fisheries	F1: Promote sustainable utilisation of fisheries resources.	<ul style="list-style-type: none"> • F.1.4. Determine the frequency of stock assessments and other necessary research at the regional level, with support from international bodies.
	F2: Promote green aquaculture	<ul style="list-style-type: none"> • F2.1. Develop reliable management systems for green aquaculture practices, in particular to reduce impacts on lagoon ecosystems. • F2.2. Provide technical advice and assessment for the selection of resilient fish species. • F2.3. Incentivise the greening of small-scale fish farms and promote the creation of cooperatives committed to sustainability.
	F3: Data collection and information sharing	<ul style="list-style-type: none"> • F3.1. Develop and implement stock assessment programmes. • F3.2. Support the constant update of the SADC Regional Fishing Vessels Register. • F3.3. Develop an effective monitoring, control and surveillance (MCS) system for marine fisheries, building on past experiences such as the SADC Monitoring Control and Surveillance of Fishery Activities Program. • F3.4. Organise awareness raising events, trainings and media campaigns to share relevant information on existing laws, fish stocks, climate change threats to marine resources and ecosystems, adaptive techniques, etc.
Tourism	T1: Promote the reduction of resource intensity in the tourism sector.	<ul style="list-style-type: none"> • T1.2. Devise and operationalise regional campaigns for the promotion of eco-tourism. • T1.3. Improve access to credit for small tourism businesses willing to invest in sustainable tourism. • T.1.4. Establish a regional sustainability certification programme for hotels and resorts.
	T2: Support the protection of natural habitats and ecosystems.	<ul style="list-style-type: none"> • T2.3. Assist the economic valuation of ecosystem services (e.g. coastal, marine, forest ecosystems). • T2.4. Encourage the involvement of local communities in development projects that would help preserve the ecosystem.
	T3: Adapt the tourism sector to current and expected climatic changes.	<ul style="list-style-type: none"> • T3.2. Support the diversification of tourism activities, especially to reduce dependency on climate sensitive resources, such as wildlife.

2 SCOPE AND PURPOSE OF THE SADC WILDLIFE-BASED ECONOMY STRATEGY

The scope and purpose of the SADC Wildlife-based Economy Strategy is to provide **strategic direction for the growth and expansion of sustainable use of wildlife resources in SADC Member States, while simultaneously conserving and protecting the indigenous biodiversity that the region has been so richly endowed with**. The Wildlife-based Economy Strategy aims to contribute to the conservation and sustainable use of biodiversity and wildlife species through the promotion of trade and investment in wildlife-based economy products and services.

The Wildlife-based Economy Strategy recognises that the biodiversity and biodiversity economy strategies of the Member States are necessary to advance the development of cross-border value chains that better enable the utilisation of wildlife biological resources within the region and to grow and expand the products and services of the wildlife-based economy.

2.1 Conceptual Framework for the SADC Wildlife-Based Economy

Noting that wildlife in the SADC region is defined as animal, plant and microbial species occurring within natural ecosystems and habitats (adapted from SADC (1999)), the wildlife-based economy within the SADC would encompass all the businesses and economic activities that either directly depend on wildlife for their core business, or that contribute to the conservation of wildlife through their activities (Snyman et al., 2021).

The **Wildlife-Based Economy** for SADC is defined as **that sector of the Member States' and region's economy that uses marine and terrestrial wildlife as an economic asset to create value that aligns with conservation objectives and delivers sustainable growth and economic development. The sustainable use of biodiversity within the wildlife-based economy may be both consumptive and non-consumptive.**

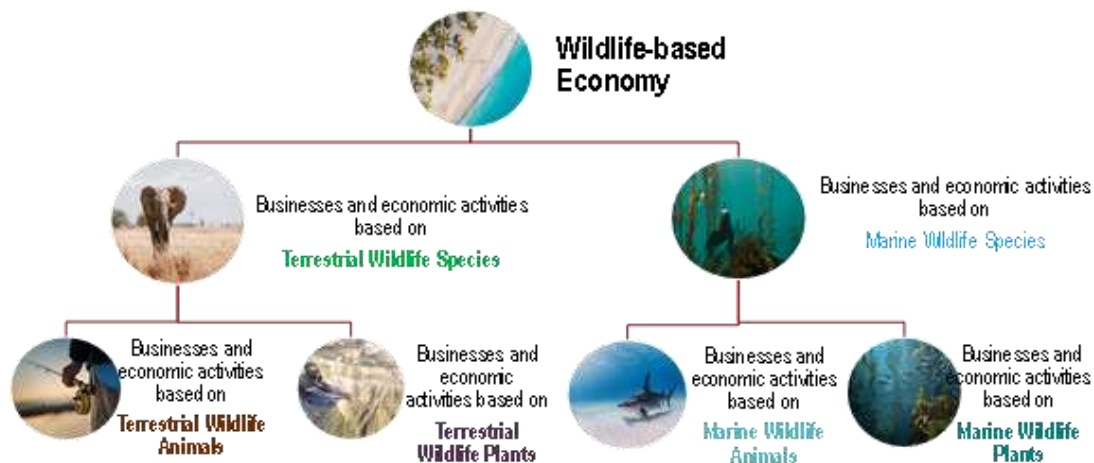


Figure 4: Diagrammatic depiction of the definition of a Wildlife-based Economy

The definition of the wildlife-based economy recognises the growing interest and research into microorganism bioprospecting and notes the benefit that this wildlife-based value chain can contribute to the wildlife-based

economy. The strategy recommended that this component of the wildlife-based economy be included in the near future, as this wildlife micro-organism value chain become more defined in Member States and in the region.

2.2 Situational Analysis of the SADC Wildlife-Based Value Chains

The SADC Wildlife-based Economy Strategy was developed based on recognition of the value of wildlife-based value chains in the Member States and in the region. This value chain approach was adopted to determine the scope and size of the SADC wildlife-based economy.

The SADC wildlife-based economy value chains were also based on recognition of the need for alliances, partnerships, cooperation and collaboration among wildlife-based economy producers, processors, distributors, traders, regulatory and support institutions to achieve the outcomes of the SADC Wildlife-based Strategy. These alliances have a common starting point, namely the rich and abundant wildlife resources of the SADC region. The value chains within the wildlife-based economy also recognise that there is a market for the products and services within the Wildlife-based Economy. Hence, a value chain approach was adopted in the Wildlife-based Economy Strategy with this approach guiding the determination of the scope and size of the wildlife-based economy, can be used to support the stakeholders and role players in the sector to identify a joint vision, can assist in identifying mutual needs and can guide stakeholders to work cooperatively to achieve the goals of the strategy. Stakeholders and role players in the value chains should be willing to share the associated risks and benefits, and invest their time, energy, and resources into realising the value chain goals within the Wildlife-based Economy Strategy.

The value chains shown in Figure 5 were those deemed to comprise the SADC Wildlife-based Economy, each with a series of components and sub-components that make up the value chains. The two main value chains or the sectors that make up the wildlife-based economy include:

- the [terrestrial and marine wildlife animal value chain](#) that include value chains related to the sustainable use of wildlife animal species such as game ranching and farming, game and hunting, inland fisheries and aquaculture and wildlife-based tourism; and
- the [terrestrial and marine wildlife plant value chain](#) that include value chains related to the sustainable use of plant biodiversity such as timber and timber products from natural forests; bioprospecting of natural plants and wildlife-based tourism.

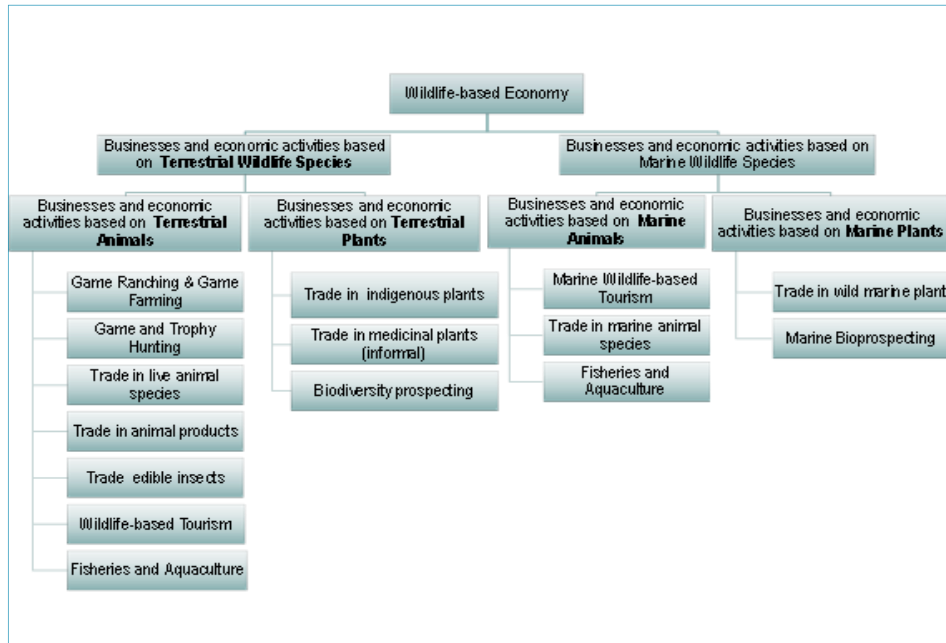


Figure 5: Value chains comprising the wildlife-based economy in this Wildlife-based Economy Strategy

2.2.1 Overview of the Terrestrial Wildlife Value Chain

The terrestrial wildlife value chain has two sub-value chains, namely (1) the sub-value chain that focusses on sustainable use of wildlife animals and the (2) the sub-value chain that focusses on sustainable use of wildlife plants.

The [terrestrial wildlife animal value chain](#), shown in Figure 5 above, encompassed the following sub-sectors:

- Game Ranching and Game Farming Value Chain
- Game Hunting Value Chain
- Trade of Live Animal Species
- Trade in Animal Products
- Wildlife-based tourism
- Inland fisheries and aquaculture.

The [Game Ranching and Game Farming](#) component can be distinguishable in the following manner:

- *Game ranching*: Comprises enterprises that manage indigenous wildlife animals in defined areas delineated by fences, similar to cattle ranching, where the animal have access to and roam freely in the natural vegetation (Snyman et al., 2021). The animals are under the custodianship (ownership) of the ranch owner, as long as they remain on the property.
- *Game farming*: Comprises enterprises that confine indigenous animal species in demarcated areas, in a semi-domestic state, with the animals being fed. Game farming includes for example, ostrich and crocodile farming and their related value chains.

Game ranching on semi-arid land can be more profitable than livestock ranching and can generate foreign currency income, as it is less susceptible to drought and climate change and it contributes to food security and income

generation (van Vliet et al., 2016). The sector is recognised as having significant potential for growth and income generation. Game ranching in the SADC and in Africa is dominated by South Africa and Namibia, with smaller game ranching industries in Botswana, Zambia and Mozambique.

The game ranching and farming value chain comprises sub-sectors, with the **game meat** as the chief component. Some of the SADC Member States have a well-established legal trade in game meat. These game meat value chains have been established and have grown due to the preference of individuals in countries, such as Botswana, Malawi, Namibia, South Africa, Zambia and Zimbabwe, for game meat and for biltong (dried, cured meat) made from game meat.

The second component of the terrestrial wildlife animal value chain is **Game Hunting**. The significant size of the southern African game hunting market is attributed to countries in the SADC region having well established game hunting value chains and markets, including South Africa, Zimbabwe, Botswana and Namibia, with smaller industries in Zambia, Mozambique and eSwatini. The hunting value chain has, over the years, evolved into a multi-function process of utilisation of terrestrial animals, based on (a) ecological, (b) economic and (c) socio-cultural purposes of hunting.

- Hunting for ecological purposes is where game is culled as a management tool for the achievement of non-meat procuring objectives, such as reducing herbivores to allow for the regeneration of forests (for conservation or production purpose), controlling the spread of zoonoses, or reducing pests.
- Hunting for economic purposes is hunting for the two primary economic functions of (1) sustaining livelihoods and (2) recreation and sport.
- The third hunting value chain relates predominantly to the development and maintenance of social capital and respect, prestige and status for hunting of wildlife animal.

The game hunting value chain also includes import and export of CITES species to and from the SADC Member States as trophies. Research showed that approximately 180,000 individual animals had been directly exported as hunting trophies from the SADC between 2005-2014, with approximately half of these emanating from the wild (i.e. conservation areas), while the remainder were captive-bred on game farms, or sourced from game ranches (15%) (Sinovas et al., 2016).

The second component of the terrestrial wildlife animal value chain is the trade in **Live Animal Species**. This is a significant sub-sector of the ranching and conservation sectors of a number of the Member States. Wildlife animals are bought and sold for a range of purposes, including to restock areas, for breeding purposes, for hunting, or to reduce animal numbers for conservation purposes. However, apart from South Africa, there is a dearth of data and information related to the sale value chain of live animals in the SADC and its Member States.

The third component of the terrestrial wildlife animal value chain is **Animal Products** that are intimately linked to the game ranching and farming value chain and the game hunting value chains. Products emerging from these markets are captured in those value chains, i.e. skins, hides, meat etc. Other wildlife products that can be produced and sold, particularly from wildlife ranching, include:

- products made from bone, such as jewellery and curios;
- products made from skin, such as shoes, wallets, handbags, etc.; and
- products made from horn, such as decorations, lampstands, and other ornaments.

In addition to animal products in the above-mentioned components of the animal value chain, bee products are a well-established value chain in the SADC region. Africa has rich and diverse ecological zones that host a variety of honeybees, with products harvested from these hives including honey, beeswax and pollination services. Beekeeping not only produces the honey value chain in the SADC Member States but is also the source of products such as pollen, wax, propolis, royal jelly, venom, which together with the honey are widely used in the cosmetics, pharmaceutical, textile, candle-making and leather industries. Beyond these direct products, beekeeping contributes significantly to pollination and other ecosystem services.

The fourth component included in the terrestrial wildlife animal value chain is the **Wildlife-based Tourism** component. The recommended wildlife-based tourism definition for the Wildlife-based Economic is that of the UNEP/CMS that defined this sub-sector as “*tourism that is undertaken to view and/or encounter wildlife in a natural setting* (Tapper, 2006). Wildlife-based tourism in this context is exclusively related to non-consumptive forms of wildlife-based activities (i.e. observing and sometimes touching or feeding of animals). The definition thus excludes consumptive forms of wildlife utilisation, such as hunting and fishing, as these sustainable uses of biological resources were captured in the other value chains within the wildlife-based economy, i.e. game hunting and fisheries. This wildlife-based tourism also included non-consumptive sustainable utilisation of indigenous plant resource such as, for example, viewing the annual blooms of Namaqualand flowers in South Africa. The definition also recognised that wildlife animal tourism is inherently linked to wildlife plant tourism – the two in fact, cannot be separated in many cases of tourism.

Countries in southern Africa are known for some of the premier destination for wildlife-based tourism, such as the viewing of the so-called “Big Five” watching (African elephant, Cape buffalo, leopard, lion and rhinoceros). Many of the wildlife-based tourism products can only be experienced on the African continent and thus represent a unique selling proposition for African tourism. Wildlife-based tourism brings millions of dollars in foreign currency into the region. In fact, wildlife-based activity in the SADC Member States was ranked among the top three contributors to the GDP in many of the Member States of the region (SADC, 2001).

The fifth component included in the terrestrial wildlife animal value chain is the **Inland Fisheries and Aquaculture** value chain. Fisheries in Africa are characterised by the contribution of small-scale fisheries to employment, but it is also important to recognise the importance of fisheries in providing food security and food sources to the people of the SADC Member States. The contribution of fisheries to the Member State economies, together with the contribution to food and nutrition security in the SADC region is significant. The inland fisheries value chains in the Member States can be sub-divided into the human consumption and non-consumption value chains. The majority of inland captured fish is directly consumed by humans, with the 2018 FAO report indicating that at least 80% of the inland fish catch is consumed by humans across the globe. The remaining capture produced is utilised for non-consumptive uses (FAO, 2020):

In 2016, at least 10 SADC Member States had active inland aquaculture value chains, including Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Tanzania, Zambia and Zimbabwe.

The **terrestrial wildlife plants value chain**, shown in Figure 5 above, encompasses the following sub-sectors:

- Live indigenous plant – including trade in indigenous timber and timber products and the floriculture sector.
- Medicinal plants.
- Biodiversity prospecting.

There is a dearth of information and data related to use of wildlife plant value chains in many of the SADC Member States. Although literature is available for the range, distribution and protection status of specific species or groups of species in some African and SADC countries, the economic value chains and market sizes for the sustainable utilisation of wildlife plant are generally not well documented.

The first component of the SADC wildlife-based economy's terrestrial wildlife plant value chains is **Indigenous Plants including natural timber and timber products**. The natural/indigenous forest and woodland have been recognised for their contribution to economies and households through timber and timber product markets and through the contributions of non-timber forest products (NTFP) to households and economies. The forest and woodlands across the globe have and continue to contribute to the survival, livelihoods and economies of many southern African households (Geldenhuys, 1991, Belcher and Schreckenber, 2007):

Recognising the dual value chains garnered from natural forest (i.e. timber and timber products and non-timber products), this component of the Wildlife-based Economy value chain focussed specifically on the natural timber and timber product trade by the SADC Member States. The non-timber forest products from these natural forests will be captured under the other values chains, i.e. trade in wildlife plant, biodiversity prospecting, tradition medicinal plant trade, and bee products.

The most important product from these forests was timber, which traditionally was the single most formally traded commodity, both nationally and internationally (SADC, 2010). The SADC Member States remain net exporters of primary wood products (round wood, sawn wood, plywood and veneers) worth about \$3,44 billion. These data led to African Natural Resources Centre (ANRC) (2021) concluding that *these figures suggest a significant loss of economic opportunity for the region in terms of jobs and wealth creation. The huge quantities of sawn wood and logs exported could be processed into finished products and substituted for imports. The protocol on forestry of the SADC provides a policy framework for forest management to embrace these development needs and could be promoted with a greater emphasis on local value addition within the region.*

The second component of the SADC wildlife-based economy terrestrial wildlife plant value chains is **Live Wildlife Plants and their Parts**. Live wildlife plants and their parts were traded in the SADC as the following:

- a) *CITES-listed species*: CITES species trade from the SADC Region between 2005-2014 found that trade in CITES-listed plant species was dominated by the import and exports of wildlife plant (including cycads and succulent plants) and plant derivatives (extract, flowers, seeds) (Sinovas et al., 2016).
- b) *Indigenous Edible Fruits*: Wild fruits from indigenous trees are widely consumed across Africa, either as food or medicine for various ailments, and are important biological resources in many global agro-ecological and forest ecosystems (Snyman et al., 2021, Awodoyin et al., 2015). Wild fruits from indigenous trees are rich in essential nutrients, antioxidants and health benefits, also have benefits in the cosmetics, traditional beverages, fibres, and crafts value chains (Snyman et al., 2021, Awodoyin et al., 2015). About 1,200 species of wild edible fruits exist in Africa, the main ones being mango, baobab, marula, kola nut, and palm dates.
- c) *Indigenous Floriculture*: From a trade perspective, cut flowers and foliage are part of a wider product cluster of Cut flowers, Foliage and Ornamental Plants, that extended to include live plants used for ornamental purposes, as well as seeds and bulbs (SADC, Undated-b). Within the SADC Member States that trade in cut flowers, specialist indigenous species, such as protea, comprised a small but very important part of the floriculture market (SADC, Undated-b). Within the SADC Member States, Zimbabwe in 2003, was the eighth-largest exporter of cut flowers (10th in 2004) globally. Other SADC countries demonstrating relative success in cut flower exports include South Africa (SA) in 21st place, Zambia (23rd), Tanzania (29th) and Mauritius

(38th) (SADC, Undated-b). South Africa, ranked 15th globally, was the only significant SADC exporter of foliage (SADC, Undated-b).

The third component of the SADC wildlife-based economy terrestrial wildlife plant value chains is **Traditional Medicines**. Research has estimated that globally between 35,000 to 70,000 plant species had been used for their medicinal properties, corresponding to 14–28% of the 250,000 plant species that are estimated to occur around the world (Volenzo and Odiyo, 2020). The medicinal market for wildlife plant in Africa is dominated by two key markets, namely (Snyman et al., 2021):

- a) the traditional medicines market; and
- b) the formal pharmaceutical market.

This component focuses on the first of the two markets, namely the use of wildlife plant on the informal African traditional medicine (ATM) market, recognising that the market has been used by African populations for the treatment of diseases for centuries and will continue to play a role in the future. A large number of plants are regularly sold as crude, unprocessed drugs on traditional markets in various parts of Africa, largely for medicinal purposes. At least 6,000 of an estimated 68,000 plant species on the continent have been used for these purposes, by an estimated 80% of the population in some Member States (Dzoyem et al., 2013). Southern Africa is a globally recognised centre of biodiversity richness and endemism, having a total of 66,888 plant species (including medicinal) of which 3,666 are endemic (Shumba et al., 2009). Van Wyk and Gericke (2000) estimated that only 2,942 of these wildlife plant species or 13.5% of the plant in the southern African region were being used as traditional medicines.

The traditional medicinal plant markets in the SADC Member States are largely informal, with the supply chain for these medicinal plants comprising the harvesting of the plants by collectors/ harvesters, largely from rural areas, whom supply the harvest to a middleman, vendor and traditional healers, more and more in the urban areas, that in-turn supply pure resources or mixes of resource as dried, tincture, extract, creams etc. to local consumers and international markets (Snyman et al., 2021). African traditional medicines and medical plants are traded as herbs, herbal materials, herbal preparations, and finished herbal products that contain parts of plants or other plant materials as active ingredients (Mahomoodally, 2013). A large amount of the harvested plants is sold with little or no processing, e.g., dried leaves.

African trade in medicinal plants was estimated to only make up 25% of global trade, amounting to an estimated USD 17,8 billion in 2013 (Dzoyem et al., 2013). There is however a dearth of data on the traditional medicinal plant markets in many countries, which makes the sizing of these markets difficult.

The third component of the SADC wildlife-based economy terrestrial wildlife plant value chains is **Biodiversity Prospecting**. Biodiversity prospecting, commonly referred to as bioprospecting, is the investigation of biodiversity to see how they can be commercially useful to humans.

In light of modern science, significant efforts have and will continue to be expended to identify and characterise the bioactive constituents, particularly from traditional medicinal plants, to offer new treatment therapies and to discovery new bioactive materials/chemicals for use in the biodiversity prospecting markets, including markets such as nutraceuticals, pharmaceuticals, cosmeceuticals, food and beverage industries, to name a few (Mahomoodally, 2013). Although as many as an estimated 6,000 African plant species have been utilised in the traditional medicinal markets, only 80 species have been traded internationally as commercially valuable medicinal plant species (Van Wyk, 2015, Snyman et al., 2021).

Bennett (2006) indicated that trade in 10 African natural products could generate an value of USD 3,43 billion per year for southern African Member States (Ariyawardana et al., 2009). However, at the time, the Member States were only trading around USD 12 million (Ariyawardana et al., 2009).

This component of the wildlife plant value chain does not follow the above distinction directly but does subdivide the biodiversity prospecting value chain into:

- powders and dried plant parts;
- oils and butters;
- extract and tinctures; and
- bioactives in products in the pharmaceutical, agribusiness (biotechnology, seed, crop protection and horticulture), cosmetic and personal care, fragrance, botanicals, and the food and beverage industries.

2.2.2 Overview of the Marine Wildlife Value Chain

The marine and ocean environments play a significant role in the sustainable socio-economic development of the SADC region and the Member States, providing a substantial portion of the region's population with a source of food and livelihoods, a means of transport and contributing to the tourism, trade, agriculture and biodiversity sectors of the region, amongst others (SADC, undated-a). The SADC (undated-a) noted that the *potential of the oceans to meet sustainable development needs is enormous; but only if they can be maintained in and/or restored to a healthy, and productive state.*

Recognising the importance of the ocean and marine environments to the economy of the region, the SADC has adopted a "Blue Economy" approach to the oceans under the jurisdiction of the Member States and has developed a concept note for the purpose of guiding the blue economy of the region (SADC, undated-a). The approach, similar to the "Green Economy", conceptualises oceans as "development spaces" where spatial planning integrates, amongst other, the conservation, sustainable use and marine bioprospecting, and ocean values and services into economic modelling and decision-making processes. The Blue Economy within the Wildlife-based Economy, focusses on a framework of sustainable development of the ocean to address *equity in access to, development of and the sharing of benefits from marine resources; offering scope for re-investment in human development and the alleviation of crippling national debt burdens* (SADC, undated-a). Thus, fundamental to the Blue Economy approach to sustainable use of marine and ocean resources in the SADC region are equity, ensuring that developing countries (SADC, undated-a):

- optimise the benefits received from the development of their marine environments, e.g. fishery agreements, bioprospecting;
- promote national equity, including gender equality, and in particular the generation of inclusive growth and decent jobs for all; and
- have their concerns and interests properly reflected in the development of seas beyond national jurisdiction, including the refinement of international governance mechanisms and their concerns as States proximate to seabed development.

The inclusion of the Blue Economy under the ambit of the Wildlife-based Economy Strategy offers the SADC Small Island Development States (SIDS) the prospect of sustained, environmentally-sound, socially inclusive economic growth, based on their significant ocean and marine biological resources, and to be guided by the strategy to stimulate and grow their economies.

The sub-value chains in the marine plant and animal value chains follow a similar structure as for the terrestrial value chains, namely:

- trade in live marine plants and animals;
- marine wildlife-base tourism;
- marine fisheries and aquaculture; and
- marine bioprospecting.

2.3 Estimating The Wildlife-Based Economic Market in the SADC Region

The estimate of the wildlife-based economy's contribution to the SADC region's GDP is currently limited to two sub-sectors outlined in the section above, namely:

- the terrestrial and marine wildlife plant sub-sector; and
- the terrestrial and marine wildlife animal sub-sector.

The subsectors that may be included in a market size of the SADC wildlife-based economy are shown in the Table 4 below.

Table 4: Sectors that underpin the Wildlife-based Economy

Sector	Wildlife economy activities
Terrestrial Wildlife animal	Includes game hunting, game ranching and farming, game meat and live animal trading.
Wildlife-based Tourism	Includes non-consumptive terrestrial and marine tourism (recreation; sport fishing, bird watching, plant bloom viewing; honey production).
Inland and Marine Fisheries	Multiple use of marine resources; freshwater fisheries; aquaculture and fish farming and subsistence fishing.
Natural Forestry	Indigenous, self-regenerating forests.
Indigenous Wildlife plant	Bioprospecting plus the forestry and plant wildlife-based tourism highlighted above.
Trade and Industry	Commercial film and photography; wildlife products; bioprospecting; nature-based carbon credits; other payments for ecosystem services; other conservation-related services; real estate.
Other	Educational activities; research activities, including research involving off-take; cultural activities; religious activities.

The contribution of the wildlife-based economy to the SADC region's economy was measured in terms of the Gross Domestic Product (GDP). Table 5 demonstrated that the GDP calculated for the wildlife-based economy was estimated to be approximately USD 33,9 billion in 2018 and USD 31,5 billion in 2019 (or 4.6 percent of total GDP for SADC). This comprised the:

- wildlife plant sub-sector GDP ~ USD 12.8 billion (2018); USD 10,9 billion (2019 est.); and
- wildlife animal sub-sector GDP ~ USD 21.1 billion (2018); USD 20.5 billion (2019 est.).

Contribution to the wildlife-based economy was dominated by South Africa, which was estimated to have contributed USD 9,5 billion, followed by Democratic Republic of Congo (~USD 7,7 billion), Tanzania (~USD 3 billion), Madagascar (~USD 2,2 billion) and Angola (~USD 2,1 billion).

Table 5: Contribution by Member State to the wildlife-based economy of SADC for 2019 (Source: Authors calculations)

Member State*	Contribution of the Wild Fauna sub-sector (USD Million)	Contribution of the Wild Flora sub-sector (USD Million)	Estimate of the Wildlife Economy (USD Million)
Angola	1,734	375	2,110
Botswana	173	41	214
Comoros	73	16	90
Democratic Republic of Congo	4,108	3,669	7,778
Eswatini	20	102	122
Lesotho	25	54	80
Madagascar	1,630	555	2,185
Malawi	474	551	1,025
Mauritius	265	8	273
Mozambique	464	849	1,313
Namibia	1,114	96	1,210
Seychelles	329	11	341
South Africa	7,532	2,060	9,593
Tanzania	1,907	1,158	3,066
Zambia	520	1,092	1,613
Zimbabwe	191	283	474
SADC	20,566	10,992	31,493

The contribution of the sub-components of each of the value chains of the wildlife-based economy was shown in Table 6, which indicated that the highest contribution of the sub-components of the wildlife plant and animal value chains to the SADC region's GDP was the inland and marine fisheries and aquaculture sub-component, contributing an estimated USD 20,5 billion in 2019. This component of the wildlife animal value chain reflects an estimated 27% growth between 2010 and 2019.

Other wildlife-based economy sub-components that contributed significantly to the SADC region's GDP in 2019 were the Game Ranching and Farming sector that contributed an estimated USD 5.1 billion and the Wildlife-based Tourism sector that was estimated to contribute USD 3.87 billion. The Game Ranching and Game Farming sector reflected a positive growth of 4% between 2010 and 2019, while Wildlife-based Tourism reflected positive growth of 13% over the same period.

Table 6: Contribution of the sub-components of the wildlife plant and animal value chains of the wildlife-based economy to the SADC GDP

Wild Flora and Fauna Value Chain Sub-component		Contribution to the SADC Wildlife-based Economy (2019)	Actual 20 – year Growth (2000-2019)	Actual 10-year growth (2010-2019)	Average year-on-year growth (2000 -2019)	Member States that Contribute a combined 80% or more to the value chains
		%	%	%	%	
Wild Faunal Value Chain	Game And Trophy Hunting	0.9	190	11	6.4	Botswana (12 %), Namibia (10 %), South Africa (55 %), Tanzania (14 %), Zimbabwe (6 %)
	Game Meat	0.6	576	15	12.6	Madagascar (14 %), Namibia (6 %), South Africa (79 %).
	Game Ranching and Farming	16	225	4	7.6	Madagascar (7 %), South Africa (86 %)
	Raw Honey Production	0.1	16	6	0.8	Madagascar (11 %), Mozambique (2 %), South Africa (3 %), Tanzania (84 %)
	Wildlife-based tourism	12	207	13	6.7	Angola (5.5 %), Botswana (3.6 %), Madagascar (3.7 %), Namibia (3.9 %), South Africa (50 %), Tanzania (13 %), Zambia (3.7 %)
	Inland and Marine Fisheries	35	236	51	7.3	Angola (13.8 %), Democratic Republic of Congo (36 %), Madagascar (8.6 %), Mozambique (4.2 %), Namibia (7.4 %), South Africa (8 %), Tanzania (11 %)
Wild Floral Value Chain	Biodiversity prospecting	2	228	27	7.1	Angola (6.7 %), Democratic Republic of Congo (24.9 %), Madagascar (7 %), Mozambique (4.2 %), South Africa (30.5%), Tanzania (9.4 %), Zambia (5.2%)
	Wild Timber and Timber Products	33	152	-2	6.5	Democratic Republic of Congo (34 %), Madagascar (4.9 %), Mozambique (8 %), South Africa (18 %), Tanzania (11 %), Zambia (10 %)

Note: Raw honey production includes the production of beeswax, Tanzania contributes 79% to the beeswax produced in SADC, followed by Madagascar (17%) and Mozambique (4%).

The development of the wildlife-based economy requires a positive link between the environmental, the economic, and the socio-economic drivers in the SADC region.

Currently the global economy faces extreme disruption as the ongoing Covid-19 pandemic continues to disrupt global, regional, and national supply chains compounded by the unrest in Europe. Given this global uncertainty forecasting over the next ten years for the wildlife-based economy for SADC remains fraught with changing local, national, regional, and global conditions. Therefore, Figures 6 to 8 provide three scenarios for the wildlife-based economy as a whole and for its two core value chains, the wildlife animal value chain, and the wildlife plants value chain. First, the low scenario remains the most cautious unless effective investment can be made into the wildlife-based economy and the demand for products related to this economy is encouraged to grow. This forecast is based on the historical performance of the wildlife-based economy over the past 20-years during periods of economic crisis and growth decline. Figure 6 shows that in this scenario the contribution of wildlife-based economy in SADC region would in fact decline to just over 6 billion USD in 2032. The second scenario provides a weakly optimistic outlook for the wildlife-based economy, anticipating relatively slow growth improvements over the next five to eight years, with improvements starting to gain traction from about 2029. Figure 6 shows that In this scenario the contribution of the wildlife-based economy to the SADC region would grow to over 52 billion USD by 2032. This scenario remains the most likely given the current outlook. The third scenario provides the most positive growth outlook for the wildlife-based economy based on the 20-year historical trajectory over periods of economic expansion and stability. Figure 6 shows that in this scenario the contribution of the wildlife-based economy to the SADC region would grow to 160 billion USD in 2032. Although this scenario provides an indication of the potential growth for the wildlife-based economy across SADC, this scenario remains ambitious and unlikely in the short to medium term future (Figure 6).

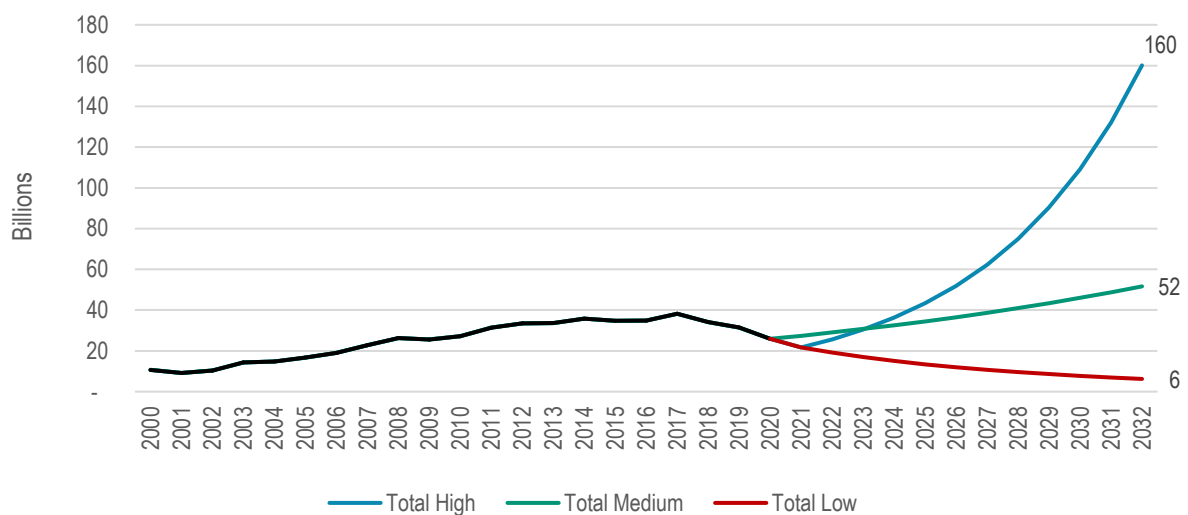


Figure 6: Forecast scenario contribution of the wildlife-based economy to the SADC region (2022-2032). Source: Authors calculations

Figure 7 shows the three forecast scenarios for the wildlife animal value chain for the SADC wildlife-based economy over the period 2022 to 2032. The predominantly stable sectors across all three scenarios remain honey production, the only sector that has not moved into negative growth during the Covid-19 pandemic, followed by fisheries and game meat although these sectors do face negative growth cycles during periods of economic uncertainty. The sectors that face the greatest risks during economic uncertainty are wildlife-based tourism, hunting, and ranching. In these scenarios the wildlife animal value chain would demonstrate the following contribution to the wildlife-based economy in SADC by 2032, shown in Figure 7:

- **Low/no growth scenario** – the wildlife animal value chain contribution could shrink to just over 5 billion USD in 2032;
- **Medium growth scenario** – the wildlife animal value chains' contribution to the SADC regional could grow to just under 31 billion USD by 2032;
- **High growth scenario** - the wildlife animal value chains' contribution to the SADC regional could grow to approximately 73 billion USD by 2032

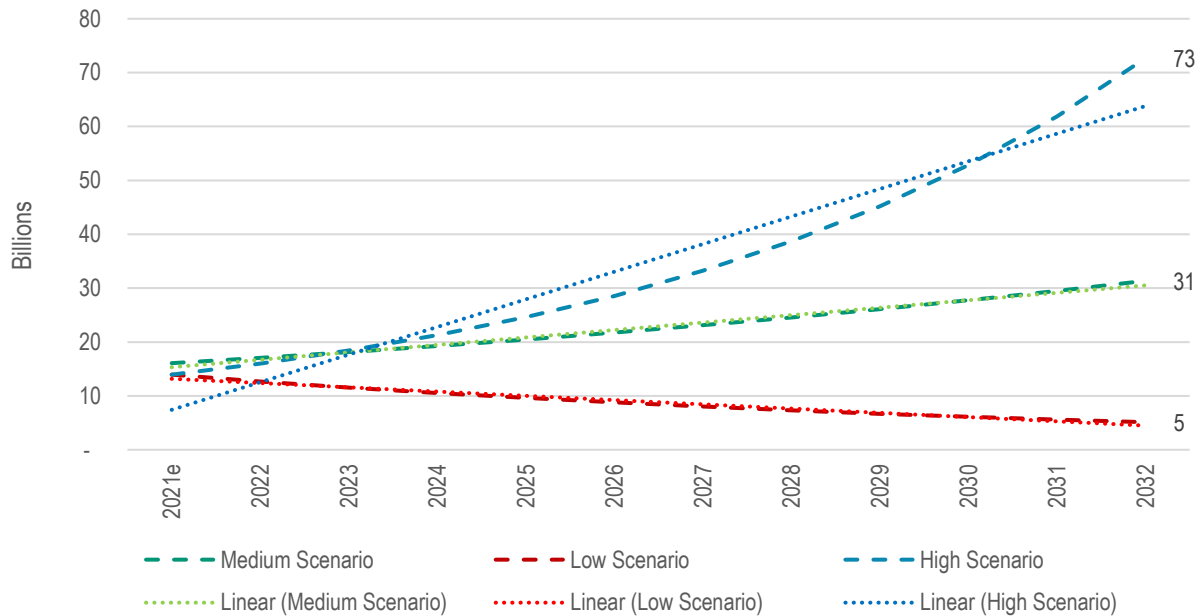


Figure 7: Forecast scenario contributions of the indigenous wild animals value chain to the SADC economy (2022-2032)Source: Authors calculations

Figure 8 shows the three forecast scenarios for the wildlife plants value chain for the SADC wildlife-based economy over the period 2022 to 2032. The predominantly stable sectors across all three scenarios remains forestry production, although this sector has faced significant economic growth challenges during periods of uncertainty and risk. The bioprospecting sector remains relatively underdeveloped and although volatile due its limited development currently, relative to the other value chains, holds potential in the context of pharmaceuticals development. In these scenarios the wildlife plants value chain would demonstrate the following contribution to the wildlife-based economy in SADC by 2032, shown in Figure 8:

- **Low/no growth scenario** – the wildlife plants value chain contribution could shrink to just over 1,1 billion USD in 2032;
- **Medium growth scenario** – the wildlife plants value chains' contribution to the SADC regional could grow to just over 20 billion USD by 2032;
- **High growth scenario** - the wildlife plants value chains' contribution to the SADC regional could grow to over 87 billion USD by 2032

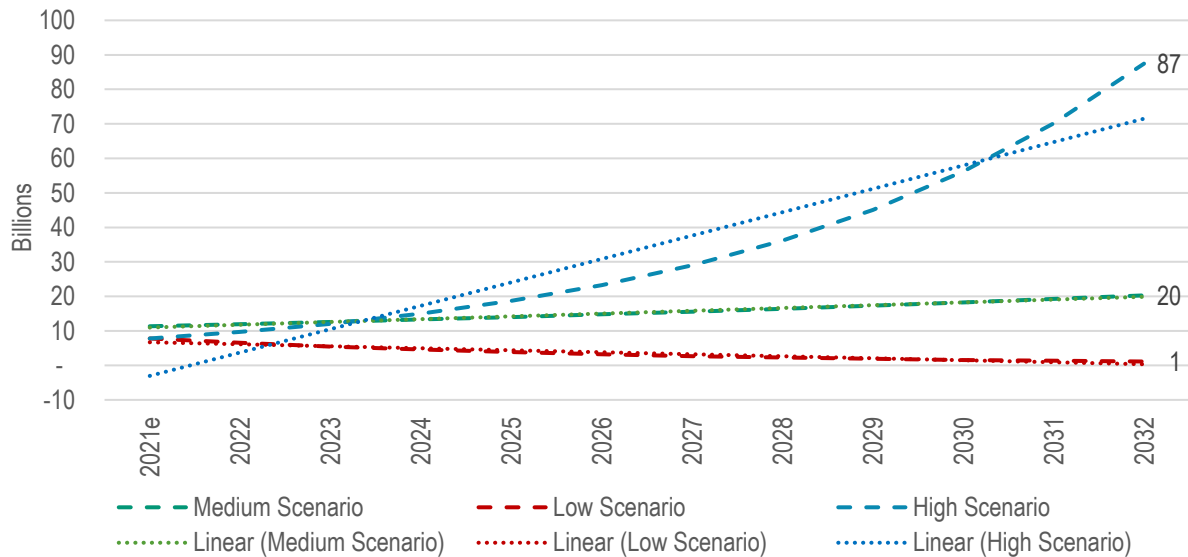


Figure 8: Forecast scenario contributions of the indigenous wildlife plant value chain to the SADC economy (2022-2032) Source: Authors calculations

Overall, forecasts remain dependent on various variables including safety and security, currency exchange rates, and end-user market demand. Given the current volatility in global markets and the potential demand opportunities both within and beyond SADC, careful investment in and focus on value chains that carry comparative advantages will help to underpin the strategic development of the SADC wildlife-based economy. The strategic actions and implementation of the provisions in the Wildlife-Based Economy Strategy can play a significant role in determining which scenarios would be followed in the contribution of the wildlife-based economy and related value chains to the economy of the SADC region.

2.4 SWOT Analysis of the SADC Wildlife-based Economy

The development of the wildlife-based economy requires a positive link between the environmental, the economic, and the socio-cultural sustainability on the one side and financial stability on the other (Weaver, 2008). The wildlife-based economy provides opportunity to grow niche markets and product offerings, as well as address the perceived growth potential associated with the following:

- A global trend indicates that anything that focuses on the Green Economy and the trend towards sustainability does matter, this is also being observed in other industries included in the tourism value chain for example through the fair-trade initiatives.
- The world is becoming more open to sustainability issues given the awareness around climate change.
- The potential for growth is rapid, however, political instability can affect this growth potential negatively.
- Growth has traditionally focused on what is in a protected area and not what is around it. The opportunity exists to expand the wildlife-based economy beyond the borders of conservation areas.

Table 7: Wildlife-based economy SWOT Analysis (Source: Authors collation)

Strengths	Weaknesses
<p>SADC Level</p> <ul style="list-style-type: none"> • Africa has a competitive advantage in terms of unique natural resources and there is a growing interest in these natural and cultural resources. • Africa has advanced wildlife-based economy product offerings that provide opportunities to expand into niche markets. • The wildlife-based economy has considerable potential for expansion and value-add, for example through longer stays, value chains for goods and services is an income generator, including in the rural areas of Member States, that can reduce rural-urban migration. • Growing the wildlife-based economy, within clearly defined and monitored principles, can contribute to long-term natural resource sustainability and sustainable socio-economic development. • The region has the capacity and scientific knowledge to become a global leader in wildlife-based economy value chains. <p>Member State Level</p> <ul style="list-style-type: none"> • The wildlife-based economy provides employment for skilled, semiskilled, and unskilled workers, including many women. • The wildlife-based economy is a generator of tax revenues for different levels of government – local and national. • The wildlife-based economy impacts regional (national and local) economic activity, through value chains and multipliers. • The wildlife-based economy has strong linkages to other sectors of the economy, such as agriculture, transport, communications, and to some extent the manufacturing industry. <p>Local Level</p> <ul style="list-style-type: none"> • The wildlife-based economy can bring benefits to local communities in various ways, including through direct employment, capacity building through skills training and development. 	<p>SADC Level</p> <ul style="list-style-type: none"> • No clearly defined policy for the wildlife-based economy has been adopted across the region. • Coordination and collaboration of wildlife-based economy efforts across the different value chains of the wildlife-based economy reduces the socio-economic growth potential of the sector. • There is a lack of coordination among stakeholders focusing on product development and the various value chains remain segmented. • Some of the returns require a long lead-time and are difficult to measure, including niche market product development. • Marketing and product focus is predominantly skewed towards international markets. • Currently a poor or limited adoption of new technology to underpin the sector • Inappropriate, poor, or failing infrastructure is evident across many of the wildlife economy value chains. • Safety and security risks are evident in many of the SADC regions. • Poor capacity development and awareness training around the value chains related to the wildlife-based economy hinder its socio-economic growth potential. • Human-wildlife conflict is rising. • Limited enterprise development and transformation also limit the sectors growth potential. • Dependence of the wildlife-based economy on other sectors, such as immigration, safety and security, transport, infrastructure, and energy make it vulnerable to changes in these supporting sectors. • Market perceptions related to health and safety risks in different SADC and African countries, as well as in terms of investor confidence can affect investment in the wildlife-based economy. <p>Member State Level</p> <ul style="list-style-type: none"> • In many Members States the wildlife-based economy is not seen as a sector on its own, thus is not accounted for in government budgeting or financial reports and therefore its contribution is not acknowledged.

Strengths	Weaknesses
<ul style="list-style-type: none"> • The wildlife-based economy can support entrepreneurial and SMME development at the local level, through wildlife-based economy supply chains. • Growing the wildlife-based economy will provide income generation opportunities in local communities, leading to improved infrastructure, living standards and quality of life. 	<ul style="list-style-type: none"> • Economic opportunity costs may arise where resources are used for the wildlife-based economy that could have been put to another use, e.g., agriculture, livestock farming, etc. It is important, however, to consider climate change, habitat loss, and changes to ecosystems that result from other uses and are often not accounted for in these calculations. • There is a lack of new product development initiatives. • There is a lack of know-how about how to develop new and innovative wildlife-based economy products. • There is generally a lack of national conservation strategies, site-based management plans and organisation for both cultural and natural resources. • Capacity is limited as training is not always market oriented with training programmes lacking a strong industry experience focus. • There are often communication barrier challenges for those working in the industry. • In some Member States, low government commitment to and, therefore investment in, the wildlife-based economic sector. <p>Local Level</p> <ul style="list-style-type: none"> • Income generation opportunities in many local communities are limited. • Local communities have poor or crumbling infrastructure. • Local communities face greater costs related to accessing decent work and market opportunities.

Opportunities	Threats
<p>SADC Level</p> <ul style="list-style-type: none"> • The wildlife-based economy creates employment, including in the rural area's development of Member States, that can reduce rural-urban migration the different value chains for goods and services. • The wildlife-based economy revenues can be reinvested into conservation, socio-economic 	<p>SADC Level</p> <ul style="list-style-type: none"> • There are generally low marketing efforts for "brand SADC" to eliminate negative perceptions of the wildlife-based economy created especially by international media. • Growth in the wildlife-based economy in an area can result in an acceleration of extraction of natural resources, by expanding the number of users or increasing revenues for new technologies to use resources.

Opportunities

development initiatives and supporting infrastructure.

- There is a competitive wildlife-based industry within and beyond SADC and therefore a need to build a brand for SADC that increases participation in the economy of the region.

Member State Level

- An established wildlife-based economy in a region or member state can inhibit poaching activities (lack of tourism during the COVID-19 pandemic highlighted this benefit).
- There exists potential to expand into new or non-traditional markets.
- The demand for 'green' solutions is rising globally.
- The wildlife-based economy provides growing investment potential and investor confidence.

Local Level

- Growing the wildlife-based economy is supportive of local community livelihood goals and sustainable socio-economic development at the local level.
- The anticipated annual growth potential for the wildlife-based economy provides job creation potential at the local, member state, and regional level.
- Education and awareness of wildlife-based economic opportunities is rising.
- The growth in the wildlife-based economy supports transformation initiatives.

Threats

- Biodiversity loss impacts on the wildlife-based product: A key driver of this is the lack of investment in conservation/wildlife, which is a major barrier to the viability of wildlife-based economy and to attracting new investment.
- Inadequate or inappropriate infrastructure crucial to wildlife-based economy value chain growth competitiveness limits growth and development.

Member State Level

- Issues such as land ownership and availability, and how land rights are transferred, are central to the wildlife-based economy development.
- Growth of the wildlife-based economy is hindered by other factors including access to finance for investors, taxes on investments, low levels of skills, lack of security and safety leading to high crime rates in some Member States, and lengthy bureaucratic processes.
- Transforming societal preferences and generational appreciation for wildlife may threaten the development of the wildlife-based economy.
- Poor funding streams and inappropriate use of available funds that do not reflect re-investment and the value of wildlife.
- Climate change impacts and management challenges may threaten the growth of the wildlife-based economy.

Local Level

- Rising development on the borders or within protected or conservation wildlife areas threatens the sustainable growth of the sector.
- Failure to link nature and communities and generate improved livelihoods will threaten the wildlife-based economy.
- A lack of good education, training and awareness around sustainable value chain development at the community level may threaten sustainable growth opportunities.

3 VISION, GOAL AND PRINCIPLES OF THE WILDLIFE-BASE ECONOMY STRATEGY

This section of the document outlines the key recommendations for a vision, goal and strategic objectives for the wildlife-based economy in the SADC region.

3.1 Vision

An abundant SADC wildlife-based economy is actively contributing to transformative economic growth, employment creation and generating equitable opportunities, that enhances the sustainable quality of life for all within the region.

3.2 Goal

By 2030, the SADC Wildlife-based economy is globally recognised for the sustainable utilisation of biodiversity resources to grow the region's economy.

3.3 Principles for the Wildlife-based Economy

The vision and goal of the Wildlife-based Economy Strategy recognised the following core principles for the sector. These core principles underpin the sector, the value chains, strategic objectives and actions within the Wildlife-based Economy in the region.

3.3.1 Conservation and Maintaining of Biodiversity Abundance

Conservation of biodiversity is one of the three, interrelated objectives of the Convention on Biological Diversity (CBD), focusing on preserving the wealth of species, ecosystems, and genetic diversity. As a principle of the SADC Wildlife-based Economy, the conservation of biodiversity requires framing strategic activities in the context of the species, habitats and ecosystems involved, recognising that the SADC region is endowed with valuable biodiversity resources. The sustainable use of these resources through the Wildlife-based Economy Strategy should be within the context of sustaining this abundance for current and future generations.

Applying this principle in the Wildlife-based Economy, activities and actions must meet the following criteria:

Criteria 3.3.1.1: Contributing to maintaining, restoring or enhancing biodiversity, including ecosystems, ecological processes, natural habitats, and species, particularly threatened or endangered species. Conservation of biodiversity abundance in the Member States and the region requires that the wildlife-based economy consider that the ecological condition of the ecosystems from which indigenous biological resources are utilised, are maintained and the wildlife-based economic activities do not change the status of these species.

Criteria 3.3.1.2: Ensuring that genetic variability of flora, fauna and microorganisms (for use and conservation) is maintained, restored, or promoted. The wildlife-based economy also needs to be underpinned by the principle of protecting and maintaining the genetic variability of biological resources and the ecological processes of the ecosystems in which these indigenous resources are utilised.

Criteria 3.3.1.3: Be aligned with national, regional and/or local legislation, policy, strategies and plans for sustainable management, conservation, and restoration of biodiversity, in coordination with the relevant authorities and actors involved. The Wildlife-Life Based Economy Strategy will also need to be

implemented with consideration of current local, national and regional biodiversity protection and conservation objectives and activities.

3.3.2 Ensuring Sustainable Utilisation of Wildlife Resources

Sustainable use of biodiversity is the second CBD objectives, focusing on the use of biodiversity in a way that maintains its potential to meet the needs and aspirations of future generations. As a core principle of the strategy, sustainable use of wildlife species in the wildlife-based economy requires that any consumptive and non-consumptive use of biodiversity within the region to be in a manner that does not cause damage or decline. Sustainable utilisation should have at its core, the use within the context of conservation and protection of biological resources.

Applying this principle in the Wildlife-based Economy, activities and actions must meet the following criteria (UNCTAD, 2020):

Criteria 3.3.2.1: Using biodiversity sustainably, based on adaptative management practices that advance the long-term viability of the biological resources used, supported by skills and trained workforce. Sustainable utilisation of wildlife resources will require sound, scientific knowledge and information on the biological resources being used in the Wildlife-based Economy, clearly defined best practices for sustainable use of these wildlife species and monitoring of the practicing of sustainable use.

Criteria 3.3.2.2: Contribute to measures that strengthen resilience and the adaptive capacity of species and ecosystems to climate-related hazards and natural disasters. Wildlife-based Economy activities and practices must aim to increase the ability of people and biodiversity to prepare for, recover from and adapt to these impacts.

3.3.3 Fair and equitable sharing of benefits derived from the use of wildlife resources

In line with the third of the CBD objectives, the fair and equitable sharing of benefits derived from the utilisation of genetic resources, this principle addresses the social and economic aspects of biodiversity. The strategy recognises the Nagoya Protocol for Access and Benefit Sharing (ABS) and has at its core equity in access for use and to the benefits from sustainable utilisation of the biodiversity of the region. This requires wildlife-based economy activities to involve long-term partnerships along supply chains, fair prices and contributions to local sustainable development. It also requires compliance with rules and agreements on access and benefit-sharing.

Applying this principle in the Wildlife-based Economy, activities and actions must meet the following criteria (UNCTAD, 2020):

Criteria 3.3.3.1: Undertaken based on transparency, dialogue, and long-term partnerships between all organisations involved in the supply chain. Information should be shared along the entire value chain, allowing for engagement in dialogue.

Criteria 3.3.3.2: Ensure prices take into account the costs of value chain activities considering the costs of supply chain activities and good practices, ensuring support for the conservation and sustainable use of biodiversity and the livelihoods of producers and their communities.

Criteria 3.3.3.3: Contribute to sustainable local development, as defined by producers and local communities, based on a respect for their world views and biocultural heritage.

Criteria 3.3.3.4: Comply with applicable legal requirements and/or relevant contractual arrangements on access to wildlife resources, including biological and genetic resources, their derivatives and associated traditional knowledge, and on the fair and equitable sharing of benefits derived from their utilisation.

3.3.4 Inclusivity

The strategy aims to be inclusive in the sense that all people of all races, creeds, religions, gender and socio-economic levels, especially vulnerable groups (for example women, people with disabilities, youth, etc) are not marginalised or excluded, and are treated fairly and equally in growing the wildlife-based economy. This principle is directed to promoting and protecting the rights of these stakeholders, including their fundamental human rights, their rights as workers and employees, and their rights as part of vulnerable groups.

Applying this principle in the Wildlife-based Economy, activities and actions must meet the following criteria (UNCTAD, 2020):

Criteria 3.3.4.1: Respecting fundamental human rights, in keeping with the United Nations Guiding Principles on Business and Human Rights and relevant ILO Conventions. Respecting human rights is the responsibility of all stakeholders in the wildlife-based economy.

Criteria 3.3.4.2: Respecting the rights of indigenous peoples and local communities, women, children, and other vulnerable groups involved in wildlife-based economy, in accordance with Member State legislation and the United Nations Declaration on the Rights of Indigenous Peoples.

3.3.5 Supporting Socio-economic Sustainability

The benefits that the wildlife-based economy provides to the Member States and the SADC region needs to contribute to the socio-economic and development imperative of job creation, poverty alleviation, improved quality of life and sustainable livelihoods. Development and growth of the wildlife-based economy will be focussed on markets and activities that address these national socio-economic imperatives, especially in the rural areas.

3.3.6 Compliance with national and international legislation

Practices under the Wildlife-based Economy Strategy do not replace, but rather build upon compliance with, applicable rules under local, national, and international legislation.

Applying this principle in the Wildlife-based Economy, activities and actions must meet the following criteria (UNCTAD, 2020):

Criteria 3.3.6.1: Comply with applicable legal and administrative requirements at local, Member State, and SADC levels. Every law and regulation established at local, Member State, and SADC level that applies to Wildlife-based Economy activities are strictly in compliance.

Criteria 3.3.6.2: Respect the principles and obligations of relevant international agreements and instruments, such as the CBD, the Nagoya Protocol, the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the United Nations Declaration on the Rights of Indigenous Peoples, and the United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas.

Criteria 3.3.6.3: When dealing with marine and coastal wildlife, respect the principles and obligations established under the United Nations Convention on Law of the Sea (UNCLOS), United Nations Fish Stocks Agreement (UNFSA), and any subsequent instrument on biodiversity in areas beyond national jurisdiction, as well as relevant conventions and instruments adopted under the United Nations Conference on Trade and Development, (UNCTAD), Food and Agricultural Organization of the United Nations (FAO), UN Environment, International Maritime Organization (IMO) and International Labour Organization (ILO).

Criteria 3.3.6.4: Gather and maintain information and records required to ensure the legality of access to and use of biodiversity, such as the country of origin, geographical location of capture or introduction from the sea, existence of applicable laws or regulations, and relevant permits and certificates.

Criteria 3.3.6.5: Recognise schemes of geographical indications and traditional specialties, such as protected designation of origin (PDO), protected geographical indication (PGI), and traditional specialties guaranteed (TSG).

Criteria 3.3.6.6: In accordance with the African Free Trade Agreement (AFTA) cooperate on investment, intellectual property rights and competition policy; cooperate on all trade-related areas; cooperate on customs matters and the implementation of trade facilitation measures; and establish a mechanism for the settlement of disputes concerning their rights and obligations

3.3.7 Respecting The Right to Use and Access Natural Resources

This principle seeks to ensure that Wildlife-based Economy activities and actions respect rights to use and access to natural resources, as well as recognising traditional knowledge related to wildlife resources. In this regard, it is important to note that the Wildlife-based Economy Strategy consider not only the rights of stakeholders involved in wildlife-based activities and value chains, but also those of their communities.

Applying this principle in the Wildlife-based Economy, activities and actions must meet the following criteria (UNCTAD, 2020)

Criteria 3.3.7.1: Use natural resources in compliance Member States relevant laws and regulations and preventing any negative impacts on the health, safety and wellbeing of surrounding populations. The strategy recognises and respects terrestrial and marine resources tenure and other ownership and use right, noting that recognising these is essential for conservation, sustainable use and livelihoods at local level.

Criteria 3.3.7.1: Accesses natural resources and associated traditional knowledge with prior informed consent of, and subject to mutually agreed terms with, the party that provides them.

Criteria 3.3.7.1: Respects the rights of indigenous peoples and local communities over land, natural resources, and associated traditional knowledge in accordance with national legislation and the United Nations Declaration on the Rights of Indigenous Peoples.

Criteria 3.3.7.1: Not threaten the availability, quantity, variety, and adequacy of food diversity or food security of producers and their local communities.

4 STRATEGIC OBJECTIVES AND ACTIONS FOR THE WILDLIFE-BASED ECONOMY

4.1 Strategic Objective 1: Globally competitive utilisation of wildlife resources drives the development of innovative, transformative, and sustainable wildlife-based value chains that contribute to employment and economic development in the region

Wildlife value chain growth and expansion for economy advancement and development of Member States and the region.

Currently, Member State and SADC wildlife-based economy value chains are operating in an uncoordinated manner, often in isolation, are untransformed, and are not always based on sustainable utilisation of wildlife resources. There is also a dearth of knowledge and information on the wildlife-based value chains and their components in many Member States and in the region, with some of the value chains (i.e. wildlife-based tourism) being better documented or some Member States (i.e. South Africa's biodiversity economy value chains) demonstrating more data and information. Strategic Objective 1 of the Wildlife-based Economy Strategy focusses on the wildlife-based value chains as the mechanism for achieving Member States' and the SADC region's socio-economy imperatives. The sustainable use of biological resources in the wildlife-based economy value chains of the Member States and the SADC region can contribute to the region's and Member States' economic and socio-economic growth and development. Strengthening the value chains is also a critical element in facilitating good practices related to the sustainable use and conservation of biodiversity and in promoting the equitable sharing of environmental, social and economic benefits among value-chain participants.

Key to the successful achievement of this strategic objective is:

- *Innovative value chains* – New and innovative wildlife-based economy value chains need to be explored and encouraged, as well innovative means of sustaining and growing existing value chains.
- *Transformative value chains* – Wildlife-based economy value chains need to contribute to both economic and socio-economic transformation of the markets and the wildlife-based sector of the Member States and the SADC region. Transformation of the value chains themselves also needs to be a priority.
- *Sustainable value chains* – Wildlife-based economy value chains need to use wildlife resources in a sustainable manner, while ensuring the structure and function of the value chains are self-sustaining. These value chains need to generate income/revenue, employment, knowledge etc. to sustain themselves.
- *Value chains that contribute to employment and economic development* – Value chains in the wildlife-based economy need to, as a key focus, contribute to the Member States' and the SADC region's imperative of creating and growing employment opportunities and stimulating economic growth and development.

Not all the value chains that underly the wildlife-based economy will have application to all the Member States in the SADC region. As noted above, the globally recognised and relatively well-established value chains in the SADC region are those of the Fisheries and Aquaculture sector, the Game Ranching and Game Farming sector, and the Wildlife-based Tourism sector. The SADC region may opt to focus on growth and development of these value chains or specific sub-components under these, i.e. game meat, live animal trade, etc. The SADC region may also opt to focus on specific emerging wildlife-based value chains, i.e. honey production.

Within the Member States, however, specific value chains or components of the above-mentioned regional value chains, must be considered. Table 8 shows that ranking of importance of the contribution of the various value chains in each of the Member States to the SADC regional economy. For example, the Member States, such as Angola, Mozambique and Zambia, may consider collaborating and cooperating to build innovative, transformative,

and sustainable natural timber and timber product value chains as these value chains of the Member States already contribute a significant amount to the SADC wildlife-based economy. Similarly, countries such as Botswana, Namibia, Tanzania and Zimbabwe, may wish to collaborate and cooperate on building innovative, transformative, and sustainable wildlife-based value chains in the already-established Game Hunting sector of the wildlife-based economy.

Member States may also cooperate and collaborate to build value chains that a country contributes minimally to the wildlife-based economy but have the potential to expand and growth. For example, South Africa currently dominates the game meat and game ranching contribution to the SADC wildlife-based economy, while Madagascar dominates the honey production value chain. These two value chains also only contribute a small percentage to the wildlife-based economy as a whole. Through cooperation and collaborates, South Africa and Madagascar could partner with the other Member States to build innovative, transformative, and sustainable game meat, game ranching and honey production value chains, increasing the contributions of the value chains to the SADC wildlife-based economy.

Table 8 also provides some insight into emerging value chains in the Member States, which may be considered for development and growth in future or may be included as a completely new value chains in future, i.e. wildlife-based tourism in the DRC and Malawi, timber and timber products in Malawi; game ranching and game meat trade in Mauritius, to name a few.

The Member States and the SADC region will need to determine and prioritise the wildlife-based economy value chains that are the focus of this strategic objective.

Table 8: Ranking wildlife-based economy strategy options for each SADC member state (percentage)

Country	Hunting	Game ranching	Game meat	Wildlife-based tourism	Honey production	Inland and Marine Fisheries	Wild Timber and Timber Products	Bioprospecting & Biotrade
Angola	-	-	-	5.5	-	10	17	8.5
Botswana	11	-	-	3.6	-	-	3.9	-
Comoros	-	-	-	0.2	-	0.7	-	-
Democratic Republic of Congo	-	-	-	2	-	40	32.6	20
Eswatini	-	-	-	0.5	-	-	0.1	-
Lesotho	-	-	-	0.7	-	-	-	-
Madagascar	-	9	11	3.7	11	9	3.1	8
Malawi	-	-	-	1.5	-	4.5	0.6	-
Mauritius	-	0.4	0.6	5.7	-	0.2	-	-
Mozambique	1.6	1.5	-	2	2	2.8	9.5	-
Namibia	10	2.1	-	4	-	6.9	1.7	-
Seychelles	-	-	-	1.3	-	2	-	-
South Africa	53	86	82	50	3	7.5	3.6	37
Tanzania	16	-	-	14	84	12	11.7	9
Zambia	2	-	-	3.7	-	3	11.6	-
Zimbabwe	7	-	-	2	-	0.9	4.5	-
SADC Contribution	0.9	16	0.6	12	0.5	35	33	2

The growth and development of the Wildlife-based Economy value chains in this strategy should recognise industrial, trade and value chain synergies and priorities in two important African and SADC documents, namely:

- a) **The AFTA Protocol:** that has the objectives of boosting intra-African trade (African Union, 2018), in this case of trade in wildlife-based goods and services, through:
 - 1) progressive elimination of wildlife-based economy trade tariffs;
 - 2) progressive elimination of barriers to entry to the wildlife-based economy;

- 3) enhanced efficiency of customs procedures, trade facilitation and transit for the wildlife-based economy;
- 4) enhanced cooperation in the areas of technical barriers to trade, and sanitary and phytosanitary measures for the wildlife-based economy;
- 5) development and promotion of the wildlife-based economy regional and continental value chains; and
- 6) enhanced sustainable socio-economic development, diversification and industrialisation across Africa.

b) **The SADC Industrialization Strategy and Roadmap (Industrialization Strategy) 2015 – 2063:** that has the objective of (1) a substantial quantitative shifts in industrial structure, manufacturing, production, exports, particularly those in the medium- and high-technology categories, while doubling industrial employment and (2) being transformational in terms of socio-economic transformation nationally and regionally (SADC, 2015). The Industrialization Strategy highlighted that countries should fully exploit comparative advantage in resource-intensive sectors through beneficiation and value addition while taking cognizance of the need to transform the industrial base through intensified downstream processing and interlinkages.

The Industrialization Strategy recognises that value chains have the potential to extend production possibilities and enable cross-border utilization of natural and human resources of the region. Applying the strategy in the wildlife-based economy, there will be a need to consider when growing and expanding wildlife-based economy value chains that :

- 1) Member State wildlife-based economy policymakers, in close collaboration with wildlife-based industrialists and entrepreneurs, should identify the stage or stages of the value chain where enterprises are most competitive.
- 2) Member State wildlife-based economy policymakers need to ensure that the policy for specific value-chain does not create losers in other wildlife-based economy industries or sectors of the economy. Wildlife-based policy of Member States needs to maximize national gains rather than those of a specific sector, industry or firm within the wildlife-based economy.
- 3) Wildlife-based economy strategic interventions by Member States need to balance potential trade-off between easy and quick gains and participation value chains with low technology, high-employment with the path to value chains that require upgrade into higher skill, greater value-addition activities.
- 4) Wildlife-based policy of Member States need to support the mitigation and circumvent of cases where value chains are buyer-dominated by foreign firms limiting the ability for small and medium SADC firms to upgrade and diversify.
- 5) Member States should substantially develop their capacities for the upgrading and diversification of wildlife-based economy value chains with the close involvement of firms and enterprises as set out in the SADC's Industrial Upgrading and Modernization Programme (IUMP).
- 6) The wildlife-based economy value chains framework should help realize regional sectoral strategies for capital equipment development, intermediate input flows, and addressing regional commons such as environment and health issues.
- 7) SADC Member States need to redouble their efforts to tackle "behind the border" obstacles to intra-regional wildlife-based economy trade and regional value chain development.
- 8) SADC should develop model legislation and regulation for intra-SADC wildlife-based economy processing and value addition along with a protocol to ensure certainty, predictability, transparency and investor protection.
- 9) Member States should establish appropriate mechanisms for consultations on the operationalization of regional wildlife-based economy value chains.

4.1.1 Strategic Outcome, Actions and Measures of Success for SO1

Table 9 below provides the outcomes and strategic actions required to achieve Strategic Objective 1.

Table 9: Outcomes and strategic enablers for Strategic Objective 1

Outcome	Strategic Enablers	Measures of Success
<p>Outcome 1.1</p> <p>By 2030, tangible, innovative, transformative and sustainable economic value chains based on SADCs wildlife-based resources are contributing to regional economic development</p>	<p>A1.1.1: Identify tangible, innovative, transformative and sustainable value chains.</p> <p>A1.1.2: Resource (i.e. incentives, investments, etc.) tangible, innovative, transformative and sustainable value chains.</p> <p>A1.1.3: Enable (i.e. infrastructure, agreement, share knowledge, skills develop) tangible, innovative, transformative and sustainable value chains.</p> <p>SADC Green Economy Strategy actions that can contribute to this outcome include:</p> <p>T2.3. Assist the economic valuation of ecosystem services (e.g. coastal, marine, forest ecosystems).</p>	<ul style="list-style-type: none"> • Number of new businesses created per year, per wildlife-based economy value chain • Value add contribution to GDP of wildlife-based economy value chain • Amount invested in the wildlife-based economy
<p>Outcome 1.2.</p> <p>By 2030, SADC is an active supplier of wildlife-economy products and services to local, Member State, regional and global market</p>	<p>A1.2.1: Integrate SADC wildlife-economy value chains with Member States and regional macro-economic, trade, industrial and fiscal policy.</p> <p>A1.2.2: Secure technical and funding partners for implementation of wildlife-based value chains.</p> <p>A1.2.3: Member States increase procurement of goods and services from the wildlife-based economy, ensuring higher capital inflows to the region.</p>	<ul style="list-style-type: none"> • Amount invested in the wildlife-based economy • Value or amount of goods and services procured from the wildlife-economy
<p>Outcome 1.3.</p> <p>By 2030, the SADC wildlife-based economy value chains are actively discovering and adopting best practice and innovation</p>	<p>A1.3.1: SADC and Member States to endorse innovation in wildlife-based economy products and services.</p> <p>A1.3.2: SADC and Member States to peruse, adopt and share best practice and innovation in goods and services in the wildlife-based economy and value chains.</p> <p>A.3.1.3: The SADC wildlife-based economy and value chains recognise and comply with Member State intellectual property rights, protected designation of origin (PDO) and geographical indicator (GI) registrations and certification.</p> <p>A1.3.4: the SADC wildlife-based economy and value chains are activity supporting, adopting and monitoring the SDG of:</p> <ul style="list-style-type: none"> • ensuring availability and sustainable management of water and sanitation for all (SDG 6); • ensuring access to affordable, reliable, sustainable and modern energy for all (SDG 7); 	<ul style="list-style-type: none"> • Value or amount of new technology adoption in the wildlife-based economy and value chains • Increase in innovation (i.e. 4IR), knowledge and adoption for sustainable wildlife use • Improved progress with SDG targets relevant to the wildlife-based economy

	<ul style="list-style-type: none"> • promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (SDG 8); • building resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation (SDG 9); • ensuring sustainable consumption and production patterns (SDG 12); • taking urgent action to combat climate change and its impacts (SDG13); • conserving and sustainable use of the oceans, seas and marine resources for sustainable development (SDG14); • protecting, restoring and promoting sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss (SDG15). <p>A.3.1.4: The SADC wildlife-based economy and value chains are supported by information sharing platforms such as Think-tanks between academia, industry, government etc.</p> <p>SADC Green Economy Strategy actions that can contribute to this outcome include:</p> <p>T1.3. Improve access to credit for small tourism businesses willing to invest in sustainable tourism.</p> <p>T.1.4. Establish a regional sustainability certification programme for hotels and resorts.</p> <p>T3.2. Support the diversification of tourism activities, especially to reduce dependency on climate sensitive resources, such as wildlife.</p>	
<p>Outcome 1.4</p> <p>By 2030, SADCs wildlife-based economy is underpinned by the principle of sustainable use and grows within the constraints of scientifically determined resources limits</p>	<p>A1.4.1: Define and adopt principles and safeguards (including risk assessment and mitigation; best practices, standard operating procedures, standards, certification) for wildlife-based economy value chains.</p> <p>A1.4.2: Develop and implement best practice monitoring, reporting and evaluation mechanisms and systems for sustainable use of wildlife resources in wildlife-based economy value chains</p> <p>SADC Green Economy Strategy actions that can contribute to this outcome include:</p> <p>F01.3. Conduct regional training programmes on sustainable forest harvesting practices.</p>	<ul style="list-style-type: none"> • Increase in innovation (i.e. 4IR), knowledge and adoption for sustainable wildlife use • Number of resource sustainability compliant wildlife-based value chains

	<p>FO1.4. Support the establishment of a regional inventory through forest measurements, assessments, and mapping.</p> <p>FO4.2. Support capacity building programmes on sustainable extraction and processing of biodiversity products.</p> <p>F.1.4. Determine the frequency of fish stock assessments and other necessary research at the regional level, with support from international bodies.</p> <p>F2.1. Develop reliable management systems for green aquaculture practices, in particular to reduce impacts on lagoon ecosystems.</p> <p>F2.2. Provide technical advice and assessment for the selection of resilient fish species.</p> <p>F3.1. Develop and implement fish stock assessment programmes.</p> <p>F3.2. Support the constant update of the SADC Regional Fishing Vessels Register.</p> <p>F3.3. Develop an effective monitoring, control and surveillance (MCS) system for marine fisheries, building on past experiences such as the SADC – Monitoring Control and Surveillance of Fishery Activities Program.</p> <p>F3.4. Organise awareness raising events, trainings and media campaigns to share relevant information on existing laws, fish stocks, climate change threats to marine resources and ecosystems, adaptive techniques etc.</p>	
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4.2 Strategic Objective 2: The SADC Wildlife-based economy drives inclusive socio-economic development and poverty alleviation in its member states and the region.

Wildlife-based economy value chain growth and expansion for household and individual socio-economic advancement and development

Development of biodiversity value chains that generate income from biodiversity can help both alleviate poverty and conserve biodiversity. This premise, which fits into a broader agenda to integrate poor communities, their land and biodiversity resources into local and global markets, forms the basis of efforts that promote the development of biodiversity-based value chains.

The focus of this Strategic Objective (SO) is to develop and grow the wildlife-based economy for the socio-economy and poverty alleviation benefits to Member States and the SADC region. This SO differs from SO1 in that SO1 has

a focus on growth of the wildlife-based economy for economic development while SO2 focusses on growth of the value chains and wildlife-based economy for sustainable livelihoods, poverty alleviation and households' incomes. This SO follows a similar decision-making process as SO1, but the endpoint of the process will be largely at a household level and not necessarily at a Member State or regional scale.

This strategic objective will focus on ensuring that all people of all races, creeds, religions, gender and socio-economic levels, especially vulnerable groups such as women, people with disabilities, youth, etc. are not marginalised or excluded, and are treated fairly and equally in growing the wildlife-based economy.

4.2.1 Strategic Outcome, Actions and Measures of Success for SO2

Table 10 below provides the outcomes and strategic actions required to achieve Strategic Objective 2.

Table 10: Outcomes and strategic enablers for Strategic Objective 2

Outcome	Strategic Enablers	Measures of Success
<p>Outcome 2.1</p> <p>By 2030, SADCs wildlife-based economy ensure inclusive socio-economic growth and reduces poverty in the region</p>	<p>A.2.1.1: Adopt inclusive socio-economic development plans that have scoped the value and determined the socio-economic development potential of the wildlife-based economy value chains.</p> <p>A.2.1.2: Develop Member State feasibility of the potential of wildlife-based economy value chains to underpin inclusive socio-economic growth and development.</p> <p>A.2.1.3: Develop and implement a SADC Framework for benefit sharing in the wildlife-based economy to drive poverty alleviate (i.e. Wildlife-based Economy regional fund).</p> <p>A1.3.3: The SADC wildlife-based economy and value chains are activity supporting, adopting and reporting their contribution to the SDG of:</p> <ul style="list-style-type: none"> • ending poverty in all its forms everywhere (SDG1); • ending hunger, achieve food security and improved nutrition and promote sustainable agriculture (SDG2); • ensuring healthy lives and promote well-being for all at all ages (SDG3); • achieving gender equality and empower all women and girls (SDG4); • reducing inequality within and among countries (SDG 10). 	<ul style="list-style-type: none"> • Reduction in the gini-coefficient • Number of people (disaggregated by gender and age) employed in each sector/value chain • Number of benefit sharing agreements • Improved progress with SDG targets relevant to the wildlife-based economy
<p>Outcome 2.2</p> <p>By 2030, wildlife-based value chains drive inclusive employment creation at the local, Member</p>	<p>A.2.2.1: Identify employment opportunities in the wildlife-based economy.</p> <p>A.2.2.2: Upskill and train the wildlife-based economy workforce for employment growth.</p>	<ul style="list-style-type: none"> • Number of jobs created per year, per wildlife-based economy value chain • Number of people living with disabilities employed in wildlife-based economy and value chains

<p>State and regional level</p>		<ul style="list-style-type: none"> • Unemployment reduced • Number of people trained (disaggregated by vulnerable groups)
<p>Outcome 2.3</p> <p>By 2030, local Communities, SMMEs and Entrepreneurs are supported (i.e. skills knowledge finance) to participate and flourish in the wildlife-based economy and associated value chains</p>	<p>A.2.3.1: Identify and determine support required for Local community, SMMEs and Entrepreneurs to participate in the wildlife-based economy and the value chains.</p> <p>A.2.3.2: SADC and Member States to actively pursue support (skills, knowledge, finance) to Local community, SMMEs and Entrepreneurs to participate in the wildlife-based economy and the value chains.</p> <p>A.2.3.3: Identify and create incentives to support businesses, in particularly SMMEs, in supply chains.</p>	<ul style="list-style-type: none"> • Number of new communities, SMMEs and Entrepreneurs participating, per year, per wildlife-based economy value chain • Value/number, type and effectiveness of incentives being utilised in the wildlife-based value chains and economy • Value (number, dollar) of support provided to Communities, SMMEs and Entrepreneurs in the wildlife-economy value chains
<p>Outcome 2.4</p> <p>By 2030, local communities underpin growth and development of the wildlife-based economy in Member States and in the region</p>	<p>A.2.4.1: The wildlife-based economy and value chains to actively adopt best practices in recognising and valuing indigenous knowledge (i.e. implementing the Nagoya protocol)</p> <p>A.2.4.2: Local communities to become the preferred suppliers of goods and services that support the wildlife-based economy value chains.</p> <p>A.2.4.3: ABS-compliant value chains to be created as a win-win for providers of genetic resources, users of genetic resources and, ultimately, for biodiversity and sustainable development.</p> <p>SADC Green Economy Strategy actions that can contribute to this outcome include:</p> <p>FO4.3. Support credit mechanisms and fiscal incentives for the establishment of community-based BioTrade cooperatives, giving central role to vulnerable groups including women.</p> <p>F2.3. Incentivise the greening of small-scale fish farms and promote the creation of cooperatives committed to sustainability.</p> <p>T2.4. Encourage the involvement of local communities in development projects that would help preserve the ecosystem.</p>	<ul style="list-style-type: none"> • Value (number, dollar) of value chains with best practice adoption • Value of wildlife-based goods and services supplied by local communities • Number of communities supplying goods and services to the wildlife-based economy • Number/value of ABS-compliant value chains

<p>Outcome 2.5</p> <p>By 2030, vulnerable groups (women, disabled, youth) are prioritised and supported to participate and flourish in the wildlife-based economy and associated value chains</p>	<p>A.2.5.1: Identified and supported vulnerable groups participate in the wildlife-based economy and the value chains</p> <p>A.2.5.2: Upskilled and trained women, disabled and youth to participate in employment growth</p> <p>A.2.5.3: Create Incentives to support vulnerable groups, such as women, disabled, youth in participating in supply chains</p> <p>A.2.5.4: Prioritise vulnerable groups as preferred suppliers of goods and services that support the wildlife-based economy value chains</p> <p>SADC Green Economy Strategy actions that can contribute to this outcome include:</p> <p>FO4.3. Support credit mechanisms and fiscal incentives for the establishment of community-based BioTrade cooperatives, giving central role to vulnerable groups, including women.</p>	<ul style="list-style-type: none"> • Number of vulnerable individuals participating in the wildlife-based economy, per value chain • Value/number, type and effectiveness of incentives being utilised by vulnerable groups in the wildlife-based value chains and economy • Number of vulnerable groups/individuals upskilled and trained • Number of vulnerable individuals/groups supplying goods and services to the wildlife-based economy • Value of wildlife-based goods and services supplied by vulnerable groups/individuals
<p>Outcome 2.6</p> <p>By 2030, mechanisms are in place to monitor, report and evaluate SADC wildlife-based socio-economic development and poverty performance</p>	<p>A.2.6.1: SADC Secretariate and Member States to explore and develop standardised mechanisms and systems for monitoring, reporting and evaluating socio-economic development and poverty performance of the wildlife-based economy</p> <p>A.2.6.2: Member States are monitoring and reporting socio-economic and poverty performance of the wildlife-based economy to the SADC performance monitoring, reporting and evaluation system</p>	<ul style="list-style-type: none"> • Standardised performance monitoring, reporting and evaluation mechanism and system in place • Number of countries contributing to the system and meeting system requirements

4.3 Strategic Objective 3: The SADC and its member states are enabled to implement the Wildlife-based economy strategy in a cooperative manner through international, regional, and national alliances.

There is a need to ensure that the SADC region's and the Member States' enabling environment is in place to facilitate the growth and development of the wildlife-based economy in the region and within the Member States. Adoption of the SADC Protocols will be necessary, and the Member States may need to rationalise their internal legislation and regulations to stimulate growth of the wildlife-based economy and its supporting value chains.

Streamlining the regulatory environment enables the sector to create, operate, manage, and if necessary, adapt within a context that complies with the rule of law. Ensuring the Wildlife-based Economy enabling environment is in place in each country will be the responsibility of each Member State, with support and guidance from the SADC secretariate. The enabling environment will require Member States to ensure that the regulatory environment of policy, legislation and regulations are in place, that country-specific Wildlife-based Economy strategies are developed, the institutional structure is in place to guide, support, monitor and report on the implementation and performance of the Wildlife-based Economy and the financial mechanisms and supports are available to the sector. All of these enablers will need to demonstrate synergies and compliance with the overarching enabling environment in the Member State.

The unlocking of the wildlife-based economy requires a regulatory environment that (1) supports economic transformation objectives, (2) promotes development objectives, and (3) ensures environmental sustainability.

The Member States also need to ensure an enabling environment of cooperation and collaboration in their efforts to develop and grow the wildlife-based economy.

4.3.1 **Strategic Outcome, Actions and Measures of Success for SO2**

Table 11 below provides the outcomes and strategic actions required to achieve Strategic Objective 3.

Table 11: Outcomes and strategic enablers for Strategic Objective 3

Outcome	Strategic Enablers	Measures of Success
<p>Outcome 3.1</p> <p>By 2030, SADC trade positions related to the wildlife-based economy are increasingly supported through cooperation at bilateral, regional, multilateral alliances</p>	<p>A.3.1.1: SADC advocates for the wildlife-based economy in the member states and the AU.</p> <p>A.3.1.2: SADC and Member States to activity promote the wildlife-based economy in the region and internationally.</p> <p>A.3.1.3: SADC and Member States to support active collaborative networks that disseminate knowledge in the region.</p> <p>A.3.1.3: SADC and Member States to promote sharing and transfer of technology, DSI, science knowledge, innovation, etc.</p> <p>A.3.1.3: SADC and Member States to support and actively encourage compliance of the wildlife-based economy and value chains to intellectual property and requirements.</p>	<ul style="list-style-type: none"> • Number of alliance agreements (trade etc.) • Increase in best practices innovation (i.e. 4IR), knowledge and technology sharing and adoption for sustainable wildlife use
<p>Outcome 3.2</p> <p>By 2030, Institutional roles in the SADC have the financial and human resources required to meet the wildlife-based economy obligations</p>	<p>A.3.2.1: SADC and Member States to identify, agree on and effectively implement appropriate institutional arrangements (i.e. financial, human etc.) for successful, efficient and sustainable SADC wildlife-based economy</p> <p>A.3.2.2: SADC and Member States to appropriately delegate and capacitate institutions to implement wildlife-based economy obligations</p>	<ul style="list-style-type: none"> • identified wildlife-based economy institution and arrangements

	<p>SADC Green Economy Strategy actions that can contribute to this outcome include:</p> <p>FO4.4. Establish regional institutions to support research and the development of BioTrade value chains.</p>	
<p>Outcome 3.3</p> <p>By 2030, effective strategy, policy and scientific structure representing key role players is in place for the coordination and implementation of the wildlife-based economy</p>	<p>A.3.3.1: SADC and Member States to establishes a SADC wildlife-based economy scientific advisory committee(s)</p> <p>A.3.3.2: SADC and Member States to recognise and commit to enforcing and where possible, sharing, wildlife-based economy intellectual property, protected designation of origin (PDO) and geographical indicator (GI) registrations and certification.</p>	<ul style="list-style-type: none"> • Scientific advisory committee in place • Number of new patents, PDOs, GIs etc. • Number of patents, PDOs, GIs etc. shared by Member States
<p>Outcome 3.4</p> <p>By 2030, Good governance underpins the development and implementation of the SADC wildlife-based economy</p>	<p>A.3.4.1: SADC and Member States to develop and ensure that a good governance framework (i.e. performance monitoring, reporting and evaluation; Member State regulatory environment; institutional structure; financial mechanism etc.) is in place to ensue accountability of key partners in the wildlife-based economy and value chains.</p>	<ul style="list-style-type: none"> • Good governance framework in place

4.4 Strategic Objective 4: The SADC Wildlife-based Economy Strategy is recognised by the Member States and globally

This strategic objective focusses on highlighting the importance and benefits of the SADC Wildlife-based Economy, and in doing so, demonstrate adopting and implementing the strategy. Table 12 below provides the outcomes and strategic actions required to achieve Strategic Objective 4.

Table 12: Outcomes and strategic enablers for Strategic Objective 4

Outcome	Strategic Enablers	Measures of Success
<p>Outcome 4.1</p> <p>By 2030, SADC is a global leader in the wildlife-based economy</p>	<p>A.4.1.1: SADC to developed and implemented wildlife-based economy marketing campaign targeting the regional and international markets.</p> <p>A.4.1.2: SADC to commissioned and adopted a refreshed brand identity for the wildlife-based economy.</p>	<ul style="list-style-type: none"> • The SADC wildlife-based brand is globally recognised (measured through communication/marketing methods) • Wildlife-based economy communication strategy is being implemented (measured by

	<p>A.4.1.3: SADC to develop, adopt and roll out a wildlife-based economy communication strategy.</p> <p>A.4.1.4: SADC to ensure appropriate human, financial and institutional resources are in place to lead branding, marketing and communicate.</p> <p>A.4.1.5: SADC to ensure leaders and citizens are engaged in positive conversations and activities related to promoting the wildlife-based economy and its brand.</p> <p>SADC Green Economy Strategy actions that can contribute to this outcome include:</p> <p>T1.2. Devise and operationalise regional campaigns for the promotion of eco-tourism.</p>	<p>implementation indicators in the strategy)</p>
<p>Outcome 4.2</p> <p>By 2030, the Wildlife-based Strategy has been adopted and domesticated by all SADC Member States</p>	<p>A.4.2.1: SADC to facilitate and encourage Member States to domesticate the SADC Wildlife-based Economy Strategy</p>	<ul style="list-style-type: none"> • Number of Member States adopting the Strategy • Number of Member States domesticating the Strategy
<p>Outcome 4.3</p> <p>By 2030, SADCs wildlife-based economy stewardship is recognised and valued regionally and globally</p>	<p>A.4.3.1: SADC and Member States to development, implement and enforce environmental compliance, guideline for extractive use of natural resources</p>	<ul style="list-style-type: none"> • Number of stewardship guidelines (a) developed; (b) implemented and (c) enforced

5 IMPLEMENTATION MECHANISMS

The SADC Secretariat, in collaboration with the institutions/structures responsible for the wildlife-based economy in Member States, as well as regional and international partners, will be expected to guide the implementation of the Wildlife-based Economy Strategy as appropriate. The success of the implementation of the Wildlife-based Economy Strategy is dependent on the various stakeholders understanding and playing their roles actively in the wildlife-based economy and the relevant value chains. Equally important and for the sake of continuity is that responsible Ministers, in all Member States, appoint member country wildlife-based economy focal points.

Since the institutional arrangement proposed for implementation of the Wildlife-based Economy Strategy will require definition, agreement and formulation in the SADC and in many of the Member States, this activity is included as an action in SO4 of the Strategy.

The successful and sustainable implementation of the Wildlife-based Economy Strategy requires increased connectivity and communication between the Member States and the SADC Secretariat. To achieve this, it is proposed that the relevant institution be established in the Member States and the Secretariate to coordinate and connect wildlife-based economy actions and activities within and between states and across the region.

To ensure an effective and efficient implementation institution for the wildlife-based economy, Member States can facilitate the institutionalising of the Strategy by domesticating this and other SADC regional strategies and action plans, and to strengthen and improve their monitoring and evaluation (M&E) of the impacts of regional strategies at the national level.

The role and obligation of the Member States will be to provide leadership, establish supportive administrative mechanisms, and monitor the in-country implementation of the Strategy. In line with the SADC Protocols, Member States in domesticating the Wildlife-based Economy Strategy should focus on the following:

- Harmonising their national biodiversity and wildlife-based economy strategies with the SADC Wildlife-based Economy Strategy.
- Cooperating with one another to ensure that the overall objective of the SADC Wildlife-based Economy Strategy is achieved.
- Ensuring the participation of all stakeholders in the promotion of the overall objective of the Wildlife-based Economy Strategy.
- Protect and regulate the use of wildlife resources, whilst creating an enabling environment and building capacity for the sustainable utilisation of these resources in the wildlife-based economy and related value chains.
- Transfer skills, technologies and innovations to other Member States to enhance effective regional scientific and technological co-operation to grow and develop the wildlife-based economy and related value chains in the region.
- Work with relevant cooperation partners including the local communities, the private sector and civil society to implement the SADC Wildlife-based Economy Strategy.
- Lobby for local communities and indigenous people's development needs to be given prominence in implementing the SADC Wildlife-based Economy Strategy within Member States.
- Create internal conditions in which the SADC Wildlife-based Economy Strategy and the wildlife-based economy sector is valued and supported at the most senior levels of government.
- In collaboration with the responsible Ministries, seek external funding from donors and other development partners to support the implementation of SADC Wildlife-based Economy Strategy.
- Report biennially national progress against the SADC Wildlife-based Economy Strategy objectives and indicators.

Member States and value chain sectors within the wildlife-based economies in these Member States may opt to develop and implement wildlife-economy strategies that are in line with the SADC Strategy. This should domesticate the regional strategy to the local context. Existing sectoral and cross-sectoral policies and action plans that link to the wildlife-based economy should be reviewed and reshaped, when needed, to include the provisions of the regional strategy.

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