State of the **Wildlife Economy** in Africa

Case Study: Malawi

ALU SCHOOL OF WILDLIFE CONSERVATION

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Thank you to all those who donated photographs for this report. Please see the credits on the photographs for details.

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Map
Claudia Capitani, BIOPAMA

Design
Mary-Anne van der Byl

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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

ACMI - Africa Carbon Markets Initiative

AfES - Action for Environmental Sustainability

AFIDEP - African Institute for Development Policy

AFR100 - African Forest Landscape Restoration Initiative

AFT - Agroforestry Fuelwood Technology

ALU - African Leadership University

AWFISHNET - African Women Fish Processors and Traders Network

BIOPAMA - Biodiversity and Protected Areas Management

BMZ - German Federal Ministry for Economic Cooperation and Development

BVC - Beach Village Committees

CASA - Commercial Agriculture for Smallholders and Agribusiness

CBNRM - Community-based Natural Resource Management

CCA - Community Conservation Area

CCC - Copenhagen Consensus Center

CITES - Convention on International Trade in Endangered Species of Wild Fauna and Flora

CLN - Community Leaders Network

CO_2 - Carbon dioxide

COMACO - Community Markets for Conservation

COP - Conference of the Parties to the United Nations Framework Convention on Climate Change

COVID-19 - Coronavirus Disease 2019

DNPW - Department of National Parks and Wildlife

DoF - Department of Fisheries

DoT - Department of Tourism

EDF - Export Development Fund

EMA - Environment Management Act

EUR - Euro

FAO - Food and Agriculture Organization of the United Nations

FMNR - Farmer-Managed Natural Regeneration

FRL - Forest Reference Level

GDP - Gross Domestic Product

GEF - Global Environment Facility

GIZ - German Corporation for International Cooperation

ICFA - International Crocodilian Farmers Association

IFAW - International Fund for Animal Welfare

ITA - International Trade Administration

IUCN - International Union for Conservation of Nature

IUCN ESARO - International Union for Conservation of Nature Eastern and Southern Africa Regional Office

KBA - Key Biodiversity Area

KfW - Kreditanstalt für Wiederaufbau

LUANAR - Lilongwe University of Agriculture and Natural Resources

LWT - Lilongwe Wildlife Trust

MEPA - Malawi Environmental Protection Authority

MGDS - Malawi Growth and Development Strategy

MK - Malawian kwacha

MNREM - Ministry of Natural Resources, Energy and Mining

MRP - Malawi REDD+ Program

MT - Metric Tonne

NAWIRA - Nkhotakota Wildlife Reserve Association

NCST - National Commission for Science and Technology

NDC - Nationally Determined Contributions

NFMS - National Forest Monitoring System

NGO - Non-governmental Organisation

NPC - National Planning Commission

NTFP - Non-timber Forest Products

NVA - Nyika-Vwaza Association

PAC - Problem Animal Control

PES - Payment for Ecosystem Services

PPP - Public-private Partnerships

REDD+ - Reducing Emissions from Deforestation and forest Degradation (plus, the sustainable management of forests, and the conservation and enhancement of forest carbon stocks)

SADC - Southern African Development Community

SOWC - School of Wildlife Conservation

TFCA - Transfrontier Conservation Area

UNDP - United Nations Development Programme

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

UNESCO - United Nations Educational, Scientific and Cultural Organization

USAID - United States Agency for International Development

USD - United States Dollar

VER - Verified Emission Reductions

VNU - Verifiable Nature Units

WEII - Wildlife Economy Investment Index

WESM - Wildlife and Environmental Society of Malawi

WTTC - World Travel & Tourism Council

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, attempt was 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.

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.

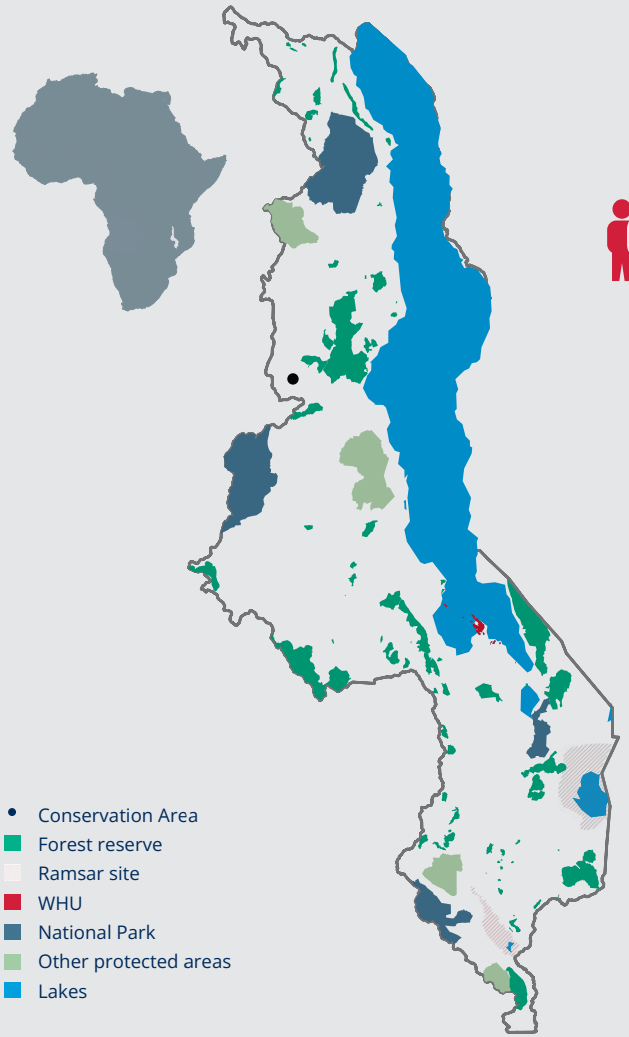
Where possible, future research aims to conduct more primary research and data collection. Currency amounts have been converted to USD for comparison purposes, with the local currency amount still included, using the average annual USD rate for the year of the data. Some graphs and tables have, however, 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 Malawi.

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.

MALAWI



Socio-economic/ governance

GDP per capita (USD)
602.3

Gini coefficient
38.5

Transparency International Corruption Perceptions Index
Ranked 107th
out of 180 countries

Total population
21.7 million

Mo Ibrahim Governance Index
Scored 55.2
out of 100

Mo Ibrahim Governance Index
Ranked 19th
out of 54 countries

Protected areas

27,374 km² total terrestrial protected area

116 protected areas

2 UNESCO-MAB Biosphere Reserves

79 forest reserves

4 wildlife reserves

2 Ramsar Sites

5 national parks

Species numbers

192 mammal species

650 bird species

145 reptile species

1,000 fish species

Sources: Government of Malawi, 2019; IUCN ESARO, 2024; Mo Ibrahim Foundation, 2025; Transparency International, 2025; World Bank, 2024a

Overview of the wildlife economy in Malawi

Forest products

- Non-timber forest products (NTFPs) such as thatch grass, mushrooms, fruits and edible insects are used by nearly all rural households in some regions, with NTFP sales generating up to USD 456 per household annually.
- Medicinal plants are economically valuable and culturally important, with traders in southern Malawi selling over 100 species.
- In Nsanje district, local communities earn up to USD 200 annually from selling Calumba (*Jateorhiza palmata*), showing the cross-border market potential of medicinal plants.
- Cooperative models in baobab (*Adansonia digitata*) collection have increased household income from baobab sales by 3.6%, contributing 26-34% of household income depending on cooperative membership.

Wildlife trade

- Malawi exported 109,397 CITES-listed specimens between 2012 and 2022, 54 times more than it imported (2,043 specimens) during the same period.
- Commercial trade accounted for 94.6% of Malawi's wildlife exports, with Nile crocodile (*Crocodylus niloticus*) products comprising 87.4% of total commercial exports (103,472 specimens).
- The Republic of Korea was the largest importer of Malawi's Nile crocodile products, receiving 31,389 specimens (30.3% of total commercial exports), followed by Italy and South Africa.

Carbon finance

- Malawi has the potential to generate up to 20 million metric tonnes of carbon credits annually, valued at approx. USD 600 million, by leveraging over 2 million hectares of land under forest and wildlife conservation.
- The Kulera Landscape REDD+ Programme covers 162,632 hectares of forest across three protected areas and aims to reduce 7.2 million tonnes of CO_2 over 30 years while supporting 65,000 households with sustainable livelihoods.

Hunting

- Bushmeat hunting remains widespread in Malawi with, in some areas, up to 39% of households consuming bushmeat, driven by food insecurity and lack of alternatives.
- A study of 250 households around four protected areas found that micro-enterprise and skills training were the most preferred interventions to reduce reliance on bushmeat hunting.

Wildlife ranching

- Game farming and ranching licences in Malawi are restricted to citizens or residents, with game farming allowing both domestic and wild species and game ranching limited to wild species only.
- Crocodile skin production in Malawi has economic potential for growth, especially in the international exotic leather market.

Fisheries

- Fisheries contribute 4–7% to Malawi's GDP, supporting approx. 10% of the population through direct and indirect employment in fishing and related value chains.
- Lake Malombe contributes USD 124 million annually in ecosystem services, 1.97% to Malawi's GDP, with fisheries alone valued at USD 35.35 million.
- Artisanal fisheries account for over 90% of Malawi's fish catch, but face serious sustainability threats from illegal nets, overfishing, and environmental degradation.
- Aquaculture produces only 5.2% of total fish but is growing rapidly. Small-scale farms are 81.5% profitable, yet only 6.2% have access to credit.
- Women make up 40% of the small-scale fisheries workforce and 80% of post-harvest workers.

Tourism

- Tourism in Malawi is closely linked to its natural heritage, with wildlife and landscape-based activities driving the majority of international leisure travel.
- In 2019, total travel and tourism contributed approx. 5.4% to GDP, and despite the pandemic-related decline, the sector recovered to the same share of GDP in 2024.
- International tourist arrivals were 708,000 in 2022 and were projected to exceed 1 million in 2024.
- In 2023, tourism directly supported 215,307 jobs, while total employment from the sector stood at over 596,000 jobs (7.7% of national employment).
- Protected areas such as Majete and Liwonde collectively generated over USD 1.5 million in tourism revenue in 2024.

Sources: African Parks, 2025; Banda & Tchereni, 2024; CCC, 2021; CITES, 2024; EC, 2024; EDF, 2024; Guta et al., 2016; Helppi et al., 2023; ITA, 2023; Kulera Landscape, 2013; Mahonya et al., 2019; Makwinja et al., 2021; Masauli, 2023; Maravi Express, 2024; Meke et al., 2016; Munthali et al., 2024; Munthali, 2021; National Parks and Wildlife Act, 2017; NPC, 2021; NSO, 2021; Olumeh & Mithöfer, 2024; Republic of Malawi, 2021; Stankova, 2023; Torell et al., 2021; Tran et al., 2022; World Bank, 2024a; van Velden et al., 2020; WTTC, 2024

Key messages

- Malawi has exceptional biodiversity, including over 1,000 fish species (600+ endemic to Lake Malawi) and diverse flora and fauna, offering a strong foundation for wildlife-based economic activities.
- Malawi's wildlife economy, however, faces key constraints, including limited infrastructure, weak data systems, underfunded conservation, and policy gaps that hinder private investment and sector expansion.
- Ecotourism is a major contributor to the wildlife economy, with protected areas such as Liwonde, Majete, and Nkhotakota generating revenue, creating jobs, and supporting community development through public-private partnerships.
- Fish stocks in Malawi are declining due to overfishing, widespread use of illegal gear, and environmental degradation, posing serious risks to sustainability. While aquaculture is expanding and profitable for smallholders, its growth is constrained by limited access to quality inputs, finance, and infrastructure.
- Community-based natural resource management (CBNRM) is legally recognised in Malawi through co-management agreements and a 25% revenue-sharing model for national parks and wildlife reserves. However, implementation remains weak due to power imbalances, unclear user rights, and limited local capacity, resulting in uneven benefits that require scaling and strengthening.
- Forest products, including non-timber goods such as honey, baobab, and medicinal plants, are essential for rural livelihoods and offer strong potential for value addition and sustainable enterprise development.
- Carbon initiatives such as REDD+ and the Malawi Carbon Market Framework present emerging opportunities to generate revenue and support conservation, but require capacity building, improved stakeholder alignment, transparency and benefit-sharing mechanisms.

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Introduction to the natural resources and biodiversity in Malawi

Malawi, often called the "warm heart of Africa," is a landlocked country in southern Africa that spreads across the Great Rift Valley along the western banks of Lake Malawi (known as Lake Nyasa in Tanzania). It shares borders with Zambia to the west, Tanzania to the north, and Mozambique to the east and south. **Malawi is known for its picturesque landscapes, including Lake Malawi, highlands, wildlife reserves, and central plateaus** (FAO, 2006). **In addition to its scenic beauty, Malawi is endowed with a variety of natural resources, including agricultural potential, mineral resources, forest cover, diverse wildlife, and opportunities for renewable energy development** (African Development Bank, 2025).

Malawi hosts rich biodiversity, including over 6,000 flowering plant species (122 of which are endemic), 83 amphibian species (6 of which are endemic), 145 reptile species (12 of which are endemic), 650 bird species (4 of which are endemic), and over 1,000 fish species (over 750 are endemic) (Government of Malawi, 2019; IUCN ESARO, 2024). Among these, **Lake Malawi's cichlids (*Cichlidae*) stand out for their remarkable diversity and endemism**, with over 600 species found only in the lake (Blue Planet Aquarium, 2020). These freshwater fish display a wide range of colours, sizes and behaviours, having evolved to occupy nearly every ecological niche in the Lake (Blue Planet Aquarium, undated). Their unique traits and high rate of speciation make them important both for biodiversity and scientific research (Blue Planet Aquarium, 2020).

Malawi's high population density, particularly around protected area boundaries, places many ecosystems under pressure (IUCN ESARO, 2024). The Government of Malawi has partnered with the private sector to support conservation and development, with the African Parks Network expanding its management from Majete Wildlife Reserve in 2003 to include Liwonde National Park and Nkhotakota Wildlife Reserve in 2015, and Mangochi Forest Reserve in 2018 (African Parks, 2023a; African Parks, 2024; African Parks, 2025). Text box 1 highlights how African Parks has contributed to biodiversity recovery, job creation and community development across the country's three longest-standing co-managed areas. Additionally, Malawi has several protected areas that form part of the Malawi-Zambia Transboundary Conservation Area, supporting regional conservation efforts (see Text box 2). Table 1 includes Malawi's national parks and wildlife reserves and their important features.

Text box 1

African Parks in Malawi

Since 2003, African Parks has partnered with the Malawi Department of National Parks and Wildlife (DNPW) to rehabilitate and manage three key protected areas: **Majete Wildlife Reserve**, **Liwonde National Park with Mangochi Forest Reserve**, and **Nkhotakota Wildlife Reserve**. Together, these areas protect over **3,400 km²** of biodiversity-rich land and demonstrate how conservation can improve livelihoods, strengthen economies and restore wildlife populations.

Majete Wildlife Reserve

Once an empty forest, Majete is now one of Malawi's top conservation and tourism destinations. Over **3,000 animals** (17 different species) have been reintroduced since 2003, and the **2024 aerial census recorded 12,400 large herbivores**. Majete remains Malawi's only reserve with no rhino (*Diceros bicornis*) or elephant (*Loxodonta africana*) poaching since reintroduction. In 2024, Majete pioneered **Verifiable Nature Units (VNUs)**, an innovative conservation finance tool developed with The Landbanking Group. VNUs measure ecological integrity, with each unit representing 1 km² of nature maintained or improved over time, enabling conservation outcomes to be financially recognised and supported. By the end of 2024, **202 VNUs** had been issued to help sustain biodiversity protection and long-term ecosystem management.

Community engagement reached nearly **47,000 people** in 2024, with more than **1,200 locals** benefiting directly from enterprise projects such as beekeeping, elephant dung paper, fish farming and poultry clubs. Over **45,000 people** accessed health care through park-supported clinics, and **23,000 trees** were planted by communities.

Liwonde National Park & Mangochi Forest Reserve

Under African Parks management since 2015 and 2018, Liwonde and Mangochi have become biodiversity havens, with cheetah (*Acinonyx jubatus*), black rhino (*Diceros bicornis*) and wild dog (*Lycaon pictus*) successfully reintroduced. In 2024, **12,000 animals** were counted during the aerial census. A new wild dog pack was released, and some black rhino were tagged for improved monitoring.

Education remains a key priority. In 2024, **3,499 learners and 509 adults** took part in conservation education programmes at the revamped Environmental Education Centre. **94 schools** were supported, and **95 scholarships** awarded. Community initiatives reached over **16,000 children** through literacy programmes, while 240 people benefited from irrigation schemes and **668 beekeepers** harvested honey. The Spicy Farmers, a sustainable livelihood initiative in which communities grow chillies along 'chilli elephant barriers' to deter crop-raiding elephants, earned over **USD 17,000**, benefiting more than 170 farmers. Tourism revenue reached **USD 645,826 in 2024**, a slight increase from **USD 626,478 in 2023**, reflecting continued growth in the park's visitor economy.

Nkhotakota Wildlife Reserve

Once depleted by poaching, Nkhotakota is now Malawi's largest and most ecologically restored reserve. Since 2015, nearly **3,300 animals** have been reintroduced. In 2024, the Reserve was nominated as a **Key Biodiversity Area**, following the discovery of **70+ new insect species** during a landmark entomology survey. Elephant (*Loxodonta africana*), eland (*Taurotragus oryx*), and kudu (*Tragelaphus strepsiceros*) populations continue to grow, and **collar tracking expanded** for species monitoring.

Community development remains strong. Over **1,500 people** earned income from sustainable enterprises, including **4,012 kg of honey** harvested by 19 beekeeping clubs. A total of **127 scholarships** were awarded, and **12,627 learners** participated in environmental education. New infrastructure includes **15 overnight ranger stations** and **75 km of Kenya-style fencing**, helping to reduce illegal incursions.

Together, **these three parks demonstrate how long-term conservation partnerships can reverse environmental degradation, create jobs, support education, and generate significant income for both government and communities**. Malawi's model is now one of the most successful examples of park restoration and community benefit in southern Africa.

Sources: African Parks, 2023a; African Parks, 2024; African Parks, 2025

Text box 2

Malawi-Zambia Transfrontier Conservation Area

The Malawi-Zambia Transfrontier Conservation Area (TFCA) spans over 32,000 km² and represents one of southern Africa's most ecologically and culturally diverse conservation landscapes. Its formal establishment began in 2004 with the signing of a memorandum of understanding between Malawi and Zambia, culminating in a bilateral treaty in 2015. The TFCA comprises two major components: the Nyika-North Luangwa and Vwaza/Lundazi area in the north, and the Kasungu/Lukusuzi landscape in the south.

The Nyika-North Luangwa component is anchored by Malawi's Nyika National Park and Vwaza Marsh Wildlife Reserve, and Zambia's North Luangwa National Park and several forest reserves. This highland region features montane grasslands, evergreen forests and rich biodiversity, including over 100 mammal species and the world's largest breeding population of blue swallows (*Hirundo atrocaerulea*). It also supports significant rewilding and anti-poaching efforts, including the reintroduction of black rhino (*Diceros bicornis*) to North Luangwa.

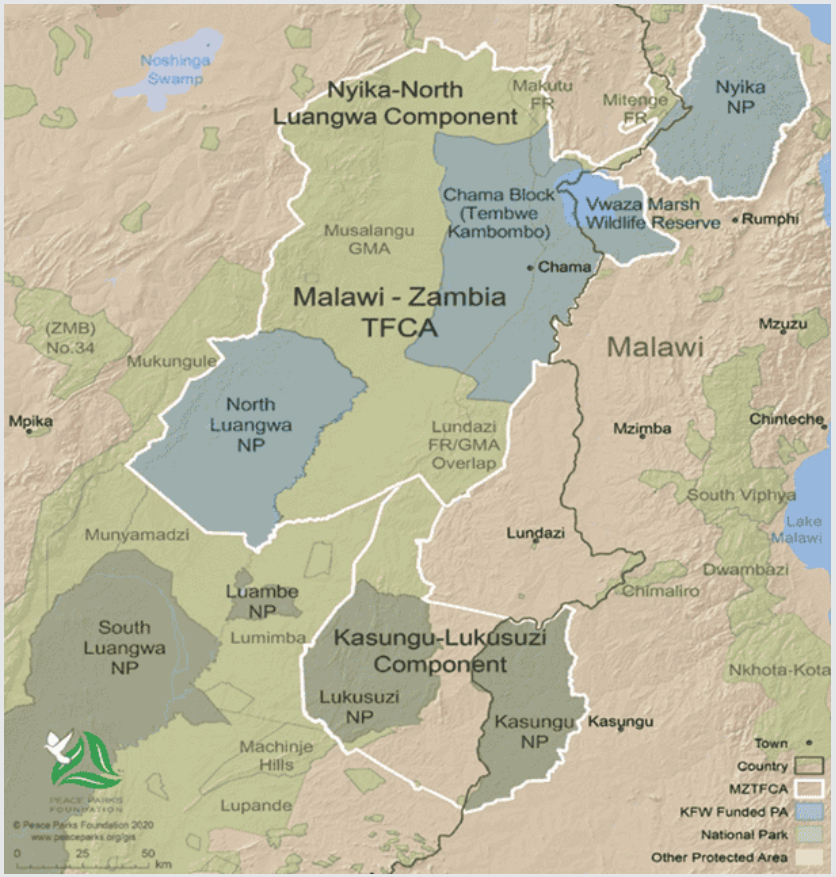
The southern Kasungu/Lukusuzi component includes Malawi's Kasungu National Park and Zambia's Lukusuzi National Park. It protects the largest contiguous expanse of intact miombo woodland in the Central Zambezian region. Both components also safeguard cultural heritage sites, such as ancient rock paintings and Iron Age smelting sites.

Communities within the TFCA engage primarily in smallholder farming on customary land. Human-wildlife conflict and access to natural resources are ongoing challenges. However, efforts are underway to improve coexistence and increase community benefits. These include solar-powered fencing, resource-use zones within protected areas, and a new potable water scheme that will serve tens of thousands of residents. In 2023 alone, over 2,700 community members participated in resource harvesting, generating approx. USD 13,600 in economic value and helping strengthen local ownership of conservation efforts.

Joint governance is central to the TFCA's success. The Nyika-Vwaza component now operates under a co-management agreement that was signed in 2023 between the Government of Malawi and Peace Parks Foundation. Community representatives sit on the board, and rangers from both state and community groups patrol across borders using shared communication systems. The TFCA is also receiving significant international support, including funding from the German Corporation for International Cooperation (GIZ), Kreditanstalt für Wiederaufbau (KfW) and other global donors.

The Malawi-Zambia TFCA is becoming a flagship example of regional collaboration, ecological connectivity and inclusive conservation practice in Africa.

Sources: Peace Parks, undated; SADC, 2025; SADC, undated



Source: IUCN, 2025

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Table 1: National parks and wildlife reserves of Malawi

Protected area	Area (km^2)	Habitat description	Important features
Lengwe National Park	887	Deciduous woodland, thicket and mopane woodland	Lengwe's topography consists of open deciduous forests and dense thickets. It is a stronghold for the Nyala antelope (*Tragelaphus angasii*), a species that is rare in Malawi and primarily found in this Park. Other animals found are buffalo (*Syncerus caffer*), impala (*Aepyceros melampus*), kudu (*Tragelaphus strepsiceros*), common (gray) duiker (*Sylvicapra grimmia*), suni *(Neotragus moschatus),* warthog (*Phacochoerus africanus*). Approximately 350 bird species have been recorded, including waterfowl *(Anatidae)* and vultures *(Accipitridae)*. It is recognised as a Key Biodiversity Area (KBA) because of the Bateleur eagle *(Terathopius ecaudatus)*, the White backed vulture *(Gyps africanus)* and the Shire Catchment River ecosystem. The climate of Lengwe is hot and dry, prone to floods and the only source of consistent water is from rain. Many man-made water holes have been constructed to attract and maintain the animal population.
Nyika National Park	3,134	Montane grassland with forest patches and miombo woodland	The Park has outstanding beauty of rolling hills which are punctuated by patches of ever-green forest and a myriad of flowers. The montane vegetation supports large numbers of antelope such as common (gray) duiker (*Sylvicapra grimmia*), eland (*Taurotragus oryx*), roan (*Hippotragus equinus*) and plains zebra (*Equus quagga*). There are a number of species of smaller mammals such as warthog (*Phacochoerus africanus*) and bush pig (*Potamochoerus larvatus*). Elephant (*Loxodonta africana*) and buffalo (*Syncerus caffer*) usually keep to the lower ground on the northern edge of the park. Lion (*Panthera leo*) and elephant (*Loxodonta africana*) have only recently been seen on the high plateau. Over 400 species of bird have been recorded in the park. The rare Denham's bustard (*Neotis denhami*) and the wattled crane (*Bugeranus carunculatus*) are among those to be seen, as is the red-winged francolin (*Scleroptila levaillantii*), endemic to Nyika.
Lake Malawi National Park	94	Island shores and inshore waters	A freshwater park that was created to protect fish and aquatic habitats. Lake Malawi National Park, a UNESCO Heritage site, is famous for its cichlids (*Cichlidae*), which are endemic to the Lake and come in different colours with over 800 species. Despite this, Lake Malawi National Park does include a fair amount of land, including several small islands in Lake Malawi. The land is covered by granite rock and Brachystegia woodland, which is also home to other animals such as baboon *(Papio cynocephalus)*, vervet monkey *(Chlorocebus pygerythrus)*, klipspringer *(Oreotragus oreotragus)*, common duiker *(Sylvicapra grimmia)*, bushbuck *(Tragelaphus sylvaticus)*, rock hyrax *(Procavia capensis)*, spotted necked otter *(Hydrictis maculicollis)*, spotted hyena *(Crocuta crocuta)* and African civet *(Civettictis civetta)*.
Majete Wildlife Reserve	691	Deciduous woodland	The Reserve consists of approx. 70,000 hectares of land and contains approx. 4,000 animals comprising of at least 28 mammals, such as elephant (*Loxodonta africana*), eland (*Taurotragus oryx*), sable antelope (*Hippotragus niger*), zebra (*Equus quagga*), giraffe (*Giraffa camelopardalis*), leopard (*Panthera pardus*), wild dog (*Lycaon pictus*), pangolin (*Smutsia temminckii)*, and warthog (*Phacochoerus africanus*). Large numbers of hippo (*Hippopotamus amphibius*) and crocodile (*Crocodylus niloticus*) are found in streams and along the banks of the Shire River. Its KBA status is due to lion *(Panthera leo)*, wild dog *(Lycaon pictus)*, the white headed vulture *(Trigonoceps occipitalis)*, black rhino *(Diceros bicornis)*, and African savanna elephant *(Loxodonta africana)*. Majete is very dry and hot in the summer, and several man-made watering holes have been constructed to maintain the wildlife population.

Protected area	Area (km^2)	Habitat description	Important features
Nkhotakota Wildlife Reserve	1,802	Miombo woodland	The Reserve contains a diversity of habitats including several different types of miombo woodland, evergreen forest and riverine forest. It also encompasses important watersheds, including the lower portions of the Bua River, which is one of the largest rivers to enter Lake Malawi from the Malawian side, and one of the few rivers where lake salmon *Opsaridium microlepis* and *Opsaridium microcephalum* spawn. The Reserve is home to several mammals including buffalo (*Syncerus caffer*), bushbuck (*Tragelaphus scriptus*), bush pig (*Potamochoerus larvatus*), common duiker (*Sylvicapra grimmia*), eland (*Taurotragus oryx*), elephant (*Loxodonta africana*), grysbok (*Raphicerus sharpei*), kudu (*Tragelaphus strepsiceros*), reed buck (*Redunca arundinum*), roan (*Hippotragus equinus*), sable (*Hippotragus niger*), warthog (*Phacochoerus africanus*), waterbuck (*Kobus ellipsiprymnus*), zebra (*Equus quagga*), baboon (*Papio cynocephalus*), leopard (*Panthera pardus*) and lion (*Panthera leo*).
Liwonde National Park	548	Acacia and Mopane woodland, with baobab	The Park is home to several species of antelope (impala (*Aepyceros melampus*), kudu (*Tragelaphus strepsiceros*), waterbuck (*Kobus ellipsiprymnus*), etc.), elephant (*Loxodonta africana*), buffalo (*Syncerus caffer*), crocodile (*Crocodylus niloticus*), hippopotamus (*Hippopotamus amphibius*), lion (*Panthera leo*) and many other mammals. The Park contains all of the Big Five and there are more than 400 bird species.
Vwaza Marsh Wildlife Reserve	986	Some Mopane woodland and miombo	The Reserve comprises a region of hills and pediments in the east, with wetland and alluvium in the west. Typically, it has large herds of buffalo (*Syncerus caffer*) and elephant (*Loxodonta africana*), and a large variety of antelope including roan (*Hippotragus equinus*), greater kudu (*Tragelaphus strepsiceros*), Lichtenstein's hartebeest (*Alcelaphus lichtensteinii*), eland (*Taurotragus oryx*) and impala (*Aepyceros melampus*).
Mwabvi Wildlife Reserve	135	Mopane, Combretum and Brachystegia woodland, open savanna dambo, and riverine areas	Located in the southern part of Malawi, the Reserve shares a boundary with Matandwe Forest Reserve. The vegetation is broad leaved with mopane as one of the dominant woodland types. It is known for the Mwabvi River, Mwabvi Gorge, the Mwabvi tree, the Thangadzi River and its rock outcrops. It is a home to several mammals including kudu (*Tragelaphus strepsiceros*), impala (*Aepyceros melampus*), buffalo (*Syncerus caffer*), suni *(Neotragus moschatus)* and other antelope. It has over 120 bird species including birds of prey. The bateleur eagle (*Terathopius ecaudatus*) is the triggering species for its KBA status.
Kasungu National Park	2,316	Miombo and seasonal riverine forest	The Park has a typical representative ecosystem of the "miombo" or Brachystegia woodland with open grassy dambo drainage systems. It also has historical sites of rock paintings, rock shelter and the iron smelting furnace. A number of rivers flow through the Park, notably Dwangwa and Lingadzi and its tributary, Lifupa, which creates an important spot for hippopotamus (*Hippopotamus amphibius*) viewing at Lifupa Lodge. Kasungu is known for its high population of elephant (*Loxodonta africana*) although it is threatened by poaching. Other animals common in the Park include antelope such as puku *(Kobus vardonii)*, sable (*Hippotragus niger*), roan (*Hippotragus equinus*), buffalo (*Syncerus caffer*), kudu (*Tragelaphus strepsiceros*), impala (*Aepyceros melampus*), and hartebeest (*Alcelaphus lichtensteinii*), as well as zebra (*Equus quagga*).

Sources: Government of Malawi, 2014, p. 5-7; KBA, 2025

Aquatic ecosystems cover approx. 20% of Malawi's surface area and host diverse fauna and flora (Government of Malawi, 2014). Key ecosystems include lakes (Malawi, Malombe, Chilwa, Kazuni, Chiuta), rivers (Songwe, Shire, Rukuru, Dwangwa), wetlands, and smaller water bodies. The Chia Lagoon, the largest, supports over 24 fish species. Wetlands such as Elephant Marsh and Lake Chilwa serve as vital bird sanctuaries and migratory destinations (Ibid.). Malawi ratified the Ramsar Convention in 1996, designating Lake Chilwa as a wetland of international importance in 1997, followed by the designation of Elephant Marsh as its second Ramsar site in 2017 (Government of Malawi, 2014; Ramsar, 2017).

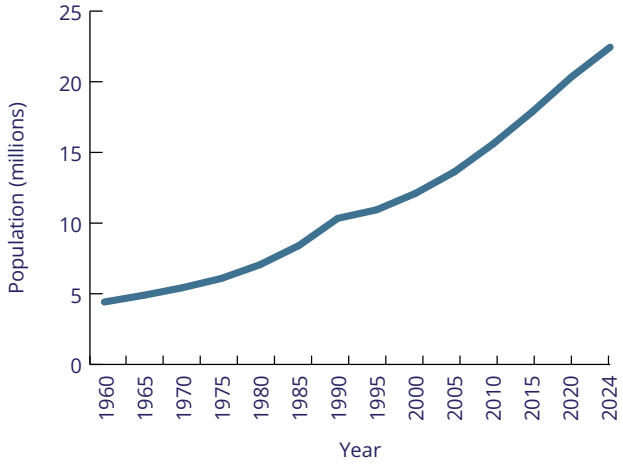
Malawi's biodiversity is, however, declining, with terrestrial and aquatic ecosystems experiencing degradation, habitat modification, and changes in species composition due to unsustainable resource use and management (IUCN ESARO, 2024). These ecosystems face additional threats from population growth, siltation, pollution, and climate change (Government of Malawi, 2014). For example, the periodic drying of Lake Chilwa, driven by catchment degradation and climate change, poses significant risks to fish and bird species (Ibid.).

Socio-economic overview

Malawi has largely been a peaceful country, maintaining political stability since achieving independence in 1964 (van Rooyen, 2025). Over the years, the country has undergone significant political transitions, evolving from colonial rule to autocratic governance and ultimately establishing a multi-party democracy in 1994 (Conroy, 2006; Tostensen, 2017).

The population has experienced substantial growth, increasing from 3.6 million in 1960 to 21.7 million in 2024 (Figure 1) (World Bank, 2024a). This rapid population growth and the country's geographic size **place Malawi among Africa's ten most densely populated countries** (van Rooyen, 2025). **As of 2023, over 70% of Malawians lived below the international poverty line of USD 2.15 per day** and the country's gross domestic product (GDP) per capita has remained consistently low, averaging below USD 1,500 over the past decade (Ibid.). While poverty, malnutrition, limited education, and poor healthcare persist, Malawi has made strides in promoting democracy, promoting human rights, and addressing economic imbalances through new policies and foreign investments (World Bank, 2023).

Figure 1: Malawi's total population (1960-2023)



Source: World Bank, 2024a

Malawi faces persistent structural challenges, including corruption, poor infrastructure, weak human capital, policy inconsistencies, and an unfavourable business environment, which hinder economic growth and diversification (Bhoojedhur & Isbell, 2019; Kateta, 2021; van Rooyen, 2025). The **economy remains heavily reliant on agriculture**, which employs over two-thirds of the population and contributes nearly a quarter of the country's GDP (van Rooyen, 2025; World Bank, 2025). The sector is mostly made up of smallholder farmers, with approx. 76% cultivating plots smaller than one hectare (van Rooyen, 2025). Despite this central role in the economy, agriculture remains low in productivity and highly vulnerable to external shocks, especially climate-related events (World Bank, 2025).

Agriculture is dominated by food and cash crops (ITA, 2024). **Maize is the primary staple food**, while **tobacco remains the leading export crop, accounting for over 40% of annual export earnings** (Ibid). Other important crops include rice, sorghum, millet, legumes, cassava, sweet potatoes, sugar, tea, cotton, and nuts (Arthur, 2017; ITA, 2024). Although agriculture supports most livelihoods, persistent food insecurity remains widespread. This is due to low yields, high dependency on rain-fed farming, poor access to inputs, and limited rural infrastructure (van Rooyen, 2025; World Bank, 2025). To reduce vulnerability and drive inclusive growth, Malawi must shift from rain-fed to irrigation-based farming, expand agro-processing, and create better links between agriculture and industry (ITA, 2024; van Rooyen, 2025). **Opportunities also exist for investment in value chains such as dairy, aquaculture, horticulture, cotton, sugar, and oilseeds** (ITA, 2024).

Malawi 2063 outlines an ambitious goal to transform the country into an industrialised, upper-middle-income economy by 2063 through agricultural commercialisation, industrialisation, and urbanisation (NPC, 2020). Achieving this vision will require significant investments in infrastructure, education, workforce development, and governance reforms to tackle corruption and bureaucratic inefficiencies (World Bank, 2021). Governance challenges, however, persist, as reflected in Malawi's ranking of 19th out of 54 countries in the 2024 Mo Ibrahim Governance Index, which highlights moderate performance in areas such as security, rule of law, and participation (Mo Ibrahim Foundation, 2025). Additionally, Malawi ranked 107th out of 180 countries in Transparency International's 2024 Corruption Perceptions Index, indicating ongoing concerns about public sector corruption (Transparency International, 2025). **Addressing these governance issues will be crucial for realising the country's long-term development aspirations.** See Text Box 3 for details on Malawi's scores and ranking in the ALU SOWC Wildlife Economy Investment Index (WEII)**.**

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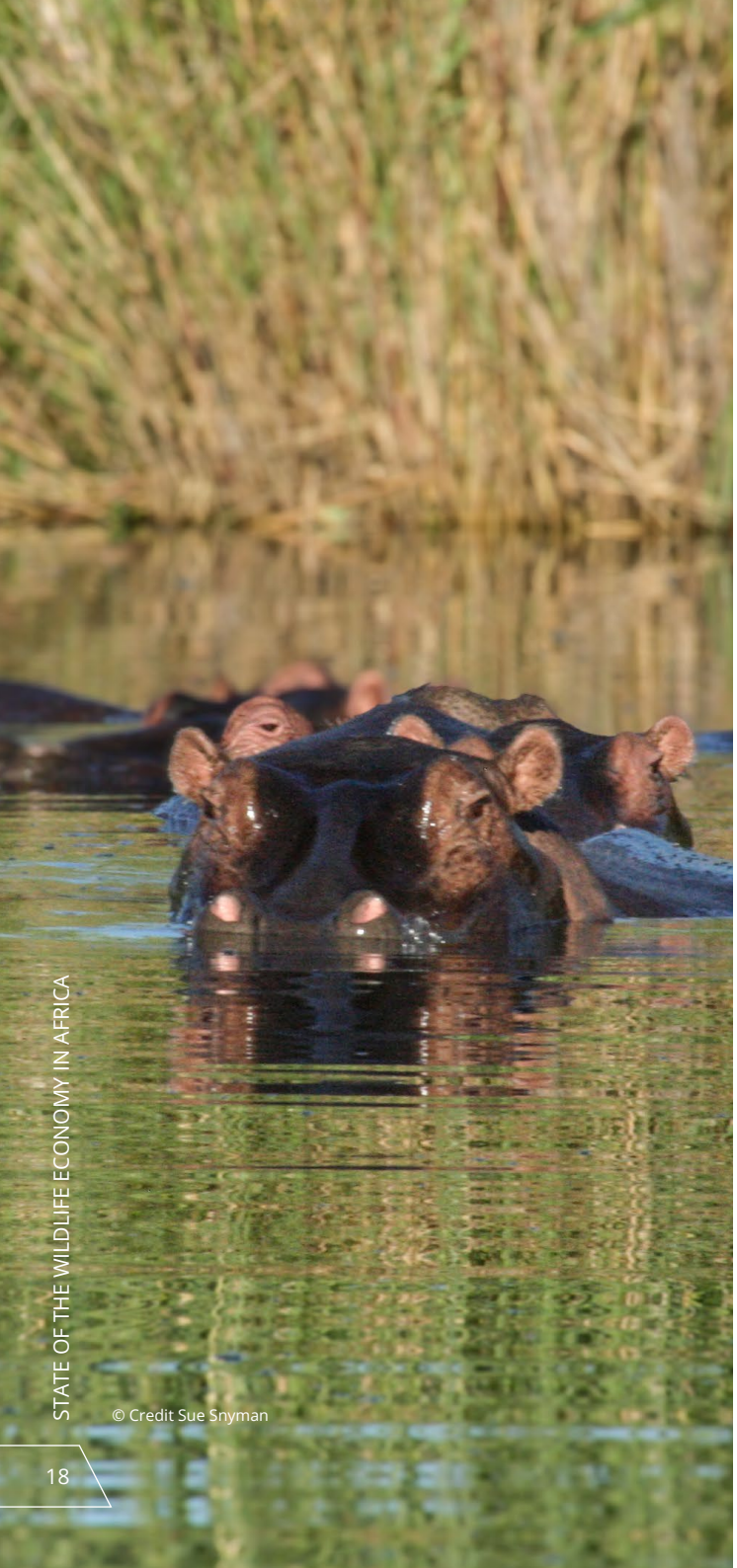

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Text box 3

Wildlife Economy Investment Index (WEII)

The Wildlife Economy Investment Index (WEII) assesses the potential of African countries, as well as their attractiveness, in terms of their wildlife asset base and investment-enabling environment, related to the wildlife economy. The structure and composition of the WEII includes two sub-indices: Wildlife Status Sub-Index and Investment-Enabling Environment Sub-Index, as well as five categories and 18 sub-categories.

Malawi obtained an overall score of 51.84, ranking 17th out of 53 countries (São Tomé and Príncipe were not included in the overall WEII score due to insufficient data). The country's performance can be attributed to its overall sub-indices scores: the Investment-enabling Environment Sub-Index (16th) and the Wildlife Status Sub-Index (19th). See Figure 2 for an illustration of the structure of the WEII and Malawi's scores and rankings.

Malawi's rankings within the Investment-Enabling Environment Sub-Index categories ranged from high to moderate, with notable achievements including 12th place in investment safety and 18th in public sector capacity. It performed moderately in ease of doing business, ranking 29th. Across the 11 sub-categories, rankings varied from high to low: rule of law (7th), money growth (13th), property rights (14th), security and stability (15th), social inclusion (17th), corruption (19th), access to markets (20th), labour market (21st), infrastructure (31st), business operations (34th), and access to finance (41st).

Malawi's performance in the two Wildlife Status Sub-Index categories remained moderate, as the country ranked 19th in wildlife management and 22nd in wildlife assets. The country only performed well in two of the seven sub-categories within the Wildlife Status Sub-index: ecological habitats (9th) and wildlife legal framework (14th). It performed less favourably in endemic species (20th), species richness (21st), protected areas (26th), key biodiversity areas (29th), and wildlife management effectiveness (34th).

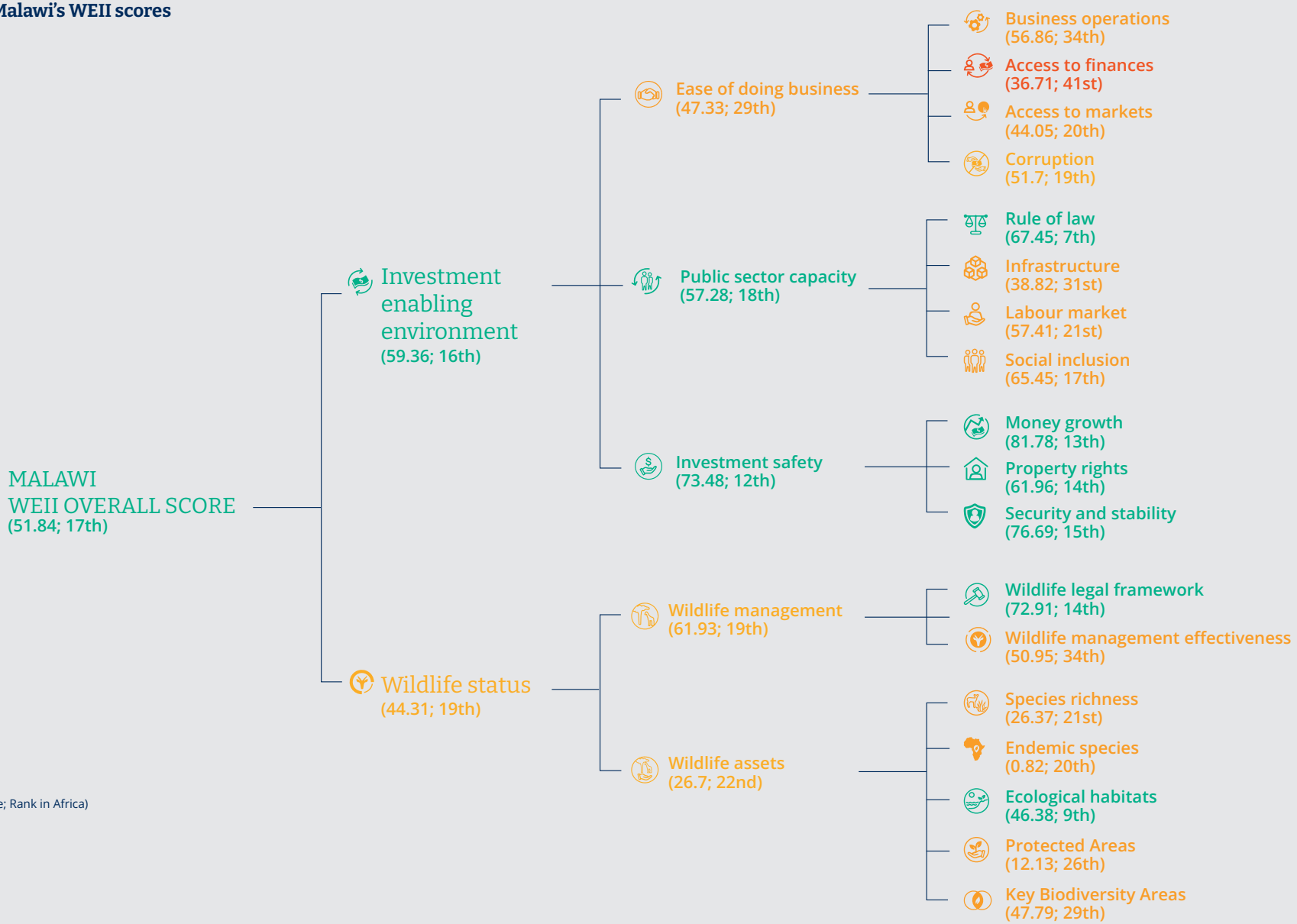
Of the 280 WEII indicators, 264 (94.3%) were populated and contributed to Malawi's WEII score calculation. Among the 264 individual indicators on the scorecard, Malawi ranks in the upper third (top 18 countries) for 139 indicators, the middle third (19th–36th) for 103 indicators, and the lower third (37th and below) for 22 indicators.

Malawi's 17th place ranking in the WEII highlights both strengths and areas for improvement. Notable achievements in investment safety, public sector capacity, and ecological habitats support its strong standing, while challenges in access to finance, business operations, and wildlife management effectiveness require attention. Addressing these gaps can enhance Malawi's position in terms of unlocking the wildlife economy and thereby maximising its use of its natural and institutional assets. For further details on Malawi's performance and policy and practice recommendations, please refer to Malawi's WEII report.

Source: Mpakairi et al., 2024

Figure 2: Overview of Malawi'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 for the wildlife economy

Malawi's wildlife economy has evolved through distinct phases, from game preservation for a European elite to ecotourism and community-based conservation (Morris, 2001)**.** Morris (2001) examined the history of wildlife conservation in Malawi and categorised it into three distinct phases:

- Initial phase (1895-1930): This era of "game preservation" primarily served the interests of a European sporting elite, with hunting restricted to this group.
- Second phase (1930-1964): Game reserves were established during this period, but sport hunting remained a key government priority. There was also a strong focus on crop protection, and animals seen as threats to agriculture were actively targeted and killed in large numbers.
- Third phase (1964-1990): This phase saw the decline of sport hunting and the establishment of viable game sanctuaries to attract tourists.

Malawi subsequently entered a fourth phase, focusing on generating foreign exchange and promoting ecotourism, often catering to international tourists (Morris, 2001). The National Parks and Wildlife Act of 1992 introduced centralised wildlife management, emphasising biodiversity conservation, sustainable resource use, and stricter penalties for poaching and illegal wildlife trade (Republic of Malawi, 1992). Amendments in 2017 further strengthened these penalties, with sentences of up to 30 years for ivory trafficking (DNPW, 2017). Text box 4 details the evolution of wildlife legislation in Malawi.

As discussed in Text box 4, Malawi's wildlife governance shifted toward greater community participation from 2000 onwards. One of the most important mechanisms through which this shift has been implemented is Community-Based Natural Resource Management (CBNRM), which institutionalised co-management and revenue-sharing arrangements between protected areas and neighbouring communities (see Text box 5).

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Text box 4

Evolution of wildlife legislation in Malawi

This text box reflects Malawi's evolving approach to wildlife governance, from colonial preservation for sport to community-centred conservation models. However, **challenges such as limited enforcement, minimal community benefits, and the ongoing human-wildlife conflict remain.**

Game Ordinances (1897, 1902, 1911, 1926)

- These laws restricted hunting to Europeans and created the first "game reserves" such as Elephant Marsh and Lake Chilwa.
- Wildlife was considered state property, and traditional hunting by local people was declared illegal.
- Larger mammals and antelope (such as sable (*Hippotragus niger*)) were protected under game schedules, primarily for sport hunting by Europeans.
- The concept of game preservation was introduced, but conservation in the ecological or public interest sense was not a primary focus of the colonial administration, which aimed instead to reserve game for European sport hunting.

Game Ordinance (1930):

- Established game sanctuaries such as Kasungu, Lengwe, and Tangadzi to protect declining populations of certain species.
- Shifted focus slightly toward conserving species such as nyala (*Tragelaphus angasii*) but emphasised crop protection and sport hunting.
- Game conservation responsibilities moved to district administrations, prioritising crop protection over wildlife conservation.
- Creation of the Department of Game, Fish, and Tsetse Control (1949): focused on controlling "vermin" and protecting crops rather than conserving wildlife.

Establishment of the Department of National Parks and Wildlife (1973):

- Oversaw the creation of major parks such as Nyika, Kasungu, Lengwe, and Liwonde, which covered 11% of Malawi's land area.
- Tourism infrastructure was developed, but the benefits to local communities remained minimal.
- A shift toward environmental education and public awareness of wildlife conservation.

Post-Independence Wildlife Policy Statement (1983):

- Emphasised protecting wildlife as a national resource for tourism and scientific purposes while balancing crop protection.
- Acknowledged wildlife's role in national development but did not recognise its intrinsic ecological value.

National Parks and Wildlife Act (1992):

- Centralised wildlife management and introduced stricter measures to protect biodiversity.
- Incorporated community-based approaches, although challenges persist in involving local populations meaningfully.

Wildlife Policy (2000):

- Marked a transformative shift toward community-based natural resource management (CBNRM).
- Promoted co-management agreements, revenue-sharing models, and recognition of local communities as key stakeholders in conservation.
- Introduced benefit-sharing mechanisms, including allocation of 25% of park-generated revenue to surrounding communities, to incentivise local participation in conservation.

National Parks and Wildlife Act Amendments (2017):

- Introduced harsher penalties for poaching, including up to 30 years imprisonment for ivory trafficking.
- Strengthened regulation of endangered and listed species, including tighter controls on wildlife trade, ownership, import and export.
- Expanded protections for protected areas by tightening restrictions on activities such as illegal hunting, settlement, mining and habitat destruction.
- Reinforced community and private sector participation in wildlife management through co-management agreements and benefit-sharing mechanisms.

National Wildlife Policy (2018):

- Built on the 2000 CBNRM approach by strengthening collaborative management and stakeholder participation in wildlife conservation.
- Promoted benefit-sharing mechanisms and expanded community involvement in conservation decision-making.
- Increased focus on ecotourism and integrating conservation with community development.
- Strengthened responses to emerging challenges such as human-wildlife conflict, climate change, and illegal wildlife trade.

Sources: DNPW, 2017; DNPW, 2018; Morris, 2001; National Parks and Wildlife Act, 2017; Republic of Malawi, 1992; Republic of Malawi, 2000

Text box 5

Community-Based Natural Resource Management in Malawi

Community-Based Natural Resource Management (CBNRM) became **a formal part of Malawi's wildlife governance framework with the adoption of the Wildlife Policy (2000).** The Policy introduced co-management agreements and revenue-sharing mechanisms designed to involve local communities in the stewardship of protected areas.

The **National CBNRM Forum** was established to support this model. It is a coordination platform comprising seven community associations located around **Kasungu National Park**, **Nyika National Park**, **Nkhotakota Wildlife Reserve**, **Lake Malawi National Park**, **Liwonde National Park**, **Lengwe National Park**, and **Majete Wildlife Reserve**. These associations were formed under the National Parks and Wildlife Act, which provides the legal foundation for their operation.

Each association has signed a **Co-Management Agreement (CMA)** with the **Department of National Parks and Wildlife (DNPW)**. These agreements entitle the communities to **25% of all revenue generated** by the protected area. The funds are administered by the associations to support local development priorities. **The associations also enter into a resource use agreement** that sets out the rights and duties of both the communities and the government.

The National CBNRM Forum plays a key role in **policy advocacy, resource mobilisation, and capacity building**. While CBNRM in Malawi is not limited to wildlife, these co-management partnerships represent a significant shift toward more inclusive and decentralised conservation practices.

Source: CLN, 2025; Republic of Malawi, 2000

Malawi's wildlife economy framework also incorporates the Malawi Growth and Development Strategy (MGDS III), linking conservation to economic growth through ecotourism and community development (Republic of Malawi, 2017a). In addition to national legislation, Malawi's adherence to international conventions such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) reinforces its commitment to global wildlife conservation standards (DNPW & LWT, 2024). By implementing the provisions of CITES, Malawi has proactively managed the trade in endangered species, aligning its domestic laws with international obligations (Ibid.).

The National Parks and Wildlife Act (2017) remains the cornerstone of wildlife management (Republic of Malawi, 2017b). **It declares wildlife a public resource held in trust by the State** (Ibid.). The Act ensures biodiversity conservation while regulating activities such as hunting and trade through permits to maintain ecological balance (Ibid.). Adherence to international obligations under conventions such as CITES aims to further underscore Malawi's commitment to sustainable wildlife governance (DNPW & LWT, 2024).

While state ownership dominates, Malawi's National Parks and Wildlife Act (2017) allows private ownership of wildlife under specific conditions, requiring licenses from the Department of National Parks and Wildlife (DNPW). Examples such as Kuti Wildlife Reserve (2023) highlight private entities' role in wildlife management, often through co-management agreements with the government.

The government recognises private conservation's potential, with legal provisions enabling private landowners to manage wildlife. This model offers opportunities to attract investment in reserves and game ranching. **Incentives such as tax breaks, secure land tenure, and streamlined regulations could enhance private sector involvement, boosting conservation and economic growth through ecotourism and wildlife-based businesses** (Chirwa, 2015). However, **challenges such as bureaucratic delays, regulatory inconsistencies, and resource conflicts such as overlapping land use claims highlight the need for clearer legal frameworks** (National Parks and Wildlife Act, 2017). Table 2 provides a non-exhaustive list of frameworks related to the wildlife economy in Malawi.

Table 2: Overview of the regulatory framework of the wildlife economy in Malawi

Framework	Overview	Source
Malawi Tourism Act, 2025	This Act provides the legal framework for regulating and promoting tourism in Malawi. It establishes the Malawi Tourism Authority to license and oversee tourism enterprises, enforce standards, and market Malawi as a tourism destination. It also creates mechanisms to support tourism development, investment, training, and sustainable tourism growth, including in protected areas.	Available at https://visitmalawi.mw/download/tourism-act/ [Accessed 4th June 2026].
Council for National Herbarium and Botanic Gardens of Malawi Act, 1987, as consolidated in 2014	This Act establishes the Council for National Herbarium and Botanic Gardens of Malawi to manage, develop, and preserve plant collections as part of Malawi's national heritage. It outlines the Council's functions, powers, financial management, and responsibilities for research, education, and public access to herbarium and botanic gardens.	Original: Available at https://faolex.fao.org/docs/pdf/mlw117876.original.pdf [Accessed 9th April 2025]. Consolidation: Available at https://malawilii.org/akn/mw/act/1987/7/eng%402014-12-31 [Accessed 9th April 2025].
Customary Land (Development) Act, 2016	This Act guides the identification, recording, and allocation of customary land for agricultural development. It sets up committees and officers to handle claims, resolve disputes, and support proper land use.	Available at https://faolex.fao.org/docs/pdf/mlw170882.pdf [Accessed 9th April 2025].
Fisheries Conservation and Management Act, 1997	This Act regulates the conservation and sustainable use of fisheries in Malawi through licensing, monitoring, and community involvement. It establishes roles for the Director of Fisheries, a Fisheries Advisory Board, and promotes local and international cooperation in fisheries management.	Available at https://faolex.fao.org/docs/pdf/mlw18341.pdf [Accessed 9th April 2025].
Forestry Act, 1997, as amended by the Forestry (Amendment) Act, 2019	This Act provides a framework for the conservation, protection, and sustainable use of Malawi's forest resources. The Amendment strengthened provisions on community participation, forest-based enterprise development, and resilience to climate change, while aligning the policy with updated environmental and land use priorities.	Original: Available at https://faolex.fao.org/docs/pdf/mlw10025.pdf [Accessed 9th April 2025]. Amendment: Available at https://malawilii.org/akn/mw/act/2020/7/eng@2020-06-19 [Accessed 9th April 2025].
Game Act, 1954	The Game Act provides for the preservation and control of game animals through licensing, designated game reserves, and controlled hunting areas. It regulates hunting activities, defines offences, and gives powers to officials to manage and enforce game laws.	Available at https://importlicensing.wto.org/sites/default/files/Game%20Act%20Cap%2066.03.pdf [Accessed 9th April 2025].
Land Act, 2016	The Land Act sets out the legal framework for land ownership, use, and management in Malawi. It defines land categories, outlines rights and duties of landholders, and regulates transfers and development of land.	Available at https://faolex.fao.org/docs/pdf/mlw170885.pdf [Accessed 9th April 2025].
Lands Acquisition Act, 1970, as amended by the Lands Acquisition (Amendment) Act, 2017	This Act gives the government power to acquire land for public purposes and provides for fair compensation to affected landowners. The Amendment updates compensation rules and aligns the Act with newer land laws, including provisions for acquiring customary land.	Original: Available at https://faolex.fao.org/docs/pdf/mlw169260.pdf [Accessed 9th April 2025]. Amendment: Available at https://faolex.fao.org/docs/pdf/mlw169261.pdf [Accessed 9th April 2025].

Table 2: Overview of the regulatory framework of the wildlife economy in Malawi

Framework	Overview	Source
National Parks and Wildlife Act, 1992, as amended by the National Parks and Wildlife (Amendment) Act, 2017	This Act provides for the conservation and management of wildlife and protected areas, and establishes the Wildlife Research and Management Board. The Amendment updates species definitions and strengthens rules on hunting, trade, and offences involving protected and endangered species.	Original: Available at https://faolex.fao.org/docs/pdf/mlw4733.pdf [Accessed 9th April 2025]. Amendment: Available at https://faolex.fao.org/docs/pdf/mlw169263.pdf [Accessed 9th April 2025].
Plant Protection Act, 2018	This Act provides for the protection of plants and plant products from pests through phytosanitary control and the establishment of the Plant Protection Unit. It sets rules for import and export, pest control, quarantine, inspections, and offences to prevent the spread of harmful organisms.	Available at https://faolex.fao.org/docs/pdf/mlw218828.pdf [Accessed 9th April 2025].
Public-Private Partnership Act, 2012	The Public-Private Partnership Act sets the rules for how government and private companies work together on major projects and services in Malawi. It is central to bringing private investment into wildlife conservation by guiding checks on project viability, shaping negotiations and helping form agreements that support revenue generation in protected areas. This allows private partners to play a steady role in boosting the wildlife economy while easing pressure on public funds.	Available at https://malawilii.org/akn/mw/act/2011/27/eng%402014-12-31 [Accessed 30th October 2025].
Registered Land Act, 1967, as amended by the Registered Land (Amendment) Act, 2017	This Act provides for the registration of land titles and sets rules for land dealings, co-ownership, and land acquired by prescription. The Amendment aligns it with the Customary Land Act and Land Act, covering customary estate registration, charges, and land rights by prescription.	Original: Available at https://faolex.fao.org/docs/pdf/mlw117635.pdf [Accessed 9th April 2025]. Amendment: Available at https://faolex.fao.org/docs/pdf/mlw169259.pdf [Accessed 9th April 2025].
Water Resources Act, 2013	This Act provides for the management, conservation, and regulation of water resources in Malawi. It establishes the National Water Resources Authority, introduces water use permits, and outlines rules to protect water quality, manage catchments, and prevent pollution.	Available at https://faolex.fao.org/docs/pdf/mlw167598.pdf [Accessed 9th April 2025].
National Fisheries and Aquaculture Policy, 2016	This Policy promotes sustainable fisheries and aquaculture to support food and nutrition security, economic growth, and social development. It focuses on increasing fish production, improving quality and value addition, strengthening governance, encouraging decent employment, and boosting research, capacity development, and stakeholder participation.	Available at https://faolex.fao.org/docs/pdf/mlw190922.pdf [Accessed 9th April 2025].
National Forest Policy, 2016	This Policy guides the conservation, protection, and sustainable use of Malawi's forest resources while promoting inclusive participation by communities, civil society, and the private sector. It aims to increase forest cover, improve forest-based livelihoods, and enhance resilience to climate change through community-based forest management and sustainable forest industry development.	Available at https://faolex.fao.org/docs/pdf/mlw190487.pdf [Accessed 9th April 2025].
National Land Policy, 2002	The Policy sets out Malawi's vision for equitable access, secure tenure, and sustainable use of land. It introduces reforms in land tenure, registration, land use planning, and decentralised administration, while recognising and protecting customary land rights.	Available at https://faolex.fao.org/docs/pdf/mlw169537.pdf [Accessed 9th April 2025].
National Tourism Policy, 2019	This Policy guides the development of a sustainable tourism sector that contributes to economic growth, rural development, and poverty reduction. It promotes regulatory reforms, service quality, marketing, and stakeholder coordination, while addressing cross-cutting issues and aligning with global goals such as the Sustainable Development Goals (SDGs) and African Union (AU) Agenda 2063.	Available at https://faolex.fao.org/docs/pdf/mlw231733.pdf [Accessed 29th July 2025].

Framework	Overview	Source
National Water Policy, 2005	This Policy promotes sustainable management and use of water resources to ensure access to safe and sufficient water for all Malawians. It supports integrated water governance, improved rural services, inclusive participation, and water use for agriculture, disaster response, and poverty reduction.	Available at https://faolex.fao.org/docs/pdf/mlw165858.pdf [Accessed 9th April 2025].
Wildlife Policy, 2000 (updated in 2018)	The Wildlife Policy from 2000 aimed to protect Malawi's wildlife in a way that involved local communities and shared benefits fairly. It also recognised that wildlife areas can be managed for both nature and income. In 2018 the government updated the Policy because the 2000 version did not cover issues such as gender equity, HIV and AIDS, aquatic species, mining and climate change. The update was shaped through wide consultation and set out to improve how wildlife is cared for while dealing with these newer pressures.	2000 version: Available at http://www.rhinoresourcecenter.com/pdf_files/120/1203269977.pdf [Accessed 9th April 2025]. 2018 version: Available at https://library.cepa.org.mw/wp-content/uploads/tainacan-items/201/6444/FINAL-NATIONAL-WILDLIFE-POLICY-APPROVED-AUGUST-2018.pdf [Accessed 30th October 2025].
Malawi 2063	Malawi 2063 is the country's long-term vision to become an inclusively wealthy and self-reliant upper-middle-income nation by 2063, anchored on three pillars: Agricultural Productivity and Commercialisation, Industrialisation, and Urbanisation. It emphasises home-grown development, youth empowerment, and mindset change, and will be implemented through successive 10- and 5-year medium-term plans.	Available at https://malawi.un.org/sites/default/files/2021-01/MW2063-%20Malawi%20Vision%202063%20Document.pdf [Accessed 9th April 2025].
National Ecotourism Strategy, 2021	This Strategy promotes sustainable tourism that conserves biodiversity, respects cultural heritage, and supports local communities. It provides a roadmap for developing Malawi's ecotourism sector through stakeholder collaboration, eco-product development, and digital promotion, aiming to boost eco-conscious travel and rural economic growth.	Available at https://faolex.fao.org/docs/pdf/mlw231713.pdf [Accessed 29th July 2025].
National Aquaculture Development Strategy and Action Plan (2025-2030)	This Plan guides aquaculture development aligned with Malawi 2063 and the Food and Agriculture Organisation of the United Nations (FAO) sustainability principles. It aims to transform subsistence aquaculture into market-driven enterprises through improved governance, sustainable production, innovation, gender-responsive value chains, capacity building, and climate-smart practices	Available at https://faolex.fao.org/docs/pdf/mlw233098.pdf [Accessed 29th July 2025].
National Aquaculture Strategic Plan (2021-2031)	This Plan aims to boost aquaculture production for improved incomes, food security, and trade. It focuses on transforming small-scale fish farming into market-led enterprises, enhancing technology, strengthening farmer capacity, promoting environmental sustainability, and upgrading public infrastructure to support a thriving aquaculture sector.	Available at https://faolex.fao.org/docs/pdf/mlw233099.pdf [Accessed 29th July 2025].
National Tourism Investment Master Plan (2022-2042)	This Plan outlines a 20-year strategy to transform Malawi into a regional and international tourism hub, aligned with Malawi 2063, by identifying key tourism nodes, prioritising infrastructure, and promoting investment in tourism-linked sectors. Developed through broad stakeholder consultation and supported by the African Development Bank, it aims to catalyse inclusive economic growth through rural empowerment, intersectoral linkages, and sustainable destination development.	Available at https://visitmalawi.mw/download/malawi-tourism-investment-masterplan/ [Accessed 29th July 2025].
Carbon Market Framework, 2025	This guides how Malawi takes part in international and voluntary carbon markets to raise climate finance and support emission reduction projects. It sets clear rules for project approval, monitoring and trading so that carbon activities align with national goals and bring fair benefits.	Available at https://mw.bl2.chm-cbd.net/sites/mw/files/documents-2025-08/carbon-market-framework_signed_final_0.pdf [Accessed 30th October 2025].


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Institutions for managing the wildlife economy

Malawi's wildlife economy is a dynamic and multifaceted sector involving many stakeholders, including government agencies, non-governmental organisations (NGOs), local communities, and the private sector.

The Department of National Parks and Wildlife (DNPW), in the Ministry of Tourism, is responsible for wildlife conservation and management in national parks, wildlife reserves, and nature sanctuaries (DNPW, 2025). The Department plays an important role in implementing policies, enforcing wildlife laws, and regulating hunting activities. It also promotes ecotourism in collaboration with the Malawi Tourism Department, which focuses on marketing the country's natural beauty and wildlife resources to international tourists (DOT, 2025). The collaboration between the DNPW and the Tourism Department aims to boost revenue from ecotourism, supporting conservation efforts (Republic of Malawi, 2019a). Through this synergy, Malawi seeks to create a sustainable wildlife economy that benefits conservation and local communities' livelihoods (Ibid.).

Alongside government agencies, non-governmental organisations such as the Wildlife and Environmental Society of Malawi (WESM, 2025), the Lilongwe Wildlife Trust (LWT, 2025) and the Wildlife Action Group Malawi (Wildlife Action Group Malawi, 2025), amongst others, play an important role in managing the country's wildlife economy. These groups carry out research, offer capacity building and run community-based conservation programmes. They work closely with local communities to reduce human-wildlife conflict, promote sustainable use of natural resources and increase local participation in wildlife conservation. For example, WESM, founded in 1947, has supported community-based natural resource management near protected areas and on customary land to help communities manage natural resources sustainably (WESM, 2025).

Malawi's wildlife economy encounters several obstacles that impede its growth and sustainability. Insufficient government funding leads to an over-reliance on unpredictable donor support, highlighting the need for alternative financing mechanisms such as ecotourism taxes or public-private partnerships (African Development Bank, 2017). Community involvement remains minimal, with many locals experiencing few tangible benefits from conservation efforts, especially when human-wildlife conflicts result in loss of life and property (Mandoloma, 2024; The Guardian, 2025). **Implementing effective benefit-sharing mechanisms and promoting alternative livelihoods are essential to gain local support.** Despite these challenges, opportunities exist to strengthen the sector through improved stakeholder collaboration, expansion of community-run ecotourism and other wildlife economy initiatives, and encouragement of private sector investment, drawing lessons from successful models in other African countries (SADC, 2023). Table 3 shows a non-exhaustive list of institutions involved in managing and supporting the wildlife economy in Malawi.

Table 3: Institutions for managing the wildlife economy in Malawi

Institution	Overview	Source
Ministry of Natural Resources and Climate Change	Responsible for sustainable management of natural resources, including wildlife, through departments such as DNPW. It develops policies for environmental protection and climate change adaptation.	Available at https://web.facebook.com/NaturalResourcesMalawi/ [Accessed 10th April 2025].
Ministry of Tourism	Develops, regulates, and promotes tourism, including wildlife tourism, to showcase Malawi's natural beauty. It implements marketing strategies and ensures quality tourism services.	Available at https://visitmalawi.mw/ [Accessed 10th April 2025].
Department of Tourism	Responsible for tourism policy, planning, investment promotion, marketing, and regulation. It develops and reviews national tourism policies and strategies, oversees tourism investment and bilateral agreements, and promotes Malawi as a destination through domestic and international marketing.	Available at https://visitmalawi.mw/department-of-tourism-2/ [Accessed 10th April 2025].
Malawi Tourism Authority (MTA)	Established under the Malawi Tourism Act, 2025, the MTA regulates and promotes Malawi's tourism sector. It licenses tourism practitioners and enterprises, enforces standards, and supports tourism development, including wildlife and nature-based tourism.	Available at https://visitmalawi.mw/ [Accessed 10th April 2025].
Department of National Parks and Wildlife (DNPW)	The primary agency for wildlife conservation, managing protected areas covering 11.6% of Malawi's land. It enforces wildlife laws, promotes ecotourism, conducts research, and engages communities for sustainable management.	Available at https://visitmalawi.mw/department-of-national-parks-and-wildlife/ [Accessed 10th April 2025].
Malawi Environment Protection Authority (MEPA)	The principal agency for environmental protection, regulating development projects to ensure they meet environmental standards. It manages biological resources and waste, preserving ecosystems essential for wildlife.	Available at https://www.mepa.mw/ [Accessed 10th April 2025].
Department of Forestry	This department is responsible for managing forest resources in a sustainable manner. Its work helps protect forests that serve as habitats for many wildlife species and contribute to the overall ecosystem health.	Available at https://web.facebook.com/people/Department-of-Forestry/100067197665608/ [Accessed 10th April 2025].
Department of Fisheries	The Department of Fisheries manages and conserves aquatic resources. It works to promote sustainable fishing and protect water bodies that are crucial ecosystems for various wildlife species.	Available at https://web.facebook.com/p/Department-of-Fisheries-Malawi-100092725347632/ [Accessed 10th April 2025].
National Commission for Science and Technology (NCST)	NCST promotes and regulates research in science and technology, setting standards for studies on biodiversity and wildlife. It supports scientific research and innovation, contributing to effective wildlife management and conservation strategies.	Available at https://www.ncst.mw/ [Accessed 10th April 2025].
Malawi Tourism Council (MTC)	MTC is the official umbrella body that represents the private sector players in Malawi's tourism industry. The council collaborates heavily with public bodies to elevate Malawi's presence on the global travel map.	Available at https://h1.nu/1qW4k [Accessed 10th April 2025].
Wildlife and Environmental Society of Malawi (WESM)	Founded in 1947, WESM is one of Malawi's oldest conservation organisations. It promotes wildlife conservation through education, community engagement and research, and advocates for stronger environmental policies to sustain the wildlife economy.	Available at https://wesm.mw/ [Accessed 10th April 2025].
Lilongwe Wildlife Trust (LWT)	Established in 2007, LWT runs Malawi's first accredited wildlife sanctuary, the Lilongwe Wildlife Centre. It focuses on rescuing and rehabilitating injured, orphaned and confiscated wildlife, while also campaigning for conservation justice and providing community outreach.	Available at https://lilongwewildlife.org/ [Accessed 10th April 2025].

Table 3: Institutions for managing the wildlife economy in Malawi

Institution	Overview	Source
Wildlife Action Group Malawi	The Wildlife Action Group Malawi focuses on conserving wildlife and habitats in Thuma and Dedza-Salima Forest Reserves through anti-poaching, community development, and research.	Available at https://www.wildlifeactiongroupmalawi.org/ [Accessed 10th April 2025].
Conservation Research Africa	It conducts applied research and capacity building for conservation, addressing human-wildlife conflict and promoting sustainable livelihoods.	Available at https://www.conservationresearchafrica.org/ [Accessed 10th April 2025].
Action for Environmental Sustainability (AfES)	AfES promotes environmental protection through projects on climate change, biodiversity, and community development. It aims to address environmental degradation and poverty, supporting conservation efforts that benefit the wildlife economy.	Available at https://afesmw.org/ [Accessed 10th April 2025].
African Parks	African Parks is an international non-governmental organisation that partners with the Malawian government to manage key protected areas such as Liwonde, Majete, Nkhotakota and Mangochi Forest Reserve. It works to reintroduce wildlife and restore degraded ecosystems, with a business model that supports long-term conservation and tourism.	Available at https://www.africanparks.org/ [Accessed 10th April 2025].
Tusk Trust	Tusk Trust works across Africa to support conservation projects. In Malawi, it collaborates with local organisations such as Lilongwe Wildlife Trust to improve wildlife rescue, enhance conservation education and support community-driven conservation efforts.	Available at https://tusk.org/projects/lilongwe-wildlife-trust/ [Accessed 10th April 2025].
The International Fund for Animal Welfare (IFAW) Malawi	IFAW supports wildlife conservation in Malawi through anti-poaching, wildlife crime investigations, and transboundary conservation initiatives, particularly around Kasungu National Park. It works with government and local communities to strengthen law enforcement and reduce human pressure on wildlife.	Available at https://www.ifaw.org/international [Accessed 10th April 2025].

Wildlife economy activities in Malawi

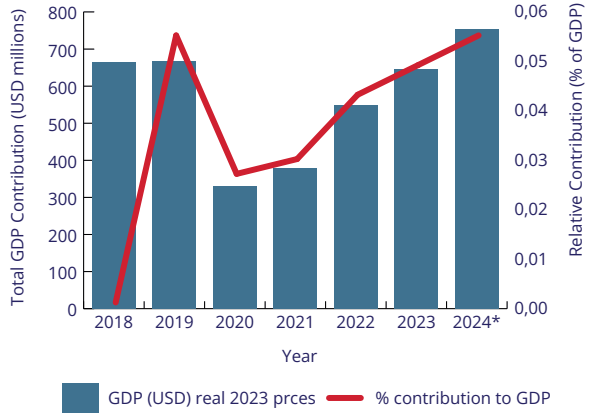
Wildlife economy activities in Malawi include ecotourism, fisheries, hunting, carbon, wildlife trade, forest products, and wildlife ranching. These activities contribute to the economy through job creation, revenue generation, poverty reduction, sustainable development, trade, and exports. This section provides relevant information on the main wildlife economy activities and attempts to illustrate their significance to Malawi's economy. **Comparable, consistent, and up-to-date data for most activities was, however, difficult to obtain,** but the data that was available still demonstrates a significant contribution to both the local and national economy.

Tourism

Tourism is a national priority in Malawi's development plans, with recent policies and long-term strategies highlighting its role in economic diversification, job creation, and rural development (EC, 2024; Republic of Malawi, 2019a; Republic of Malawi, 2022). Recent reforms, including the launch of a new tourism authority in 2025, reflect growing government commitment to transforming the sector and strengthening its contribution to the economy (Hes, 2025).

Tourism makes a significant economic contribution in Malawi, though estimates vary by source and methodology. Before the COVID-19 pandemic (2019), the tourism sector contributed **approx. 5.4% of Malawi's GDP** (total direct and indirect contributions) (see Figure 3). The pandemic caused a sharp contraction: in 2020 tourism's GDP share fell to **approx. 2.6-3.2%** as international travel halted (EC, 2024; WTTC, 2024). As the sector began to recover, the share has risen again: **in 2024, travel and tourism were estimated to have accounted for approx. 5.4% of GDP** when including direct, indirect and induced effects (WTTC, 2024). The direct contribution of tourism to Malawi's GDP was USD 260.9 million (1.9% of GDP) in 2023 and is expected to grow by 5.1% per year, **reaching USD 616 million (2.5% of GDP) by 2034** if current trends continue (Ibid.).

Figure 3: Travel and tourism contribution to GDP (2018 - 2024)

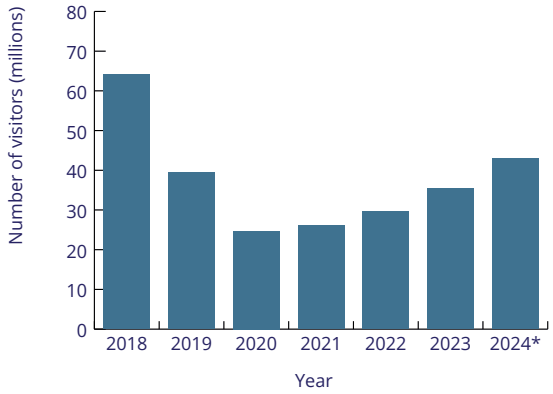


* Estimated

Source: WTTC, 2024

International tourist spending (visitor exports) made up only **6-7% of total tourism internal spending in 2023**, reflecting the dominance of domestic tourism (WTTC, 2024). Prior to the pandemic, **visitor exports** were **approx. USD 39.4 million** in 2019, and this fell sharply to **approx. USD 24.7 million** in 2019 amid global travel bans (Ibid.). Some estimates state that travel restrictions led to an **80% drop in international tourism revenue in 2020** (BMZ, 2024). As borders reopened, tourism exports began recovering: Malawi generated **approx. USD 35.5 million** from international visitors in 2023 and is estimated to have generated **approx. USD 42.9 million** in 2024 (see Figure 4).

Figure 4: Visitor exports (2018 - 2024)



* Estimated

Source: WTTC, 2024

Prior to the COVID-19 pandemic, visitor arrivals to Malawi have shown an overall increasing trend, followed by a steep decline and ongoing recovery. **In 2019, Malawi welcomed over 978,000 international tourist arrivals**, a record high driven by steady growth in regional and overseas visitors (NSO, 2021). Tourism in Malawi is highly regional: according to the National Statistics Office, the majority of international visitors come from neighbouring African countries (ITA, 2023). The top source markets in 2021 were **Zambia, Mozambique, Tanzania, Zimbabwe, and South Africa**, with regional travellers constituting most tourist entries (Maravi Express, 2024). A smaller share of arrivals come from long-haul markets such as Europe, North America, and Asia; for instance, **Germany, the United States, India, and Australia** are noted among the leading non-African visitor origins, though their numbers are modest in comparison (ITA, 2023; Maravi Express, 2024).

International overnight visitors plummeted by approx. 80% in 2020, falling from approx. one million in 2019 to **only 198,905 arrivals in 2020** (ITA, 2023; NSO, 2021). This was due to border closures, travel bans and drastically reduced demand. In 2021 the sector began to rebound, with **432,999 arrivals** recorded (EC, 2024). As travel restrictions eased, Malawi saw a further **64% increase in international arrivals in 2022**, reaching a total of **approx. 708,000 visitors** (Maravi Express, 2024). This represents a substantial recovery, with 2022 arrivals approx. 72% of the pre-pandemic peak. Preliminary data showed continued growth in 2023, and projections made before the end of 2024 suggested that Malawi could surpass **one million international visitors** that year, effectively returning to or exceeding 2019 levels (EC, 2024).

In 2020, the average national room occupancy rate fell to only 15.6%, with bed occupancy at approx. 13% (NSO, 2021). This indicates that on average less than one in six hotel rooms were occupied throughout 2020, emphasising the severe impact of the pandemic on hospitality businesses (Ibid.). By 2022, occupancy levels most likely began to improve alongside the return of tourists, though detailed figures are yet to be published.

In the pre-pandemic period, travel and tourism supported **approx. 590,000 jobs in 2019**, which was **7-8% of total employment in the country** (WTTC, 2024). This figure includes both **direct jobs** (in hotels, restaurants, airlines, travel agencies, attractions) and **indirect jobs** in the broader supply chain (Ibid.). The World Travel and Tourism Council estimated that **215,307 people were employed directly in tourism in 2023** (approx. 2.8% of all workers), while the total employment impact (including indirect and induced jobs) was over **596,000 jobs** (7.7% of employment) in that year (Ibid.). These numbers demonstrate **tourism's substantial role in Malawi's labour market,** even though the sector is still developing. Notably, tourism's employment share had dipped in 2020 due to COVID-19 (with over 123,000 jobs lost in 2020) but has risen again as activity recovered (WTTC, 2024).

Despite Malawi's progress in tourism recovery and policy reform, the sector continues to face **structural challenges that could limit its full potential. Key barriers include** insecure land tenure, limited access to reliable tourism data, and weak financial support systems for small and medium enterprises (African Nature-Based Tourism Platform, 2023a; ITA, 2023). The impacts of the COVID-19 pandemic exposed the vulnerability of tourism-dependent communities, many of which lacked savings or alternative livelihoods to withstand the shock (African Nature-Based Tourism Platform, 2023a). High borrowing costs and limited access to soft loans left many local operators struggling to survive, with some forced to sell assets or turn to unsustainable practices such as charcoal production (Ibid.). At the same time, opportunities are emerging through ecotourism, cultural heritage products, and nature-based enterprises. Initiatives such as the African Nature-Based Tourism Platform are helping communities build resilience by supporting alternative income sources while also promoting conservation (African Nature-Based Tourism Platform, 2023a). Since 2021, the platform has worked to mobilise **at least USD 15 million across 11 countries** and, in Malawi, helped secure a **USD 186,000 grant** through the Biodiversity and Protected Areas Management (BIOPAMA) programme to support climate-resilient livelihoods around Kasungu National Park (African Nature-Based Tourism Platform, 2023b).

Complementing these efforts, the operationalisation of the Malawi Tourism Authority is closely linked to the development of new ecotourism zones, park co-management models, and the expansion of tourism training institutions (Hes, 2025). The rehabilitation of protected areas, such as Liwonde, Majete and Nkhotakota, has attracted new investment and product offerings, while strong international demand signals potential for further growth (Ibid.). Nonetheless, challenges remain in infrastructure, workforce skills, and institutional delivery (Ibid.). With sustained investment, community engagement, and effective leadership by the Malawi Tourism Authority, Malawi has the opportunity to build a more inclusive, competitive and sustainable tourism sector.

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Ecotourism

Ecotourism is generally defined as "**responsible travel to natural areas that conserves the environment and sustains the well-being of local people**" (TIES, 2015). In Malawi, ecotourism centres on non-consumptive wildlife and nature-based experiences that generate economic value while supporting conservation objectives (Republic of Malawi, 2021).

As part of protecting the wildlife asset base for ecotourism, Malawi has undertaken significant conservation initiatives to protect its wildlife and habitats. In 2015, the Department of National Parks and Wildlife (DNPW) partnered with African Parks to manage Liwonde National Park, which was then plagued by poaching and human-wildlife conflict (African Parks, 2015) (see Text box 1 for more details). This collaboration led to notable improvements, including the removal of over 40,000 wire snares and the reintroduction of predators such as cheetah (*Acinonyx jubatus*) in 2017 and lion (*Panthera leo*) in 2018 (African Parks, 2017; African Parks, 2018; African Parks, 2023b). Community engagement has been integral, with programmes focusing on environmental education and sustainable livelihoods to foster local support for conservation efforts (African Parks, undated a). These successes have enhanced Liwonde's appeal as an ecotourism destination, offering activities such as wildlife viewing, guided walks, and boat safaris along the Shire River, contributing to both conservation funding and local economic development (Africa Geographic, 2023).

Prime attractions include **wildlife safaris** in protected areas such as Liwonde National Park, Majete Wildlife Reserve, Nyika National Park and others, where the 'Big Five' and diverse fauna have been reintroduced and protected (Hes, 2025; MTMC, 2025). **Birdwatching (avitourism) is a notable niche.** Malawi hosts over 400 bird species, and sites such as Nyika National Park, Liwonde National Park, Kasungu National Park, Lengwe National Park and the Misuku Hills are regarded as birding havens (Republic of Malawi, 2021). New ecotourism activities are being developed, including **guided walking safaris**, **hiking trails** and **community-based cultural tourism experiences** (Ibid.). Among these, Elephant Marsh stands out as an example of community-based tourism, offering birdwatching and boat safaris combined with cultural experiences in partnership with the Thangadzi River Conservancy (SVC, 2024). These initiatives are supported by recent infrastructure improvements. With donor assistance, over 300 km of trails have been refurbished, bridges built and nine new campsites established in key nature areas to improve visitor access and broaden ecotourism options (BMZ, 2024). Table 4 lists some of Malawi's key ecotourism sites along with their associated tourism activities/attractions.

Table 4: Malawi's ecotourism sites

Type	Sites	Associated tourism activities/attractions
National Parks	Nyika National Park	Nyika National Park offers day and night game drives, guided walking safaris for game viewing and birdwatching, flower spotting during the wet season, mountain biking on plateau trails, trekking on marked paths, trout fishing in upland streams, and both guided and self-drive 4x4 excursions.
	Kasungu National Park	Kasungu National Park, located near Lilongwe and bordering Zambia, offers several visitor activities including game viewing drives, mountain hikes, guided trail walks, overnight hiking trails, and sport fishing in the park's dam and streams. Visitors can also explore historical and archaeological sites and take part in cultural experiences in nearby villages. Birdwatching is popular, with over 300 bird species recorded.
	Liwonde National Park	Liwonde National Park is Malawi's most popular park, known for its scenic Shire River and rich wildlife. Visitors can enjoy boat safaris, game drives, guided walks, and birdwatching, with nearly 300 bird species recorded.
	Lake Malawi National Park	Lake Malawi National Park, a UNESCO World Heritage Site, offers unique water-based activities such as kayaking, snorkelling, scuba diving, and sailing. Visitors can explore the park's islands, including Mumbo, Domwe, and Maleri, while enjoying the lake's exceptional freshwater biodiversity.
	Lengwe National Park	Lengwe National Park, approx. 75 km from Blantyre, is a birdwatcher's paradise with over 300 recorded species. Safari drives offer opportunities to spot a variety of wildlife, while key activities include birdwatching, guided game drives and walking safaris. Visitors can also spend time at the game-viewing hides, observing the natural behaviour of animals and birds. The Park also has a conference centre with standard facilities, offering a unique experience.
Forest Reserves	Ntchisi Forest Reserve	Ntchisi Forest Reserve, home to some of Malawi's last remaining indigenous rainforest, is a quiet destination ideal for hiking and mountain biking. It offers excellent birdwatching, and visitors may also encounter butterflies, orchids, and mammals such as bushbuck (*Tragelaphus scriptus*) and common duiker (*Sylvicapra grimmia*).
	Thuma Forest Reserve	Thuma is dominated by miombo woodland and supports wildlife such as elephant (*Loxodonta africana*), buffalo (*Syncerus caffer*), bushbuck (*Tragelaphus scriptus*), leopard (*Panthera pardus*), spotted hyena (*Crocuta crocuta*), and various primates. Key activities include hiking and guided safaris.
	Dzalanyama Forest Reserve	Dzalanyama is a popular site for birdwatchers, known for rare and endemic species. The Reserve also features a rich variety of flora, including ferns and epiphytic orchids. Visitors can enjoy birdwatching and walking safaris in a tranquil forest setting.
Wildlife Reserves and Nature Sanctuaries	Vwaza Marsh Wildlife Reserve	Set along the Malawi-Zambia border, Vwaza offers quality birdwatching and game viewing, especially during the dry season. The Reserve includes wetlands around Lake Kazuni and Zaropool and supports diverse wildlife such as elephant (*Loxodonta africana*), buffalo (*Syncerus caffer*), and hippo (*Hippopotamus amphibius*), along with over 300 bird species.
	Nkhotakota Wildlife Reserve	Malawi's oldest reserve, featuring rivers and waterfalls, supports elephant (*Loxodonta africana*), lion (*Panthera leo*), and leopard (*Panthera pardus*), with over 280 bird species. Activities include birdwatching, fishing, canoeing, river rafting, and game drives.
	Majete Wildlife Reserve	A conservation success through a public-private partnership with African Parks, now home to the Big Five including reintroduced species such as elephant (*Loxodonta africana*) and lion (*Panthera leo*). Visitors can enjoy game drives, bush walks, birdwatching, and boat safaris.
	Mwabvi Wildlife Reserve	Malawi's smallest and most remote reserve, offering diverse habitats and scenic riverine areas. Activities include guided safaris and hiking.
	Kuti Wildlife Reserve	A compact reserve hosting zebra (*Equus quagga*), elephant (*Loxodonta africana*), antelope species, wildebeest (*Connochaetes taurinus*), and primates. Visitors can enjoy horse riding, bike safaris, and birdwatching.
	Lilongwe Nature Sanctuary	Located in the capital, this is Malawi's only accredited wildlife sanctuary for rescued wild animals, housing nearly 200 animals undergoing rehabilitation or permanent care. Activities include birdwatching, walking safaris, and relaxing in a forested setting.

Table 4: Malawi's ecotourism sites

Type	Sites	Associated tourism activities/attractions
Botanical Gardens	The National Herbarium and Botanic Gardens of Malawi	Overseen by a national botanical authority, these gardens, such as Zomba, Kulemeka (Lilongwe), and Catalina (Blantyre), are underdeveloped but hold strong potential for domestic tourism. They offer picnic areas, leisure and recreation including weddings and engagements, as well as opportunities for education and plant conservation.
Cultural Heritage	Chongoni Rock Art Site (Dedza)	A UNESCO World Heritage Site, Chongoni holds one of the densest concentrations of rock paintings in central Africa. Visitors can explore the cultural landscape through guided cultural routes and rock art viewing.
	Popular Cultural Events	Annual ceremonies including Umtheto (Ngoni of Mzimba), Kulamba (Chewa), Gonapamuhanya (Tumbuka), Umhlangano wa Maseko (Ngoni of Ntcheu), Mulhakho wa Alhomwe (Lhomwe) and the Khulubvi cultural event offer rich opportunities to visit cultural sites and experience local traditions.
Community Tourism	Njobvu Cultural Village	Located close to Makanga Gate, Liwonde National Park, this village offers immersive cultural stays in traditional mud-brick huts. Visitors can engage in daily village life, visit traditional healers and schools, and enjoy local cuisine such as nsima.
	Mpale Cultural Village	Perched on Chinaphale Hill, Mpale offers cultural experiences centred on Yao traditions and other lake-region communities. Activities include cultural performances, traditional food, accommodation, educational tours, and excursions.
	Elephant Marsh Wetlands: Gong'o Community Conservation Area (CCA)	Located in the Lower Shire district of Nsanje, Gong'o is a community-managed area that hosts a variety of waterfowl, including migratory species. Visitors can enjoy birdwatching, boat safaris and traditional cultural dances.

Source: Republic of Malawi, 2021

While national statistics do not yet isolate "ecotourism" in GDP accounts, nature-based tourism constitutes a substantial share of tourist activity and spending (ITA, 2023; Republic of Malawi, 2021). Wildlife and landscape attractions (safaris, lake and mountain tours) are the main draw for international leisure visitors, indicating that a high proportion of Malawi's tourism income is tied to its natural assets (ITA, 2023). Available site-based data illustrate ecotourism's important contribution. **Entrance fees, safari activities and lodge concessions in protected areas generate significant income.** For example, **Majete Wildlife Reserve** saw revenues rise from approx. **USD 240,057 in 2017 to USD 323,223 in 2018** (Republic of Malawi, 2021). By 2023, Majete's tourism revenue had further grown to approx. **USD 759,087**, almost 50% above pre-pandemic levels (MTMC, 2024). In 2024, revenue reached a record-breaking **USD 903,265**, supported by nearly 15,000 visitors, over a third of whom were Malawian nationals (African Parks, 2025). Similarly, **Liwonde National Park** received just under **20,000 visitors in 2018**, yielding an increase in park income from **USD 329,699** in 2017 **to USD 405,052** that year (Republic of Malawi, 2021). In 2024, the park generated **USD 645,826** from tourism, a slight increase from **USD 626,478** in 2023 (African Parks, 2025).

At Elephant Marsh Wetlands, community-based tourism generated USD 184 from 23 visitors in 2023 and **USD 448 from 56 visitors in 2024**, with income directed to site management, guide payments and community projects through the Thangadzi River Conservancy managed by Agricane Kaombe (W. Kawaye, 2025, pers. comm.). In Malawi's national parks managed through public–private partnerships, such as those run by African Parks, tourism revenues are reinvested into park operations and community projects, supporting a self-financing model for conservation. (African Parks, undated b). Notably, Malawi implemented a revenue-sharing scheme whereby one-quarter of each park's monthly gate revenue is allocated to community trusts for development projects (Likomwa, 2014). **In Liwonde National Park, for example, nearby communities have been receiving 25% of park revenues since 2011**, which has funded schools, housing and other local infrastructure (Ibid.). In 2024 alone, community initiatives included support to 94 schools, 95 scholarships, irrigation schemes benefiting over 240 people, and livelihood programmes such as beekeeping and chilli farming, with the Spicy Farmers initiative earning more than USD 17,000 for participating farmers (African Parks, 2025). These mechanisms help ensure that a share of ecotourism income flows back to both conservation management and the people living adjacent to wildlife areas.

Ecotourism supports a range of employment opportunities in Malawi, often in regions with few alternative livelihoods. Majete Wildlife Reserve, for example, went from having only 12 government-employed scouts in the early 2000s and virtually no tourism activity, to supporting a wide range of livelihoods through its ecotourism operations (African Parks, undated c). In 2024 alone, sustainable enterprise initiatives linked to the Reserve reached 1,211 people through activities such as beekeeping, fish farming, irrigation schemes, poultry clubs

Text box 6

Ecotourism income and household impacts around Liwonde National Park

Ecotourism around Liwonde National Park significantly contributes to poverty reduction and rural development in Malawi, accounting for 97% of the park's revenue in 2009, with 58% from private lodge concession fees.

A study of 61 ecotourism staff and 251 community households revealed that 59% of staff households relied entirely on tourism salaries, supporting over 800 dependents, supporting an average of 7.44 dependents, compared to 4.24 for non-staff. Staff were better off economically, with 67% owning mobile phones compared to 27% non-staff in the community. While 41% of community households lived below the poverty line, none of the staff did, and their expenditures injected USD 3,660 annually into local economies.

Challenges include heavy reliance on ecotourism income, limited local skills, and human-wildlife conflict, with 92% of respondents reporting issues with elephants. Addressing these challenges through education, capacity-building, and strengthening local linkages can further enhance livelihoods and conservation efforts in Malawi. Although this study is now over 10 years old, it illustrates the importance of ecotourism to the communities living around Liwonde National Park.

Source: Snyman, 2013

and elephant dung papermaking, reflecting a transformation enabled by the long-term partnership between the Government of Malawi and African Parks (African Parks, 2025; African Parks, undated c). Similar trends have been observed in Liwonde National Park, where ecotourism has played a key role in improving household incomes and reducing poverty, as shown in Text Box 6.

Malawi has strong ecotourism potential but realising this potential remains constrained by several structural barriers (Republic of Malawi, 2021). One major challenge is poor accessibility to key protected areas, especially in remote and northern regions, where inadequate road infrastructure, water supply, and electricity limit the development of ecotourism sites (Lambulira & Bello, 2022). In-country travel also remains difficult, especially during the rainy season, due to degraded road conditions and weak transportation systems (Ibid.). Limited investment in basic infrastructure at tourism sites, including accommodation and visitor facilities, further restricts the growth of ecotourism (Republic of Malawi, 2021). Weak intersectoral coordination and centralised tourism governance have also slowed the rollout of tourism-related services at local levels (Lambulira & Bello, 2022). In addition, the lack of up-to-date tourism statistics and limited visibility of Malawi's ecotourism offerings make it difficult to attract international investors or differentiate the country from regional competitors (ITA, 2023; Lambulira & Bello, 2022). Despite these constraints, Malawi's Ecotourism Strategy identifies **strong opportunities for growth**, including product innovation, digital promotion, and better inclusion of communities in tourism planning and benefits (Republic of Malawi, 2021). With government commitment to improving data collection, decentralising tourism administration, and promoting public-private partnerships, ecotourism could become a leading contributor to inclusive economic development in Malawi.

Hunting

The Department of National Parks and Wildlife (DNPW), under the Ministry of Tourism, oversees wildlife conservation and management in national parks, wildlife reserves, and nature sanctuaries, including aspects related to hunting.

The National Parks and Wildlife Act (2017) outlines Malawi's hunting and wildlife management framework. The Act provides provisions for the conservation of wildlife, protection of endangered species, and regulation of hunting activities. Key points include:

- **Hunting is strictly regulated,** requiring various licenses, including bird, game, and special licenses for protected species. Licenses are not transferable, and certain species require additional permits. Hunting is also not permitted within a 5 km radius of a protected area.
- Protected areas are designated under the Act, and unauthorised entry, hunting, or possessing traps and weapons within these areas is prohibited.
- The Act establishes the Wildlife Advisory Board to recommend wildlife management policies, including hunting regulations.
- Penalties for illegal hunting, poaching, and other offences are included to deter violations and protect biodiversity.
- Community participation and private sector involvement in wildlife conservation are encouraged, supporting sustainable management practices.

Despite the robust legal framework, bushmeat hunting (poaching) persists across Malawi, often driven by poverty, food insecurity, and limited livelihood alternatives. Addressing these underlying drivers requires community-informed approaches (van Velden et al., 2020). Text box 7 highlights findings from a study exploring local perceptions of bushmeat hunting and responses to related conservation interventions. **Data on legal hunting quotas, designated areas and the socio-economic contributions of authorised hunting in Malawi is scarce or non-existent.**

Text box 7

Community responses to bushmeat hunting interventions in Malawi

Bushmeat hunting and consumption are major threats to wildlife across Africa, especially in protected areas where it is the leading cause of biodiversity loss. **In some areas of Malawi, up to 39% of households consume bushmeat.** This is driven by food insecurity, the need for income, cultural traditions and a lack of affordable alternatives. Bushmeat hunting puts pressure on wildlife populations and affects conservation efforts, but strict enforcement alone can create tensions with local communities who rely on natural resources for their survival.

A study involving 250 households around four protected areas in Malawi (Majete Wildlife Reserve, Nkhotakota Wildlife Reserve, Vwaza Marsh Wildlife Reserve and Nyika National Park) explored community responses to seven potential interventions to reduce bushmeat hunting. The interventions included micro-enterprise support, skills training, livestock donations, park-based resource harvesting, regulated hunting and increased enforcement.

Key findings include:

- Micro-enterprise and skills training were the most favoured interventions. These programmes offer alternative income sources such as small shops, tailoring, carpentry or craft making. They were seen as fair and helped reduce reliance on natural resources.
- Livestock donations were also popular. Households preferred individual livestock schemes over group ones because they offered better control and quicker benefits.
- Regulated hunting was the least preferred option. Many respondents were concerned that hunting would deplete wildlife populations and damage tourism, which provides long-term community benefits.
- Enhanced enforcement of wildlife laws was supported by most households, with 84% indicating it was fair because it helps conserve the environment. However, stronger enforcement could reduce meat availability in households by 14%, raising concerns about food security.

The study showed that micro-enterprise and skills training were likely to be supported to replace hunting activities. Other interventions such as livestock and resource harvesting would be treated as extra activities instead of alternatives to hunting.

Overall, the research highlights that conservation programmes must always be designed with community needs in mind. **Projects that provide long-term opportunities and clear links to conservation are more likely to succeed.** Partnerships with development organisations and considered community involvement are essential. This approach supports Malawi's national efforts to combat bushmeat hunting while promoting both conservation and the well-being of rural communities.

Source: van Velden et al., 2020

Fisheries

Malawi has five major water bodies important for fish production and other fishing activities: Lake Malawi, Lake Chilwa, Lake Malombe, Lake Chiuta, and Shire River (FAO, 2020). Fishing is of great socio-economic importance in Malawi as 20% of the total land of Malawi is covered with water (Ibid.). The sector comprises two main subsectors: the dominant capture fisheries and a growing aquaculture industry (NPC, 2021). **Fisheries provide an important food source and provide livelihoods** to thousands of Malawians by encouraging tourism, attracting aquarists (someone who maintains and cares for aquatic animals and plants) worldwide, and maintaining the ecosystems in the lakes (Weyl et al., 2010).

The sector has been estimated to contribute between 4% and 7% of Malawi's Gross Domestic Product (GDP) in recent years (Munthali, 2021; NPC, 2021). In 2021, fisheries production reached approx. 173,480 metric tonnes, **generating MWK 187.3 billion (approx. USD 234 million) in revenue from fish sales** (Nation Online, 2022). According to policy estimates, fisheries also earn foreign exchange through exports, with over 500 tonnes of fish exported annually (NPC, 2021).

Fisheries provide direct jobs to more than 153,000 inland fishers and approx. 12,800 aquaculture farmers (Munthali, 2021). In addition, **up to two million Malawians are engaged in ancillary activities along the fish value chain**, including fish processing, trading, marketing, net making, boat building and engine repair (Ibid.), with over 500,000 people indirectly involved in supporting industries (Government of Malawi, 2016). This means **approx. 10% of the population derive a livelihood from fisheries-related work**. In 2018, **fisheries and aquaculture provided direct employment to 153,084 inland fishers and 12,800 fish farmers (30% women)** (FAO, 2020). Table 5 provides fisheries statistics for Malawi from 1995 to 2018.

For Malawian consumers, fish is an indispensable part of the diet. It **provides approx. 70% of the country's animal protein intake and approx. 40% of total protein supply**, making fisheries vital for national food and nutrition security (Nation Online, 2022). Text box 8 presents the economic contribution of Lake Malombe, while Text box 9 discusses the management challenges facing Lake Malawi..

Table 5: Malawi's fisheries statistics (1995-2018)

	1995	2000	2005	2010	2015	2016	2017	2018
Employment (thousands)	**40.98**	**43.66**	**146.47**	**157.05**	**161.76**	**163.34**	**163.34**	**168.08**
Aquaculture	0	0	0	6	9	10.07	10.07	15
Capture (inland)	40.98	43.66	146.47	151.05	152.76	153.27	153.27	153.08
Fleet (thousands boats)	**15.32**	**15.32**	**15.32**	**15.6**	**17.12**	**16.54**	**18**	**21.36**

Source: FAO, 2020

Text box 8

Economic contribution of Lake Malombe

Lake Malombe plays a vital role in Malawi's economy, with its ecosystem services contributing approx. USD 124.36 million annually (1.97% of GDP), benefiting 97.74% of local households, with an average of USD 1,943.08 per household per year. Other key ecosystem services that Lake Malombe provides include fisheries, which account for 29.8% of total benefits (valued at USD 35.35 million annually) and water supply, contributing 27.94% of services (valued at USD 33.15 million annually). Crop farming adds USD 28.65 million, while other services such as aquatic plant use, fuelwood, and cultural values total USD 14.5 million.

Challenges include over-reliance on lake resources, low participation in conservation efforts (99.44% of households are uninvolved), and environmental degradation. **Policy recommendations include** adopting ecosystem-based management, integrating indigenous knowledge, and implementing payment for ecosystem services (PES) to enhance sustainability and local participation.

Source: Makwinja et al., 2021

Co-management of fisheries in Malawi, particularly through Beach Village Committees (BVCs), has been a key strategy for promoting sustainable resource use in lakes such as Malombe, Chilwa, and Malawi (Njaya et al., 2012). Introduced under the Fisheries Conservation and Management Act of 1997, co-management was designed to decentralise governance by empowering local communities to participate in decision-making, enforcement, and stewardship of fisheries resources (Ibid.). While this approach has demonstrated potential to enhance community participation and improve regulatory compliance, its effectiveness remains limited by weak institutional capacity, inadequate legal frameworks, and unclear user rights (Munthali et al., 2024; Njaya et al., 2012; Vugusta et al., 2025). To achieve sustainable fisheries, systemic constraints must be addressed through stronger legal and financial support for local management. As shown in Text Box 9, persistent power imbalances hinder co-management, highlighting the need for role clarity, legal reform, and greater autonomy for BVCs.


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Text box 9

Power dynamics and co-management in Lake Malawi

Lake Malawi's fisheries sector, particularly in Nkhotakota District, is governed under a co-management system intended to devolve authority and promote collaboration between state, community, and third-sector actors. However, the system is undermined by power asymmetries. The Department of Fisheries (DoF) and traditional chiefs retain dominant influence over financial, human, material, and mental resource mobilisation. For example, the DoF collected over USD 10,000 in licence fees during 2021/22, yet only 25% was retained locally, and fisherfolk had no input into how funds were used. Similarly, the recommended fisheries officer-to-fisherfolk ratio of 1:100 is far exceeded in practice, with only 12 officers for an estimated 9,000 fisherfolk (1:750), leading to inadequate oversight.

Local management bodies such as Beach Village Committees (BVCs) face both interference and marginalisation. Chiefs often override fisherfolk-elected BVC leaders, while fisherfolk report that their traditional knowledge is excluded from management decisions. Attempts at collaborative governance are further challenged by competitive relationships, for instance, NGOs recruiting their own extension officers due to inefficiencies in government deployment, and friction between the DoF and Lilongwe University of Agriculture and Natural Resources (LUANAR) over research control. These hidden and unresolved conflicts reinforce one-sided dependency and antagonistic power relations, limiting the effectiveness of the co-management system and threatening sustainable fisheries governance.

To improve co-management, roles should be redefined to support sustainability while recognising past roles and benefits. BVCs need to be empowered as independent decision-makers, supported by greater role clarity and shifts in attitudes among the Department of Fisheries, chiefs, and other actors toward more inclusive and transparent decision-making. The DoF should enable transparent coordination and complete the legal process to devolve management authority to district level, thereby reducing dependency and strengthening co-management.

Source: Vugusta et al., 2025

Artisanal fisheries

Artisanal fisheries in Malawi are small-scale, low-capital fishing activities primarily conducted by individual fishers or households. These fisheries employ simple technologies and methods such as gillnets, handlines, longlines, beach seines, and fish traps, often operated from dugout canoes or small plank boats (FAO, 2005; FAO, 2020). **Artisanal fishers contribute over 90% of the annual fish catch in Malawi, with more than half of this catch originating from Lake Malawi** (African Development Bank, 2000). The sector predominantly targets small pelagic fish species, including Lake Malawi Sardine (*Engraulicypris sardella* (*usipa*)), *Copadichromis* species (*utaka*), and *Lethrinops* species (*chisawasawa*), which make up approx. 70% of Lake Malawi's catch (African Development Bank, 2000). These fish are essential for local consumption and provide a valuable source of income for fishers and traders.

Despite its significance, the artisanal fisheries sector faces numerous challenges that threaten its sustainability. **Overfishing is a pressing issue**, with evidence showing that the current number of fishing crafts far exceeds sustainable levels, leading to severe overcapitalisation and biological overfishing (CCC, 2021). Additionally, approx. 90% of nets used are illegal, employing mesh sizes too small and capturing juvenile and spawning fish, which hinders fish population recovery (CCC, 2021). **Other challenges include** limited capital, traditional and ineffective fishing methods, poor market systems, and weak enforcement of fisheries laws and regulations (Banda and Tchereni, 2024). Addressing these issues is crucial to ensure the long-term viability of Malawi's artisanal fisheries and the livelihoods they support.

Environmental degradation further exacerbates the challenges facing artisanal fisheries in Malawi. Deforestation, sedimentation, pollution, and habitat destruction threaten the health and productivity of aquatic ecosystems, diminishing fish habitat and reducing overall fish populations (Jamu et al., 2011). Moreover, climate change-induced factors, such as fluctuating water levels and rising temperatures, pose additional stressors on fish populations and exacerbate the vulnerability of artisanal fishers (Makwinja and M'balaka, 2017). **Addressing these multifaceted challenges requires holistic approaches** that integrate sustainable fisheries management practices, community engagement, and environmental conservation efforts to ensure the resilience and viability of artisanal fisheries in Malawi.

Industrial and semi-industrial fisheries

The industrial and semi-industrial fisheries subsectors in Malawi are relatively small but play a key role in the country's fish production. They mainly operate in the

southern part of Lake Malawi using trawlers and purse seiners, targeting deeper waters beyond 18 metres (FAO, 2005). In 2005, about thirteen stern trawlers, eight pair trawlers, and five purse seiners were operational, although the number of vessels has fluctuated over the years (Ibid.). Despite their importance, **these subsectors have faced major challenges** including overfishing, outdated vessel designs, and lack of landing and processing facilities (Bartley et al., 2020). Efforts to modernise operations, such as adopting newer stern trawlers or improving cold chain infrastructure, have been slow due to limited investment and weak enforcement of fishing regulations (Ibid.). The collapse of high-value species such as Chambo *(Oreochromis squamipinnis)* further reflects how the industrial sector's pressure on stocks has worsened biological sustainability (AFIDEP, 2021; World Bank, 2002).

Semi-industrial operations also suffer from systemic issues such as widespread use of illegal fishing gear and lack of compliance, which is common across both artisanal and commercial fleets (AFIDEP, 2021). Fishing companies have often prioritised short-term profits, with sector profits in 2018 estimated to be five times higher than what would be sustainable under maximum yield practices (Ibid.). Proposals to manage fishing pressure, such as fishing by rotation and restricting the number of vessels, have been introduced as more viable compared to costly net replacement schemes (Ibid.). Overall, **the industrial and semi-industrial fisheries in Malawi are fragile and underperforming**, facing urgent needs for better governance, investment, and enforcement to ensure long-term viability (AFIDEP, 2021; Bartley et al., 2020; FAO, 2005).

Aquaculture

The Government of Malawi recognises the role of aquaculture in enhancing food security and nutrition by supplementing capture fisheries (FAO, 2020)**.** Although fish is a major source of animal protein, accounting for 28% of intake, aquaculture contributes only 5.2% of total fish production (Tran et al., 2022). The sector has grown steadily from just 500 tonnes in 2000 to approx. 10,000 tonnes in 2019 (Ibid.).

As of 2018, **aquaculture in Malawi employed approx. 15,000 fish farmers, the majority of whom were smallholders operating pond-based systems** (Munthali et al., 2022; Tran et al., 2022). By 2019, local tilapia species (*Oreochromis shiranus*) accounted for 94% of farmed fish production, with catfish (*Clarias gariepinus*) contributing 5% and common carp (*Cyprinus carpio)* or trout *(Oncorhynchus mykiss*) making up the remaining 1% (Tran et al., 2022). The farming of exotic species such as common carp was banned due to environmental concern, particularly the potential threat to the unique biodiversity of Lake Malawi (FAO, 2020; Tran et al., 2022).

Factors such as poor access to quality fingerlings, high feed costs, and weak extension services limit productivity (Tran et al., 2022). Women and youth are involved mainly in post-harvest activities, reflecting deep gender inequalities in ownership and leadership roles (Nkhoswe et al., 2023). Despite these challenges, **aquaculture is a promising avenue for improving food security, livelihoods, and climate resilience**. Innovations such as integrated fish-livestock-crop systems and the use of deeper ponds show good results in adapting to climate change (UNDP 2022). However, poor regulatory enforcement has led to maladaptive practices such as the introduction of invasive fish species (Ibid.). Furthermore, while large commercial farms such as Chambo Fisheries use advanced technologies such as recirculating systems, most smallholders lack access to finance and structured markets, making it difficult to scale operations (CASA, 2020). The absence of local feed production also increases operational costs, with farmers relying heavily on imports (Ibid.).

Future growth of the aquaculture subsector depends on targeted policy interventions. Improving input markets, enhancing access to affordable finance, and strengthening extension services are critical (Munthali et al., 2022; UNDP, 2022). More inclusive policies that empower women and youth will also be vital for sustainability (Nkhoswe et al., 2023). While initiatives to promote cage farming in Lake Malawi could increase output, proper environmental assessments are necessary to prevent ecological damage (UNDP, 2022). **Overall, Malawi's aquaculture sector is poised for expansion but requires coordinated investments and reforms to fulfil its potential**. Text box 10 illustrates the economic viability and key performance indicators of small-scale aquaculture in Malawi, based on recent survey findings.

Text box 10

Productivity and profitability of small-scale aquaculture

Small-scale aquaculture in Malawi plays an increasingly important role in food security, rural incomes, and agricultural diversification. Based on a survey of 732 fish farms, representing 8% of Malawi's fish farms, findings show that 81.5% of farms are profitable, generating an average annual profit of MWK 90,285 (approx. USD 111). Average production was 153 kg per farm, with a mean profit of MWK 323/ m^2, equivalent to MWK 3.2 million (approx. USD 3,969) per hectare, surpassing profits from staple crops such as maize or tobacco. Most farms are small (average pond size 299 m^2), individually owned (86.8%), and rely on homemade feed and organic fertiliser. Despite low input intensity, aquaculture contributes to economic diversification and has potential for expansion with targeted support.

Profitability is strongly linked to farm characteristics and input use. Farms producing both fingerlings and table fish reported higher profits (582% increase), as did those using inorganic fertilisers and commercial feed. Southern region farms demonstrated the highest yields and profits. However, only 6.2% of farms had access to credit, and 37.5% maintained written records, highlighting systemic barriers to scaling productivity. Furthermore, species choice influenced profitability: farms culturing catfish (*Clarias gariepinus)* performed better than those producing local Tilapia species. Enhancing access to improved inputs, extension, and finance, especially for high-potential species and integrated systems, will be key to realising aquaculture's full contribution to Malawi.

Source: Munthali et al., 2024

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Women in fisheries

Women play a key role in Malawi's fisheries sector, especially in post-harvest activities such as drying, smoking and selling fish (Torell et al., 2021). Despite this, their work is often overlooked and undervalued. **Women account for approx. 40% of the small-scale fisheries workforce and make up approx. 80% of those involved in post-harvest processes** (Mkoka, 2022; Torell et al., 2021). Although women take part in trade, they earn lower profits than men due to poor access to capital, equipment and quality fish (Rice et al., 2023). Gender norms that view fishing as men's work limit their opportunities, even when women own gear or try to participate more fully in the sector (Mweninguwe, 2023).

Some of the most serious challenges faced by women in fisheries are linked to exploitation and unsafe working conditions. In many lakeshore areas, women are pressured into giving sexual favours in exchange for fish (Masauli, 2023). This practice, often called "*sex-for-fish*," puts them at risk of violence, stigma and disease (Ibid.). Although Malawi has policies that address gender equality, such as the Gender Equality Act (2013) and the National Fisheries and Aquaculture Policy (2017), these are not strongly enforced. As a result, gender-based violence and exclusion remain common in fishing communities (Ibid.).

Women's groups have emerged as a way to respond to these issues. These include savings groups, associations, cooperatives and subcommittees of local fisheries bodies. Most of these groups are not formally registered, which limits their access to government support or financial services (FAO, 2022a). Still, the groups show strong internal organisation, with good leadership structures and regular meetings. They also take part in environmental monitoring and have adopted better fish processing methods, although they lack key tools such as improved ovens and storage facilities (Ibid.).

Recent projects have tried to support women more directly. These include the launch of the AWFISHNET Malawi chapter and a five-year sustainable fisheries programme that aims to support 10,000 women (Mkoka, 2022; Mweninguwe, 2023). However, deep-rooted cultural views continue to hold women back, for example, in some communities, women are not allowed to fish even when they have invested in nets or boats (Mweninguwe, 2023).

There is a need for stronger, long-term support that tackles these barriers. Policies should focus on formalising women's groups, improving access to credit and markets, and increasing women's involvement in fisheries governance (FAO, 2022b). Without real changes in terms of how power and resources are shared, women will remain on the margins of Malawi's fisheries sector (FAO, 2022a; Torell et al., 2021).

Wildlife trade

CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) regulates the international trade in endangered species to ensure their survival and safeguard biodiversity. **Malawi, which joined CITES in February 1982 and entered into force in May 1982, is an active participant in CITES** (CITES, 2025). It employs its regulations to manage and monitor the trade in endangered species. This section provides a detailed breakdown of Malawi's CITES exports and imports over an 11-year period (2012-2022)[1]. The data was sourced from the CITES trade database, and all subsequent information on CITES-listed species is derived from this database (CITES, 2024), unless stated otherwise.

Between 2012 and 2022, Malawi exported 109,397 CITES-listed specimens, which is 54 times the amount of the 2,043 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 taxon 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 6 indicates the purposes and reported quantities of exports and imports from Malawi. This report explores commercial exports and imports, providing insights into trade terms and detailing the source and destination countries involved in these transactions. No USD values were found for commercial exports or imports.

1. CITES annual reports are due October 31 of the following year, so 2023 trade data was submitted in 2024 and likely unavailable before the deadline. Therefore, data up to the end of 2022 was used.

Table 6: Purpose of Malawi's exports and imports of CITES-listed species (2012–2022)

	Imports		Exports	
Purpose	**Quantity**	**%**	**Quantity**	**%**
Breeding in captivity	150.00	7.34	0.00	0.00
Educational	2.00	0.10	0.00	0.00
Hunting trophy	6.00	0.29	111.00	0.10
Medical	332.00	16.25	962.00	0.88
Introduction to the wild	178.00	8.71	3,422.00	3.13
Personal	15.00	0.73	20.00	0.02
Scientific	37.00	1.81	1,403.00	1.28
Commercial	1,323.01	64.76	103,472.00	94.58
Zoo	0.00	0.00	5.00	0.00
Law enforcement	0.00	0.00	1.00	0.00
Uncategorised	0.00	0.00	1.00	0.00
Total	**2,043.01**		**109,397.00**	

Source: CITES, 2024

Commercial trade: Exports

Five CITES-listed species were exported commercially from Malawi, all of which were Appendix II listings. Appendix II includes species not necessarily threatened with extinction but in which trade must be controlled to avoid utilisation incompatible with survival. Table 7 provides the reported quantity of species commercially exported from Malawi. Table 8 goes into more detail.

Table 7: Commercial exports of Malawi's CITES-listed species (2012-2022)

Species	Common name	Reported quantity
Crocodylus niloticus	Nile crocodile	90,442.00
Crocodylus porosus	Salt-water crocodile	2.00
Hippopotamus amphibius	Hippopotamus	12,824.00
Loxodonta africana	African elephant	198.00
Panthera leo	Lion	6.00
Total		**103,472.00**

Source: CITES, 2024


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Malawi has a significant export market for the Nile crocodile (*Crocodylus niloticus*), representing 87.41% of the country's commercial wildlife exports. Trade items for this species include 6,521 small leather products, 504 large leather products, 1,443 skin pieces, and 81,974 whole skins. **The Republic of Korea is the largest importer of Nile crocodile specimens,** accounting for 34.7% of exports, followed by Italy (18.36%), South Africa (16.89%), and Singapore (16.58%).

The hippopotamus (*Hippopotamus amphibius*) ranks as the second most exported species, accounting for 12.39% of Malawi's wildlife specimen exports. Trade items include 12,822 teeth, one tail, and one skull. **China is the primary importer,** receiving 87.70% of hippopotamus specimens.

Table 8: Malawi's commercial exports of CITES-listed species (2012–2022)

Country	Species	Common name	Trade terms	Reported quantity
Australia				**138**
0.13% of commercial exports	*Crocodylus niloticus*	Nile crocodile	skins	126
	Hippopotamus amphibius	Hippopotamus	teeth	12
China				**11,248**
10.87% of commercial exports	*Crocodylus niloticus*	Nile crocodile	skins	2
	Hippopotamus amphibius	Hippopotamus	teeth	11,246
Germany				**2,937**
2.84% of commercial exports	*Crocodylus niloticus*	Nile crocodile	leather products (small), skin pieces, skins	2,937
Spain				**2,141**
2.07% of commercial exports	*Crocodylus niloticus*	Nile crocodile	skins	2,125
	Hippopotamus amphibius	Hippopotamus	skulls, tails, teeth	16
Great Britain				**6**
0.01% of commercial exports	*Panthera leo*	Lion	specimens	6
Italy				**16,607**
16.05% of commercial exports	*Crocodylus niloticus*	Nile crocodile	skins	16,607
Japan				**6,242**
6.03% of commercial exports	*Crocodylus niloticus*	Nile crocodile	skins	6,242
Republic of Korea				**31,389**
30.34% of commercial exports	*Crocodylus niloticus*	Nile crocodile	leather products (large and small), skins	31,387
	Crocodylus porosus	Salt-water crocodile	leather products (small)	2
Nigeria				**1,000**
0.97% of commercial exports	*Hippopotamus amphibius*	Hippopotamus	teeth	1,000
Netherlands				**6**
0.01% of commercial exports	*Crocodylus niloticus*	Nile crocodile	skins	6
Singapore				**14,996**
14.49% of commercial exports	*Crocodylus niloticus*	Nile crocodile	skin pieces, skins	14,996
United States of America				**198**
0.19% of commercial exports	*Loxodonta africana*	African elephant	specimens	198
Unknown				**2**
<0.01% of commercial exports	*Crocodylus niloticus*	Nile crocodile	skins	2
South Africa				**15,830**
15.30% of commercial exports	*Crocodylus niloticus*	Nile crocodile	leather products (small), skins	15,280
	Hippopotamus amphibius	Hippopotamus	teeth	550
Zimbabwe				**732**
0.71% of commercial exports	*Crocodylus niloticus*	Nile crocodile	skins	732
Total				**103,472**

Source: CITES, 2024

Commercial trade: Imports

As indicated in Table 9, **13 CITES-listed species were imported into Malawi for commercial purposes,** all listed as Appendix II species. Table 10 goes into more detail.

Table 9: Malawi's CITES-listed species commercial imports (2012-2022)

Species	Common name	Reported quantity
Acipenser baerii	Siberian sturgeon	0.01
Agapornis fischeri	Fischer's lovebird	40.00
Alligator mississippiensis	American alligator	7.00
Ara ararauna	Blue-and-yellow macaw	18.00
Crocodylus niloticus	Nile crocodile	1,115.00
Dalbergia melanoxylon	Mozambique ebony	45.00
Eclectus roratus	Eclectus parrot	14.00
Malayopython reticulatus	Reticulated python	1.00
Psittacus erithacus	African grey parrot	52.00
Psittacus erithacus timneh	African grey parrot	10.00
Pyrrhura molinae	Green-cheeked parakeet	10.00
Python breitensteini	Bornean short-tailed python	1.00
Trichoglossus haematodus	Rainbow lorikeet	10.00
Total		**1,323.01**

Source: CITES, 2024

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Table 10: Malawi's commercial imports of CITES-listed species (2012–2022)

Exporter country	Species	Common name	Trade terms	Reported quantity
Germany				**0.01**
<0.01% of commercial imports	*Acipenser baerii*	Siberian sturgeon	extract	0.01
France				**9**
0.68% of commercial imports	*Alligator mississippiensis*	American alligator	leather products (small)	7
	Malayopython reticulatus	Reticulated python	leather products (small)	1
	Python breitensteini	Bornean short-tailed python	leather products (small)	1
Mozambique				**150**
11.34% of commercial imports	*Crocodylus niloticus*	Nile crocodile	live	150
South Africa				**1,160**
87.68% of commercial imports	*Agapornis fischeri*	Fischer's lovebird	live	40
	Ara ararauna	Blue-and-yellow macaw	live	18
	Crocodylus niloticus	Nile crocodile	skins	961
	Dalbergia melanoxylon	Mozambique ebony	wood product	45
	Eclectus roratus	Eclectus parrot	live	14
	Psittacus erithacus	African grey parrot	live	52
	Psittacus erithacus timneh	African grey parrot	live	10
	Pyrrhura molinae	Green-cheeked parakeet	live	10
	Trichoglossus haematodus	Rainbow lorikeet	live	10
Zimbabwe				**4**
0.30% of commercial imports	*Crocodylus niloticus*	Nile crocodile	leather products (small)	4
Total				**1,323**

Source: CITES, 2024

Wildlife ranching

The National Parks and Wildlife Act of Malawi (2017) provides specific game farming and game ranching provisions. Both licences are governed by the conditions and provisions set out in the Act to ensure sustainable management and utilisation of wildlife resources:

1. **Game Farming Licence (Section 54B):**
   - Authorises license holders to rear both game species and domestic animals for utilisation.
   - Issuance of this licence is restricted to citizens or residents of Malawi.
2. **Game Ranching Licence (Section 54C):**
   - Permits license holders to rear game species exclusively for utilisation purposes.
   - As with the game farming licence, it is only available to Malawian citizens or residents.

Crocodile ranching and farming in Malawi, established in the mid-1980s, continues to operate, though the exact number of ranches or farms, and the economic value derived from these farms in terms of revenues and employment, is unclear. Oversight is provided by the Department National Parks and Wildlife (DNPW), which also serves as Malawi's CITES Management Authority (Crocodile Specialist Group, 2006). While compliance with reporting requirements is inconsistent and activity data is sparse, CITES-export data shows that crocodile products remain Malawi's most exported wildlife species, suggesting that operations are still active (CITES, 2024).

Despite this activity, crocodile exports have seen a decline since the closure of the Dwangwa Sugar Estates farm in 2001 (Crocodile Specialist Group, 2006). The closure of this key facility, coupled with discrepancies in export data from the Department of National Parks and Wildlife (DNPW) and UNEP-WCMC, highlights significant gaps in monitoring and record-keeping (Ibid.). Additionally, no recent biological surveys have been conducted to assess the industry's sustainability, and operations lack clear documentation and transparency (Ibid.).

The Crocodile Management Plan, last updated by the FAO in 1990, has not been revised, and few of its recommended actions have been implemented (Crocodile Specialist Group, 2006). This

outdated policy framework hinders effective management and conservation efforts. Meanwhile, approx. 300 adult crocodiles are killed annually through quotas and problem animal control (PAC) measures, yet biological data do not guide these activities to ensure sustainability (Ibid.). Skins from problem animals are often not recovered or exported, further reflecting inefficiencies in the system (Ibid.).

Human-crocodile conflict remains a significant issue, and quotas are issued annually for local hunters to address problem animals (Crocodile Specialist Group, 2006). However, these activities are poorly documented, and the absence of comprehensive monitoring and reporting exacerbates the challenges of managing these conflicts (Jeremiah & Reniko, 2018). While egg collection from the wild appears sustainable, the lack of regulation around killing adult crocodiles raises concerns about long-term conservation (Ibid.).

Although crocodile ranching contributes to Malawi's wildlife economy, its full potential is undermined by data deficiencies, outdated policies, and insufficient monitoring and enforcement (Crocodile Specialist Group, 2006). **To ensure sustainability and maximise its economic benefits, updated data collection, regular monitoring, and policy reform are urgently needed.** Additionally, increased funding and capacity-building for DNPW are needed for effectively managing and conserving the Nile crocodile population (Ibid.).

Located in Senga Bay, Salima, Croc-Nile Crocodile Farm (owned by Nyika Farms) is the largest in Malawi, housing approx. 10,000 crocodiles bred for both skins and meat (Malawi Plus, 2022). Table 11 provides a list of major crocodile ranches in Malawi. Text box 11 highlights the economic contributions and current dynamics of the crocodile skin industry in the country.

Table 11: Crocodile farms in Malawi

Farm	Location	Enterprise type
Nyika Crocodile	Salima	Ranching
Shire Valley Crocodile	Chikwawa	Ranching
Chiwale Crocodile	Thyolo	Ranching
Koma Crocodile	Mangochi	Ranching

Source: FAO, 2022c

Text box 11

Crocodile skin market in Malawi

Malawi's crocodile skin industry has potential for economic growth, producing high-value skins for the international exotic leather market. Current production levels are modest, but the sector could expand to meet rising global demand, especially in European markets for products such as bags and wallets made from crocodile and other reptile leathers. The global exotic leather goods market, covering crocodile, python, and ostrich skins, is projected to exceed USD 2 billion by 2025, with an expected Compound Annual Growth Rate of 8-10% through 2033.

A small number of crocodile farms produce a significant proportion of the skins exported from Malawi. Institutional support, such as grants and technical assistance from the Export Development Fund (EDF), has helped these farms expand production and strengthen value addition. Such support also contributes to local development, for instance by enabling communities to access water resources for agriculture and aquaculture, promoting diversified livelihoods and sustainable resource use.

The industry faces challenges, including high financing costs, limited transport infrastructure, and constraints in accessing the water, aquaculture, and agricultural resources needed to support expansion.

Sources: EDF, 2024; Mangazi, 2024; MRA, 2024

Forest products

Malawi's forests remain a cornerstone of national life, yet forest cover has declined steadily from approx. 37.1% in 1990 to 23.8% in 2020, and further to 22.9% in 2022 (World Bank, 2024a). Historically, Malawi has been recognised as having one of the highest rates of deforestation in the SADC region, driven by agricultural expansion, charcoal production, fuelwood demand, and population growth. **Forests are essential not only for their ecological value but also for their role in supporting climate resilience, biodiversity conservation, economic activity, and cultural identity.**

Malawi's forest landscape is diverse, comprising both natural and planted forests. **The country is dominated by natural Miombo woodlands, which are rich in biodiversity** (Kamnitzer, 2025). These woodlands are supported by other types such as Mopane and Montane forests, including highland reserves such as Mount Mulanje and Michiru Mountain, home to several endemic species (BirdLife International, 2023; Kamnitzer, 2025). These ecosystems provide critical services, including watershed protection and habitat for endangered flora such as the Mulanje cedar (*Widdringtonia whytei*), a symbol of national heritage that is now being restored after near-extinction (Kamnitzer, 2025).

Malawi's plantation forests are concentrated mainly in the Viphya region in the north. Established in the mid-20th century, the Viphya plantation was once considered the largest man-made forest in Africa, consisting primarily of pine (*Pinus patula*) and eucalyptus (*Eucalyptus grandis/citriodora*) (Kadzuwa, 2023). These forests are crucial for timber production and support a growing forestry industry. Plantation forestry contributes significantly to Malawi's economy, especially in terms of GDP and employment. In 2023, agriculture, forestry and fishing made up 30.38% of the country's GDP (World Bank, 2024a). Despite their economic importance, plantations face challenges such as fires, pests and illegal harvesting, pointing to the need for better investment and policy alignment (Kadzuwa, 2023).

Policy and governance structures have evolved to address the challenges in the forest sector. The 2016 Forest Policy encourages community participation, sustainable harvesting

and reforestation (Republic of Malawi, 2016a). Co-management approaches, such as those under the Shire River Basin Management Program, have begun to show promise by empowering local communities to manage and restore nearby forests (Bhammar, 2019). Legal frameworks such as the Forestry Act (amended in 2019) and the National Charcoal Strategy (2017-2027) aim to balance conservation with sustainable economic use. Yet, **enforcement remains inconsistent, and institutional capacity is often overstretched** (BirdLife International, 2023; Mpaka, 2025).

Recent years have witnessed a rise in innovative conservation and restoration initiatives. Through its commitment to the AFR100 (*African Forest Landscape Restoration Initiative*) and Bonn Challenge, Malawi has pledged to restore 4.5 million hectares of degraded land by 2030 (Mpaka, 2023). This ambition is backed by targeted funding, including EUR 40 million (approx. USD 43.2 million) under a Food and Agriculture Organisation of the United Nations–German Federal Ministry for Economic Cooperation and Development (FAO-BMZ) programme focused on agroforestry and land restoration in districts such as Ntcheu and Mangochi (Chiwayula, 2025). Techniques such as Farmer-Managed Natural Regeneration (FMNR) and intercropping with nitrogen-fixing trees are helping align ecological recovery with agricultural productivity (Mpaka, 2023).

Ecologically, forests are essential for water regulation, erosion control and maintaining biodiversity. Forested catchments, such as those around Mount Mulanje, supply water to millions and sustain vital river systems (Kamnitzer, 2025). The presence of indigenous trees, such as White acacia (*msangu, Faidherbia albida)*, is known to enhance soil fertility and reduce the need for chemical fertilisers, improving climate resilience for farming communities (Mpaka, 2023). Additionally, forest ecosystems act as buffers against extreme weather events, which are becoming more frequent due to climate change.

The Department of Forestry has faced persistent funding and capacity constraints, including inadequate budget allocations, staffing shortages, and limited equipment for forest management and enforcement activities (Mpaka, 2024a). Rangers tasked with enforcing forest laws face real dangers, including violent confrontations with illegal loggers and charcoal producers (Mpaka, 2025). The gap between policy ideals and field-level capacity continues to limit effectiveness. Despite these obstacles, the progress of community-based forestry and growing investment in landscape restoration suggest that with adequate support, Malawi's forests could shift from a story of degradation to one of recovery.

Deforestation

Deforestation in Malawi remains a pressing environmental and socio-economic challenge, with recent data showing a concerning acceleration in tree cover loss. Between 2001 and 2023, the country lost 247,000 hectares of forest, representing a 16% decrease in tree cover and resulting in 105 million metric tonnes of CO_2 emissions (Global Forest Watch, 2024). Alarmingly, 89% of recent deforestation occurred in natural forests, signalling a continued depletion of ecologically vital ecosystems (Ibid.). This forest loss is not only an environmental concern but also a critical contributor to climate change and biodiversity collapse. The annual trend shows worsening degradation, with 23,300 hectares lost in 2023 alone, equating to 14.4 million tonnes of CO_2 emissions (Ibid.).

The root causes of deforestation in Malawi are complex and multi-layered. Proximate drivers include agricultural expansion, tobacco farming, and brick production, while underlying factors are entrenched in poverty, insecure land tenure, and rapid population growth (Ngwira & Watanabe, 2019). These pressures are especially visible in areas such as the Mwazisi zone, where customary land use and lack of formal land rights have limited sustainable forest management efforts (Ibid.). This points to the failure of top-down forest governance and highlights the **need for decentralised, community-sensitive solutions that address both land-use dynamics and socio-economic vulnerabilities.**

The impacts of deforestation extend beyond the environment. The health sector, for instance, is increasingly affected. Deforestation leads to increased exposure to vector-borne diseases, reduced access to clean water, and deteriorating health equity, especially for rural and marginalised populations (Heneine & Stephens, 2020). Community reforestation programmes are emerging as integrated interventions, attempting to rebuild tree cover while improving public health and economic resilience (Ibid.). However, these efforts remain small-scale and under-resourced. There is an urgent need for stronger policy frameworks that link environmental conservation with social services and livelihoods.

Ethical and human development concerns must guide any policy response. Deforestation disproportionately affects rural women and children, worsening food insecurity and poverty (Magawa & Azizi, 2025). Access to clean drinking water is also closely linked to forest cover, with a one-percentage-point loss in forest area associated with a 0.93-percentage-point drop in water access (Mapulanga & Naito, 2019). This shows how environmental degradation directly impacts essential human needs. If not addressed, deforestation will continue to erode Malawi's development progress, calling for urgent, coordinated action that places communities at the heart of forest protection.

Firewood and charcoal

Malawi continues to rely heavily on biomass fuels, especially firewood and charcoal, for household energy needs. **Approximately 97% of households primarily use these fuels for cooking** (Zulu, 2018). While policies such as the National Charcoal Strategy have aimed to address this reliance, various factors contribute to its persistence. These include widespread poverty, limited infrastructure, and restricted access to electricity, especially in rural areas where only approx. 2% of households are connected to the power grid (Toth et al., 2019). The high use of biomass fuels has been associated with deforestation, which may affect food security, water availability, and hydroelectric power generation (Zulu, 2018).

Charcoal production and illegal logging, which make up approx. 41% of firewood sourcing, are key factors in this trend (MyClimate, 2023; Toth et al., 2019). **Charcoal production alone contributes to approx. one-third of forest loss due to the use of freshly cut wood** (Toth et al., 2019). These changes have been linked to environmental challenges such as biodiversity loss, soil erosion, and reduced water availability. These, in turn, can affect agricultural productivity and the wellbeing of communities that depend on natural resources (Toth et al., 2019; Zulu, 2018).

Agroforestry has been introduced as a potential solution to improve fuelwood sustainability. Agroforestry Fuelwood

Technology (AFT), which includes both individual and shared woodlots, helps provide a more reliable source of firewood while offering additional environmental benefits (Toth et al., 2019). In southern Malawi, fuelwood sellers are 43% more likely to adopt AFT than the general population, highlighting its practical and economic value (Ibid.). However, its adoption is uneven. Factors such as unclear land ownership, limited market access, and policy enforcement challenges have slowed broader implementation (Ibid.).

Efforts have also focused on promoting improved cookstoves to reduce biomass consumption and improve indoor air quality. These stoves are up to 45% more fuel-efficient than traditional cooking methods, reducing demand for firewood and charcoal while helping to lower pressure on Malawi's forests. The broader programme contributes to **annual emissions reductions of approx. 500,000 tCO□e while also reducing the time households spend collecting fuelwood** (MyClimate, 2023). Traditional cooking practices still contribute to indoor air pollution, which mainly affects women and children who are most involved in cooking and fuel collection (Jagger & Perez-Heydrich, 2016). While improved stoves offer clear advantages, adoption remains limited due to affordability, distribution challenges, and limited public awareness (Ibid.).

Addressing these challenges may benefit from approaches tailored to local contexts, including consideration of gender roles and land access. Promoting secure land rights could help support sustainable practices such as agroforestry, especially among female-headed households (Toth et al., 2019). Malawi's policy framework has promoted both biomass-based energy and cleaner energy alternatives, creating mixed signals regarding future energy and land-use pathways (Ibid.). Moving forward, efforts that combine clear and consistent policies, community involvement, improved education on sustainable practices, and enforcement of environmental regulations may help support a more balanced and sustainable energy future (MyClimate, 2023; Toth et al., 2019; Zulu, 2018).

Non-timber forest products

Non-Timber Forest Products (NTFPs) are integral to rural livelihoods in Malawi, providing both sustenance and income. In southwest Malawi, a study of 286 households revealed universal use of NTFPs, with thatch grass, bamboo, edible orchids, mushrooms, and wild fruits being predominant (Mahonya et al., 2019). Notably, 15% of these households engaged in selling NTFPs, earning between USD 20 and USD 456 annually, depending on product type and market engagement (Ibid.). Proximity to forested areas influenced this dynamic; communities near intact forests were more likely to sell NTFPs, while those in deforested regions tended to purchase them (Ibid.). **Regionally, the importance of specific NTFPs varies**: mushrooms and fruits are significant in central Malawi, while termites and caterpillars are more prominent in the north and south (FAO, 1999). The following sections provide details on some of the NTFPs in Malawi. However, data on the value and employment generated from these NTFPs was not always readily available, and collecting such information consistently and regularly would be valuable in understanding the local and national significance of forests and natural resources more broadly.

Edible insects

Edible insects play a valuable role in Malawi's food system, offering high nutritional benefits while being embedded in cultural practices. Studies show that species such as locusts (*Nomadacris septemfasciata,* locally known as *dzombe*) contain up to 69.78% protein, making them richer in protein than some conventional meat sources (Jose et al., 2022). Insects such as black ants (*Carebara vidua,* locally known as *mafulufute*) also have high fat content, and others are significant sources of minerals such as phosphorus (Ibid.). Their traditional use across Malawi demonstrates local acceptance and longstanding culinary relevance (Ibid.).

In addition to their nutritional value, edible insects are crucial in enhancing food security, especially in rural communities where access to diverse and nutrient-rich food is limited. Their cultivation requires fewer resources than traditional livestock, making them environmentally sustainable amidst climate change and land degradation (Kelemu et al., 2015). An example of this can be seen in the seasonal collection and sale of *dzombe* (locusts) in Malawi, which highlights both the cultural and economic value of edible insects. This is further described in Text box 12.

Text box 12

Locusts as food and income

In Malawi, large grasshoppers and locusts, known as *dzombe*, are collected mostly between March and July, when they are most plentiful. Women and children gather them early in the morning using sticks to knock them down, while young men may hunt them with reed bows and pronged arrows. The insects are usually prepared by removing the wings and legs, then cooking them with salt and water. They may also be fried with oil or cooked with tomatoes or groundnut flour. When available in large numbers, *dzombe* are dried and stored for later use.

The sale of *dzombe* in local markets brings in seasonal income, especially for women. Some families collect enough to store for a year, taking small amounts as needed. In many areas, baskets of dried grasshoppers can be seen for sale during the dry season. The insects are eaten as a snack or served as relish with the main meal, making them both useful and desirable.

Source: Morris, 2004

Despite their benefits, further research is needed to fully understand the diversity and nutritional content of edible insects across Africa, including Malawi. This knowledge gap hinders insects' broader adoption and sustainable integration into mainstream diets and agricultural practices (Ibid.).

Medicinal plants

Medicinal plants are deeply embedded in Malawi's healthcare system, **economy, and cultural identity**, especially in rural areas where access to conventional medicine remains limited. **An ethnobotanical study in Mzimba district documented over 80 medicinal species used by communities to treat infections and chronic diseases, reflecting the crucial role of traditional knowledge in primary healthcare** (Chisamile et al., 2023). However, such knowledge is under threat due to the ageing of custodians and lack of systematic documentation (Ibid.). Traditional medicine remains a preferred option not just out of necessity but because of cultural acceptance, cost, and perceived efficacy (Ibid.).

The economic value of medicinal plants is evident in both domestic and cross-border markets. In Nsanje district, for instance, communities derive substantial income from selling Calumba (*Jateorhiza palmata)*, with individual annual earnings ranging from USD 17 to over USD 200 (Guta et al., 2016). Similarly, in southern and central Malawi, traders sell over 100 plant species for medical purposes, including Long-tail cassia/Sjambok pod (*Cassia abbreviata)*, Ivy-grape/Wild grape (*Cissus cornifolia)*, and Pod mahogany/Lucky bean tree (*Afzelia quanzensis)*, with exports going to South Africa, Botswana, and Zimbabwe (Meke et al., 2016). Many traders invest significant time and money into harvesting trips, some lasting up to three days, indicating high demand and profitability (Ibid.). However, pricing remains inconsistent due to the informal nature of the trade and the influence of social status on transaction values (Ibid.).

Despite this economic importance, sustainability concerns are growing. A large proportion of species are harvested destructively for roots and bark, which increases tree mortality (Meke et al., 2016). Overharvesting, forest degradation, and limited cultivation threaten supply, especially of high-demand species such as White's ginger (*Mondia whitei)*, already endangered in neighbouring countries (Ibid.). Malawi's lack of coherent policies and enforcement mechanisms allows for continued unregulated trade, undermining conservation efforts. Although some species are protected, poor implementation and corruption at border points hinder effective regulation (Ibid.).

The integration of medicinal plants into broader health strategies is becoming increasingly relevant, especially with the rise of global health threats. During the COVID-19 pandemic, studies identified over 100 local species in the country with potential antiviral properties, prompting renewed interest in traditional medicine's role in disease management (Chikowe et al., 2021). **Strengthening community-based conservation structures, improving propagation skills, and formalising traditional healer networks could help ensure the sustainability and continued socio-economic benefits of Malawi's medicinal plant resources.** The diversity, usage, and trade of medicinal plants in Malawi are further illustrated in Table 12, which lists selected species commonly used and exported, including their vernacular names, plant parts used, trader frequency, and export destinations.

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Table 12: List of traditional medicinal plants sold in Southern and Central Malawi

Name of species	English name	Malawian vernacular name	Family	Plant part used	Trader frequency (%) (n = 30)	Destination (for exported species)	No. of traders citing the sp. as being exported
Acacia karroo (Vachellia karroo)	Sweet thorn	Nthumbati	Fabaceae	Bark, gum	3		
Acacia xanthophloea (Vachellia xanthophloea) [1]	Fever tree	Ubaniwamtengo	Fabaceae	Root	3		
Acalypha brachiata	Hairy-stemmed acalypha	Chinyamunyamu	Euphorbiaceae	Leaves	3		
Adansonia digitata	Baobab	Mulambe	Bombacaceae	Bark, leaves, fruit	3	ZA, BW, LS	1
Adenia cissampeloides	Monkey rope	Mulozi; Mlozi	Passifloraceae	Root, leaves	7		
Afzelia quanzensis	Pod mahogany	Msambafumu	Fabaceae	Bark, root	30	ZA	2
*Agave sisalana Perrine**	Sisal	Salivelo; Khonje	Asparagaceae	Leaves	3		
Allophylus africanus	African false currant	Mtatul; Chikule	Sapindaceae	Leaves	7		
Annona senegalensis subsp. senegalensis	Wild custard apple	Mpoza	Annonaceae	Bark, root, fruit	7		
Aristolochia hockii	Dutchman's pipe	Ndyoka; kamvabingu	Aristolochiaceae	Root	47	ZA	2
Asparagus africanus	Wild asparagus	Tsisilamanda	Asparagaceae	Root, leaves	3		
*Azadirachta indica *[1]*	Neem tree	Neem	Meliaceae	Leaves	17	ZA	1
Azanza garckeana [1]	Snot-apple	Matoyitoyi	Malvaceae	Leaves	3		
Bauhinia petersiana	Kalahari camel's foot	Mwihuwa; Mpandula	Fabaceae	Bark, root	7	ZA, BW	1
Bauhinia thonningii (Piliostigma thonningii)	Camel's Foot	Chitimbe	Fabaceae	Bark, root	3		
Brachystegia boehmii	Prince of Wales feathers	Nankajombo	Fabaceae	Root	3		
Brachystegia spiciformis	Zebrawood	Kachumbe	Fabaceae	Root	3		
Brachystegia utilis		Mchumbe	Fabaceae	Root, leaves	3		
Breonadia salicina	Matumi; Mingerhout	Mchonya	Rubiaceae	Bark, root	10	ZA, BW	1
Bridelia micrantha	Mitzeerie	Msopa	Phyllanthaceae	Root, fibre	3		
Burkea africana	Wild syringa	Nkalati	Fabaceae	Bark, root	13	ZA	2
Capparis erythrocarpos	Red-fruited caper-bush	Mkandankhuku	Capparaceae	Root	3		
*Carica papaya**	Papaya	Mpapaya	Caricaceae	Root	3		
Carissa spinarum	Simple-spined num-num	Chilangamfiti	Apocynaceae	Root, leaves	3		
Cassia abbreviata	Sjambok Pod	Muwawani; Mkwapukwapu; Nchalamila; Mdala	Fabaceae	Bark, root	77	ZA, BW	2
Catunaregam spinosa	Mountain pomegranate	Chipembere	Rubiaceae	Root	3		
Cissampelos mucronata	Hairy heartleaf	Chirambe	Menispermaceae	Root	3		
Cissus cornifolia	Wild grape	Mwanamphepo	Vitaceae	Bark, root	47	ZA, BW	2
Cissus integrifolia	Depa-vine	Ntambe	Vitaceae	Root	13	ZA, BW	9
Combretum zeyheri	Large-fruited bushwillow	Mkotamo	Combretaceae	Bark, root	30		

Table 12: List of traditional medicinal plants sold in Southern and Central Malawi

Name of species	English name	Malawian vernacular name	Family	Plant part used	Trader frequency (%) (n = 30)	Destination (for exported species)	No. of traders citing the sp. as being exported
Commiphora africana [1]	African myrrh	Ubaniwamtengo	Burseraceae	Root	3		
Commiphora mossambicensis	Pepper-leaved Corkwood	Mpokopoko	Burseraceae	Bark	3	ZA	2
Croton gratissimus	Lavender Croton	Kakhome	Euphorbiaceae	Root	10		
Cucumis hirsutus [1]	Hairy wild cucumber	Likhomera; Mkuwikuwi	Cucurbitaceae	Root	7	ZA, BW, NA	2
Cussonia arborea	Octopus cabbage tree	Mbwabwa	Araliaceae	Bark, root	3	ZA, BW	1
Dalbergia melanoxylon	African blackwood	Phingo	Fabaceae	Leaves, stem	7		
Dalbergia nitidula [1]	Purple-wood flat-bean	Mlembera	Fabaceae	Bark, root	3		
Dicoma anomala	Fever bush	Palibekanthu	Compositae	Root	30		
Diplorhynchus condylocarpon	African rubber tree	Thombozi	Apocynaceae	Bark	10	ZA, BW, ZW	2
Dolichos kilimandscharicus	Wild lupin	Ndupa	Fabaceae	Root	7		
Droogmansia pteropus	Winged Droogmansia	Mlundelunde	Fabaceae	Root	3		
Ekebergia benguelensis	Woodland dogplum	Mulepa	Meliaceae	Bark, root	3	ZA, BW	1
Elephantorrhiza goetzei	Narrow-pod elephant root	Chiteta	Fabaceae	Tuber	10	ZA	8
Entada rheedii	African Dream Herb	Liweya	Fabaceae	Root, stem	3		
Erythrina abyssinica	Flame tree	Muwale	Fabaceae	Bark	3		
Erythrophleum suaveolens	Forest Ordeal Tree	Mwavi	Fabaceae	Bark, root, leaves	13	ZA	3
Erythroxylum emarginatum	African Coca-tree	Mulungamo	Erythroxylaceae	Bark, root	23		
*Eucalyptus sp.**	Gum species	Bluegum	Myrtaceae	Bark, leaves	3		
Euphorbia sp.	Euphorbia species	Likungusi	Euphorbiaceae	Sap	3		
Faidherbia albida	Ana tree	Msangu	Fabaceae	Bark, root	3		
Ficus sp.	Fig species	Kachere	Moraceae	Bark	3		
Ficus sur	Broom cluster fig	Mkuyu	Moraceae	Bark, leaves	3		
Flacourtia indica	Governor's plum	Nthema	Salicaceae	Root	13		
Gardenia subacaulis		Chiungamire	Rubiaceae	Root	7		
Gmelina arborea	White teak	Malayina	Lamiaceae	Bark, root	3		
Grewia inaequilatera [1]	Bastard silver raisin bush	Thoza	Malvaceae	Root	3		
Heteromorpha trifoliata	Common parsley tree	Msiyeapite	Apiaceae	Root	13		
Holarrhena pubescens	Tellicherry tree	Thombozi-chipeta; Mkwale	Apocynaceae	Root	27		
Jateorhiza bukobensis	Nyoka	Dululu	Menispermaceae	Root	3		
Khaya anthotheca	African mahogany	Mbawa	Meliaceae	Bark	10	ZA, BW	1

Table 12: List of traditional medicinal plants sold in Southern and Central Malawi

Name of species	English name	Malawian vernacular name	Family	Plant part used	Trader frequency (%) (n = 30)	Destination (for exported species)	No. of traders citing the sp. as being exported
Kigelia africana	Sausage tree	Mvunguti; Chiswabumbu	Bignoniaceae	Bark, Root, fruit	10	ZA	1
Kirkia acuminata [1]	White seringa	Mtumbu	Kirkiaceae	Leaves	3		
Landolphia kirkii	Rubber vine	Mposiposi	Apocynaceae	Leaves, latex	7		
Lecaniodiscus fraxinifolius	River litchi	Mkulumu	Sapindaceae	Bark, root, leaves	3		
Macledium sessiliflorum	Doll's Protea	Somphole	Asteraceae	Root	3	ZA, BW	2
Maclura africana	African Osage-orange	Mphabulu	Moraceae	Bark, root	3		
*Mangifera indica**	Mango	Mango	Anacardiaceae	Bark, leaves	10		
*Manihot carthagenensis subsp. glaziovii**	Tree cassava	Mpira	Euphorbiaceae	Leaves	10		
Markhamia obtusifolia	Golden bean tree	Kaliuti	Bignoniaceae	Root	3		
Melinis macrochaeta		Muitano	Poaceae	Whole plant	7		
Mondia whitei	White's ginger	Gondolosi; Nthubulo	Apocynaceae	Root	27	ZA, BW	2 + 2
Mucuna stans		Chitedze	Fabaceae	Root	3		
Musa x paradisiaca	Banana	Nthochi	Musaceae	Root	7		
Myrothamnus flabellifolia	Resurrection bush	Chisoni	Myrothamnaceae	Whole plant	13	ZA	2
Ozoroa insignis [1]	Currant resin tree	Mtukumphako	Anacardiaceae	Root	3		
Paederia bojeriana	Stinkvine	Ntuvituvi	Rubiaceae	Leaves	7		
Parkia filicoidea	African locust bean	Mkundi	Fabaceae	Bark	3		
Pericopsis angolensis	East African afrormosia	Muwanga	Fabaceae	Bark	13		
Phyllanthus ovalifolius	Small-fruited potato bush	Ntanthanyerere	Phyllanthaceae	Root	3		
*Prunus persica**	Peach	Pichesi	Phyllanthaceae	Bark, leaves	3		
Pseudolachnostylis maprouneifolia	Kudu berry	Msolo; Mbewe	Phyllanthaceae	Bark, root	7	ZA, BW	1
Psorospermum febrifugum	Christmas berry	Mdima; Chiphamtima	Hypericaceae	Root	27		
Pterocarpus angolensis	Bloodwood, kiaat	Mlombwa	Fabaceae	Bark	10	ZA, BW	2
Pterocarpus rotundifolius	Round-leaved bloodwood	Mbalika; Mbalitsa	Fabaceae	Bark	7	ZA	1
Rauvolfia caffra	Quinine tree	Mlilira; Mwimbi	Apocynaceae	Bark	17		
Securidaca longipedunculata	Violet tree	Bwazi	Polygalaceae	Root	17		
Senegalia polyacantha	White-stemmed Thorn	Nkakozi	Fabaceae	Root	7		
Solanum panduriforme	Poison apple	Nthula	Solanaceae	Root, fruit	3		
Solanum sp.		Mbwanyanya	Solanaceae	Root	3		

Table 12: List of traditional medicinal plants sold in Southern and Central Malawi

Name of species	English name	Malawian vernacular name	Family	Plant part used	Trader frequency (%) (n = 30)	Destination (for exported species)	No. of traders citing the sp. as being exported
Steganotaenia araliacea	Carrot tree	Msempano; Mphambano; Mpoloni	Apiaceae	Bark, root	17	ZA, BW, LS	1
Sterculia appendiculata	African cotton tree	Njale	Sterculiaceae	Bark	3		
Stereospermum kunthianum	Pink jacaranda	Kokonasimba	Bignoniaceae	Bark, root	3		
Tabernaemontana elegans [1]	Toad tree	Chikope	Apocynaceae	Root	3		
Tacca leontopetaloides	Polynesian arrowroot	Mwinimunda	Dioscoreaceae	Tuber	3		
Terminalia sericea	Silver cluster-leaf	Naphini	Combretaceae	Bark	7		
Trema orientalis	Gunpowder tree	Mpepu; mpetu	Combretaceae	Bark, root, leaves	10		
Trichilia emetica	Natal mahogany	Msikizi	Meliaceae	Bark, root	3		
Trichodesma zeylanicum	Camel bush	Chilungumwamba	Boraginaceae	Root	3		
Uapaca kirkiana[*1]	Sugar plum	Msuku	Phyllanthaceae	Root	7		
Uapaca nitida [*1]	Wild mahogany	Msechera	Phyllanthaceae	Root	3		
Vangueria infausta	Wild medlar	Mbilira	Rubiaceae	Root, leaves	3		
Vernonia adoensis (Baccharoides adoensis)		Futsa	Compositae	Root	3		
Vernonia bracteosa	Ironweed	Chiziyo	Compositae	Leaves	7		
Xeroderris stuhlmannii	Wing bean	Mwazi; Ubaniwamtengo	Fabaceae	Fibre	7		
Ximenia caffra	Sour plum	Mpinjipinji	Olacaceae	Bark, root	13		
Zanha africana	Velvet-fruited zanha	Mututumuko; Mjuju	Sapindaceae	Bark, root, stem	37	ZA	2
Zanthoxylum chalybeum var. chalybeum	Knobwood	Mzobala; Mkandanyalubwe; Mlunguchulu	Rutaceae	Bark, root	20		
Ziziphus abyssinica	Abyssinian jujube	Masau; kankande	Rhamnaceae	Bark, root	13		

* Exotic species;
[1] Species also known to be used for bark, but not recorded as being used for bark in this study
Species in bold are protected in Malawi
Abbreviations: LS, Lesotho; NA, Namibia; ZA, South Africa; BW, Botswana; ZW, Zimbabwe

Source: Meke et al., 2016

Apiculture

In Malawi, honey production is an emerging economic activity that has the potential to significantly improve the livelihoods of rural women beekeepers. **The domestic demand for honey exceeds supply by 30%, indicating a substantial market opportunity** (Rockflower, 2020). Honey production in Malawi involves a wide range of stakeholders, from individual beekeepers to larger entities such as the Bee Hive Group, which participates in the processing and export of honey (Ibid.).

The income from honey production can be significant for individual beekeepers. In areas such as the Lingoni watershed, **each beehive can produce approx. 15 litres of honey three times a year, with half a litre selling for MK 1,500 (approx. USD 3.75), leading to an annual additional income of approx. USD 113 per hive** in a country where the average annual income is USD 270 (USAID, 2014).

Efforts by organisations such as Footsteps Africa and the United States Agency for International Development (USAID) have been crucial in supporting women beekeepers. Footsteps Africa provides modern beekeeping kits and training, enabling women to produce and market high-quality honey and bee by-products such as beeswax, while integrating them into the formal honey market (Rockflower, 2020). Similarly, USAID's initiatives in southern Malawi helped beekeepers increase their income through sustainable practices that also promote environmental conservation (USAID, 2014).

These initiatives highlight the growing importance of beekeeping in Malawi's rural development. A notable example is the beekeeping activities around Kasungu National Park, where local communities are engaging in sustainable honey production. Text box 13 provides further details on how beekeeping in Kasungu supports both livelihoods and conservation efforts.

Baobab

The baobab tree (*Adansonia digitata*) has considerable socio-economic and cultural importance in Malawi. Beyond its economic value, it serves as a cultural landmark and spiritual symbol for communities, often hosting traditional gatherings, meetings, and rituals (Balala, 2018). Its unique appearance, often described as an upside-down tree, reinforces local beliefs of its divine significance, enhancing its spiritual status among communities (Ibid.). Additionally, prominent baobabs attract tourists, boosting local economies, as seen at the 800-year-old baobab tree at Cape Maclear, Mangochi (Ibid.).

Economically, baobab contributes significantly to local livelihoods, especially in rural areas (Olumeh & Mithöfer, 2024). Baobab collection (of fruit pods from wild trees) and sales provide crucial income, contributing on average between 26% to 34% of household earnings, depending on cooperative membership (see Text box 14). Given these benefits, the Wildlife and Environmental Society of Malawi (WESM) highlights the necessity of conserving baobab populations against increasing threats such as agricultural expansion and urbanisation (Balala, 2018).

Text box 13

Beekeeping in Kasungu supports sustainable livelihoods and conservation

Beekeeping is gaining popularity in Malawi, especially around Kasungu National Park. With support from the GIZ C-NRM (Climate Resilience and Natural Resource Management) project, through a grant awarded to organisations such as IFAW (International Fund for Animal Welfare) and COMACO (Community Markets for Conservation), local communities are adopting beekeeping as a sustainable way to earn income and reduce reliance on activities such as poaching and cutting trees for firewood. By July 2024, approx. 700 kilograms of honey had been harvested from new beehives placed near the Park. Even without formal markets, villagers can earn approx. USD 5 per litre of unprocessed honey sold locally. This shows that beekeeping can help improve livelihoods while also protecting the environment.

Beyond income, beekeeping supports forest conservation, as trees are needed to hang beehives. It can also help reduce human-wildlife conflict. Studies have shown that elephants avoid areas with beehives, which can prevent them from entering farms. This approach encourages peaceful coexistence between people and wildlife. With further training in honey processing and marketing, **Malawi's honey industry has the potential to grow, benefiting both communities and conservation efforts.**

Source: Mpaka, 2024b

Text box 14

The role of collective action and cooperatives in baobab commercialisation in Malawi

In Malawi, the commercialisation of underutilised crops such as baobab is gaining recognition as a strategy for rural development and food security. Collective action through cooperatives plays a central role in improving the welfare of baobab fruit collectors. Based on data from 795 households across four districts, cooperative membership was found to increase income from baobab sales by 3.57%, improve household dietary diversity by 11%, and raise food consumption scores by 5.6%. These gains are linked to better market access, coordinated sales, and stronger bargaining power among members.

Baobab sales are a vital source of livelihood. Income from baobab contributes about 26% of total household income for non-members, and rises to 34% for cooperative members. This highlights the economic importance of the crop and the added value of collective marketing. Cooperatives, often organised as local clubs of 15 to 40 members, offer training in harvesting, quality control, and storage. They also help aggregate and sell baobab products through umbrella groups such as the Zankhalango Association.

However, membership is not universal. Only 38% of collectors belonged to cooperatives. Among non-members, common reasons for staying out included delayed payments, preference for alternative buyers, and mistrust due to past payment issues. These concerns mirror challenges faced in other agricultural cooperatives in the region, suggesting a need for stronger financial management and more transparent governance.

The benefits of cooperative membership are not equally shared. Male baobab managers gained more than their female counterparts, likely due to gendered decision-making power over income and food purchases. Among women, unmarried female managers saw better outcomes in food security than married ones. Households with smaller land sizes and less experience in baobab fruit collection also benefited more from membership, as cooperatives helped offset their limited resources and market access.

Certain characteristics increased the likelihood of joining a cooperative. These include older age, larger household size, and access to hired labour. Interestingly, education levels did not significantly influence membership, suggesting that practical constraints and income needs are stronger motivators.

Overall, the findings highlight the **value of collective action in emerging value chains such as baobab.** Well-functioning cooperatives help smallholders overcome market barriers, raise incomes, and improve food security. For policymakers and development practitioners, this means investing in cooperative training, outreach, and support structures. Expanding membership, especially among women and newer collectors, could further amplify the role of baobab in rural livelihoods and make commercialisation more inclusive and resilient.

Source: Olumeh & Mithöfer, 2024

Malawi's baobab market has experienced growth and diversification in recent years, driven by rising consumer interest both locally and internationally (Darr et al., 2020). Products such as fruit juices, pulp powders, sweets, ice-lollies, cosmetics, and soaps are increasingly common in formal and informal retail markets (Ibid.). Consumer preferences show clear segmentation based on income levels: lower-income groups, especially school children, prefer affordable products from informal vendors, while wealthier, educated consumers favour formally packaged products with detailed nutritional labels and quality certification (Ibid.).

A growing demand for healthy, natural products has created significant international market opportunities for Malawi's baobab sector. Export markets, including those in Asia, have shown increasing interest in baobab powder due to its nutritional properties and use in functional foods and health products. This growing demand highlights the potential for expanding exports of value-added baobab products, provided Malawi continues to improve product quality, processing capacity, branding, and market access.

Despite growing market opportunities, **the baobab sector faces challenges**, notably post-harvest losses and limited infrastructure. Losses of approx. 7.8% occur annually, with traders experiencing the highest losses (12.2%), mainly due to poor storage, handling practices, and limited knowledge on reducing losses (Cossam et al., 2023). Addressing these challenges through improved storage facilities, training, and policy support could significantly boost income for collectors and traders (Ibid.).

Additionally, rural producers often face high transaction costs, limited access to finance, weak market linkages, and poor infrastructure, hindering effective market participation (Darr et al., 2020; Olumeh & Mithöfer, 2024). Such constraints limit the profitability and growth potential of baobab products in Malawi's rural communities (Olumeh & Mithöfer, 2024).

Given the global interest in underutilised plant species, Malawi has considerable potential to expand its baobab sector, provided current constraints are addressed. Enhancing quality through better handling, packaging, and labelling could significantly raise product value and consumer willingness to pay (Darr et al., 2020). Further, targeted market strategies focused on consumer segments and expanding export linkages would help unlock greater economic opportunities.

The carbon market

Malawi's CO_2 emissions have increased over time, rising from approx. 3.57 million tonnes in 2005 to 5.63 million tonnes in 2022 (Worldometer, undated). A sharp increase in CO_2 emissions from 2005 to 2022 (Figure 5) is primarily driven by rising emissions from the power industry and industrial combustion (Ibid.). Malawi's land area spans 11.85 million hectares (118,485 km^2), with over one million hectares designated as forest reserves and another one million hectares under wildlife conservation parks and reserves (Stankova, 2023). **This presents an opportunity to generate nearly 20 million metric tonnes (MT) of carbon credits annually, potentially contributing USD 600 million to the national economy** (Ibid.). The Malawi Carbon Market Initiative was launched on 23rd June 2023 in response to this potential (Ibid.). This Initiative aims at capitalising on Malawi's extensive forest reserves through carbon trading, unlocking economic benefits by leveraging natural resources in the global carbon market (Ibid.). This aligns with commitments made during the 27th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 27) in Egypt, where Malawi, alongside Kenya, Nigeria, Togo, and Gabon, pledged to establish national carbon market initiatives complementing the Africa Carbon Markets Initiative (ACMI) (Bedair et al., 2023).

Malawi's efforts to reduce emissions are further supported by the Malawi REDD+ Program (MRP), established in 2012 (Republic of Malawi, 2019c). MRP has achieved significant milestones, including the REDD+ Action Plan (2014-2019), endorsed by the government to achieve REDD+ readiness (Ibid.). Its implementation is overseen by the Ministries of Agriculture, Irrigation and Water Development, and Natural Resources, Energy and Mining (Ibid.). The MRP addresses the four REDD+ pillars: the National Forest Monitoring System (NFMS), the Forest Reference Level (FRL), the Safeguard Information System, and the National REDD+ Strategy (Ibid.).

The REDD+ programme is highlighted in Malawi's Nationally Determined Contributions (NDC) as the primary mechanism for reducing emissions in forestry and land use sectors. Its priority activities include forest conservation and afforestation (Republic of Malawi, 2019c). The Kulera Landscape REDD+ Programme for Co-Managed Protected Areas remains Malawi's sole REDD+ project, focusing on protecting and sustainably managing forests (Kulera Landscape, 2013). Text box 15 provides additional details on this project.

Figure 5: CO_2 emissions in Malawi (2005-2022)

Source: Worldometer, undated

The Malawi carbon sector has historically faced challenges in coordination, capacity building, and benefit sharing, which limited its engagement in international carbon markets (Morita & Matsumoto, 2023; Stringer et al., 2012). With the launch of the Malawi Carbon Market Framework in July 2025, the government has established a structured approach to carbon trading, enabling participation in both compliance and voluntary markets (EAD, 2025). The Framework aligns with Malawi's National Climate Change Management Policy and updated NDCs, providing clear guidance for project developers, investors, and other stakeholders (Ibid.). Despite this progress, capacity building remains critical, as there are currently few experts in the country's carbon sector. Regular training for public servants, such as forest rangers and agricultural extension officers, alongside community awareness programmes, can help reduce resistance to carbon project implementation and foster knowledge sharing (Kafumbata et al., 2018; Malawi REDD+, 2018). In addition, REDD+ and other mitigation activities requiring large land areas must carefully implement benefit-sharing mechanisms, such as sustainable land use and agroforestry, to ensure that communities are actively involved and not disenfranchised while contributing to emission reductions and ecosystem protection (Alusiola et al., 2021; Oladeji et al., 2022).

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Text box 15

Kulera Landscape REDD+ Programme

The Kulera Landscape REDD+ Programme aims to reduce forest degradation through sustainable land use, climate-smart agriculture, and community-based forest management. The programme operates within a five-kilometre zone surrounding three protected areas in central and northern Malawi: Nyika National Park, Vwaza Marsh Wildlife Reserve, and Nkhotakota Wildlife Reserve. It is implemented through a partnership between the Department of National Parks and Wildlife (DNPW), the Nyika-Vwaza Association (NVA), the Nkhotakota Wildlife Reserve Association (NAWIRA), Total LandCare, and Terra Global Capital (Helppi et al., 2023).

The programme generates Verified Emission Reductions (VERs) through REDD+ activities, with revenues from carbon credit sales supporting conservation, biodiversity restoration, and community development initiatives. It aims to benefit approximately 65,000 households (350,000 people) living adjacent to the protected areas, many of whom rely on forest resources for fuelwood, charcoal production, and timber due to high levels of rural poverty.

The programme supports the governance, protection, and management of the three protected areas. Nyika National Park, Malawi's largest national park, covers approximately 3,134 km² and contains montane grasslands, miombo woodlands, and evergreen forests, supporting over 95 mammal species and 430 bird species. Vwaza Marsh Wildlife Reserve covers approximately 1,000 km² and supports around 50 mammal species, including the African elephant (*Loxodonta africana*) and African wild dog (*Lycaon pictus*), as well as more than 320 bird species. Nkhotakota Wildlife Reserve, Malawi's largest wildlife reserve, covers approximately 1,800 km² of predominantly miombo woodland and riverine habitats and supports important populations of elephant, buffalo, sable antelope, kudu, leopard, and numerous bird species.

Through forest conservation, improved land management, community patrols, and strengthened local governance structures, the programme seeks to conserve and monitor approximately 162,632 hectares of forest while generating an estimated 7.2 million tonnes of carbon emission reductions over 30 years. **The Kulera Landscape REDD+ Programme represents one of Malawi's most significant examples of nature-based climate finance, linking carbon markets with biodiversity conservation and improved rural livelihoods.**

Source: Terra Global Capital (2023); Helppi et al. (2023)

Opportunities and challenges in terms of the wildlife economy

The following are opportunities and challenges for Malawi's wildlife economy, which are also aligned with the recommendations of the Wildlife Economy Investment Index (WEII) national report for Malawi (Mpakairi et al., 2024), highlighting key actions to unlock the potential of the wildlife economy while addressing critical barriers to sustainable development.

Opportunities

- The government of Malawi should **enhance wildlife management efforts** to protect its biodiversity and natural resources. This can be achieved by creating an enabling environment to attract increased funding for conservation, expanding protected areas, and promoting sustainable tourism. Public-private partnerships (PPPs), such as those established with African Parks, can play a key role in supporting these initiatives. Additionally, ecotourism has the potential to generate significant revenue by leveraging Malawi's rich biodiversity and natural attractions, including Lake Malawi and its national parks. These efforts will ensure the sustainable use of natural resources while boosting economic growth.
- **Empowering local communities** through revenue-sharing and participatory governance can strengthen conservation by providing tangible incentives to live alongside and conserve wildlife. By ensuring that communities benefit directly from wildlife-based economic activities, this approach aligns local interests with conservation objectives, fosters stewardship of natural resources, and supports sustainable livelihoods while promoting long-term biodiversity conservation.
- **Developing non-consumptive uses of fauna**, such as sustainable forest products and medicinal plants, offers a viable alternative to reduce reliance on consumptive practices such as logging. Sustainable forest products, including honey, nuts, and fibres, can be harvested without damaging ecosystems, providing communities with renewable sources of income. Medicinal plants contribute to healthcare needs and local economies while promoting the conservation of biodiversity.
- **Enhancing infrastructure, such as roads, bridges, hotels, and airports,** is essential for boosting ecotourism, improving access to wildlife areas for visitors and investors and access to markets for wildlife economy products. By facilitating the movement of goods and people, infrastructure development can drive economic growth and improve the quality of life for Malawians. Public-private partnerships (PPPs) offer a viable approach to achieving these improvements.
- **Development of value chains for wildlife economy products**. For example in apiculture, promoting value addition through the honey value chain can serve to increase employment opportunities, as well as revenues earned at a local level.
- **Growth in aquaculture offers a sustainable way to meet Malawi's rising fish demand**, as capture fisheries are operating at full capacity. Expanding fish farming can increase supply, generate employment, and improve rural incomes. With the right investment and marketing, aquaculture can play a key role in enhancing food security and supporting economic growth.
- **Malawi's forests and protected areas provide opportunities for carbon credit generation**, REDD+ projects, and nature-based climate finance. The emerging carbon market framework creates potential to attract investment, diversify conservation funding, support community livelihoods, and strengthen biodiversity conservation.

Challenges

- **Low community participation in wildlife management** stems from inadequate benefit-sharing mechanisms, which often fail to provide tangible incentives for local communities to actively engage in conservation efforts. This is further aggravated by persistent human-wildlife conflicts, such as crop destruction, livestock predation, and threats to human safety, which create resentment toward wildlife and conservation initiatives. Without meaningful economic or social benefits, communities may perceive conservation as a burden rather than an opportunity, leading to apathy or even resistance to management efforts.
- **Outdated policies, inconsistent regulations, overlapping mandates, weak coordination, and limited institutional capacity** undermine wildlife conservation in Malawi. These challenges create enforcement gaps, deter investment, and reduce the sector's ability to respond effectively to emerging threats. Strengthening policy coherence, institutional coordination, and technical capacity is essential for effective wildlife governance.
- **Insufficient government funding for wildlife management** forces reliance on unpredictable donor support, undermining effective planning and conservation efforts. This dependence creates gaps in key activities such as anti-poaching and habitat restoration. Sustainable, locally-driven funding mechanisms (including the unlocking and growing wildlife economy activities) are needed to ensure continuity and reduce reliance on external support.
- **Limited and outdated data** on wildlife resources and their value hinder informed decision-making and effective monitoring. This restricts the ability to assess biodiversity, track wildlife trends, and evaluate the socio-economic contributions of the wildlife economy. Without accurate data, evidence-based policies, conservation efforts, and investment opportunities are difficult to implement, reducing stakeholder confidence. Improved, consistent data collection and analysis are essential for sustainable management and decision-making.
- **Poaching, illegal wildlife trade, deforestation and unsustainable resource harvesting** threaten biodiversity, disrupt ecosystems, and undermine economic sustainability. These activities diminish wildlife populations, degrade ecosystems, and reduce ecotourism potential. Weak enforcement and governance enable their persistence, highlighting the need for stronger legal frameworks, better enforcement, community engagement, and international cooperation to promote sustainability.

Conclusion

The wildlife economy in Malawi holds strong potential to support biodiversity conservation, create sustainable livelihoods, and contribute to economic growth. However, this potential remains largely untapped due to persistent challenges. These include weak benefit-sharing with communities, outdated and inconsistent policies, limited funding, poor data, and threats such as poaching and deforestation. At the same time, opportunities are clear. Malawi can expand ecotourism, develop value chains for products such as honey, baobab and fish, grow aquaculture, and invest in infrastructure to unlock greater value from its natural assets. Community participation and private sector engagement are vital to this process. Coordinated action is needed to address the barriers and scale up proven solutions. **With the right policies, partnerships, and investment, the wildlife economy can play a key role in achieving Malawi 2063 and delivering long-term environmental, development and economic benefits.**

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