State of the **Wildlife Economy** in Africa

Case Study: Angola

ALU SCHOOL OF WILDLIFE CONSERVATION

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DISCLAIMER
Although every attempt was made to collect data from as many sources as possible, both online and from numerous, varied other sources, this report is in no way exhaustive and there are a number of data gaps. For a number of the wildlife economy activities the 'latest' available data was often still 5-10 years old, highlighting a major gap in terms of relevant, recent, robust data to measure the value of the wildlife economy in Africa. The authors have taken care to ensure that the material presented in this report is accurate and correct. However, the authors do not guarantee the accuracy of the data or material contained in this report, and accept no legal liability or responsibility connected to its use or interpretation.

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List of acronyms

ACADIR - Associação de Conservação do Ambiente e Desenvolvimento Integrado Rural

AfDB - African Development Bank

AFAP - Artisanal Fisheries and Aquaculture Project

ALU - African Leadership University

ANRC - African Natural Resources Centre

CBNRM - Community-Based Natural Resource Management

CBD - Convention on Biological Diversity

CEDESA - Associação Cedesa-Centro De Estudos Para O Development Economic E Social De África

CFB - Caminho de Ferro de Benguela

CFL - Caminho de Ferro de Luanda

CITES - Convention on International Trade in Endangered Species

CO_2 - Carbon dioxide

COVID-19 - Coronavirus Disease 2019

CPI - Corruption Perceptions Index

D - Decreasing

DRC - Democratic Republic of Congo

E - Endangered

EEZ - Exclusive Economic Zone

EIA - Environmental Investigation Agency

ESARO - Eastern and Southern Africa Regional Office

EU - European Union

FAO - Food and Agriculture Organisation of the United Nations

GDP - Gross Domestic Product

GFID - Global Biodiversity Information Facility

GHG - Greenhouse Gas

GoA - Government of Angola

ID-RECCO - International Database of REDD+ Projects and Programs: Linking Economics, Carbon and Communities

IDF - Institute for Forestry Development

IIAG - Ibrahim Index of African Governance

INBAC - National Institute for Biodiversity and Protected Areas

INIP - National Fisheries Research Institute

ITA - International Trade Administration

IUCN - International Union for Conservation of Nature

IUU - Illegal, Unreported, and Unregulated

KAZA - Kavango Zambezi

LC - Least Concern

MAB - Man and the Biosphere

MoU - Memorandum of Understanding

MtCO2e - Metric tons of carbon dioxide equivalent

NACSO - Namibian Association of CBNRM Support Organisations

NBSAP - National Biodiversity Strategy and Action Plan

NDB - National Directorate of Biodiversity

NDF - Non-Detriment Findings

NGO - Non-governmental Organisation

NT - Near Threatened

NTFP - Non-Timber Forest Products

OKACOM - Permanent Okavango River Basin Water Commission

PDN - Plano de Desenvolvimento Nacional

PES - Payment for Ecosystem Services

PGR - Public Prosecutors Officers

PREI - Programa de Reconversão da Economia Informal

PRODESI - Programa de Apoio à Produção, Diversificação das Exportações e Substituição das Importações

PROPRIV - Programa de Privatizações

REDD - Reducing Emissions from Deforestation and forest Degradation

RISDP - Regional Indicative Strategic Development Plan

SADC - Southern African Development Community

SIC - Criminal Investigation Services

SOWC - School of Wildlife Conservation

SSA - Sub-Saharan Africa

STA - Special Tourism Area

List of acronyms

TFCA - Transfrontier Conservation Area

UNCCD - United Nations Convention to Combat Desertification

UNCTAD - United Nations Conference on Trade and Development

UNDP - United Nations Development Programme

UNDESAPD - United Nations Department of Economic and Social Affairs, Population Division

UNEP-WCMC - United Nations Environment Programme World Conservation Monitoring Centre

UNESCO - United Nations Educational, Scientific and Cultural Organisation

UNFCCC - United Nations Framework Convention on Climate Change

USAID - United States Agency for International Development

USD - United States Dollar

V - Vulnerable

WEII - Wildlife Economy Investment Index

WEM - Wild Edible Mushroom

WTTC - World Travel and Tourism Council

WWF - World Wildlife Fund / World Wide Fund for Nature

ZAMCOM - Zambezi Watercourse Commission

© Credit Sue Snyman

CASE STUDY INTRODUCTION

Overview of the research

Conservation of wildlife is frequently seen as a cost to governments, resulting in little investment in wildlife resources despite the extensive contributions that the wildlife economy can, and does, make in terms of employment and revenues. The African Leadership University's School of Wildlife Conservation received funding to conduct research and produce the inaugural State of the Wildlife Economy in Africa Report, as well as country case studies for all African countries, to illustrate the current and potential value of wildlife to economies in Africa and through this to encourage investment in this important economic asset. The report development process highlighted data gaps that should encourage the collection of robust data related to wildlife economies in order to better understand the vast contribution of wildlife resources to local, national and regional economies.

For the purposes of this research, the wildlife economy is defined as:

> ***"The Wildlife Economy uses wildlife, plants and animals (marine and terrestrial), as an economic asset to create value that aligns with conservation objectives and delivers sustainable growth and economic development"***

Wildlife economies can include a mix of consumptive and non-consumptive uses. The growth and development of the wildlife economy in Africa is influenced by a number of factors, including, amongst others:

- The enabling environment which either facilitates (or not) various stakeholders, including communities and the private sector, to engage in and benefit from the wildlife economy. This includes policy, legislation and supporting institutions
- The stock of wildlife resources for use in the wildlife economy
- Investment in wildlife resources to 'grow' the asset base on which the wildlife economy depends
- Political will and support
- Infrastructure to support the wildlife economy, such as roads, airports, hotels, etc.

As the first comprehensive regional assessment of the wildlife economy in Africa, the State of the Wildlife Economy in Africa report had the following main objectives:

1. To provide an overview of the status of the wildlife economy in Africa, including country case studies
2. To provide an overview of the regulatory framework governing the wildlife economy, including country case studies
3. To highlight gaps in the data in terms of country data, as well as data specifically relating to different types of wildlife economy activities
4. To analyse and highlight best practices of particular relevance to the region, through the use of case studies
5. To provide facts and figures required by governments and investors to make informed decisions, track progress and provide guidance for implementation in terms of the wildlife economy
6. To raise the profile of the wildlife economy in Africa and to highlight the importance of seeing wildlife as an asset to invest in
7. To promote the learning of lessons between countries and organisations
8. Where possible, to provide key recommendations for policy and practice

The overall aim of the report was to highlight the potential of the wildlife economy and encourage more public and private investments in protected and conserved areas to improve biodiversity outcomes and support economic development.

Ultimately, the aim of the ALU SOWC research is to ensure that governments see wildlife as a key strategic asset and, therefore, create an enabling environment for the wildlife economy and the conservation of related wildlife resources.

The first full report focused on five main wildlife economy activities: ecotourism, hunting, wildlife ranching, carbon finance and forest products. The activities included in the report had the criteria of having to contribute to both biodiversity conservation and social and/or economic development.

For all ALU SOWC wildlife economy reports, including this one, the activities are defined as follows:

Ecotourism includes non-consumptive tourism related to nature/wildlife.

Hunting includes trophy hunting, game meat hunting, as well as some aspects of fishing, such as artisanal, small-scale and recreational fishing.

Wildlife ranching includes the breeding of wild/ indigenous animals for hunting, game meat, products and other uses.

Other consumptive use includes forest products used commercially and for subsistence purposes.

The carbon market includes projects that earn income through REDD+ and other mechanisms that sequester carbon, reduce greenhouse gas emissions and conserve/preserve natural systems of carbon.

The full report covered 54 countries in Africa. Data for all 54 countries was, however, not available and a selection of case study countries, with diversity in terms of geographic location, biomes, wildlife economy activities, policy and socio-economic context were selected. Throughout the report, text boxes were included covering other countries in order to cover as many countries on the continent as possible and to provide examples of different approaches to the wildlife economy, as well as innovative examples and best practices. Wherever possible, attempts were made to allow for generalisations, and where not possible, caveats or specific enabling factors have been highlighted.

This report is part of the series of national State of the Wildlife Economy reports for Africa to provide an important baseline for the country, as well as to identify challenges and opportunities for growing and unlocking the wildlife economy.


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Data collection process

A research project of this magnitude requires a number of different approaches to gathering the data and information required to present analyses and a useful picture of the wildlife economy. Given various time and budget constraints, and limited access to printed documents, it was decided to largely focus on conducting a literature review, as well as desktop research and, where possible, contacting in-country sources to gather data.

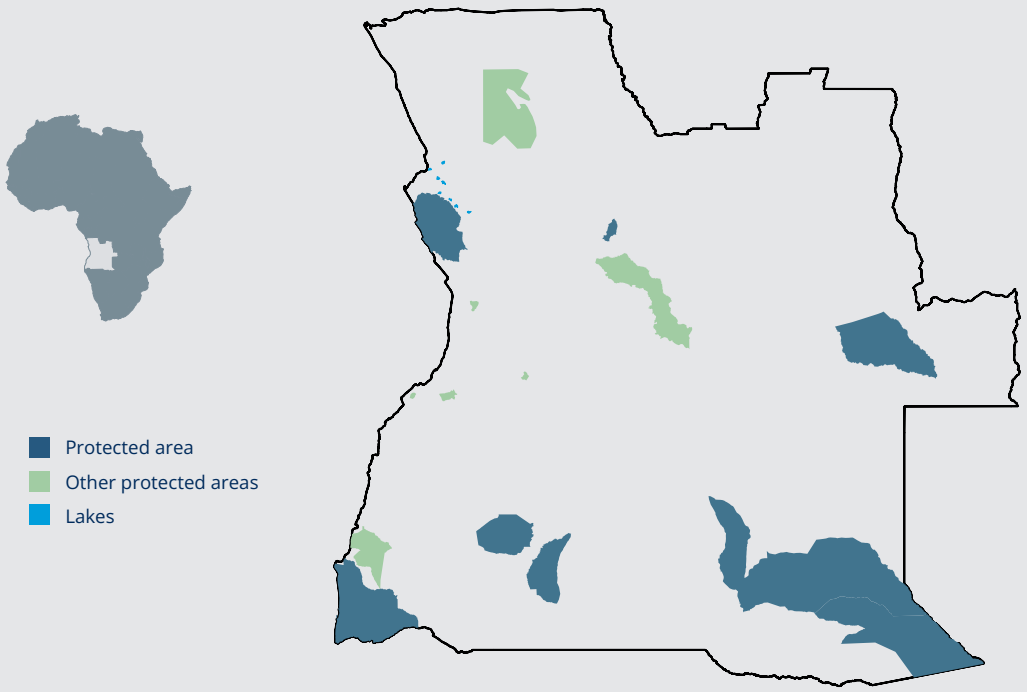
Where possible, future research aims to conduct more primary research and data collection. Currency amounts have been converted to USD for comparison purposes, with the local currency amount still included, using the average annual USD rate for the year of the data. Some graphs and tables have, however, been kept in the local currency because fluctuations in the exchange rates can affect the USD amount in such a way that it does not reflect the true local and national economic impacts as well as the local currency amounts do.

During the research for the full report as well as the subsequent national reports, it was found that very few countries in Africa have a good understanding of the value of the wildlife economy at a national level. For certain wildlife economy activities there was information and data available at a local, and often only a project level, and often this data was only collected for the duration of the project, or when funding was available. This resulted in data for the continent, as well as per country, largely being inconsistent, incomparable, and often quite old. The overall research project highlights a large gap in data on the value of the wildlife economy and the important need to have consistent, comparable data to ensure that the value of the wildlife economy is truly understood. This information would allow for better policy and investment decision making and would encourage greater investment in the wildlife economy once the true value is understood. Research for the case study countries includes contacting relevant contacts in the specific countries, an extensive literature review and engaging stakeholders to collect as much relevant, up-to-date data as possible. It also, where possible, includes stakeholder workshops and external reviews of the case study by relevant experts.

The complexity of stakeholders involved in the wildlife economy and the fact that a large amount of activity also occurs in the informal sector, also results in a difficulty in collecting and collating data that provides a true reflection of the total value of the wildlife economy. The data collection process is in no way exhaustive and is done with the purpose of providing an illustrative overview of the wildlife economy. Following on from the full report, the Roadmap for Africa's Wildlife Economy report and numerous country case studies, this case study focuses on the state of the wildlife economy in Angola. The data collection process for this case study included a virtual engagement with the Angola government representative for the KAZA TFCA and an extensive literature review.

All country case studies follow the same structure to allow for comparisons and ease of reading. Please see https://sowc.alueducation.com/research/ for all publications to-date.

ANGOLA



Socio-economic/governance

GDP per capita (USD)
2,551.3

Gini coefficient
51.3

Transparency International Corruption Perceptions Index
Ranked 121st
out of 180 countries

Total population
37.9 million

Mo Ibrahim Governance Index
Scored 43.8
out of 100

Mo Ibrahim Governance Index
Ranked 36th
out of 54 countries

Protected areas

10.76% terrestrial protected area coverage

18 protected areas

2 integral nature reserves

1 marine conservation area

3 mountain ranges

9 national parks

2 partial reserves

1 regional nature park

Species numbers

291 mammal species

25 endemic bird species

278 reptile species

>255 fish species

Sources: Beja et al., (2019); Branch et al., (2019); IIAG (2024a); IUCN ESARO (2020); Skelton (2019); Transparency International (2024); UNDESAPD (2022); UNEP-WCMC (2025); IUCN (2022); World Bank (2023); World Bank (2025)

Overview of the wildlife economy in Angola

Forest products

- The extent of forest and other wooded land is estimated at 58.4 million hectares, which is approx. 47% of the country's total land area of 125 million hectares.
- The available forest area is owned by either the government or private sector companies, 140,000 ha of planted area belongs to the private sector.

Carbon finance

- Angola's greenhouse gas (GHG) emissions totalled 29.7 million metric tonnes of carbon dioxide equivalent ($MtCO_2e$) in 2014.
- Angola's annual GHG emissions are relatively low compared to many other countries, and the country's per capita emissions (0.72 tonnes of CO_2) are among the lowest in the world.
- The country's emissions are expected to rise in the coming years, as the country continues to develop its economy.
- The Maiombe Forest Carbon Project is one of the few REDD+ projects in Angola and it has immense potential to support the livelihoods of communities in the area.

Fisheries

- In 2011, the fisheries sector accounted for 4.6% of Angola's GDP, declining to 2.1% by 2018.
- In 2019, it was estimated that approx. 62,000 people were engaged in fisheries activities.
- Approx. 20,000 people are engaged in the inland fisheries sector, where women make up 8% of the workforce.
- In 2021, the fisheries sector produced just over 400,000 tonnes of fish, including industrial, semi-industrial, artisanal, inland, and aquaculture activities.

Wildlife trade

- Angola's shark meat trade supports coastal communities. It, faces sustainability risks, as small-scale fishers report declining ray and shark populations driven by overfishing, industrial trawling, and rising demand, especially from Chinese traders.
- Since 2023, Angola has exported Mukula timbers (*Pterocarpus genus*), primarily to China, following their recent inclusion in CITES Appendix II.
- Angola is a source and transit hub for illicit wildlife products, including ivory, rhino horn, pangolin scales, and wild birds, with over 11 tonnes of ivory linked to the country since 2016. Only 23% was, however, seized within its borders.

Tourism

- Despite the country's troubled past, Angola has a wealth of natural resources and cultural heritage that attracts tourists.
- Tourism in Angola has been identified as an opportunity for economic growth and development, with the potential to create employment, generate income and alleviate poverty.
- Angola's tourism sector is primarily domestic-driven, with 98.8% of tourism spending in 2023 coming from local travelers.
- The tourism sector contributed approx. 2.6% to GDP in 2024, with tourism revenue projected to grow from USD 2.1 billion (2023) to USD 2.2 billion (2024).
- The sector supported 160,200 jobs in 2024, with projections of over 535,900 jobs by 2034, reflecting long-term employment potential.

Wildlife ranching

- Wildlife ranching is still in its infancy but there are several potential areas in Angola that could be suitable for wildlife ranching.

Hunting

- Hunting is regulated by the Angola Ministry of Environment and is generally restricted to designated areas.
- Illegal bushmeat hunting is more prominent and is a threat to wildlife in Angola.
- Local communities involved in the bushmeat trade can earn approx. USD 43.9 - USD 83.7 monthly.

Sources: Bersacola et al. (2014); Butler et al. (2020); Climate Watch (undated); FAO (2020a); FAO (2020b); FAO (2022); FAO (2023); Gonçalves et al. (2019); Huntley et al. (2019); ITA (2024); Kesari (2022); Lindsey et al. (2013); Mawunu et al. (2020); Preferred By Nature (2022); USAID (2018); WTTC (2024); World Bank (2019).

Key messages

- **Angola has significant potential for growth in the wildlife economy, including tourism, hunting, wildlife ranching, fisheries, and non-timber forest products.** However, there is a need for sustainable management practices that balance economic growth with conservation efforts to ensure the long-term viability of these activities.
- **Angola has immense potential for tourism,** with a diverse range of natural attractions such as national parks, waterfalls, beaches, and cultural heritage sites. However, it should focus on creating an investment-enabling environment, diversifying its tourism products and services as well as improving access and infrastructure. This would likely increase visitation and private sector investment in the tourism sector.
- **Trophy hunting can provide significant economic benefits to Angola**, contributing to the livelihoods of local communities and the growth of the wildlife economy. However, this is threatened by the bushmeat trade which is largely unregulated.
- **Angola has potential for the development of its wildlife ranching industry,** particularly through strategic partnerships with private investors and government support in terms of infrastructure development, policy formulation and implementation, and capacity building for wildlife ranchers. Lessons can also be learned from other southern African countries with good existing wildlife ranching industries.
- **Angola has a significant coastline and vast marine resources, making the fisheries sector a significant contributor to the country's economic development.** To fully unlock the potential of the fisheries sector, it is imperative to optimise the value chain for different fish products.
- **Angola's forests are home to a wealth of non-timber forest products** (NTFPs) such as fruits, nuts, and medicinal plants. These products have the potential to contribute towards rural livelihoods and poverty reduction.
- **Sustainable management practices are needed** to ensure the conservation and protection of Angola's wildlife resources, while ensuring livelihoods are supported in communities.

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Introduction to the natural resources and biodiversity in Angola

Angola is in southwestern Africa, with **a rich diversity of natural resources and biodiversity**, including fauna and flora, as well as oil, gas, diamonds, and minerals such as iron, copper, and gold (Oglethorpe et al., 2018). The country's biodiversity includes a range of terrestrial and aquatic ecosystems, including **savanna, forest, wetlands, and marine ecosystems** (GoA, 2019).

The primary institution managing Angola's biodiversity is the National Institute for Biodiversity and Protected Areas (INBAC) under the Ministry of Environment. The institution is responsible for developing and implementing policies and strategies to protect and conserve the country's natural resources (NDB, 2019). INBAC also works closely with other government agencies, non-governmental organisations, and local communities to manage protected areas, promote sustainable use of natural resources, and raise awareness about environmental issues (NDB, 2019; World Bank, 2019).

Angola has a network of **18 protected areas that cover approximately 10.76% (134,976 km²)** of its land (UNEP-WCMC, 2025). National designations include national parks, integral nature reserves, marine conservation areas, mountain ranges, partial reserves and regional nature parks as shown in Table 1. These protected areas are home to a wide range of wildlife species, including elephant (*Loxodonta africana*), lion (*Panthera leo*), leopard (*Panthera pardus*), various antelope (e.g., Sable antelope (*Hippotragus niger variani*)), and primates (e.g., Western lowland Gorilla (*Gorilla gorilla gorilla*)) (Oglethorpe et al., 2018; World Bank, 2019). Angola does not have any recorded conservation areas with international designations such as Ramsar sites, UNESCO-MAB Biosphere Reserves or World Heritage Sites.

According to the 2019-2025 National Biodiversity Strategy and Action Plan, Angola is host to approx. **5,000 plant species, with 1,260 of them being endemic** (GoA, 2019). This remarkable number of endemic plants makes **Angola is one of the African countries considered to have high biodiversity** (Ibid.). In addition, the country has **approx. 291 mammal species and 872 bird species which contribute to 92% of the birds found in southern Africa** (GoA, 2019). The country has several different ecosystems, including tropical rainforests, dry forests, savannas, wetlands, and coastal and marine environments. Angola's forests are home to a diverse range of tree species, including African teak (*Milicia excelsa*), African mahogany (*Khaya spp.*), and ebony (*Diospyros crassiflora*). Angola's savannas are characterised by grasslands and acacia trees, while the wetlands support a variety of aquatic and semi-aquatic species, including hippopotamus (*Hippopotamus amphibius constrictus*) and crocodile (*Crocodylus niloticus*) (NDB, 2019).

Table 1: Number of protected areas in Angola based on the national designation

Designations	Number
Integral Nature Reserve	2
Marine Conservation Area	1
Mountain Range	3
National Park	9
Partial Reserve	2
Regional Nature Park	1

Source: UNEP-WCMC, 2025

Community Based Natural Resource Management (CBNRM) in Angola

In Angola, communities have long relied on natural resources as a fundamental part of their livelihoods (Norfolk et al., 2004). Community-Based Natural Resource Management (CBNRM) initiatives in the country have gained momentum due to their potential to address poverty, enhance food security, and foster sustainable livelihoods while concurrently conserving biodiversity (Ibid.). **While communities are permitted to hunt for subsistence purposes, it is strictly regulated that hunting should only occur outside of protected areas** (Oglethorpe et al., 2018). Hunting permits are not required, but there are restrictions on the targeted species, with a prohibition on hunting pregnant females and young animals (Ibid.). Additionally, the use of illegal methods such as spotlights, wildfires, horses, vehicles, poisonous substances, traps, and explosives is strictly prohibited. Commercial utilisation of timber and other forest resources by communities is facilitated through community forests and cooperatives (Oglethorpe et al., 2018). Fishing activities are permitted outside protected areas, and further details regarding these policies can be found in the policy section (Ibid.).

The implementation of **modern CBNRM operations is still in its early stages in Angola, and there is a lack of specific legislation to adequately support such initiatives** (Oglethorpe et al., 2018). Nonetheless, Angolan legislation does support the sustainable management of natural resources by communities, extending beyond conservation areas (Ibid.). Some NGOs are currently undertaking individual projects, drawing upon experiences from neighbouring countries such as Namibia, Zambia, South Africa, Botswana, and Zimbabwe (Oglethorpe et al., 2018).

Threats to biodiversity

The most significant **threats to Angola's biodiversity are habitat destruction, over-exploitation of natural resources, climate change, illegal bushmeat hunting and pollution** (Gonçalves et al., 2019; IUCN-ESARO, 2020). Deforestation, particularly for agriculture and charcoal production, is a major driver of habitat loss, while overfishing and illegal hunting are leading to declines in several species (GoA, 2019; Gonçalves et al., 2019). **Annually, Angola experiences a significant loss of approximately 20 million hectares of arable land due to erosion** (NDB, 2019). This erosion problem is further exacerbated by the loss of around 106,000 hectares of natural forests and 370 hectares of plantations each year (Ibid.). These figures indicate **an average annual loss of 0.2% to 0.25% of the natural forest** in Angola (NDB, 2019). **Climate change is exacerbating these threats** by altering weather patterns, which affects the timing of breeding and migration of many species. Additionally, pollution from oil spills and mining activities is also a significant threat to biodiversity in Angola (NDB, 2019). These threats to biodiversity pose a serious challenge for the conservation of Angola's unique ecosystems and wildlife (GoA, 2019; Gonçalves et al., 2019).

The civil war, which lasted from 1975 to 2002, also caused significant damage to Angola's environment and wildlife (GoA, 2019; Gonçalves et al., 2019). The conflict resulted in widespread destruction of natural habitats, displacement of local communities, and an increase in illegal hunting and poaching. The mining of diamonds and other minerals during the war also led to the destruction of natural habitats and ecosystems (NDB, 2019; Gonçalves et al., 2019).

Efforts are being made to address the environmental impact of the civil war and to conserve Angola's natural resources. The government has implemented a strategy to promote ecotourism and community-based conservation initiatives, which involve local communities in the management of natural resources. These efforts aim to not only conserve the environment but also support the economic development of local communities (Gonçalves et al., 2019; Mukorori & Nieman, 2023).

Socio-economic overview

Angola's population **was estimated at 37.9 million in 2024**, with 69% of the population living in urban areas as of 2023 (World Bank, 2023; World Bank 2025). Angola is one of the most urbanised countries in sub-Saharan Africa, and its capital, Luanda, had a **population of approx. 9.7 million in 2024** (Africapolis, undated; Population Stat, 2025). Luanda dominates the **urban hierarchy, with a Primacy Index of 11.3 in 2020**, indicating a significant concentration of population and economic activity in the city (Africapolis, undated). The Primacy Index compares the population of the largest city to that of the next largest city, indicating the level of urban dominance (Faraji et al., 2016). Higher values mean a greater concentration in the largest city, while lower values suggest a more balanced distribution among cities (Ibid.).

The Angolan economy is strongly dependent on oil, which annually accounts for more than **95% of export revenue, 46% of government revenue, and 30% of gross domestic product (GDP)** (Oglethorpe et al., 2018; Afreximbank, 2025). While oil remains the primary export, the government is actively encouraging export diversification, with a particular focus on agriculture and manufacturing (Afrixembank, 2025). Agriculture accounted for **9.5% (approx. USD 74 billion) of Angola's GDP in 2021**, and it provided employment, both formal and informal, to more than 50% of the population (ITA, 2022; World Bank, 2023). Agriculture contributed 14.9% to Angola's GDP in 2024, with a GDP value from agriculture of approx. USD 18.4 billion in the fourth quarter (Trading Economics, 2025). Agriculture mainly consists of subsistence farming and the key industrial crops are coffee and cotton (ITA, 2022). The **diamond industry is another one of the main sources of revenue for Angola, with nearly USD 1.4 billion in annual production in 2021** (Ibid.). **In 2023, Angola's diamond exports were valued at approx. USD 1.6 billion, reflecting a decline from the USD 1.9 billion** recorded in 2022, which marked a peak in recent export earnings (Sasu, 2024).

The **government of Angola has recognised the need to diversify the economy** and reduce its dependence on oil (World Bank, 2022). It has implemented measures to support the development of agriculture, fisheries, and the manufacturing sector. However, progress has been slow due to factors such as limited access to finance, inadequate infrastructure, and a lack of skilled labour (World Bank, 2022).

National estimates indicate that the unemployment rate has remained above 30% for several years, and about 80% of jobs are informal (World Bank, 2025). In 2019, poverty levels were 54% in rural areas and 18% in urban areas (World Bank, 2020). To address the high unemployment and poverty, the Angolan government has implemented economic reforms aimed at promoting private sector growth, reducing bureaucracy, and improving the business environment (World Bank, 2020). The difference in the poverty level between rural and urban inhabitants could partially explain the overall high inequality in Angola (Ibid.). Between 2018-2019, the **Gini inequality index was 0.51 in Angola.** The Gini index measures the degree of income distribution inequality within a population, with values ranging from 0 (perfect equality) to 1 (perfect inequality) (World Bank, 2019).

Despite the government's plans to address the poverty level, unemployment and inequality in the country, progress has been erratic and uneven across the country, and corruption remains a significant challenge (de Morais, 2011). In 2024, **Angola ranked 121st out of 180 countries on the Transparency International Corruption Perceptions Index**, with a score of 32/100 (Transparency International, 2024). Transparency International (2024) uses the Corruption Perceptions Index (CPI) to rank countries around the world by their perceived levels of public sector corruption, with a score of 0 being highly corrupt and 100 being very clean. To attract the private sector and other investments, it is important that this ranking is improved year on year. Angola ranked 45th (out of 53 African countries) in terms of the Wildlife Economy Investment Index (WEII), , 43rd (out of 53 African countries) in the Investment-enabling Environment Sub-Index and 42nd (out of 53 countries) in the Wildlife Status Sub-Index. The Wildlife Economy Investment Index (WEII) measures the investment potential in Africa's wildlife economy (see Text box 1 for more information).

Angola **has a history marred by conflict and political instability**. However, the country has made remarkable strides in recent years, exemplified by successful democratic elections in 2017 and concerted efforts to enhance governmental transparency (Transparency International, 2022). **Angola has also experienced notable advancements in key indicators such as life expectancy**, which rose from 46 years in 2000 to 62 years in 2020, along with a decline in infant mortality rates to just 47.2 deaths per 1,000 live births in 2021 (World Bank, 2023). The Ibrahim Index of African Governance (IIAG) is a key tool that measures how well governments in Africa are serving their people, with scores out of 100 and rankings among 54 countries (IIAG, 2024b). In the 2023 IIAG, Angola received a score of 43.8 and ranked 36th overall (Ibid.). This is an improvement of 5.8 points since 2014, but the country's progress has slowed in recent years, rising only 2.3 points between 2019 and 2023 (IIAG, 2024b).

Land tenure in Angola is a complex issue that has been influenced by various historical, political, and economic factors (USAID, 2008). The Angolan Civil War (1975-2002) disrupted the country's land tenure system and caused widespread displacement of people (Ibid.). The **country's land tenure system is characterised by a mix of customary and modern legal frameworks** (USAID, 2008, 2010). The colonial-era **Land Law of 1858 recognised customary land rights, but only for rural areas** (Ibid.). In contrast, the modern Land Law of 2004 aimed to provide a legal framework for both rural and urban areas. However, the implementation of the law has faced various challenges, such as insufficient funding, lack of awareness among the population, and corruption (USAID, 2010).

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Text box 1

Wildlife Economy Investment Index (WEII) results for Angola

The Wildlife Economy Investment Index (WEII), developed by the African Leadership University's School of Wildlife Conservation, aims to evaluate the potential of African countries in terms of their wildlife assets and the investment-enabling environment related to the wildlife economy. It is a comprehensive tool that gauges five fundamental pillars: wildlife assets, wildlife management, ease of doing business, public sector capacity, and investment safety.

In the overall WEII rankings, Angola was 45th out of 53 countries (São Tomé and Príncipe were not included in the overall WEII score due to insufficient data), with a score of 38.85. For the Wildlife Status Sub-Index the country ranked 42nd (score of 37.08) and for the Investment-Enabling Environment Sub-Index, the country ranked 43rd in Africa (score of 40.62). See Figure 1 for an overview of the country's scores across the WEII, with green denoting positioned in the upper third of African countries, yellow in the middle third and red in the lower third.

According to the WEII report for Angola, the country scored in the bottom third in terms of wildlife management, specifically in terms of the wildlife legal framework and wildlife management effectiveness. The only sub-categories where the country fell in the upper third of African countries were 'Species richness' and 'Endemic species'.

In terms of recommendations from the WEII report, the below were highlighted:

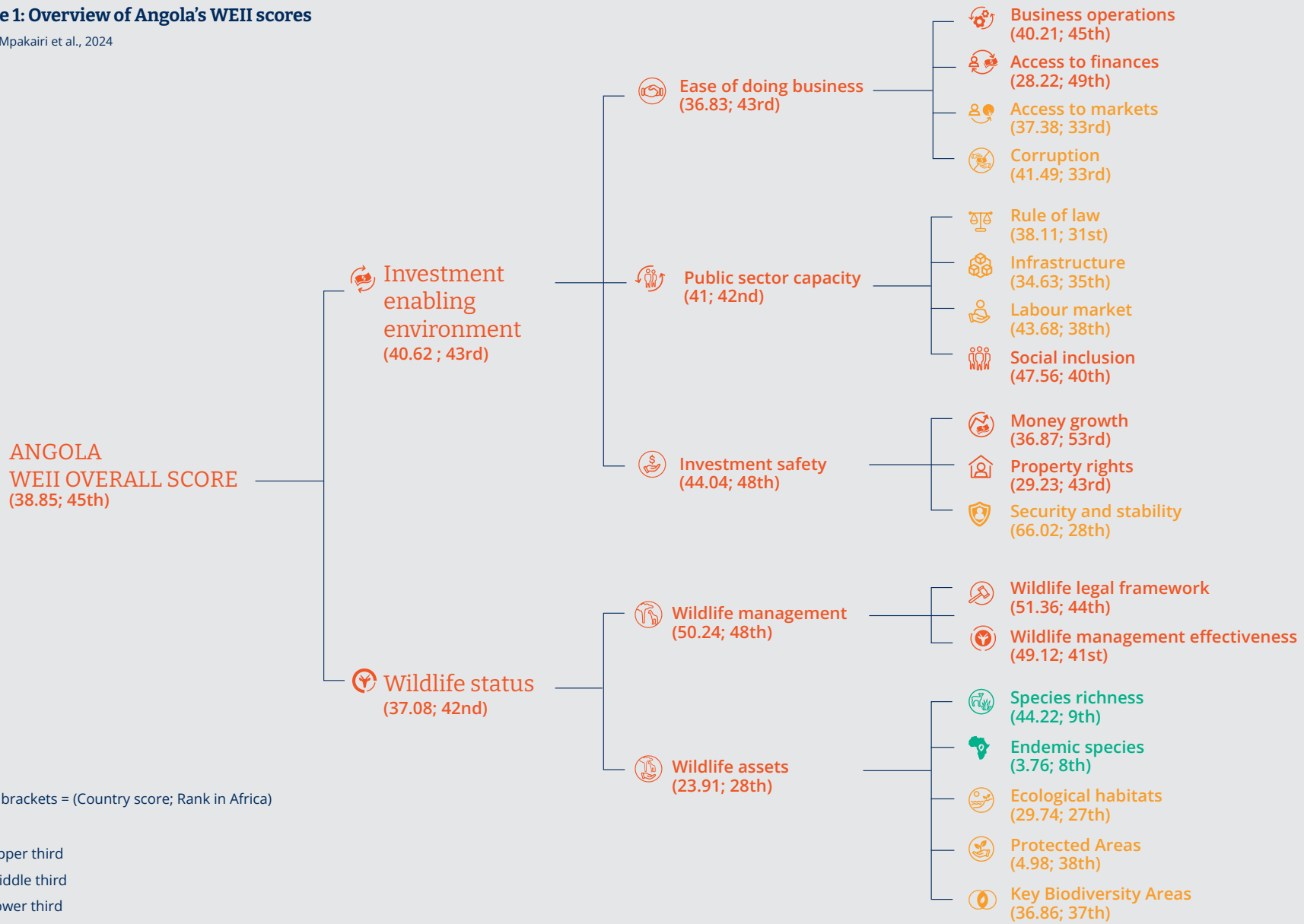
- To promote biodiversity conservation and ecotourism;
- To enhance the investment-enabling environment;
- To strengthen the legal and institutional framework;
- To improve access to finance;
- To promote collaboration and ensure capacity building of stakeholders

For more detail on these recommendations and for the full scorecard for Angola on all 280 indicators, please see the Angola's WEII report.

Source: Mpakairi et al., 2024

Figure 1: Overview of Angola's WEII scores

Source: Mpakairi et al., 2024



Text in brackets = (Country score; Rank in Africa)

Key:

- Upper third
- Middle third
- Lower third

Regulatory framework of the wildlife economy

Angola's legal system is founded on civil law, which involves the codification of legal obligations into written laws, in contrast to the common law system that relies on past court decisions (Oglethorpe et al., 2018). Legislation is the primary basis of law, although **customary law still plays a significant role in many parts of the country**. In Angola, the legislative and regulatory provisions that apply to wildlife are distributed between different codes, laws, and accompanying implementing decrees (World Bank, 2019). Numerous policies and laws have been enacted to replace outdated colonial legislation. In addition, the Angolan government has a national development plan that promotes biodiversity conservation and supports broader socio-economic development, as shown in Text box 2.

Angola has also ratified numerous international conventions to strengthen its legal and regulatory framework for wildlife conservation. Some of the international conventions signed by Angola include the United Nations Framework Convention on Climate Change (UNFCCC), the Ramsar Convention on Wetlands, Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on the Conservation of Migratory Species of Wild Animals, the Convention on Biological Diversity (CBD), the Convention concerning the Protection of the World Cultural and Natural Heritage, and the United Nations Convention to Combat Desertification (UNCCD). Additionally, **Angola has signed many regional agreements** such as the African Convention on the Conservation of Nature and Natural Resources, the OKACOM Agreement, the Zambezi Watercourse Commission Agreement, the Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) MoU, the Benguela Current Convention, and agreements on Iona and Skeleton Coast Park Transfrontier Conservation Area and Maiombe Transfrontier Conservation Area. These and other transboundary conservation efforts are described in more detail in Text box 4. However, Angola has signed but not yet ratified the Indigenous and Tribal Peoples Convention, 1989. Table 2 provides a non-exhaustive list of legislation, policies and strategies related to the wildlife economy.

Text box 2

National Development Plan 2023 - 2027

The *Plano de Desenvolvimento Nacional* (PDN) 2023-2027 is Angola's medium-term development framework, serving as the first phase of the country's long-term strategy, *Angola 2050*. It aims to address key socio-economic challenges by promoting inclusive and sustainable growth, improving public services, and enhancing national resilience.

The plan is structured around seven strategic axes, which include:

1) sustainable and inclusive economic development,
2) human development and social inclusion,
3) infrastructure, habitat and territorial development,
4) state reform and institutional strengthening,
5) defence, public order and justice,
6) environmental sustainability and risk management, and
7) international insertion and diplomacy.

A major focus of the PDN is the development of human capital and the promotion of food and nutritional security, with a strong emphasis on education, health, youth employment and gender equality. The government also prioritises economic diversification through targeted investment in agriculture, industry, and services. To support implementation, the plan relies on tools such as the *Programa de Apoio à Produção, Diversificação das Exportações e Substituição das Importações* (PRODESI - Support Programme for Production, Export Diversification and Import Substitution), the *Programa de Reconversão da Economia Informal* (PREI - Informal Economy Conversion Programme), and the *Programa de Privatizações* (PROPRIV - Privatisation Programme).

Environmental sustainability is integrated through Strategic Axis 6, which includes objectives such as reducing environmental degradation, promoting sustainable resource use, and strengthening biodiversity protection. The plan highlights Angola's commitment to global environmental agreements and positions conservation as a key pillar of long-term development. Although wildlife is not discussed in detail, the plan includes broader goals related to nature protection, ecosystem resilience, and sustainable rural development.

Overall, the PDN 2023-2027 reflects a more coordinated and results-oriented approach to national planning, aiming to deliver measurable improvements in the economy, society, and environment while aligning with international commitments such as the United Nations Sustainable Development Goals and the African Union's Agenda 2063.

Source: GoA, 2023.

Table 2: Non-exhaustive list of legislation related to the wildlife economy

Policy/legislation	Overview	Source
Constitution of the Republic of Angola	The Constitution of the Republic of Angola provides the legal framework for the management of natural resources in the country. The constitution recognises the need to protect Angola's natural resources, including its diverse wildlife, as a national priority.	Available at http://www.legis-palop.org/ [Accessed 20th April 2023].
Forest Law, 2015	The Forest Law aims to "regulate and promote the sustainable management and use of forests and forest resources in Angola." It covers a wide range of issues related to forestry, including forest management, forest reserves, and the promotion of sustainable forest use.	Available at https://leap.unep.org/countries/ao/national-legislation/law-no-617-forest-and-wildlife-basic-legislation [Accessed 30th March, 2023].
Urban and Land Planning Law, 2004	This Law comprises five chapters and 71 articles, and it sets forth the fundamental principles governing land, territorial, and urban planning. Specifically, the Law governs matters such as land and territorial planning, land classification, and registration procedures. Additionally, the Law identifies the relevant authorities and outlines their respective responsibilities.	Available at https://www.ecolex.org/details/legislation/law-no-304-on-land-territorial-and-urban-planning-lex-faoc118155/?q=Urban+and+Land+Planning+Law+Law+in+Angola&xdate_min=&xdate_max= [Accessed 20th April 2023].
Basic Environmental Law, 1998	Its purpose is to establish fundamental principles for the Angolan government to follow regarding natural heritage protection, ecosystem preservation, and environmental conservation. Its goal is to ensure the quality of human life. The law applies to the National Programme of Environmental Management, which must comply with national legislation. The law specifies the conditions and requirements that must be met to achieve environmental quality standards. Furthermore, any project that affects the interests of communities, disrupts the ecological balance, or utilises natural resources at the expense of third parties must undergo Environmental and Social Impact Assessment processes.	Available at http://www.legis-palop.org/ [Accessed 20thApril 2023].
National Parks and Wildlife Conservation Law, 2010	The National Parks and Wildlife Conservation Law establishes a legal framework for the protection of Angola's wildlife and biodiversity. It includes provisions related to the creation and management of national parks and other protected areas, the regulation of hunting and fishing, and the protection of endangered species.	Available at https://leap.unep.org/countries/ao/national-legislation/law-no-617-forest-and-wildlife-basic-legislation [Accessed 30th March, 2023].
Land Law, 2004	This is a legal framework that regulates land use, ownership, and tenure in the country. The law aims to ensure the sustainable use and management of land, as well as the protection of land rights of communities and individuals. The law recognises and protects customary land tenure rights and provides for the establishment of community-based land management systems. Overall, the Land Law, 2004 is an important legal framework for ensuring the sustainable use and management of land in Angola, and for protecting the land rights of communities and individuals.	Available at https://pdf.usaid.gov/pdf_docs/PDACL672.pdf [Accessed 15th March 2023]
Law on Environmental Licensing, 2017	This is a legal framework that regulates the process of environmental licensing for activities and projects that may have significant environmental impacts. The law aims to ensure that such activities are conducted in an environmentally sustainable manner, and that the environmental and social impacts of the activities are properly assessed and mitigated.	Available at https://leap.unep.org/countries/ao/national-legislation/presidential-decree-no-11720-approving-general-regulation [Accessed 30th March, 2023].
Marine and Coastal Resources Management Law, 2014	This law aims to promote the sustainable management and use of Angola's marine and coastal resources. It covers a range of issues related to marine and coastal resource management, including the regulation of fishing, the protection of marine biodiversity, and the prevention of pollution.	Available at https://erc.undp.org/evaluation/documents/download/20179 [Accessed 30th March, 2023].

Table 2: Non-exhaustive list of legislation related to the wildlife economy (continued)

Policy/legislation	Overview	Source
Law on Conservation Areas and Ecological Equilibrium, 2004	The law establishes a system for the establishment and management of conservation areas, which includes measures such as the designation of protected areas, the development of management plans, and the establishment of co-management arrangements between the government and local communities. The law also provides for the protection of biodiversity, including endangered species, and the regulation of activities that may impact conservation areas. Overall, the Law on Conservation Areas and Ecological Equilibrium, 2004 is an important legal framework for promoting the conservation and sustainable use of natural resources in Angola and protecting the country's rich biodiversity.	Available at https://www.dbsa.org/sites/default/files/media/documents/2021-05/Chapter%200%20Front%20section.pdf [Accessed 30th March, 2023].
Law No. 9/15 on Tourism	The law establishes a legal framework for organising, monitoring, supervising, promoting, and developing tourism activities. It applies to both public and private sectors, tourists, consumers, service providers, and suppliers of tourism products.	Available at https://www.ecolex.org/details/legislation/law-no-915-on-tourism-lex-faoc148315/?q=tourism+in+Angola&xdate_min=&xdate_max= [Accessed 30th March, 2023].
Law No. 6-A/04 on Aquatic Biological Resources (New Fishing Act), 2004	This law establishes principles for the use of biological aquatic resources, including fishing practices and the granting of fishing rights. It also sets special rules to protect aquatic resources and ecosystems. Subsistence fishing is allowed in designated areas without prior authorisation. Moreover, the law recognises the importance of involving fishermen and riverine communities in the preservation of biological aquatic resources.	Available at https://www.ecolex.org/details/legislation/law-no-6-a04-on-aquatic-biological-resources-new-fishing-act-lex-faoc050971/?q=LAW+ON+BIOLOGICAL+AQUATIC+RESOURCES+in+Angola&xdate_min=&xdate_max= [Accessed 20th April 2023].
Forest and Wildlife Basic Legislation, 2017	The objective of this Law is to establish general principles and regulations for safeguarding and administering forest and wildlife resources and their ecosystems. It also aims to ensure responsible, integrated, and sustainable utilisation; to guarantee that forests and wildlife, as well as related undertakings, contribute to food security, fulfil basic necessities, create employment and income, and gradually ameliorate the quality of life of present generations	Available at http://www.legis-palop.org/ [Accessed 20th April 2023].
National Fisheries Policy, 2018	The National Fisheries Policy aims to develop management plans for key fisheries, the establishment of protected areas and to conserve critical habitats. The policy is also aimed towards the implementation of monitoring and control measures to prevent illegal fishing activities, and the promotion of partnerships between the government, private sector, and civil society to support sustainable fisheries management.	Available at https://www.fao.org/fishery/figis [Accessed 30th March, 2023].
National Policy on Forests, Wildlife And Conservation Areas, 2017	This policy acknowledges the vital role of communities in managing natural resources, highlighting the importance of incorporating the subsistence needs of these communities into poverty reduction strategies. One of the core principles of this policy is to ensure that communities have access to natural resources such as forests, fauna, and conservation areas. It emphasises that access to these resources should always take into account the rights of local communities to use them for their subsistence and to gain tangible benefits from their use, ultimately improving their living conditions and promoting responsible and sustainable use of resources.	Available at http://www.legis-palop.org/ [Accessed 20th August, 2022].

Table 2: Non-exhaustive list of legislation related to the wildlife economy (continued)

Policy/legislation	Overview	Source
National Biodiversity Strategy and Action Plan (NBSAP), 2019-2025	The National Biodiversity Strategy and Action Plan (NBSAP) 2019-2025 in Angola is a policy document that aims to guide efforts towards conserving and sustainably managing biodiversity in Angola. The plan identifies strategic objectives, which include strengthening institutional and legal frameworks, promoting sustainable land use and forest management, ensuring sustainable use and management of aquatic resources, promoting sustainable tourism and environmental education, and ensuring integration of biodiversity conservation and sustainable use in national development planning. The plan includes specific actions and targets for each objective and aims to contribute to the conservation and sustainable use of Angola's rich biodiversity.	Available at https://dev-chm.cbd.int/doc/world/ao/ao-nbsap-v2-en.pdf [Accessed 30th March, 2023].
SADC Regional Indicative Strategic Development Plan (RISDP), 2020-2030	SADC Regional Indicative Strategic Development Plan (RISDP) 2020-2030 highlights the importance of an integrated green economy for achieving sustainable development goals.	Available at https://www.sadc.int/sites/default/files/2021-08/RISDP_2020-2030.pdf [Accessed 20th June, 2023].
OKACOM Agreement, 1994	The Permanent Okavango River Basin Water Commission (OKACOM) was established by Angola, Botswana, and Namibia to promote coordinated management of the Cubango–Okavango River Basin. The agreement aims to ensure equitable and sustainable use of water resources while protecting the basin's ecological integrity.	Available at https://faolex.fao.org/docs/pdf/mul17435.pdf [Accessed 3rd June 2025].
Zambezi Watercourse Commission Agreement, 2004	The ZAMCOM Agreement provides a legal framework for cooperation among the eight riparian states of the Zambezi River. It supports joint planning, development, and management of water resources, including those relevant to ecosystem conservation and sustainable economic development.	Available at https://www.zambezicommission.org/sites/default/files/clusters_pdfs/ZAMCOM%20agreement.pdf [Accessed 3rd June 2025].
Kavango Zambezi Transfrontier Conservation Area (KAZA TFCA) MoU, 2006	The KAZA TFCA MoU established the world's largest transfrontier conservation area, covering five countries: Angola, Botswana, Namibia, Zambia, and Zimbabwe. It aims to promote biodiversity conservation, enhance ecological connectivity, and boost sustainable tourism as a key driver of regional development.	Available at https://www.kavangozambezi.org/ [Accessed 3rd June 2025].
Iona and Skeleton Coast Transfrontier Conservation Area MoU, 2018	This bilateral MoU between Angola and Namibia links Iona National Park with Skeleton Coast National Park to create a shared conservation area. It enhances cross-border biodiversity management and encourages joint initiatives in tourism, research, and anti-poaching efforts.	Available at https://tfcaportal.org/repository/repository235.pdf [Accessed 3rd June 2025].
Maiombe Transfrontier Conservation Area MoU, 2009	The Maiombe TFCA MoU was signed by Angola, Republic of Congo, and Democratic Republic of Congo to protect the Mayombe forest ecosystem. It promotes transboundary cooperation in forest conservation, biodiversity protection, and sustainable livelihoods for forest-dependent communities.	Available at https://portals.iucn.org/library/sites/library/files/documents/2013-029-En.pdf [Accessed 3rd June 2025].

Institutions for managing the wildlife economy

The **Ministry of Environment is the leading institution responsible for implementing the policies defined by the government** for the protection and management of natural resources, including wildlife.

The Ministry of Environment is supported by various departments and agencies, such as the National Institute of Biodiversity and Conservation Areas, the National Institute of Forest Development, and the National Institute of Fisheries Research and Development (GoA, 2019; NDB, 2019). The Ministry of Environment, through the National Institute of Biodiversity and Conservation Areas, is also responsible for issuing permits for the trade in wildlife products (NDB, 2019). A non-exhaustive list of institutions supporting the wildlife economy in Angola is shown in Table 3. Text box 3 shows the partnership between the Angolan government and African Parks. Angola is also engaged in various partnerships with other countries through the Transfrontier Conservation Areas (TFCAs) (see Text box 4).

Text box 3

African Parks and its partnership with the Angolan government

In 2019, the Angolan government and African Parks signed a **20-year agreement to manage and restore Iona National Park**, which covers over 15,000km^2 in southwestern Angola. Under the agreement, African Parks is responsible for the management of the park, including law enforcement, infrastructure development, and community engagement. The partnership with African Parks is part of Angola's broader efforts to protect its unique biodiversity and promote sustainable development.

Through joint efforts, the park has seen the reintroduction of wildlife populations, including remnant populations of zebra (*Equus zebra*), oryx (*Oryx spp*), and springbok (*Antidorcas marsupialis*) that now sustain cheetah (*Acinonyx jubatus*), leopard (*Panthera pardus*), and brown hyena (*Parahyaena brunnea*) populations. Since the reintroductions, **Iona has experienced a revival in its unique biodiversity, supporting over 37 mammals, 250 birds, and 70 reptile species.**

Community engagement and development have been the core focus, **with over 7,000 people living in and around the park benefiting from initiatives such as the Community Observer Programme**. This programme provides valuable information to mitigate the impact of unregulated human activity in the protected area. In terms of community development, the collaboration has resulted in the provision of scholarships, benefiting students originally from the communities around the park. Additionally, **a total of USD 104,356 was spent on community development, including education and healthcare support**, marking a remarkable 98% increase since 2021.

The partnership also facilitated the construction of the new park headquarters at Pediva which was important in terms of enhancing the park's operational capacity. Furthermore, the park's vehicle fleet was expanded with the addition of seven vehicles and 17 motorbikes, contributing to improved mobility and efficient management. With a total increase of 66% in capital and operational expenditure, as well as a 71% increase in payroll costs, these capital and operational costs have significantly contributed to the revitalisation of Iona National Park. This highlights the commitment of both the government of Angola and African Parks to ensure the conservation of Iona's unique biodiversity and the well-being of its surrounding communities. The collaborative efforts between the government of Angola and African Parks have not only revitalised the park's biodiversity but also provided significant benefits to the communities residing in and around Iona National Park.

Source: African Parks, 2023

Table 3: Institutions supporting the wildlife management economy in Angola

Institution	Overview	Source
Ministry of Environment	The Ministry of the Environment is the Ministerial Department whose mission is to propose the formulation, conduct, execute and control the Executive's policy regarding the environment in a perspective of protection, preservation and conservation of environmental quality, pollution control, areas of conservation and enhancement of the natural heritage, as well as the preservation and rational use of natural resources.	Available at https://iwlearn.net/iw-projects/organizations/991#:~:text=The%20Ministry%20of%20the%20Environment,of%20environmental%20quality%2C%20pollution%20control%2C [Accessed 2nd April, 2023].
Ministry of Culture and Tourism	The Ministry of Culture and Tourism in Angola plays a pivotal role in promoting and preserving Angola's cultural heritage while also fostering tourism as an economic driver. The Ministry is also responsible for developing policies and initiatives that showcase Angola's cultural richness, including heritage sites, traditional events, and artistic expressions.	Available at https://www.gbif.org/publisher/7ba6190f-1fcd-4092-9b58-3c166e093127#:~:text=The%20National%20Institute%20for%20Biodiversity,through%20a%20Presidential%20Decree%20n. [Accessed 2nd April, 2023].
Ministry of Fisheries and Sea	The Ministry oversees and manages the country's aquatic resources and marine ecosystems. This Ministry plays a crucial role in sustainable fisheries management, implementing policies and regulations to prevent overfishing and protect marine environments. It also supports the fishing industry, promoting economic development and food security.	Available at https://www.trade.gov/country-commercial-guides/angola-marine-technologies-fisheries-and-sea-ports [Accessed 2nd April, 2023].
National Institute of Biodiversity and Conservation Areas (INBAC)	The National Institute of Biodiversity and Conservation Areas (INBAC) in Angola manages and oversees the country's protected areas, including national parks and nature reserves	Available at https://www.gbif.org/publisher/7ba6190f-1fcd-4092-9b58-3c166e093127#:~:text=The%20National%20Institute%20for%20Biodiversity,through%20a%20Presidential%20Decree%20n. [Accessed 2nd April, 2023].
National Institute of Fisheries Research and Development	The National Fisheries Research Institute (INIP) in Angola is responsible for conducting technical and scientific research related to the country's aquatic biological resources, marine ecosystems, and continental waters, with a primary focus on the Angolan coast and marine diversity.	Available at https://preface.w.uib.no/about/who/inip/ [Accessed 2nd April, 2023].
Institute for Forestry Development (IDF)	The Institute for Forestry Development (IDF) in Angola is responsible for managing the country's forests and promoting sustainable forest management practices	Available at https://www.idf.gov.ao/index.php/quem-somos. [Accessed 10th September 2021]
The United Nations Development Programme (UNDP)	UNDP works with the Angolan government, civil society organisations, and local communities to support efforts to reduce poverty, promote economic growth, and improve social welfare. The organisation provides technical assistance, capacity building support, and financial resources to help implement development programs and projects.	Available at https://www.undpopenplanet.org/projects/Combating_Illegal_Wildlife_Trade_and_Human_Wildlife_Conflict_in_Angola/ [Accessed 2nd April, 2023].
The International Union for Conservation of Nature (IUCN):	The International Union for Conservation of Nature (IUCN) is promoting the conservation of mangrove ecosystems, supporting the establishment of marine protected areas, improving protected area management, promoting sustainable agriculture practices, and promoting climate change adaptation measures in Angola	Available at https://www.iucn.org/regions/eastern-and-southern-africa/our-work/iucn-angola [Accessed 2nd April, 2023].

Table 3: Institutions supporting the wildlife management economy in Angola (continued)

Institution	Overview	Source
The World Wildlife Fund (WWF)	The World Wildlife Fund (WWF) mainly works to promote sustainable and responsible natural resource management, conserve endangered species, and protect critical habitats in Angola.	Available at https://www.worldwildlife.org/magazine/issues/spring-2016/articles/five-countries-work-toward-a-common-goal-in-southern-africa [Accessed 2nd April, 2023].
African Parks	The partnership between African Parks and the Angolan government aims to restore the ecological integrity of Iona National Park and improve the livelihoods of local communities through sustainable tourism and conservation activities. African Parks provides technical and financial support to the park management team, including training, equipment, and infrastructure development.	Available at https://www.africanparks.org/angola-government-partners-african-parks-management-iona-national-park [Accessed 2nd April, 2023].
Association for the Conservation of the Environment and Integrated Rural Development (ACADIR - Associação de Conservação do Ambiente e Desenvolvimento Integrado Rural)	The Association for the Conservation of the Environment and Integrated Rural Development (ACADIR) is one of the few locally-led NGOs spearheading community conservation efforts on a significant scale in southern Angola's Cuando-Cubando province. ACADIR is implementing various initiatives such as enhanced local fisheries management, wildlife monitoring, and river basin management. These efforts aim to empower communities in the region to effectively manage and derive benefits from their natural resources.	Available at https://www.maliasili.org/acadir [Accessed 2nd April, 2023].

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Text box 4

Angola's Transfrontier Conservation Areas (TFCAs)

Angola is actively engaged in several Transfrontier Conservation Areas (TFCAs) within southern Africa. These collaborative conservation efforts aim to protect biodiversity, promote sustainable development, and foster regional cooperation. Currently, Angola participates in three established TFCAs and is involved in a proposed fourth.

The **Kavango-Zambezi (KAZA) TFCA** is the world's largest transboundary conservation area, covering approximately 520,000 km² across Angola, Botswana, Namibia, Zambia, and Zimbabwe. It includes 36 formally proclaimed national parks along with various reserves, communal lands, and tourism areas. Angola's contribution is part of the southeastern range, through its inclusion in the Okavango and Zambezi River basins. The region hosts high ecological diversity with over 3,000 plant species and supports significant migrations of large mammals such as elephant (*Loxodonta africana*) and wild dogs (*Lycaon pictus*). Besides ecological goals, KAZA also focuses on harmonising conservation with sustainable rural development, aiming to improve livelihoods through tourism, cultural exchange, and local participation in natural resource planning.

The **Iona-Skeleton Coast TFCA** was formally established through a Memorandum of Agreement signed on 3 May 2018 between Angola and Namibia. It spans 47,698 km² along the desert coasts of both countries. In Angola, Iona National Park is the oldest and largest protected area, covering 15,150 km². It connects directly with Namibia's Skeleton Coast National Park at the Kunene River. The two parks are located in the Namib Desert biome, known for its arid climate and unique biodiversity, including the ancient welwitschia plant (*Welwitschia mirabilis*) and the endemic desert plated lizard (*Gerrhosaurus skoogi*). The TFCA contributes to the conservation of coastal ecosystems and migratory routes, and efforts are underway to reintroduce species such as giraffe (*Giraffa giraffa angolensis*) and black-faced impala (*Aepyceros melampus petersi*). As wildlife populations grow, predators such as cheetah (*Acinonyx jubatus*) are also beginning to return to Angola's section of the park.

On 28 May 2025, Angola and Zambia signed a Memorandum of Understanding to establish the **Liuwa Plains–Mussuma TFCA**, forming a cross-border conservation landscape that connects Liuwa Plain National Park in Zambia with Angola's Mussuma region. The Liuwa–Mussuma TFCA is ecologically significant, supporting the second-largest wildebeest (*Connochaetes taurinus*) migration in Africa and hosting predators such as lion (*Panthera leo*), cheetah (*Acinonyx jubatus*), and spotted hyena (*Crocuta crocuta*). The area also forms part of the Zambezi River catchment, essential for regional water and biodiversity security. The Mussuma side, while historically affected by conflict, is seen as critical for species recovery and habitat connectivity. This initiative is supported by multiple partners and aims to foster community benefits through scientific research, ecotourism, and landscape-scale conservation.

Angola is part of the **proposed Three Nations Namib Desert TFCA**, which would connect protected areas across Angola, Namibia, and South Africa. It would include Angola's Iona National Park, Namibia's Namib-Skeleton Coast National Park, and South Africa's /Ai-/Ais–Richtersveld Transfrontier Park. If established, it would help conserve a fragile desert ecosystem and improve climate resilience by linking large-scale terrestrial and marine conservation areas.

These TFCAs highlight Angola's growing role in regional environmental protection and governance. By participating in transboundary conservation, Angola is contributing to the conservation of ecosystems that span national borders, while also supporting economic growth and sustainable livelihoods for its citizens.

Source: NACSO, undated; SADC TFCA, undated

Wildlife economy activities in the country

The next sections provide an overview of the main wildlife economy activities, collating as much data as possible to provide a broad picture of the state of the wildlife economy in Angola. Although every attempt was made to gather as much data as possible, there are a number of data gaps and some of the data was outdated and/or not comparable and sometimes only at a site, rather than national level.

Tourism

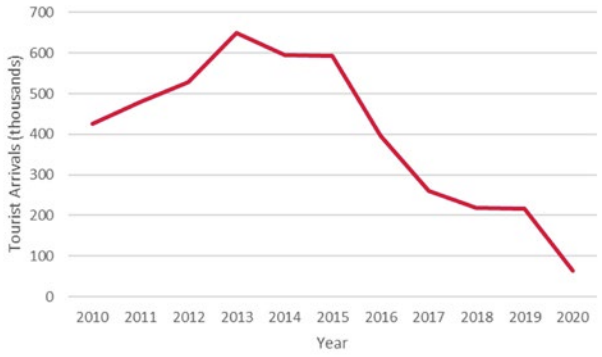
Tourism in Angola has been identified as an opportunity for economic growth and development, with the potential to create employment, generate income and alleviate poverty (Butler et al., 2020). Despite the country's troubled past, including a long civil war that ended in 2002, Angola has a wealth of natural resources and cultural heritage that attracts tourists (World Bank, 2019). The government has recognised the importance of tourism and has developed policies and strategies to promote the industry (WTTC, 2022). Some of the policies and strategies include the creation of Special Tourism Areas (STAs) that integrate hotels, restaurants, local entertainment, security, and improved access. These zones will also benefit from the elimination of visa requirements for tourists visiting the STAs (CEDESA, 2022).

Prior to the outbreak of the COVID-19 pandemic, **tourism revenue in 2019 was approx. USD 2.5 billion, accounting for 2.8% of Angola's total economy** (WTTC, 2024). In 2023, the sector generated an **estimated USD 2.1 billion, representing 2.4% of GDP**, while tourism revenue was **estimated at USD 2.2 billion in 2024, or approx. 2.5% of GDP** (Ibid.). Although these figures remain below pre-pandemic levels, they indicate a steady recovery and sustained contribution of the tourism sector to Angola's national economy.

Total travel and tourism jobs stood at approx. **360,700 in 2023,** with the number estimated to rise to **375,700 in 2024** (WTTC, 2024). Tourism in Angola remains largely **domestic-driven,** with **98.8% of total spending in 2023** attributed to domestic tourism, while international visitor spending accounted for just 1.2% (Ibid.). The primary international source markets in 2023 included **Portugal (26%), Lebanon (16%), Brazil (5%), France (4%), and India (4%)** (Ibid).

By comparison, according to the WTTC (2022) report, the leading sources of inbound arrivals from outside Africa in 2021 were **Portugal (30%), France (9%), China (4%), and Brazil (4%).** Overall, **the number of foreign visitors arriving in the country has been declining** since it peaked in 2013 as shown in Figure 2. This trend may be partly explained by reduced investment in infrastructure following the 2014 oil price crash, along with persistent barriers such as high travel costs and complex visa procedures (Chatham House, 2018; Redvers, 2015).

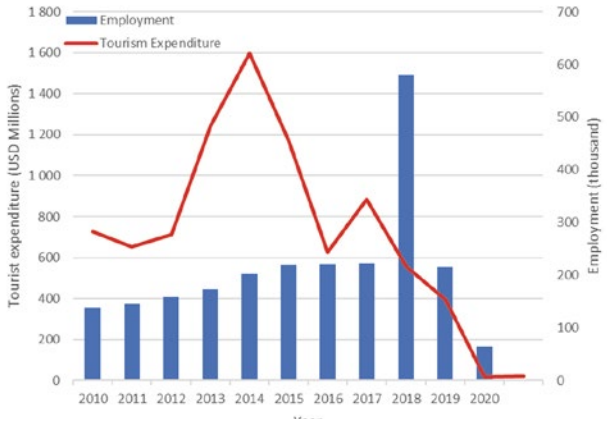
Figure 2: Tourist arrivals for Angola (2010-2020)



Source: WTTC, 2022

In 2021, travel and tourism employed 364,400 people (2.9% of the total jobs), a 5.2 % increase from 2020 when it only employed 345 000 (2.8 % of the total jobs) (WTTC, 2022). In the same period, tourism expenditure was USD 23 million, a decline as compared to its peak period in 2014 and 2015 when expenditure was approx. USD 1.5 billion as shown in Figure 3. The high tourist expenditure around 2014 may be partly due to increased business travel and regional activity during the tail end of Angola's oil-fuelled economic boom, while the employment peak in 2018 might reflect short-term gains from early diversification efforts that were later affected by economic and global disruptions (Ford, 2018; Golub and Prasad, 2016).

Figure 3: Employment and expenditure from travel and tourism in Angola (2010-2020)



Source: WTTC, 2022

Despite the challenges posed by the COVID-19 pandemic, Angola has experienced an increasing dependence on tourism over the past 25 years. Prior to the pandemic, the tourism sector reached a notable total of USD 395 million, contributing approximately 0.57% to the country's gross national product (WTTC, 2022). On average, the total international visitors spending was estimated to be USD 0.59 billion while domestic tourists spending was USD 2.0 billion in 2019 (Ibid.). These figures highlight the sector's significant potential for driving economic growth.

Angola possesses immense potential as a tourist destination; however, it encounters obstacles (e.g., poor infrastructure, limited road connectivity and political instability) in the advancement of its tourism industry (Morais et al., 2018; Butler et al., 2020). To address these challenges, the government has taken significant steps to enhance infrastructure and facilitate access to tourist sites. Notably, they have constructed new airports (e.g., an airport in Cuando Cubango) and improved road networks, allowing for easier travel within the country (World Bank, 2019). Furthermore, **Angola has displayed openness**

to foreign investment in the tourism sector by providing incentives such as tax exemptions and land allocations for tourism development (Ibid.). These measures demonstrate Angola's commitment to fostering the growth and success of its tourism industry.

Ecotourism

Within the tourism sector, ecotourism is a key activity in Angola and it is supported mainly by the biodiversity present in its protected areas. Some of the **most popular ecotourism destinations in Angola are the Cuando Cubango Province, Bicuar National Park**, and **Iona National Park**. These areas offer a wide range of wildlife, including elephant (*Loxodonta africana*), giraffe (*Giraffa camelopardalis*), and lion (*Panthera leo*) (Rocha, 2023). Another popular ecotourism destination in Angola is the Kissama National Park, located in the northwestern part of the country. The park covers an area of approx. 9,960 km^2 and is home to a wide range of wildlife, including waterbuck (*Kobus ellipsiprymnus)*, buffalo (*Syncerus caffer*), and roan (*Hippotragus equinus*) (Africa Tour Operators, undated).

Ecotourism is an important aspect of tourism development in Angola due to the country's unique landscape, biodiversity, and coastal zones (Ezaquias, 2022). The characteristics and management of tourism in Angola is discussed more in Text box 5 and Text box 6 respectively. While the private sector in Angola has shown interest in investing in protected areas, their involvement is currently limited (World Bank, 2019; Butler et al., 2020). A survey done by the World Bank in 2019, shows that domestic investors, as well as renowned international investors such as Wilderness Safaris, Chobe Holdings, and the Singita group, have expressed interest and conducted prospecting visits in Angola. The realisation of these investment opportunities depends on factors such as the regulatory framework for concessions, Angola's negotiation capacity, access and market trends (Ibid.).

Text box 5

Characteristics of tourists visiting Iona National Park

In 2018, the characteristics of Iona National Park's visitors and their perceived image of the visit was examined using empirical evidence from primary and secondary data. The findings from the study show that the **majority of tourists visiting Iona National Park come from neighbouring countries, particularly South Africa and Namibia**, while the other half consists of visitors from Angola and European countries, such as Portugal and Spain. Visitors from Angola's neighbouring countries and Europe primarily learnt about the park through family and friends, whereas Angolan visitors relied on newspapers and radio for information. The main **motivation for visiting the park was the fauna**, reflecting a strong interest in wildlife-related activities among the visitors. **Nature-based and casual leisure activities were the primary reasons for the visit**, with cultural activities ranking lower. In terms of demographics, the tourist population at Iona National Park tends to be relatively young, with a significant proportion falling under the age of 30. The visitors were predominantly couples and families, with many bringing their children. The educational level of the tourists was generally high, with a majority having completed secondary education and a significant portion holding graduate degrees.

While visitors generally found the experience worthwhile and rated it as good, there were suggestions for improvement. The **lack of tourism infrastructure, including road and signage, was a common concern**, and there was a need for increased investment in the ecotourism sector. However, despite these challenges, the overall satisfaction level among visitors remained high.

Source: Morais et al., 2018

Text box 6

Ecotourism management challenges and potential in Cuando Cubango

The Cuando Cubango Province in Angola has a local management structure led by the Provincial Governor, who coordinates efforts for development and ecotourism. However, the management structure has been observed to be inefficient, lacks political participation, and has limited knowledge of the opportunities ecotourism offers. This has resulted in natural resources degrading, reduced tourist arrivals (as shown in Table 4), and socio-economic problems in and around protected areas in Cuando Cubango.

Owing to the poor performance and management of ecotourism, the province suffers from inadequate education, healthcare, infrastructure, and access to basic services. The lack of school institutions and teachers, limited hospital facilities, and insufficient electricity coverage create difficulties in managing ecotourism. Communication and transportation services are also limited in these rural areas.

Despite these challenges the Cuando Cubango Province in Angola offers significant opportunities for ecotourism. The region is characterised by a variety of ecosystems, including savannah, forests, grasslands, and rivers. The Province boasts a rich **biodiversity with over 1,000 plant species, 3,000 fish species, and a range of reptiles, mammals, and birds**. In addition, there is a growing interest in wildlife destinations in general, good weather conditions as well as Angola's immense natural and cultural potential. The political commitment to tourism development and the Province's conserved areas have the potential to support and develop ecotourism (National Development Plan (2017-2022)). To leverage these opportunities, key strategic objectives have to be identified, including engaging communities in wildlife conservation, improving accessibility and infrastructure, and promoting the conservation of natural and cultural resources for sustainable development.

Source: Ezaquias, 2022

Table 4: Tourist numbers in Cuando Cubango (2015-2018)

Year	Tourists		Total
	National	Foreign	
2015	*	*	10,557
2016	*	*	4,599
2017	2,512	146	2,658
2018	822	220	1,042

*The breakdown of figures was not available

Source: Ezaquias, 2022

Hunting

In Angola, **the regulations regarding protected areas and hunting were established by Decree No. 43/77 of 1977** (USAID, 2013). According to this Decree, hunting was allowed in regional nature parks and special reserves (Ibid.). Regional nature parks were designated for the conservation of nature, where activities such as hunting, fishing, collection or destruction of wild animals or plants, and industrial, commercial, or agricultural activities were either prohibited or subject to limitations (USAID, 2013). Special reserves, on the other hand, served as areas where the hunting of certain species, whose conservation cannot be effectively achieved through other means, was strictly prohibited (Ibid.).

The conversion of Luengue Luiana and Mavinga into protected areas in Angola eliminated sport hunting in the two parks that were previously designated for controlled hunting (World Bank, 2019). Nonetheless, subsistence hunting is legal in Angola and is regulated to ensure the sustainability of the wildlife populations (Teutloff et al., 2021). Hunting is regulated by issuing permits through the Forestry Development Institute (IDF) and subsistence hunting is generally restricted to designated areas (World Bank, 2019).

Anyone wanting to hunt must obtain a hunting licence and be accompanied by a licensed guide (Braga-Pereira et al., 2020). However, the hunting of certain species (e.g., primates, reptiles, mammals, and various bird species) may be restricted or prohibited depending on their conservation status (Teutloff et al., 2021; Jindanji, 2023).

The bushmeat trade in Angola poses a dual threat to both wildlife conservation and public health, as it contributes to the decline of key species and increases the risk of zoonotic diseases crossing from animals to humans (Jindanji, 2023). Species such as primates and small antelope, including **the Yellow-backed duiker (*Cephalophus silvicultor*), are among the most hunted and locally sold animals along roadsides in urban areas** (Bersacola et al., 2014; Gonçalves et al., 2019). Most of the wildlife along these roadsides is illegally sourced (Bersacola et al., 2014) (see Text boxes 7 and 8). Urgent measures are required to address this unsustainable practice

and safeguard both wildlife and public health in the country. Given the high demand, wildlife ranching could be utilised to legally provide wild meat, while at the same time creating employment (see the section on wildlife ranching).

Text box 7

Bushmeat poaching on the rise in Cuando Cubango

In 2023, there was a significant confiscation of illegally hunted bushmeat in Angola's southeastern Cuando Cubango Province. The local Criminal Investigation Services (SIC) and Public Prosecutors Officers (PGR) seized over one hundred small bundles of meat from various animals that were illegally hunted in the Cuito Cuanavale and Mavinga municipalities. The meat was found to be dried and packaged in bags weighing 50 and 100 kilograms, and it was being transported to Menongue and other locations. The increase in seizures of illegally poached bushmeat indicates a growing problem, which can be attributed to high levels of poverty in the region (Teutloff et al., 2021). The indiscriminate hunting practices of illegal hunters, who target pregnant individuals and offspring for quick profits, further exacerbate the situation.

The surge in bushmeat hunting has had severe consequences, leading to a decline in mammal species in areas where they were once commonly observed. Despite the presence of two national parks in the Cuando Cubango Province and its inclusion in the Kavango Zambezi (KAZA) Transfrontier Conservation Area (TFCA), there has been a rapid disappearance of diverse species. Markets in Menongue, as well as popular locations such as Missombo and Maseka, have unfortunately become common sites for the illegal sale of poached animals, with such transactions occurring almost every day.

Source: Jindanji, 2023


© Credit Sue Snyman

Text box 8

Hunting and the bushmeat trade in Angola

Bushmeat consumption is not solely driven by affordability but also by cultural factors. Urban families who can afford alternatives often consider bushmeat a special treat for special occasions (van Vliet and Mbazza, 2011). From an economic perspective, hunting contributes significantly to the income of rural families, serving as a means to compensate for crop failures or as a source of daily income. The majority of people in the Uíge Province rely on subsistence agriculture (80%), with monthly income ranging from USD 43.9 to USD 83.7 from activities such as collecting plants, agriculture, and charcoal production. In comparison, the value of a Yellow-backed Duiker (*Cephalophus silvicultor*) can reach USD 151.16, making hunting and trading bushmeat financially appealing and further endangering already rare and threatened species.

Among the four African pangolin species, the White-bellied Pangolin (*Phataginus tricuspis*) is both endangered and the most hunted. The price of bushmeat varies depending on the species as shown in Table 5. Smaller rodents and bats, which reproduce quickly and are hunted in larger numbers per day or night, tend to be cheaper (e.g., USD 0.19-0.28 per mouse). As body size increases, hunting rates decline, resulting in fewer individuals harvested per month or year. Consequently, rarer species have higher prices. The affordability of bushmeat compared to domestic meat is influenced by species and their respective prices. While some species, such as the Blue Duiker (*Cephalophus monticola*), fall within a similar price range as domestic meat, others, such as the rarely hunted Yellow-backed Duiker (*Cephalophus silvicultor*), can be significantly more expensive as mentioned above.

The harvesting and sale of bushmeat in Angola exhibit certain patterns. Smaller animals are typically consumed locally, while larger animals are transported to city markets. The market sales of bushmeat include a mix of catches from various hunting methods, including shotgun hunting, which likely contributes to differences in range and quantity compared to the harvest by hunters. Although hunting the Yellow-backed Duiker (*Cephalophus silvicultor*) is officially prohibited due to its near-threatened status, enforcement is poor. In addition, there is a discrepancy between the government's assessment of the Bush Duiker (*Sylvicapra grimmia*) and its availability in markets and hunting rates. The species is commonly hunted and sold, suggesting relative abundance, but the government considers it threatened due to intense poaching rather than actual low population rates.

Source: Teutloff et al., 2021

Table 5: Average harvesting rate and value of mammal species in Angola
Source: Teutloff et al., 2021

Group	English name	IUCN/ CITES status*	Harvesting rate per year/ per capture event	Value in USD
Rodents	African Dormice (*Graphiurus sp.*)	LC	3723 ± 3444 p.y	0.25 ± 0.09
	Brush-furred Mice (*Lophuromys sp.*)	LC	2112 ± 3639 p.y	0.22 ± 0.05
	African Wood Mice (*Hylomyscus sp.*)	LC	2605 ± 2782 p.y	0.20 ± 0.06
	Narrow-footed Thicket Rats (*Grammomys sp.*)	LC	2605 ± 2782 p.y	0.20 ± 0.06
	Fire-footed Rope Squirrel (*Funisciurus pyrropus*)	LC	221.3 ± 309.0 p.y	0.91 ± 0.88
	Marsh Cane Rat (*Thryonomys swinderianus*)	LC	138.3 ± 104.9 p.y	14.41 ± 8.27
	African Giant Squirrel (*Protoxerus stangeri*)	LC	80.2 ± 79.2 p.y	0.55 ± 0.42
	Brush-tailed Porcupine (*Atherurus africanus*)	LC	92.6 ± 95.2 p.y	5.81 ± 1.64
	Anomalure (*Anomalurus sp.*)	LC	60.3 ± 48.6 p.y	5.48 ± 4.18
Primates	Red-tailed Monkey (*Cercopithecus ascanius ssp.*)	LC, D	71.0 ± 106.3 p.y	9.48 ± 2.51
	Southern Talapoin (*Miopithecus talapoin*)	V	46.8 ± 15.2 p.y	8.50 ± 1.80
	Angola Colobus (*Colobus angolensis*)	LC	36.0 ± 12.0 p.y	10.47 ± 5.32
Duiker	Blue Duiker (*Philantomba monticola*)	LC, D/ App. II	50.9 ± 53.3 p.y	8.94 ± 2.44
	Bush Duiker (*Sylvicapra grimmia*)	LC, D	49.0 ± 51.7 p.y	62.58 ± 33.56
	Yellow-backed Duiker (*Cephalophus silvicultor*)	NT/ Ap. II	2.0 ± 0.0 p.y	151.16
Pangolin	White-bellied Pangolin (*Phataginus tricuspis*)	E/ App. I	60.4 ± 58.7 p.y	5.81 ± 1.21
Pigs	Bushpig (*Potamochoerus sp.*)	LC	22.3 ± 15.3 p.y	58.14 ± 21.5
Carnivores	Genet (*Genetta sp.*)	LC	46.8 ± 38.7 p.y	4.65 ± 2.23
	Banded Mongoose (*Mungos Mungo*)	LC	44.0 ± 36.8 p.y	7.98 ± 3.86
Horned-Antelopes	Bushbuck (*Tragelaphus scriptus*)	LC	30.0 ± 0.0 p.y	35.70 ± 22.69
Otter-shrew	Giant Otter-shrew (*Potamogale velox*)	LC, D	21.5 ± 20.5 p.y	3.26 ± 1.70
Oxen	African Forest Buffalo (*Syncerus caffer nano*)	NT	–	–
Elephant	Forest Elephant (*Loxodonta cyclotis*)	V/ App. I	–	–
Bats	Hammer-Headed Fruit Bat (*Hypsignathus monstrosus*)	LC	21.8 ± 18.3 p.n	2.47 ± 3.08
	Egyptian Rousette (*Rousettus aegypticus*)	LC	20.2 ± 17.7 p.n	0.23 ± 0.00
	Collared Fruit Bats (*Myonycteris angolensis*)	LC	13.5 ± 13.3 p.n	0.34 ± 0.14
	Dwarf Epauletted Fruit Bats (*Micropteropus pusillus*)	LC	–	–
	Horseshoe Bats (*Rhinolophus sp*)	LC	–	–

**IUCN and CITES (LC – Least Concern, D – Decreasing, NT – Near Threatened, V – Vulnerable, E – Endangered). The threat assessed by the Angolan government (categorised in A – Extinct, B – Threatened with Extinction, C – Vulnerable, D – Abundant, E – Important Species (because of culture, endemic, tourism etc.). (App. I – Forbidden to hunt, App. II – Allowed in announced season),*

Fisheries

Fish is an important part of people's diets in Angola, where two-thirds of the population live below the poverty line (Abila, 2021). The fisheries reserves in Angola are divided into two types: marine and inland (Kesari, 2022). Marine capture fisheries are further categorised into industrial and artisanal sectors. The industrial marine sector targets commercial fish species such as Round sardinella (*Sardinella aurita*), Yellowfin tuna (*Thunnus albacares*), Horse mackerel (*Trachurus trachurus*), Pacific white shrimp (*Litopenaeus vannamei*), Scalloped spiny lobster (*Panulirus homarus*), Red crab (*Chaceon quinquedens*), and other demersal fishes (Ibid.). The artisanal marine sector employs traditional fishing methods such as nets, lines, and traps to catch pelagic and demersal fish species, and it operates within the country's Exclusive Economic Zone (EEZ) and inshore waters (ITA, 2022).

Overall, the **fisheries industry in Angola is supported by various water bodies, including the Okavango Basin** and the country's vast coastline. The Okavango Basin, which spans across Angola, Namibia, and Botswana, is one of the largest river basins in southern Africa and supports a diverse range of aquatic species (ITA, 2022; Kesari, 2022). **Angola's 1,650 km long coastline also provides ample opportunities for fishing, particularly for small-scale artisanal fishers who play a significant role in the country's fisheries industry** (ITA, 2022). Angola has abundant fishing resources in the Benguela Current System and the Guinea Current System, which offer a diverse range of fish species. The **major marine resources in Angola include** demersal finfish, cephalopods, shrimp, lobster, crab, and pelagic species (ITA, 2022; Kesari, 2022).

Angola's Kwanza River lakes are vital for fish supply, but they suffer from severe overfishing (Abila, 2021). Local fishermen often employ unsustainable methods, such as using small-mesh nets that catch juvenile fish yet to reproduce (Ibid.). This has harmed both fish populations and the livelihoods of those relying on fish for nutrition (Abila, 2021). To address overfishing, the Artisanal Fisheries and Aquaculture Project (AFAP) formed committees with local fishermen and groups received training and were assigned various tasks, including monitoring catches and collecting data (Ibid.). Additionally, they engaged in activities such as planting trees in villages and monitoring against tree cutting and littering near the lakes. The project also provided sustainable fishing nets as a replacement for small-mesh nets (Abila, 2021).

Table 6: The total employment from aquaculture and capture fisheries in Angola (1995-2019)

	1995	2000	2005	2010	2015	2016	2017	2018	2019
Aquaculture	0	0.25	0.5	0.78	0.82	0.82	0.82	0.82	1.08
*Capture	30.36	39.17	60.5	94.8	59.16	59.16	59.16	59.16	60.96
Inland	7.0	10.1	14.0	18.0	19.46	19.46	19.46	19.46	21.3
Marine	23.36	29.07	46.5	76.8	39,69	39.69	39.69	39.69	39.6
****Total Employment (thousands)**	**30.36**	**39.42**	**61.0**	**95.58**	**59.98**	**59.98**	**59.98**	**59.98**	**62.04**

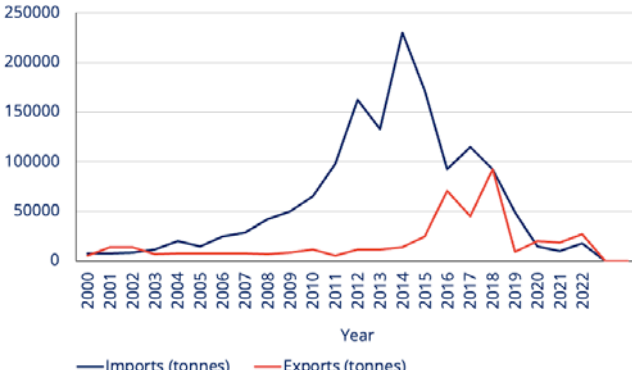
*Inland and marine values contribute towards capture fisheries
**Due to roundings, total may not sum up
Source: FAO, 2022

The fisheries sector In Angola has undergone significant changes since the end of the war in 2002 (FAO, 2022; Kesari, 2022). Previously ranked as the third most economically important sector, following oil and mining, its prominence has diminished over the years (Ibid.). **In 2011, the fisheries sector accounted for approx. 4.6% of the country's GDP, but by 2018, this figure had dropped to a mere 2.1%** (FAO, 2022). Angola's total fish production was approx. **532,000 tonnes in 2017**, but this dropped to just over **400,000 tonnes by 2021**, reflecting challenges such as overfishing, environmental changes, and limited infrastructure (ITA, 2024; Kesari, 2022). Despite this decline, the fisheries sector remains crucial to the national economy, particularly for the coastal regions where small-scale and artisanal fisheries play a vital role in sustaining livelihoods and providing food for a significant portion of the population (Abila, 2021). **In 2019, it was estimated that approx. 62,000 people were engaged in fisheries activities,** including **around 20,000 in the inland fisheries sector**, where **women accounted for 8% of the workforce** (FAO, 2022). According to FAO (2022), total employment in the fisheries sector has remained around 60,000 people since 2015 (Table 6), although the World Bank (2019) provided a higher estimate of 150,000 people for 2015. Inland fisheries are mostly for subsistence, although there is significant potential for increasing output, which now amounts to 6,000 tonnes per year (Kesari, 2022). **The per capita consumption of fish in Angola was recorded at 20.2 kg in 2017** (Ibid.). **Most of the fish production (over 80%) is sold in the domestic market,** with small pelagic fish, particularly horse mackerel (*carapau*), being the most favoured species (FAO, 2022). Most of the fish catches are either consumed or utilised in fresh or frozen form, while a portion is processed into salt-dried fish (Ibid.). A small volume of the landings is further processed into fishmeal, and a negligible amount goes into canned fish production (FAO, 2022).

To meet the demand for fish, Angola relies on imports of fish and fishery products to supplement its domestic production as shown in Figure 4. **In 2018, fish imports were valued at approx. USD 198 million, whereas exports accounted for USD 81 million** (FAO, 2022). In 2021, **Angola's imports of meat, fish, and seafood preparations were estimated at USD 81 million** (UNCTAD, 2023a). This decrease in fish imports shows collaborative efforts between the government of Angola and different non-governmental partners (e.g., UNCTAD) to create a more resilient blue economy in the country (Ibid.). **In 2015, horse mackerel (*carapau*) emerged as the most significant import for Angola, with 74,231 tonnes valued at USD 121.7 million** (World Bank, 2019). This import figure decreased to 37,248 tonnes worth USD 82.1 million in 2016 due

to sufficient domestic production to meet national demand (Ibid.). Additionally, salted cod, frozen tilapia, and dried and canned fish accounted for 84,913 tonnes (USD 86 million) in 2015 and 20,341 tonnes (USD 22.8 million) in 2016 (World Bank, 2019). As for exports, **Angola's fisheries products contributed to 11% of the country's non-oil exports in 2015**, with oil making up the majority at 88% (Ibid.). Frozen fish and fish meal constituted the bulk of the exported quantity, while crustaceans (crabs and shrimps) contributed significantly to the export value (World Bank, 2019). **According to the World Bank (2019), the export value of fisheries products reached USD 45.8 million in 2015 and 2016, resulting in a fisheries product trade deficit of USD 161.9 million for Angola that year**.

Figure 4: The total imports and exports of fish and fish products in Angola (2000-2022)



Source: FAO, 2022

The 2018-2022 National Plan for Development was set to increase fish production and its contribution towards the country's GDP (Kesari, 2022). The 2018-2022 **National Development Plan aimed to grow the fisheries industry by between 4.7% - 8.3%** with the support of the African Development Bank and the United Nations (Ibid.). This was going to be done through value-added production in the country for both coastal fisheries and aquaculture. The aim was to advance the country's economic diversification, create employment opportunities, and expand food production capacity both for national consumption and for export (ITA, 2024). While the 2023-2027 National Development Plan does not include an evaluation of the outcomes of the previous plan, it continues the same goals and sets **new targets of 751,789 tonnes of fish and 8,542 tonnes from aquaculture by 2027** (GoA, 2023). It focuses on improving fish processing infrastructure, cutting post-harvest losses, and encouraging private investment, with fisheries still seen as a key part of Angola's plan to diversify its economy (Ibid.). The Angolan government is also supporting artisanal fisheries to increase fish production. This is discussed more in Text box 10.

The fisheries sector in Angola faces several key threats, including illegal fishing, which leads to overfishing and threatens the livelihoods of those dependent on the industry. Additionally, inadequate infrastructure and equipment limit the sector's potential, while the impacts of climate change, including rising sea temperatures and habitat destruction, further challenge fish stock distribution and abundance, affecting the sustainability of the industry (UNCTAD, 2022a). The 2016 annual stock assessments by the National Fisheries Research Institute (INIP) in Angola revealed that key fish species, such as horse mackerel, sardinella, and demersal species, face issues such as overexploitation, declining biomass, and unsustainable catch levels (World Bank, 2019). While Angola has implemented management measures, including quotas, to alleviate these concerns, INIP recommends the reinforcement of conservation efforts and a precautionary approach to ensure the sustainability of these fish stocks (Ibid.). These threats are further discussed in Text boxes 11 and 12. Text box 9 illustrates the effect of COVID-19 on coastal fisheries, highlighting the potential threats of similar future events.

Text box 9

The impact of COVID-19 on coastal fishing in Angola

The **COVID-19 pandemic had a significant impact on the fishing industry in Angola**, particularly in coastal communities. With lockdown measures and border closures being implemented worldwide, the fishing industry experienced disruptions in both the supply chain and market demand. **The fisheries sector dropped by 27.8%, in performance during the second quarter of 2020**.

The closure of markets and restrictions on movement led to a decrease in fish prices and a reduction in the volume of fish being traded. **This resulted in reduced incomes for fishers and fish processors**, which had a cascading effect on the economy of coastal communities.

Furthermore, restrictions on movement led to a decrease in the number of fishing trips taken by fishers. This resulted in reduced catches and further loss of income. In some cases, fishers were forced to sell their catch at a lower price due to the lack of storage facilities and transportation options. In addition to the economic impact, the pandemic also had a social impact on coastal communities. Many **fishers were unable to provide for their families due to reduced income**, and the lack of government support exacerbated the situation. In some cases, fishers were forced to take out loans or sell their assets to make ends meet.

Sources: UNCTAD, 2021; UNCTAD, 2022a; UNCTAD, 2022b

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Text box 10

Angola's Artisanal Fisheries Support Project

In 2013, the African Development Bank (AfDB) signed a USD 40 million loan agreement with Angola for the Artisanal Fisheries Support Project. The project aimed to enhance the livelihoods of small-scale fishers and traders by improving fishery infrastructure, reducing post-harvest losses, and enhancing the quantity and quality of fish capture and sales. The project primarily focused on coastal communities in four provinces in Angola, namely Cabinda, Benguela, Kwanza Sul, and Bengo, **with a focus on populations exceeding 10,000, primarily women who represent 80% of small-scale fish processors and traders**.

The project's implementation had a positive impact on the communities it targeted. For instance, **it helped to improve fish processing and storage facilities,** which in turn led to a reduction in post-harvest losses. The project also provided training to fishers and fish processors on best practices in fish handling, processing, and marketing. As a result, the quality of fish improved, and this led to increased demand for fish from these communities.

The project also helped to increase the incomes of small-scale fishers and traders. By providing access to better fishery infrastructure and equipment, small-scale fishers were able to catch more fish, which they could sell to the local market or export to other countries. This increased their incomes and contributed to poverty reduction in these communities.

In addition, the project had a **positive impact on women's economic empowerment**. Women, who make up the majority of small-scale fish processors and traders, were the primary beneficiaries of the project. By providing them with training and equipment, they were able to improve the quality of their fish products, which led to increased sales and income. This, in turn, contributed to the economic empowerment of women in these communities.

Source: ITA, 2022

Text box 11

Threats to the fishing sector in Angola

The fishing sector in Angola is facing numerous threats that are hampering its growth and sustainability. **One of the primary threats is illegal fishing, which continues to undermine the efforts made to manage and conserve fish stocks**. **Illegal fishing accounts for most of the fishing activities in Angola**, leading to overfishing and depletion of fish stocks in the country's waters (Belhabib & Divovich, 2015). This threatens the livelihoods of millions of people who depend on the fishing industry for their income and food security. Angola shares its fishing borders with Namibia and there have been several overlaps with regards to Angola operating in Namibian waters. **In 2017, foreign-flagged vessels operating from Angola were found illegally fishing in Namibian waters** (The Namibian, 2017). With each vessel capable of holding up to 1,200 tonnes, it was estimated that these vessels had the potential to repeatedly exploit Namibia's fishing grounds throughout the year (Ibid.). A fleet of ten such vessels had the potential to illegally offload over 100,000 tonnes of horse mackerel annually, surpassing Namibia's designated quota of 340,000 tonnes in 2017 (The Namibian, 2017). **These vessels are harder to report due to the connection between fishing companies and politicians or public officials** (Martini, 2013).

Another significant threat to the fishing sector in Angola is **the lack of modern infrastructure and equipment**. The country has a long coastline but the majority of the fishing communities lack proper storage, processing, and transportation facilities. This limits their ability to maximise their catches and access lucrative markets, reducing their incomes and the overall economic benefits of the sector (Martini, 2013). Without modern infrastructure and equipment, the fishing industry in Angola cannot fully realise its potential and meet the growing demand for fish products.

The effects of climate change are also becoming increasingly evident in the fishing sector in Angola. Rising sea temperatures, ocean acidification, and changing currents are affecting the distribution and abundance of fish stocks, making it difficult for fishers to predict their catch and maintain their livelihoods. The effects of climate change are compounded by pollution and habitat destruction, which are also taking a toll on fish populations in Angola's waters (Martini, 2013).

Source: UNCTAD, 2022a

Text box 12

Stock assessments of fisheries in Angola

According to annual stock assessments conducted by the National Fisheries Research Institute (INIP) in 2016, **important fish species in Angola, such as horse mackerel, sardinella, and demersal species, are either fully exploited, overexploited or experiencing a decline in overall biomass**. Angola has implemented strict management measures, including a quota-based system, to reduce fishing pressure on the stocks. However, INIP continues to recommend the implementation and strengthening of conservation and management measures, emphasising a precautionary approach for the sustainability of the stocks.

Angola commercially utilises two species, which are shared with neighbouring countries. The **horse mackerel (*carapau*) stock is assessed to be overexploited, with catch levels exceeding the maximum yield per recruit by 15%**. Catches of *carapau* have gradually decreased from 140,000 tonnes annually in the late 1990s to 90,000 tonnes in 2015 and 75,500 tonnes in 2016. As a result, Angola now imports *carapau* from other African countries to meet national market demand.

Sardinellas, another important species, have reported catches ranging from 100,000 to 150,000 tonnes per year, estimated to be utilised at sustainable levels. These resources are shared with neighbouring countries to the north of Angola. Industrial and semi-industrial purse-seine vessels primarily catch these species, accounting for 80% of horse mackerel catches, and 97% of sardinella catches.

Demersal fish, caught by all fishery sectors (artisanal, semi-industrial, and industrial), are part of multispecies fisheries. However, stock assessment methods rely on robust fisheries statistics currently unavailable in Angola. Therefore, the analysis of demersal fish status is based on trends in biomass indices. **The biomass indices for demersal fish in 2016 indicated a 22% reduction compared to 2015**.

Crustacean resources, while not abundant in quantity, hold high value, especially for export markets. **Coastal and deep-sea shrimp are fully utilised, with no potential for further expansion**. The deep-sea crab species, West African Geryon, experienced a significant increase in abundance from 2011 to 2015, but since 2015, abundance indexes have shown a declining trend, indicating potential overutilisation of the stock.

Source: World Bank, 2019

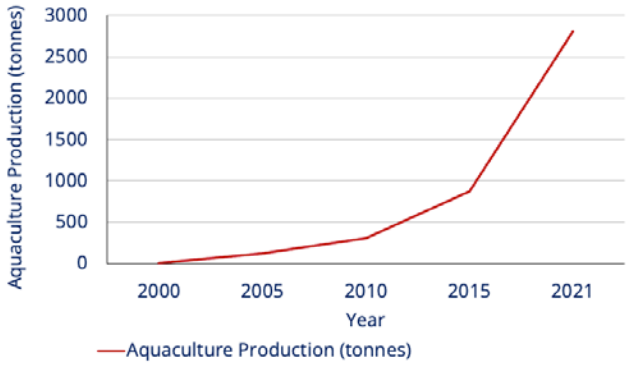
Aquaculture

The Government of Angola prioritises the fisheries and aquaculture sector to diversify its economy, reduce imports, increase exports, and alleviate poverty (World Bank, 2019). This was embedded in Angola's 2018–2022 National Development Plan (*Plano Nacional de Desenvolvimento*, PND) as well as in the 2018–2022 Fisheries Management Plan (*Plano de Ordenamento de Pescas e Aquicultura*), and continues under the 2023-2027 National Development Plan (GoA, 2023; World Bank, 2019)**. Aquaculture production in Angola is currently modest**, with a focus on tilapia and catfish, but government efforts are underway to expand production through the USD 11.1 million loan from the UN International Fund for Agricultural Development (IFAD) (Abila, 2021; FAO, 2022; ITA, 2024).

Aquaculture production is supported by the existence of several small-scale communal ponds with extensive cultures of both tilapia and local catfish species, producing small amounts of fish, mostly for local consumption (GoA, 2018). **In 2018, Angolan authorities sought to reach more than 700,000 tonnes of production per year** through small-scale communal ponds and medium to large-scale commercial aquaculture operations but were unable to meet this goal since medium to large-scale commercial aquaculture is still emerging (ITA, 2024; World Bank, 2019). In 2019, aquaculture production was estimated to be approx. 1,900 tonnes and was from inland areas (FAO, 2022). The total aquaculture production in Angola over the years from 2005 to 2021 is shown in Figure 5 and has been rising, with the highest production from aquaculture (2,808 tonnes) observed in 2021 (FAO, 2024).

In recent years, **aquaculture has emerged as a promising solution for unlocking fisheries production in Angola**. However, the development of an effectively governed aquaculture sector requires a comprehensive approach that takes into account social inclusivity, equity, and environmental responsibility (ITA, 2024). To this end, the **Government of Angola provided USD 200,000 to implement the first phase of a project aimed at identifying the most promising zones for aquaculture development and producing an inventory of existing and planned aquaculture farms** (Ibid.). In addition, between August 2018 and July 2021 there were eight fisheries projects worth USD 132 million set to improve the aquaculture production in Angola (UNCTAD, 2021; Xinhua, 2021).

Figure 5: The total aquaculture production in Angola (2005-2021)



Source: FAO, 2024

Wildlife trade

The Ministry of Environment in Angola, through the National Institute of Biodiversity and Conservation (INBC), serves as the designated authority responsible for issuing permits for the import and export of wildlife species (GBIF, 2016). It also represents Angola in international agreements, including the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which regulates the international trade in endangered species to ensure their survival and to safeguard biodiversity (Ibid.).

Angola, which joined CITES in October 2013 and entered into force in December 2013, is an active participant in CITES (CITES, 2025a). It employs its regulations to manage and monitor the trade in endangered species. This section examines Angola's CITES exports and imports over a 10-year period (2014-2023) (CITES annual reports are due October 31 of the following year, so 2024 trade data was submitted in 2025 and likely unavailable before the deadline. Therefore, data up to the end of 2023 was used). The data was sourced from the CITES trade database, and all subsequent information on CITES-listed species is derived from this database (CITES, 2025b), unless stated otherwise.

Between 2014 and 2023, Angola exported 43,548.32 CITES-listed specimens, 1.4 times the number of the 30,291.84 specimens imported. Accurately determining the exact number of CITES-listed species traded via the CITES database is challenging due to inconsistent recording methods. Quantities often include partial specimens, derivatives, and measurements by weight or volume, potentially leading to inflated figures. As a result, these quantities require scrutiny, as they may not reflect the actual number of taxa imported. Quantities are reported from both the exporter and the importer. Amounts reported were calculated using the highest reported value, whether from the importer or exporter, depending on which was greater. Table 7 indicates the purposes and reported quantities of exports and imports from Angola.

Table 7: Purpose of Angola's exports and imports of CITES-listed species (2014–2023)

Purpose	Exports		Imports	
	Quantity	%	Quantity	%
Breeding in captivity	0	0.00%	78	0.26%
Commercial	42,593.71	97.81%	9,727.71	32.11%
Educational	0	0.00%	26	0.09%
Hunting trophy	0	0.00%	8	0.03%
Introduction to wild	12	0.03%	260	0.86%
Personal	81	0.19%	260.31	0.86%
Scientific	172	0.40%	0	0.00%
Uncategorised	250.51	0.58%	19,931.82	65.80%
Zoo	439	1.01%	0	0.00%
Total	**43,548.32**		**30,291.84**	

Source: CITES, 2025b

CITES-listed species exports

Exports from Angola are predominantly for commercial purposes, accounting for 97.81% of all exports. Of these commercial exports, 51.72% are for Shortfin mako (*Isurus oxyrinchus*), which were all exported to Spain. Exports of this

species have only been in recent years, as the CITES database indicates that exports have only been recorded since 2021. Table 8 shows the reported quantity of species commercially exported from Angola, along with their destination countries.

Angola's shark meat trade is a significant part of its coastal economy, particularly in the southern province of Namibe (Save Our Seas Foundation, 2021). Small-scale fishers use traditional methods such as salting and sun-drying to preserve shark and ray meat, a necessity due to limited refrigeration access, with the dried meat serving as both a key protein source and a culturally valued food in local cuisines (Ibid.). **While shark fins are often exported to markets such as Spain, the meat is primarily consumed domestically, supporting livelihoods in fishing communities** (Soares & Jabado, 2024). However, sustainability concerns are mounting, as overfishing and the lack of species-specific catch data threaten shark populations (Save Our Seas Foundation, 2021). Text box 13 provides insights into understanding Angola's small-scale shark and ray fisheries. Text box 14 highlights Spain's role in the global shark meat trade and its links to African fisheries. Conservation initiatives are increasingly focusing on community-based approaches to promote sustainable harvests and protect marine biodiversity (Save Our Seas Foundation, 2021).

In Angola, the *Pterocarpus* genus (Mukula or rosewood-like timbers) accounts for the second-largest share of exports at 41.34%, led by African padauk (*Pterocarpus tinctorius*, 19.14%), African bloodwood (*Pterocarpus angolensis*, 18.65%), and African coral wood (*Pterocarpus soyauxii*, 3.54%). Export records for these species only appear from 2023 onward, reflecting their recent inclusion in CITES Appendix II and the resulting requirement for trade monitoring (see Text Box 15).

China is the leading importer of *Pterocarpus* timber from Angola, accounting for 57.37% of exports from the genus, followed by South Africa (30.41%) and Vietnam (9.2%). Over the past decade, international demand for rosewood-like timbers has surged, driven by the Asian market's appetite for wood used in Hongmu furniture and cabinet-making (CITES, 2018). Since 2011, growing demand from the Hongmu trade has placed significant pressure on Mukula timber from *Pterocarpus* species in Central and Southern Africa's Miombo woodlands, as these visually resemble traditional Asian rosewoods and have become preferred substitutes (Ibid.).

Text box 13

Understanding Angola's small-scale shark and ray fisheries

A study by Soares and Jabado (2024) provides the first detailed examination of how small-scale fisheries in Angola interact with sharks, rays, and guitarfishes. Based on interviews with 83 fishers across Luanda and Bengo Provinces, the research reveals that all fishers catch elasmobranchs (subclass of cartilaginous fishes), with rays intentionally targeted and sharks mostly caught as bycatch. Despite the central role these fisheries play in food security and livelihoods, most respondents observed sharp declines in the size and number of elasmobranchs caught over the past 30 years, citing overfishing, industrial trawling, and increased demand, including by Chinese traders, for fins and meat.

The study highlights fishers' general lack of awareness about national regulations and the absence of species-specific conservation measures in Angola. However, some older fishers expressed support for shark protection, but most participants, particularly younger fishers, opposed conservation actions due to economic reliance on these species. The authors stress **the urgency of developing co-managed, sustainable strategies** to protect threatened elasmobranch populations while ensuring the well-being of fishing communities. Local ecological knowledge (LEK) is proposed as a vital tool for shaping informed, community-supported conservation efforts.

Source: Soares & Jabado, 2024

Text box 14

Spain's role in the global shark meat trade and its links to African fisheries

Spain plays a pivotal role in the global shark meat trade, standing as the world's leading exporter. Between 2012 and 2019, Spain exported shark meat to 85 countries and territories, contributing significantly to a global market valued at over USD 2.6 billion. This trade is deeply rooted in Spain's coastal regions, where shark meat is integrated into traditional culinary practices, such as in *caella* or *cazón en adobo* dishes. **To meet domestic and export demand, Spain increasingly sources shark meat from African countries, particularly West Africa, where weak fisheries governance and limited monitoring create risks of unsustainable and potentially illegal harvests**. The European Union (EU), which accounts for approx. 22% of the global shark meat trade has implemented regulatory measures such as the EU Control Regulation and the EU Illegal, Unreported, and Unregulated (IUU) Regulation to enhance traceability and combat illegal, unreported, and unregulated fishing. Despite these efforts, the continued high demand and extensive trade networks highlight the need for more stringent enforcement and sustainable fishing practices to protect vulnerable shark populations.

Sources: WWF, 2021a & WWF, 2021b

Table 8: Angola's commercial exports of CITES-listed species (2014-2023)

Importer country	Species	Common name	Trade terms	Reported quantity
Belgium				22.18
< 1% of commercial exports	*Pterocarpus soyauxii*	African coral wood	Sawn wood	22.18
Brazil				3
< 1% of commercial exports	*Arctocephalus pusillus*	Cape Fur Seal	Live	2
	Psittacus erithacus	African grey parrot	Live	1
China				10,716
< 1% of commercial exports	*Arctocephalus pusillus*	Cape Fur Seal	Live	387
	Pterocarpus angolensis	African bloodwood	Logs, sawn wood	2,166
	Pterocarpus soyauxii	African coral wood	Sawn wood	399
	Pterocarpus tinctorius	African padauk	Logs, sawn wood	7,764
Egypt				11
< 1% of commercial exports	*Arctocephalus pusillus*	Cape Fur Seal	Live	11
Malaysia				3
< 1% of commercial exports	*Arctocephalus pusillus*	Cape Fur Seal	Live	3
Morocco				3
< 1% of commercial exports	*Arctocephalus pusillus*	Cape Fur Seal	Live	3
Namibia				319.51
< 1% of commercial exports	*Pterocarpus angolensis*	African bloodwood	Sawn wood	319.51
Portugal				459.47
1.08% of commercial exports	*Entandrophragma cylindricum*	Sapele mahogany	Sawn wood	22
	Khaya anthotheca	East African Mahogany	Wood product	164.72
	Khaya ivorensis	African Mahogany	Sawn wood, wood product	74.71
	Pterocarpus soyauxii	African coral wood	Sawn wood	101.98
	Pterocarpus tinctorius	African padauk	Sawn wood	96.06
Russian Federation				20
< 1% of commercial exports	*Arctocephalus pusillus*	Cape Fur Seal	Live	20
Serbia				3
< 1% of commercial exports	*Arctocephalus pusillus*	Cape Fur Seal	Live	3

Table 8: Angola's commercial exports of CITES-listed species (2014-2023) (continued)

Importer country	Species	Common name	Trade terms	Reported quantity
South Africa				5,478
12.86% of commercial exports	*Pterocarpus angolensis*	African bloodwood	Sawn wood, timber	5,477.59
Spain				22,521
52.87% of commercial exports	*Isurus oxyrinchus*	Shortfin mako	Bodies, live	22,521
Switzerland				
< 1% of commercial exports	*Arctocephalus pusillus*	Cape Fur Seal	Live	15
Turkey				4
< 1% of commercial exports	*Arctocephalus pusillus*	Cape Fur Seal	Live	4
United Arab Emirates				10
< 1% of commercial exports	*Arctocephalus pusillus*	Cape Fur Seal	Live	10
United States of America				82.084
< 1% of commercial exports	*Khaya anthotheca*	East African Mahogany	Sawn wood	82.084
Viet Nam				2,917.58
6.85% of commercial exports	*Afzelia pachyloba*	Afzelia	Sawn wood	258.07
	Afzelia quanzensis	Afzelia	Derivatives, sawn wood	1,002.97
	Pterocarpus angolensis	African bloodwood	Sawn wood	160
	Pterocarpus soyauxii	African coral wood	Derivatives, sawn wood, timber	1,019.66
	Pterocarpus tinctorius	African padauk	Sawn wood	476.88
Unknown				
< 1% of commercial exports	*Arctocephalus pusillus*	Cape Fur Seal	Live	6
Total				**42,593.71**

Text box 15

Mukula trees gain protection under CITES scrutiny

Mukula (*Pterocarpus* genus), a timber species native to Central and Southern Africa, has been added to CITES Appendix II, a major step toward regulating its international trade. Although not officially classified as rosewood in China's list of 33 species used in the lucrative Hongmu furniture trade, Mukula's rich reddish colour and durability have made it a sought-after substitute as traditional rosewoods such as *Dalbergia* become overexploited. The booming demand, particularly in China, has led to widespread harvesting across Angola, Zambia, Mozambique, and neighbouring countries, with traders capitalising on its resemblance to more regulated species.

The new CITES listing does not ban trade but requires countries to prove that harvesting levels are sustainable and non-detrimental to wild populations. Exporting countries must now conduct Non-Detriment Findings (NDF), issue permits, and improve traceability. However, challenges remain, as past national bans in countries such as Zambia were inconsistently enforced, often driven more by political motives than environmental concern. Experts argue that broader protection, such as a genus-wide listing of *Pterocarpus*, may be necessary to prevent traders from shifting exploitation to other unlisted species.

Source: Cerutti & Bourland, 2019

CITES-listed species imports

According to CITES (2025b), Angola's imports are predominantly uncategorised, making up 65.8% of total imports, with commercial imports accounting for 32.11%. The largest share of uncategorised imports was 7,515 specimens of the *Phalaenopsis* genus from the Netherlands (37.7%), followed by 4,521 specimens of the *Euphorbia* genus (22.68%) imported from both the Netherlands and Thailand. Within the commercial category, the leading import was 1,170 specimens of Crown-of-thorns (*Euphorbia milii*) from Thailand, representing 17.58% of commercial imports, followed by 1,020 Sago palms (*Cycas revoluta*) from China (10.49%). All of these species are primarily imported for their ornamental value.

Illegal wildlife trade

Angola functions as both a source and transit country in the illegal wildlife trade, particularly concerning the trafficking of ivory and rhino horn (Africa Organised Crime Index, 2023; UNDP, 2019). Despite a national ban on ivory trade, ivory is still being smuggled out of the country, often through neighbouring countries such as Zambia and Namibia (Schlossberg et al., 2018). Transnational organised crime networks exploit Angola's geographic position and infrastructure to smuggle these illicit products from Africa to Asia (EIA, 2024). Since 2016, Angola has been implicated in the confiscation of at least 11 tonnes of ivory, with only 23% of these seizures occurring within the country, indicating that significant quantities of illegal ivory have exited Angola undetected and were intercepted abroad (Ibid.). Additionally, Angola serves as a transit point for other illegal wildlife products, including pangolin scales, gorillas, and wild birds (Africa Organised Crime Index, 2023; Hamutenya et al., 2022; UNDP, 2019). Recent reports also identify the country as a potential transit hub for the illegal trade of lion and leopard parts (Africa Organised Crime Index, 2023).

While the legal wildlife trade in Angola is regulated, there are **ongoing challenges related to enforcement and preventing illegal wildlife trade** (UNDP, 2019; Schlossberg et al., 2018). The government of Angola has recognised the importance of addressing these issues and has taken steps to strengthen regulation and enforcement, including increasing penalties for wildlife crime. However, much more work is needed to protect Angola's unique and valuable wildlife from illegal trade and exploitation (Schlossberg et al., 2018).

Wildlife ranching

The wildlife ranching industry in Angola is still in its early stages of development, but it has the potential to play an important role in the country's conservation efforts and economic growth. Wildlife ranching has the potential to bring several benefits to the country including reducing pressure on natural habitats and promoting sustainable use of wildlife resources as observed in other countries in southern Africa (Lindsey et al., 2013). As an alternative land use option, wildlife ranching can also help prevent land conversion and fragmentation of wildlife habitat (Duporge et al., 2018; Huntley et al., 2019).

Wildlife ranching can also generate economic benefits. It can contribute to tourism by attracting visitors interested in wildlife and nature experiences, creating job opportunities and stimulating local economies (Duporge et al., 2018). **The south and southwestern parts of Angola are good starting points for wildlife ranching since most farmers already have knowledge from cattle ranching** (Huntley et al., 2019). By developing wildlife ranching projects, Angola can tap into the economic potential of its natural resources and improve livelihoods in rural areas (Duporge et al., 2018). Wildlife ranching could also provide wild meat to increase the legal supply and promote the legal market for wild meat, given the high levels of illegal bushmeat and, therefore, the demand for wild meat.

Forest products

Angola has abundant and extensive forest resources and biodiversity with considerable economic potential (Mawunu et al., 2016; Preferred by Nature, 2022). The extent of **forest and other wooded land is estimated at 58.4 million hectares** which is about 47% of the country's 125 million hectares of land area (FAO, 2020a; Preferred By Nature, 2022). The forest area is owned by either the government or private sector companies (Preferred By Nature, 2022). Specifically, **140,000 ha of planted area belongs to the private sector**, including companies such as the Benguela Railway (CFB), the Pulpwood Company of Alto Catumbela and Luanda Railway Company (CFL) (Ibid.). Angola's forests are mainly in tropical rainforest in the northern provinces of Cabinda, Zaire, Bengo, and Kwanza-Norte (an estimated 95%

of total forest) and open dry forests and savannah or miombo woodlands in other parts of the country (about 5% of total forest) (FAO, 2020a; Mawunu et al., 2016).

Related to the forests in the country, Table 10 shows a non-exhaustive list of some of the edible plants found and sold in Angola markets. Some of the edible fruit and plants in Table 10 are from neighbouring countries such as Democratic Republic of Congo (DRC) (Mawunu et al., 2020). See Text box 16 on the potential use of edible plants.

The **trade in forest products is important in Angola and is a key income earner** (ANRC, 2021). From 2010 to 2019, Angola had a positive trade balance of USD 2.2 million for primary forest products, whereas during the same period, it had negative trade balances of USD 2.14 billion for secondary forest products and USD 403 million for tertiary forest products (Ibid.). The trade balances specifically for primary forest products in Angola are shown in Table 9.

The rural population is one of the main and direct beneficiaries of forest and non-timber forest products as part of their livelihoods are supported by these resources (Omotayo & Aremu, 2020). The diversity of forests and woodlands, provides a wide range of non-timber forest products (NTFPs) to local communities (Omotayo and Aremu, 2020). **These NTFPs are important for food, medicine, cultural practices, and income generation** (Mawunu et al., 2020). However, there are concerns about the sustainability of harvesting practices and the lack of regulations and policies to manage these resources (Omotayo and Aremu, 2020; Urso et al., 2016).

Some of the commonly harvested NTFPs in Angola include fruits, nuts, honey, medicinal plants, fibres, and resins (Omotayo and Aremu, 2020; Urso et al., 2016). Fruits such as Monkey orange (*Strychnos spinosa),* marula (*Sclerocarya birrea*), baobab (*Adansonia digitata*), and jambalau (*Ximenia americana*) are popular NTFPs in Angola. These fruits are used for food, beverage, and medicinal purposes. Nuts from tallow wood (*Ximenia American var)* are also harvested for their oil, which is used in cooking and soap-making (Urso et al., 2016; Omotayo and Aremu, 2020; Novotna et al., 2020).

Text box 16

Traditional knowledge and potential for sustainable use of wild edible plants

The forests and savannahs of Mucaba municipality in northern Angola are a potential source of plant-based non-timber forest products (NTFPs), particularly wild food plants. These products can provide valuable nutrients and phytochemicals for human nutrition and health. **Local communities in Mucaba possess a wealth of traditional knowledge regarding the use of wild edible plants.** However, this knowledge is at risk of being lost among the younger generations, which may have negative impacts on the sustainable use and conservation of these resources.

To document the traditional knowledge of wild edible plants held by Mucaba villagers, an ethnobotanical survey was conducted in 2020. The survey identified **46 wild edible plants used for food, spices, and alcoholic drinks**. These wild edible plants belong to 25 families and 30 genera. They are consumed as wild edible vegetables, seasonal fruits, spice substitutes for tea, and forest alcoholic drinks.

The survey also revealed that White's ginger (*Mondia whitei)* and African holly (*Pyrenacantha klaineana)* are underutilised wild edible plants that are considered as food and spice in some parts of northern Angola.

It is noteworthy that traditional edible plants are rich sources of minerals, fibres, proteins, and other useful phytochemicals that can contribute to human health and nutrition. Moreover, the diversified cultivation of these local plants would allow their sustainable use and conservation, particularly of endangered species in the region. Thus, **efforts to conserve traditional knowledge and promote the sustainable use of wild edible plants in Mucaba municipality are crucial for the well-being of local communities and the conservation of biodiversity.**

Source: Mawunu et al., 2022

Table 9: Trade balances for primary forest products in Angola (USD*1000)

Trade	Ind. roundwood	Plywood	Sawn wood	Veneer	Grand Total
Balance	172,124	-164,630	21,812	-6,898	22,408
Exports	175,805	547	41,106	577	218,034
Imports	3,681	165,177	19,293	7,475	195,626

Source: ANRC, 2021

Table 10: A selection of the edible plants sold in Angolan markets

Name	Common name	Scientific name	Part of the plant sold	Uses
Bulukutu	Bush tea/Gambian bush tea	*Lippia multiflora Moldenke*	Leaf, Stem	Tea
Bungudi, bungudi,	African daisy	*Crassocephalum montuosum (S. Moore) Milne-Redh.*	Leaf	Vegetable
Bungudi, bungudia	Yoruba bologi/efo eburu	*Crassocephalum rubens (Juss. Ex Jacq.) S. Moore*	Leaf	Vegetable
Kikaya		*Non ident.*	Leaf	Tea
Kumpidi/kampidi	Uziza/masoro	*Piper guineense Schumach. & Thonn.*	Seeds	Spice
Mabumi, kalankonki	Corky-bark monkey orange tree	*Strychnos cocculoides L.*	Fruit	Fruit
Mahata/maata	N/A	*Landolphia lanceolata (K. Schum.) Pichon*	Fruit	Fruit
Makanzu	Cola nut/goora-nut	*Cola acuminata (Beauv.) Schtt & Endl.*	Nuts	Snacks
Malombwa	Congo rubber plant/ white rubber vine	*Landolphia owariensis P. Beauv.*	Fruit	Fruit
Mampodia	Gingembre	*Aframomum stanfieldii Hepper*	Fruit	Fruit
Mansansa ma mfinda	Madagascar cardamom	*Aframomum angustifolium*	Fruit	Fruit
Mansunja/ mansansa ma	Ginguenga	*Aframomum albo-violaceum (Ridl.) K.*	Fruit	Fruit
Londe	Yellow oleander/luckynut	*Schum*		
Matombe/mavusu	Raffia palm	*Raphia spp*	Fruit, Seve	Fruit, Wine
Mbidi	Bush candle/african olive	*Canarium schweinffurtii Engl.*	Fruit	Fruit
Mbonde/mbondi	Salacie de pynaertii	*Salacia pynaertii De Wild.*	Leaf	Vegetable
Mfumbwa	African joint fir	*Gnetum africanum Welw.*	Leaf	Vegetable
Mfungu/loengo	Anisophyllea de quang	*Anisophyllea quangensis*	Fruit	Fruit
Mitekua tekua	Bracken/eagle fern	*Pteridium aquilinum subsp. Africanum*	Shoot	Vegetable
Mpeve	Pomme africaine	*Monodora angolensis*	Seeds	Spice

Table 10: A selection of the edible plants sold in Angolan markets (continued)

Name	Common name	Scientific name	Part of the plant sold	Uses
Mungoma ngoma	Lucky bean	*Erythrina abyssinica*	Bark	Tea
Munkula	Bloodwood	*Pterocarpus angolensis DC.*		
Ngo nti, Nkosi nti	N/A	*Ochna afzelii subsp. mechowiana*		
Ba dia Ngazi	Oil palm	*Elaeis guineensis Jacq.*	Fruit, Seve	Oil and palm win
Nkasu	African walnut	*Plukenetia conophora*	Fruit	Spice
N'kizu	Water pear	*Syzygium guineense subsp. macrocarpum*	Fruit	Fruit
Nkondo, mucua	Baobab tree	*Adansonia digitata L*	Fruit, Pulp	jus
Nkuwa nkuwa, n'sanu	Ethiopian pepper	*Xylopia aethiopica*	Fruit, Seed	Spice
Nlondo,kimbiolognua,nlondo	White's ginger/tonic root/ umondi/mundi	*Mondia whitei*	Leaf, Root	Snacks, Vegetable
Nsafu	African pear	*Dacryodes edulis*	Fruit	Fruit
Nsala bakala	Dracaena du cameroun	*Dracaena camerooniana Baker*	leaf	Vegetable
Nsungi, tsongo	African breadfruit	*Treculia africana Decne.ex Trécul*	Seeds	Spice
Pepino	African horned cucumber	*Cucumis metuliferus E.Mey*	Fruit	Vegetable
Sangu sangu	Congo lemongrass.	*Cymbopogon densiflorus*	Leaf, Inflorescence	Tea
Tu menga menga	Ivory coast milkbush	*Landolphia lecomtei Dewère*	Fruit	Fruit
Wayi, mukubi	Garlic tree/divida	*Scorodophloeus zenkeri Harms*	Bark, Fruit	Spice

Source: Mawunu et al., 2020

Medicinal plants

Angola is rich in biodiversity, with **over 6,000 indigenous plant species identified** (Goyder & Goncalves, 2019). Many of these plants are used for traditional medicine by local communities, and some have been shown to have pharmacological properties that could be useful in modern medicine (Lautenschläger et al., 2018; Mawunu et al., 2016). Some of the medicinal plants widely harvested in Angola include species such as the aloe vera (*Aloe barbadensis*), wild ginger (*Siphonochilus aethiopicus*) and African wormwood (*Artemisia afra*) (Novotna et al., 2020; Pompermaier et al., 2018). These medicinal plants are primarily utilised for the treatment of gastrointestinal disorders, obstetric and gynaecological issues, and respiratory diseases (Urso et al., 2016; Lautenschläger et al., 2018). For more information on the rich diversity of medicinal plants in Angola and their uses see Text boxes 17 and 18.

Some examples of medicines that are commonly known and have key chemicals coming from Angola's medicinal plants include:

- **Artemisinin:** This is a key chemical extracted from *Artemisia annua*, a species of wormwood. It is used to treat malaria and is considered one of the most effective treatments for the disease (Matandirotya et al., 2022).
- **Aloe vera gel:** The gel from *Aloe vera* is commonly used in cosmetics and skincare products due to its moisturising and healing properties (Matandirotya et al., 2022).
- **Wild ginger** (*Siphonochilus aethiopicus)*: This plant contains various phytochemicals with anti-inflammatory and analgesic properties, which make it useful for treating conditions such as arthritis and muscle pain (Matandirotya et al., 2022).

Fibres

Fibres from the leaves of palms and other plants are used to make a variety of products, including baskets, mats, and ropes (USAID, 2010; Lautenschläger et al., 2018). These products are important for household use as well as for sale in local markets. The 'iLala' palm (*Hyphaene coriacea*) found along the southern border of Angola is the fibre of choice for basketry and other woven products (Gumbo & Chidumayo, 2010). Some of the natural fibres such *as* Caesar weed (*Urena lobata*), Burbush (*Triumfetta cordifolia*), and Pink wild pear (*Dombeya burgessiae*) are used as natural fibres for green composite materials (Senwitz et al., 2016). Although this has not fully developed it is promising as it aligns with sustainability objectives which the government of Angola aims to attain (Ibid.). No data was, however, found on the economic value of these resources.

Apiculture

Honey production in Angola has a rich history dating back to the 1950s (UNCTAD, 2018; Paixão et al., 2022). However, **production has remained traditional and artisanal**, causing it to fall behind as other countries' beekeepers transitioned to modern techniques (UNCTAD, 2018; Paixão et al., 2022). The **honey produced in Angola is mostly sold locally,** but there is also some export to neighbouring countries. Honey production is a source of income for communities, and it is also used as traditional medicine, food source and has cultural significance. **Angola is estimated to produce approx. 90 tonnes of honey annually and this could be improved to 200 tonnes with enhanced production methods (UNCTAD, 2023b)**. However, **challenges still exist in the honey sector**, including limited access to credit, modern beekeeping equipment, and markets (UNCTAD, 2020). Nonetheless, the potential for honey production and trade in Angola is significant and can contribute to the country's economic growth, biodiversity, and local food security (UNCTAD, 2023b). See Text boxes 19 and 20 for more on the potential for honey production in Angola.

Text box 17

Exploring the rich diversity of medicinal plants

Angola **is renowned for its remarkable botanical diversity, boasting more than 900 indigenous *Leguminosae* species** and positioning itself as one of the most floristically diverse countries worldwide. A study conducted in 2019 revealed that **at least 127 of the indigenous *Leguminosae* species in Angola possess medicinal properties**, with 65% of these species serving other important purposes for local populations. **However, the majority of *Leguminosae* species used for medicinal applications are non-endemic**, with only 13.4% being indigenous exclusively to Angola.

Among the *Leguminosae* species utilised for medicinal purposes, Red hot poker tree (*Erythrina abyssinica*), Camel's foot (*Bauhinia thonningii*), and Kiaat (*Pterocarpus angolensis*) stood out as the most frequently used species. Roots, leaves, and bark emerged as the predominant plant parts utilised for their medicinal benefits. These *Leguminosae* species were primarily employed in treating conditions such as skin infections, wounds and burns, intestinal problems, and respiratory diseases.

These medicinal *Leguminosae* species face potential threats such as logging and wood harvesting, the expansion of livestock farming and ranching, the collection of terrestrial plants for commercial, subsistence, or cultural motives, habitat degradation, and human disturbance. The excessive utilisation and indiscriminate collection of legumes for various purposes, including forage, food, timber, and medicinal uses, escalate the risks faced by the indigenous vegetation (Heywood, 2019). Nevertheless, the profusion of flora found in Angola signifies an immense potential for the discovery of new therapeutically valuable drugs.

Source: Catarino et al., 2019

Text box 18

The use of medicinal plants in Angola

A study to assess the anti-inflammatory activity of medicinal plants in Uíge province Angola identified a total of 32 plants which are traditionally used for treating inflammation-related disorders. The predominant plant part used for medicinal purposes was the leaf (39%), followed by roots, rhizomes, bark, fruits, and seeds. Decoction was the most common preparation method (47%). Detailed investigations focused on three leaf extracts, leading to the identification of specific compounds. Mountain thistle (*Acanthus montanus*) and Christmas bush (*Alchornea cordifolia*) stood out for their high activity across all survey areas. This study validated the traditional use of these plants for inflammation-related ailments and emphasised the need for further exploration of medicinal plants in northern Angola.

Meanwhile, in Bié province, central Angola, a separate study examined the diversity of plant species used for medicinal purposes and explored their social and cultural significance. Ten traditional healers shared their knowledge, resulting in the documentation of 87 plant species from 57 genera and 36 botanical families. The *Fabaceae* family was the most represented, followed by *Phyllanthaceae, Apocynaceae, Asteraceae, Rubiaceae, Lamiaceae, and Ochnaceae*.

Medicinal plants were typically gathered away from human settlements, as there was a belief in the higher efficacy of "wild" plants. Roots were the most commonly used plant part (79%), leading to the herbalists being referred to as "root doctors." The study confirmed the traditional use of significant medicinal species, such as Violet tree (*Securidaca longepedunculata*), Granite garcinia (*Garcinia huillensis*), Wild custard apple (*Annona stenophylla*), Pod mahogany (*Afzelia quanzensis*), and Corky-bark monkey orange (*Strychnos cocculoides*), which have also been reported for similar purposes in neighbouring countries and other parts of Africa. The research also identified locally valuable species that have not yet been investigated for their medicinal potential.

Sources: Novotna et al., 2020; Pompermaier et al., 2018

Text box 19

The potential of honey production in Angola

Angola's honey industry has untapped potential for growth and diversification, according to the government and the United Nations Conference on Trade and Development (UNCTAD). **With favourable climatic conditions and the ability to produce honey in every region, Angola's current annual honey production of 90 tonnes could easily be doubled to 200 tonnes, benefiting approx. 100,000 beekeepers**. However, one of the main challenges is obtaining international certification, as traditional production methods hinder compliance with regulatory frameworks and quality standards required for export. International certification, along with improved legislation, access to finance, and logistics, is crucial for Angola to fully utilise its honey export potential in Europe, North America, and beyond. Recognising the economic and environmental benefits of the honey sector, efforts are being made to address informality and certification issues, promote biodiversity conservation, and enhance local food security. UNCTAD has organised seminars and training sessions to improve production techniques, meet certification standards, and provide knowledge-sharing platforms for Angolan honey producers. These initiatives aim to equip local producers with the necessary skills and resources to thrive in the industry and contribute to sustainable economic development in Angola.

Sources: UNCTAD, 2018; UNCTAD, 2020

Text box 20

UNCTAD project empowers women beekeepers in Angola to create sustainable livelihoods

The United Nations Conference on Trade and Development (UNCTAD) is working with the government, researchers, farmers, and businesses in Angola to empower women through beekeeping. **The project is focused on improving the techniques and equipment of beekeepers, improving the quality of honey, and providing better access to buyers and infrastructure for processing and transporting products.** Honey is seen as a promising "green" product that can diversify exports and create new economic opportunities in rural communities. The project also aims to protect the environment and boost food security by training women farmers to care for bees. Beekeeping can empower women, diversify, and renew the industry, and give them a sense of independence as they take on leadership roles in their communities.

The UNCTAD project in Angola aims to harness the untapped potential of honey production in the country to create sustainable economic opportunities in rural communities while also promoting environmentally friendly practices. The project is a component of a larger EU-funded programme to support Angola's efforts to diversify its economy away from its reliance on oil exports.

Through the project, UNCTAD is **working to improve honey quality, and create better infrastructure for processing and transporting honey products**. Additionally, UNCTAD is particularly focused on empowering women beekeepers, who have traditionally been excluded from the industry. **Ultimately, the project aims to create a more sustainable and inclusive honey industry in Angola that can generate new economic opportunities**, protect the environment, and improve food security.

Source: UNCTAD, 2023b

Wild fruits

Angola has a wide variety of wild fruits which **are an important food source for many communities** (Baumgärtel et al., 2022; Monteiro et al., 2022). Some of the most widely consumed wild fruits in Angola include:

- **Marula (*Sclerocarya birrea*):** This fruit is rich in vitamin C and is commonly used to make jams, juices, and alcoholic beverages. The fruit pulp can also be eaten raw or cooked.
- **Baobab (*Adansonia digitata*):** The fruit of the baobab tree is high in vitamin C, calcium, and iron. It is often used to make a refreshing drink or mixed with other ingredients to make porridge or bread.
- **Mongongo nuts (*Schinziophyton rautanenii*):** These nuts are high in protein and fat and are a valuable source of nutrition in areas where other food sources are scarce. The nuts are often roasted and eaten as a snack.

Other wild fruits found in Angola include wild mangoes (*Cordyla africana*), tamarind (*Tamarindus indica*), and various types of berries (Baumgärtel et al., 2022; Baumgärtel & Lautenschläger, 2022).

The **consumption of wild fruits in Angola has both nutritional and economic benefits**. These fruits are a rich source of vitamins, minerals, and other nutrients that are important for maintaining good health (Monteiro et al., 2022). They are **also a valuable source of income for many rural communities**, who sell them in local markets or use them to make traditional food products (Baumgärtel et al., 2022). However, **the sustainability of wild fruit resources in Angola is threatened** by factors such as deforestation, land degradation, and climate change. To ensure the long-term availability of wild fruits, it is **important to implement sustainable harvesting practices and to involve**

Text box 21

Sustainable use of wild fruits

Wild fruits play an important role in the diet and income of many people in Angola. Sustainable use of wild fruits is necessary to ensure their availability and benefits in the long term. In Angola, the National Strategy and Action Plan for Biodiversity Conservation was developed in 2014 to protect and manage the country's natural resources, including wild fruits. The strategy calls for the conservation of biodiversity and sustainable use of natural resources by promoting sustainable agriculture, forestry, and fisheries, amongst others.

To sustainably use wild fruits, it is necessary to adopt practices that promote their conservation while benefiting local communities. Promoting sustainable harvesting practices by collecting fruits in a way that does not harm the trees or plants and by leaving enough fruits for wildlife and future generations. Additionally, local communities should be involved in the management and decision-making processes of wild fruit resources through adaptive co-management strategies. Adaptive co-management involves collaboration between different stakeholders to develop and implement sustainable use practices that benefit all parties involved.

Encouraging the cultivation of wild fruits and promoting their value addition can reduce the pressure on wild populations and provide economic incentives for sustainable use. Furthermore, raising awareness among communities about the importance of sustainable use of wild fruits and the negative impact of overharvesting is crucial. The promotion of sustainable wild fruit harvesting practices and the involvement of local communities in the management of wild fruit resources can help to ensure the sustainable use of wild fruits in Angola.

Sources: Baumgärtel et al., 2022; Catarino et al., 2019

local communities in conservation efforts (Baumgärtel et al., 2022; Baumgärtel & Lautenschläger, 2022). See Text box 21 on the potential use of wild fruits in Angola.

Mushrooms

Angola is home to a variety of edible mushroom species, including Oyster Mushroom (*Pleurotus ostreatus*), Termite Mushroom (*Termitomyces microcarpus*), Scaly Wood Mushroom (*Lentinus squarrosulus*), and Jelly Ear Mushroom (*Auricularia auricula-judae*) (Kissanga et al., 2022; Ndifon, 2022). The consumption of wild mushrooms in Angola is part of the traditional diet of some rural communities and has been associated with cultural and medicinal practices (although not all mushrooms currently consumed are indigenous). During the rainy season, mushrooms can be found in abundance in some parts of Angola, and it is common to see people foraging for them (Catarino et al., 2019). Mushroom collection has been documented in Angola as a source of income and food security for some households (Bastos et al., 2023; Ndifon, 2022). However, there are **concerns about overharvesting and the need for sustainable mushroom management practices**. Table 11 shows a non-exhaustive list of some of the edible mushrooms found and sold in Angolan markets.

Studies have shown that the overharvesting of mushrooms can lead to a decline in their availability and diversity, and that overharvesting practices can have an impact on the ecology of the forests where mushrooms grow (Kissanga et al., 2022; Catarino et al., 2019). It is important, therefore, to promote sustainable mushroom management practices to ensure that wild mushrooms can continue to provide a source of income and nutrition for rural communities in Angola. See Text box 22 on the potential socio-economic contribution of mushrooms in Angola.

Charcoal

The charcoal industry in sub-Saharan Africa (SSA) makes a significant economic contribution. In 2011, the charcoal industry was valued at USD 8 billion, whilst employing over seven million people (Sumba et al., 2021). It is projected that the value of the industry will surpass USD 12 billion by 2030, with a workforce of more than 12 million people (Ibid.). Although generally not an activity included in the wildlife economy due its lack of alignment with conservation objectives, it is important to note its size and contribution to survival and livelihoods in Angola.

Table 11: A selection of the edible mushrooms sold in Angolan markets

Local name	Common name	Scientific name	Edible parts
Kuete kuete, Wunkulu nkulu	Chanterelle	*Cantharellus sp.*	Hat
Mvumbu, Mvubu	Edible milkcap	*Lactarius edulis*	Hat, Stem
Nsempedia	Termite mushroom	*Termitomyces aurantiacus*	Hat, stem
Wunguvu, Unguvu, Nguvu	Giant termite mushroom	*Termitomyces titanicus*	Hat, stem
Unzenga nzenga, Nkutu bala	Jew's ear/Wood ear	*Auricularia sp.*	Hat
Nkaka matu, bukutu kutu	Cloud ear/Rough-hair-tree-jellyfish	*Auricularia cornea*	Hat
Mbala ntoto	N/A	*Termitomyces mammiformis*	Hat, stem
Unzawu, Nzawu	Bhatolian	*Termitomyces microcarpus*	Hat, stem
Ntumbudia	Nkulela/iye	*Termitomyces mammiformis*	Hat, stem

Source: Mawunu et al., 2020

Text box 22

Socio-economic importance of mushrooms in Huila, Angola

Wild edible mushrooms (WEMs) are vital non-timber forest products in Huila, Angola, playing an important role in rural subsistence, food security, and income generation. They are harvested from Miombo woodlands and sold both fresh and dried, primarily in the urban and peri-urban markets of Lubango and surrounding areas. In total, 35 mushroom vendors were identified across four markets: Mutundo, Humpata, Hoque, and Rio Nangombe, with 21 vendors interviewed during the fieldwork.

Dried mushrooms are sold year-round, typically in medium-sized dishes containing 65–120 g (average ~90 g) per unit. Prices are consistent within markets, ranging from USD 0.20 to USD 0.30 per unit. Based on these prices and typical quantities sold per unit, the equivalent price per kilogram is approx. USD 2.64 to USD 3.48 (calculated from USD 0.20–0.30 per 65–120 g). In contrast, fresh mushrooms, which are seasonally available and highly perishable, are sold in bowls or plates at fluctuating prices (USD 0.20–1.00 per unit), often reduced in the evening to avoid spoilage.

Each vendor is estimated to sell around 900 g of dried mushrooms per day, totalling approx. 31.5 kg daily across the four markets, or about 11.3 tonnes annually. Minimum daily earnings per vendor from mushroom sales reach USD 1.80, equating to a monthly income of around USD 43.20, assuming 24 sales days per month.

Source: Kissanga et al., 2022

Text box 23

Promotion of sustainable charcoal production in Angola

Angola's long-term development depends on building a sustainable charcoal sector. Charcoal is the primary energy source for most households in rural and peri-urban areas, but its traditional production methods have led to widespread deforestation, pollution, and carbon emissions. To tackle these challenges, the Government of Angola, with support from the United Nations Development Programme (UNDP) and the Global Environment Facility (GEF), launched a national project in 2016 to promote sustainable charcoal through a full value chain approach.

The project aimed to improve charcoal production using energy-efficient technologies, support community-based forest management, and strengthen national policies on sustainability. It also sought to create jobs, raise environmental awareness, and integrate gender equality into the charcoal value chain. The project was implemented in Huambo and Cuanza Sul Provinces with a total budget of over USD 23 million, including co-financing from national and international partners.

Communities were trained in improved tree harvesting techniques and reforestation. They received energy-efficient charcoal kilns, briquetting machines, and cookstoves, which helped reduce wood use and smoke exposure. The project supported women's participation through targeted training and a gender action plan, ensuring that women benefited from income-generating activities and technical knowledge.

By the time the project concluded in 2023, it had reached more than 100,000 people. It established local forest committees, planted thousands of trees, and improved livelihoods in targeted areas. A national strategy for sustainable charcoal was also developed. However, some expected results were not fully achieved. For example, the planned certification system for sustainable charcoal was not operational by the project's end, and government co-financing fell short of commitments. The final evaluation rated the project as moderately satisfactory and highlighted the need for stronger institutional leadership and a clear post-project plan.

Although some goals remain unmet, the project built an important foundation. It increased awareness, introduced better technologies, and demonstrated how sustainable charcoal can contribute to rural development and environmental protection. The next step is to fully implement the national strategy and ensure that institutions are equipped to continue supporting sustainable practices.

Sources: UNDP, 2016; UNDP, 2023

Text box 24

Government regulations of charcoal production in Angola

To improve forest management in Angola, the government has established regulations and quotas for charcoal production, logging, and firewood production. According to Executive Decree Nº. 277/18 of the Ministry of Agriculture and Forestry, the licensed charcoal production during the 2018 Forest Harvest Season was set at 41,750 tonnes. This production limit was divided into 34,250 tonnes from natural forests and 7,500 tonnes from planted forests. Additionally, logging activities were restricted to 259,853 m^3 in natural forests and 48,500 m^3 in planted forests, resulting in a total quota of 308,353 m^3.

During the 2018 season, the decree assigned the largest logging quotas to the provinces of Uíge (over 60,000 m^3), Cabinda (51,820 m^3), and Bengo (28 m^3), which collectively account for more than half of the permitted quantity. In terms of charcoal production, the province of Huambo has the highest share, with 11,000 tonnes (5,000 tonnes from natural sources and 6,000 tonnes from planted sources), followed by Cuanza Sul with 6,100 tonnes, Bengo with 5,000 tonnes, Uíge with 9.53 tonnes, and Cuanza Norte with 6.4 tonnes.

Source: NDB, 2019

Charcoal production is a significant economic activity in Angola, with an estimated 80% of the population relying on charcoal (Sumba et al., 2021)**.** However, the preferred tree species for charcoal production are scarce and fruit trees are now being used to produce charcoal (Ibid.).

The expanding charcoal market in Angola presents both opportunities and challenges for charcoal farmers (e.g., in Capato). However, the charcoal industry is predominantly informal, leading to inadequate management of natural resources (Cabral et al., 2011; Chiteculo et al., 2018). Conserving this valuable resource and the associated livelihoods has become a top priority for Angola. **Efforts are being made to promote sustainable charcoal production practices across Angola.** The United Nations Development Programme (UNDP), with the Global Environmental Fund, Angolan Ministry of Environment, universities, and civil society, have started training local communities in sustainable tree harvesting, reforestation, and gender equality (UNDP, 2016). More about efforts to promote sustainable charcoal production in Angola is discussed in Text boxes 23 and 24.

Edible insects

The **consumption of edible insects is a traditional practice that has been carried out by various ethnic groups for generations in Angola** (Hlongwane et al., 2020; Lautenschläger et al., 2017a). Some of the most commonly consumed edible insects in Angola include mopane worms *(Gonimbrasia belina*), flying ants (*Pseudacteon spp.*), termites (*Macrotermes spp*.), grasshoppers (*Locusta migratoria*), and caterpillar (*Imbrasia epimethea*) (Hlongwane et al., 2020; Matandirotya et al., 2022). Table 12 shows a non-exhaustive list of edible animals, including insects, found and sold in Angolan markets. Some of those listed in Table 12 are from neighbouring countries such as Democratic Republic of Congo (DRC) (Mawunu et al., 2020).

In many regions around the world, insects are consumed in various forms as emergency food, as a staple food, or even as delicacies (Hlongwane et al., 2020; Matandirotya et al., 2022). However, **in Angola, approximately 85-90% of the rural population relies heavily on subsistence farming, hunting, and gathering of natural resources, including insects** (Lautenschläger et al., 2017b). Insects play a crucial role in supporting the livelihoods of forest-dependent communities in Angola, providing an important source of nutrients such as protein, vitamins, minerals, iron, and B-vitamins (Lautenschläger et al., 2017b; Mawunu et al., 2020). This reliance on insects as a source of sustenance reflects the limited access to alternative food sources for these communities (Hlongwane et al., 2020 Lautenschläger et al., 2017b).

In local markets, insects are regularly sold as a commodity. In Uíge Province, for example, the larvae of *I. epimethea* are relatively common (Lautenschläger et al., 2017a). After preparation, smaller quantities of these larvae are dried for storage and subsequently sold in local markets (Ibid.). Unlike other species, such as Pallid Emperor Moth (*Cirina forda)*, which can be found in the market throughout the year, until the new season begins the availability of larvae from *I. epimethea* is limited to a specific season and in 2015 the prices for these larvae ranged between USD 0.5 and USD 1 per 100 g (Lautenschläger et al., 2017a).

The diversity of forest products in Angola provides numerous opportunities in terms of the value chains and the related employment. Information on the value of forest products was, however, found to be inconsistent and in most cases non-existent. It is important to ensure that this data is collected in order to have a better understanding of the value of forests and the related forest products in terms of revenues and employment, as well as in terms of ensuring the long-term sustainability of the forest resources.

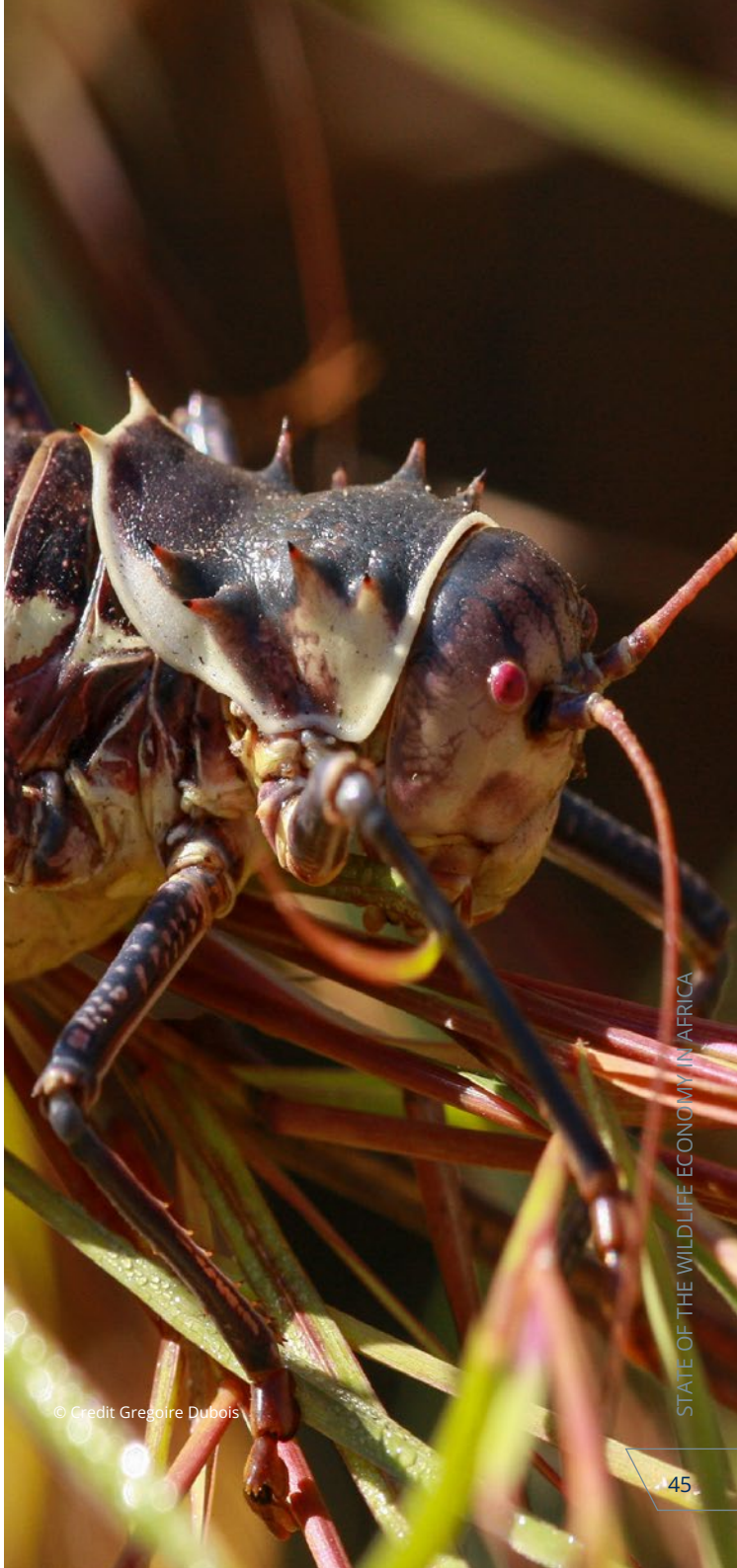

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Table 12: Some of the edible wild animals sold in Angolan markets

Local Name	Common Name	Scientific Name
Cacusso/tilapia	N/A	*Tilapia sp.*
Kamba	Eel Catfish	*Chanallabes apus*
Kimpiti	Chestnut-Backed Duiker	*Cephalophus castaneus*
Kusu	Griselda's Striped Grass Mouse	*Lemniscomys griselda*
Lunsua	Macrotermes Subhyalinus (Rambur, 1842)	*Macrotermes subhyalinus*
Mansende	Emperor Moth	*Gonimbrasia (Nudaurelia) dione*
Mansende	African Emperor Moth	*Imbrasia obscura*
Mbala	Common Genet	*Genetta genetta felina*
Mbende	Striated Grass-Mouse	*Lemniscomys striatus*
Mboma	Central African Rock Python	*Python sebae*
Nzimbula	West African Honey Bee	*Apis mellifera adansonii*
Mfuenge	Large-Spotted Genet	*Genetta tigrina*
Mfulu tutu	Forest Hingeback Tortoise	*Kinixys erosa*
Milenda	N/A	*Sciatta inconcisa*
Minzundu/Minzunzu	Banded Peacock Moth	*Anaphe panda*
Mpakasa	African Forest Buffalo	*Syncerus caffer nanus*
Mumfungua		*Non ident.*
Munguela	Giant African Moth	*Imbrasia epimethea*
Mungusu	African Snakehead	*Parachanna obscura*
N'kanka	Red-Tailed Squirrel	*Funisciurius pyrrhopus*
Ngandu	Nile Crocodile	*Crocodylus niloticus*
Ngola	Angolan Walking Catfish.	*Clarias angolensis*
Ngone		*Non ident.*
Ngulu a mfuta	Red River Hog	*Potamochoerus porcus*
Ngulu a nzimba	Cape Porcupine	*Hystrix africaeaustralis*
Ngumbe	African Spurfowl	*Fracolinus afer*
Nkaka	Tree Pangolin.	*Phataginus tricuspis*
Nkayi	Bushbuck	*Tragelaphus scriptus*
Nkelele	Helmeted Guineafowl	*Nimida meleagris*
Nkima	Red-Tailed Monkey	*Cercopithecus ascanius*
Nkuati	Pallid Emperor Moth/Shea Defoliator	*Cirina forda*
Nkumbi	Pallid Emperor Moth/Shea Defoliator	*Cirina forda*
Nkumbi	Southern Giant Pouched Rat	*Cricetomys ansorgei*
Nlumba a londe	Hares	*Lepus sp.*
Nsekele	African Brush-Tailed Porcupine	*Atherurus africanus*
Nsengui, mbambi	Nile Monitor	*Varanus niloticus*
Nsesi	Blue Duiker.	*Cephalopus monticola*
Nsizi, cambuige	Greater Cane Rat	*Thryonomys swinderianus*
Nsombe	African Palm Weevil	*Rhynchophorus phoenicis*
Ntoto	Banded Mongoose	*Mungos mungo*
N'vanda, Mvudi		*Non ident.*
Nzenze	Tobacco Cricket	*Brachytrupes membraceus*
Nzima, kombe	African Civet	*Civettictis civetta*
Nzombo	Slender Lungfish	*Protopterus dolloi*
Nzonzi	Barbus Barbus	*Enteromius sp.*
Seke	Sparrow	*Passer spp.*

Source: Mawunu et al., 2020

The carbon market

Angola's **greenhouse gas (GHG) emissions totalled 67.7 million metric tonnes of carbon dioxide equivalent ($MtCO_2e$) in 2023, representing approx. 0.13% of global GHG emissions** (World Bank, 2023). This represents an increase of approximately 112% from 1990 levels, when Angola's emissions were approx. 31.9 $MtCO_2e$ (Ibid.). Overall, Angola's annual GHG emissions are relatively low compared to many other countries, and the **country's per capita emissions (1.8 tonnes of CO_2 in 2023) are among the lowest in the world** (World Bank, 2023).

Angola is not currently known to have an active carbon market. Carbon markets are typically established as part of a country's efforts to reduce its greenhouse gas emissions, and Angola has not yet set any specific emissions reduction targets or implemented policies to support carbon markets (NDB, 2019; GoA, 2021). Although no carbon markets exist, Angola has shown some interest in developing its renewable energy sector, which could potentially lead to the establishment of a carbon market in the future (GoA, 2011; NDB, 2019).

The country has been participating in the UN-backed REDD+ programme, which aims to create financial incentives for developing countries to reduce their greenhouse gas emissions from deforestation and forest degradation (World Bank, 2019; FAO, 2020b). REDD+ projects in Angola focus on the conservation and sustainable management of the country's forested areas, which are an important carbon sink and also provide vital ecosystem services.

One example of a REDD+ project in Angola is the Maiombe Forest Carbon Project, which is located in the Cabinda Province in the north of the country. The project aims to reduce emissions from deforestation and forest degradation, while also promoting sustainable forest management and supporting the livelihoods of local communities (NDB 2019). The project is expected to **reduce emissions by an estimated 5.5 million tonnes of CO_2 over the course of 20 years** (NDB, 2019). **Another REDD+ project in Angola is the Canjombe Community Ecosystem Services** in the Kwanza Sul Province (ID-RECCO, undated). The project seeks to reduce greenhouse gas emissions by facilitating sustainable forest management through a Payment for Ecosystem Services (PES) scheme (Ibid.). Project activities include developing a Community Forest Management Plan, introducing improved kilns for charcoal production, planting native firewood species, and promoting agroforestry and beekeeping to support local livelihoods (ID-RECCO, undated). Although the project submitted a Plan Vivo certification proposal in 2014, by September 2020 it had not yet achieved certification (Ibid.).

It is worth noting that while there are REDD+ projects in Angola, the country's participation in the programme is still in its early stages, and much work remains to be done to develop the necessary institutional and legal frameworks to support REDD+ implementation (NDB, 2019). Angola has good preconditions and hydrocarbon reserves from well-characterised sedimentary basins that present ideal opportunities for carbon dioxide storage as per the Clean Air Task Force (de Sousa, 2021).

Opportunities and challenges in terms of the wildlife economy

Challenges

- **Poaching and illegal wildlife trade:** Poaching and the illegal wildlife trade are major challenges in Angola. The country's wildlife resources are threatened by poachers who hunt animals for their meat, skins, and other body parts, which are sold illegally. This illegal trade is not only a threat to wildlife but also to the communities that rely on these resources for their livelihoods.
- **Lack of infrastructure:** Angola's wildlife economy faces challenges due to a lack of infrastructure. Many wildlife reserves and parks are difficult to access due to poor roads and transportation systems. This makes it challenging to manage and monitor wildlife populations and to attract tourists.
- **Limited funding**: Angola's conservation efforts, and wildlife management programmes are hindered by limited funding. The government should promote the existence of public–private partnerships similar to what was done with African Parks. These partnerships have the potential to improve wildlife management, develop infrastructure and promote tourism in Angola.
- **Lack of awareness**: There is a lack of awareness about the importance of wildlife conservation and the wildlife economy in Angola. Many people are not aware of the value of wildlife and how it contributes to the economy and to conservation. Public awareness campaigns and education programmes can help increase awareness about the importance of protecting wildlife and its habitats.
- **Inadequate legislation:** Angola's legal framework for wildlife conservation and management is inadequate. Existing gaps may impede the ability to address issues such as illegal wildlife trade, habitat destruction, and unsustainable practices as well as to unlock and grow the wildlife economy sustainably.
- **Lack of capacity:** Angola's wildlife management institutions lack the necessary resources and capacity to manage and conserve wildlife populations effectively. There is a need for capacity building to ensure more trained personnel, and there is also a need for more equipment and infrastructure to carry out their work. Capacity building is also required in terms of wildlife economy activities and growing the local multipliers and value chains related to these.
- **Climate change:** Climate change is a significant challenge facing the wildlife economy in Angola. It can alter the distribution and abundance of wildlife species and exacerbate existing threats such as habitat loss and degradation. Climate change mitigation and adaptation measures are necessary to ensure the long-term viability of Angola's wildlife resources.
- **Scientific research and data collection:** Scientific research is crucial for evaluating the status of wildlife resources. This knowledge serves as a valuable tool for conservation efforts, enabling informed decision-making and promoting the long-term sustainability of the wildlife economy in the country.
- **Poor investment enabling environment:** Angola faces significant challenges in creating an enabling environment for investment. The country ranks poorly (in regards to WEII) on the continent in terms of access to financial resources, which reflects limited availability of funding and financial services for businesses and investors. Moreso, Angola's infrastructure development and modernisation remain underdeveloped, indicating the urgent need for robust investments in transport, energy, and digital infrastructure. These factors collectively hinder the country's ability to attract and sustain both domestic and foreign investment.

Opportunities

- **Ecotourism:** Angola has a unique and diverse wildlife population that can attract tourists interested in ecotourism. Ecotourism can generate significant revenue for the country, creating jobs and boosting the local economy, directly as well as through the related multipliers and value chains associated with ecotourism. It can also encourage the conservation of wildlife habitats, as conserving natural areas is essential for attracting ecotourists.
- **Sustainable use of wildlife resources:** Angola can benefit from promoting the sustainable use of its wildlife resources. Presently, local communities can hunt and fish for subsistence or commercial purposes legally and illegally. This provides a source of income but might be detrimental to wildlife populations, as well as benefitting only a limited number of people. Promoting sustainable hunting and fishing can help unlock the value chain of the wildlife trade whilst controlling illegal wildlife trade of bushmeat in the country.
- **Conservation:** The wildlife economy in Angola can provide an opportunity for the country to protect and conserve its natural resources. The economic value of wildlife resources can provide an incentive for local communities and the government to protect these resources and prevent illegal use, as well as to encourage investment in conservation to protect the asset base of the wildlife economy. Conservation efforts can also help protect endangered species and their habitats.
- **Employment opportunities**: The development of the wildlife economy in Angola can create employment opportunities for people living in rural areas. Ecotourism, hunting, wildlife ranching, forest products and fishing, as well as the related value chains, can generate jobs in local communities, reducing the need for people to move to urban areas in search of work, as well as providing much needed income.
- **Diversification of the economy**: Angola's economy is heavily reliant on oil exports and diversification is necessary to ensure the country's long-term economic stability. Developing and growing the wildlife economy can provide a diversified, more sustainable, source of income for the country and help reduce its dependence on oil exports.
- **Improve access to finance**: Angola can enhance its access to finance for wildlife economy investments by establishing a dedicated financial mechanism in collaboration with international donors. Incentives for financial institutions, such as tax breaks and reduced regulatory burdens, should be introduced to encourage investments in wildlife-related projects. Additionally, the government should establish public-private partnerships and leverage available international funding to further diversify funding sources and promote sustainable development in Angola's wildlife economy.

Conclusion

Angola's wildlife economy holds vast potential to support sustainable development, enhance biodiversity conservation, and improve livelihoods, particularly in rural communities. With an abundance of natural assets including diverse ecosystems, a rich biodiversity and extensive forest cover the country is well-positioned to harness nature-based sectors such as ecotourism, fisheries, forest products, wildlife trade, and emerging markets such as carbon finance, wildlife ranching and aquaculture. While Angola has made commendable progress in establishing policy frameworks and investing in infrastructure to support these sectors, several systemic challenges persist. These include weak enforcement of conservation laws, limited investment in community-based natural resource management (CBNRM), inadequate infrastructure, overutilisation of resources, and insufficient data to inform decision-making and investment. Additionally, Angola ranks in the lower third on the Wildlife Economy Investment Index (WEII), highlighting the **need to strengthen institutional capacity, improve governance, and create a more enabling environment for both domestic and foreign investment**.

Nonetheless, promising initiatives such as the country's collaboration with African Parks, support for small-scale fishers, and growing interest from the private sector in ecotourism and aquaculture signal a growing recognition of the wildlife economy as a viable pathway for economic diversification and conservation. **If effectively supported through improved data collection, inclusive policy implementation, community engagement, and strategic partnerships, Angola's wildlife economy can significantly contribute to its national development goals and conservation priorities.**

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