State of the **Wildlife Economy** in Africa

Case Study: Cabo Verde

ALU SCHOOL OF WILDLIFE CONSERVATION

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

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List of acronyms

AIS - Atlantic, Indian Ocean and South China Sea

ALU - African Leadership University

APESC - Association dos Armadores de Pesca de Cabo Verde

BIOPAMA - Biodiversity and Protected Areas Management

CBD - Convention on Biological Diversity

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

CVE - Cabo Verdean Escudo

DGA - Directorate General for the Environment

DGT - General Directorate of Tourism

DNA - National Directorate for Environment

DSCN - Nature Conservation Service

EEZ - Exclusive Economic Zone

EU - European Union

EUR - Euro

FAO - Food and Agriculture Organization

GDP - Gross Domestic Product

GEF - Global Environmental Facility

GHG - greenhouse gas

GIF - General Inspection for Fisheries

IBA - Important Birding Area

IGFA - International Game Fish Association

IHH - Illuminating Hidden Harvests

IMar - Institute of the Sea

IMP - Institute for Maritime and Ports

INDP - Instituto Nacional de Desenvolvimento das Pescas

IPO - initial public offering

IUCN - International Union for Conservation of Nature

LPG - Liquefied petroleum gas

MAA - Ministry of Agriculture and Environment

MPA - Marine Protected Area

MPD - Movement for Democracy

NDC - Nationally Determined Contribution

NDPA - National Direction for Fisheries and Aquaculture

NGO - Non-governmental organisational

NPPAP - National Parks and Protected Areas Programme

OACPS - Organisation of Africa, Caribbean, and Pacific States

PA - Protected Area

PAICV - African Party for the Independence of Cabo Verde

PAIGC - African Party for Independence of Guinea and Cabo Verde

PGRP - Fisheries Resources Management Plan 2020–2024

SAMOA - SIDS Accelerated Modalities of Action

SIDS - Small Island Developing States

SME - Small medium-sized enterprises

SOWC - School of Wildlife Conservation

UN - United Nations

UN-OHRLLS - United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States

UNCED - United Nations Conference on Environment and Development

UNDAF - United Nations Development Assistance Framework

UNDP - United Nations Development Programme

USD - United States Dollar

WEII - Wildlife Economy Investment Index

WTO - World Trade Organization

WTTC - World Travel & Tourism Council

WWF - World Wildlife Fund for Nature

ZEEEM-SV - Zona Económica Especial de Economia Marítima em São Vicente

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.

Success would include turning conservation into a growth industry, attracting young, inspired leaders, increasing private sector investment in wildlife resources and related businesses, involving communities and increasing their benefits and nature/wildlife becoming more abundant. 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, 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 (selection criteria described below). 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.

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Data collection process

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

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

During the research for the full report as well as the subsequent national reports, it was found that very few countries in Africa have a good understanding of the value of the wildlife economy at a national level. For certain wildlife economy activities there was information and data available at a local, and often only a project level, and often this data was only collected for the duration of the project, or when funding was available. This resulted in data for the continent, as well as per country, largely being inconsistent, incomparable, and often quite old. The overall research project highlights a large gap in data on the value of the wildlife economy and the important need to have consistent, comparable data to ensure that the value of the wildlife economy is truly understood. This information would allow for better policy and investment decision making and would encourage greater investment in the wildlife economy once the true value is understood. Research for the case study countries includes reaching out to 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 Cabo Verde.

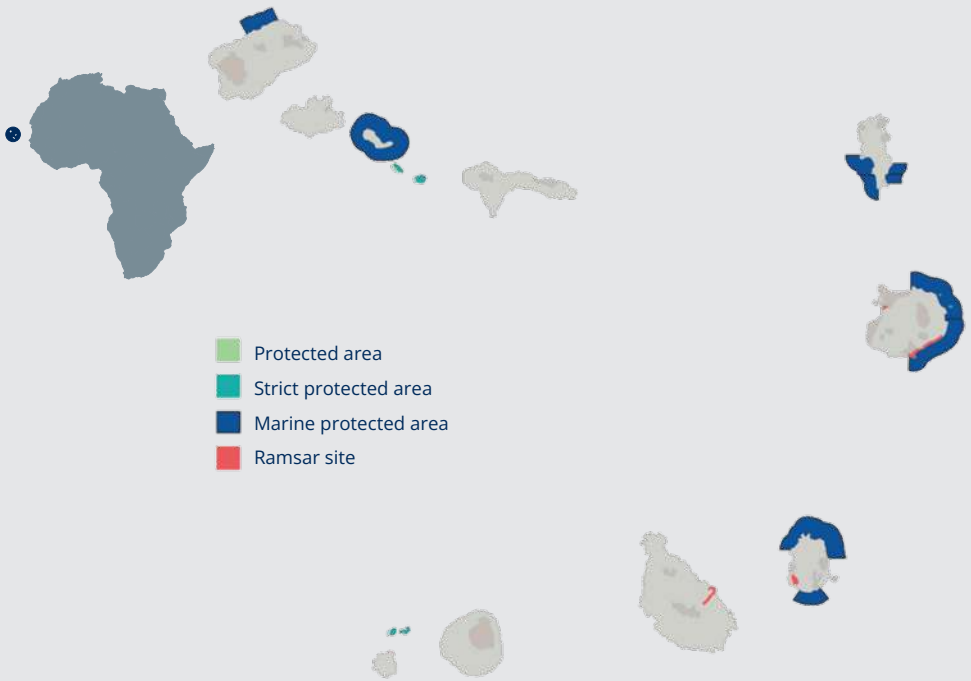
All country case studies follow the same structure to allow for comparisons and ease of reading. The general structure is as follows:

Country map with key statistics
Wildlife economy summary graphic
Key points related to the wildlife economy
Introduction/background: conservation and socio-economic
Regulatory framework/enabling environment
Wildlife economy activities (where relevant):
- Ecotourism
- Hunting
- Wildlife ranching
- Carbon
- Forest products
- Other activities

Summary
References

Please see https://sowc.alueducation.com/research/ for all publications to-date.

CABO VERDE



Socio-economic/governance

GDP per capita (USD)
4,851

Gini coefficient
50.9

Transparency International Corruption Perception Index
Ranked 30th
out of 180 countries

Mo Ibrahim Governance Index
Ranked 69.6
out of 100

Total population
522,331

Protected areas

718 km² terrestrial protected area coverage (17.62%)

1,148 km² marine protected area coverage (0.14%)

4,030 km² total land area

Conservation

965 km coastline

50 protected areas (PAs)

14 nature reserves

Species numbers

239 bird species

29 reptile species

712 fish species

Sources: Mo Ibrahim Foundation, 2024; Official Bulletin, 2014; Transparency International, 2025; UNEP-WCMC, 2025; World Bank, 2025
Disclaimer: This map was generated using data from the UNEP-WCMC database on world protected areas to ensure consistency with previous reports. However, some protected areas in Cabo Verde may be missing from this map.

Overview of the wildlife economy in Cabo Verde

Forest products

- In 2012, 26% of Cabo Verde's population relied on firewood for cooking. By 2020, 81% had access to cleaner fuels and technologies, reducing fuelwood dependence.
- Efforts towards beekeeping aim to enhance agricultural production through pollination.
- Both indigenous and introduced medicinal plants play a crucial role in Cabo Verde's traditional medicine.
- Approx. 40% of Cabo Verde's 80 endemic vascular flora taxa are utilised in traditional medicine.

Carbon finance

- While tourism is a pillar of Cabo Verde's economy, driving significant GDP contributions and employment, rapid growth has increased environmental pressures, highlighting the urgent need for sustainable tourism development and stronger environmental management.

Tourism

- Cabo Verde's tourism is centered on sun, sea, and sand, with distinct attractions on islands such as Sal, Boa Vista, and São Vicente, as well as mountain tourism in Santo Antão and Santiago..
- Before COVID-19, Cabo Verde hosted 758,000 tourists, generating USD 567 million in tourism revenue—33.28% of GDP and 16% of West Africa's international tourism income.
- The COVID-19 pandemic severely affected tourism, leading to a significant decline in tourist numbers and revenue.
- Despite setbacks, tourism remains vital, with plans to attract 1.2 million tourists by 2026.
- Cabo Verde has rich ecotourism potential, but faces challenges such as limited transport, overfishing and unregulated fishing practices, climate change, and coastal degradation.
- Cabo Verde is known for big-game fishing, attracting enthusiasts targeting various oceanic species.

Fisheries

- Fishing in Cabo Verde is vital for food security and income and contributes approx. 0.8% to the GDP.
- Annual fish consumption is 11 kgs per person, with artisanal fishing as the primary source, mostly consumed fresh.
- In 2019, national exports of fisheries products totalled 16,880 tonnes, generating USD 47.4 million in revenue.
- Overfishing and climate change pose challenges, impacting income, jobs, and stock sustainability.
- Artisanal fishing employs over 5,000 fishers using small vessels, contributing significantly to the catch but facing declining catches.
- Women play a crucial role in the fisheries sector, as approx. 86% of fish sellers are women.
- Aquaculture development is in its early stages, with initiatives underway for shrimp and bluefin tuna farming to meet local demand and create jobs.

Wildlife trade

- Aquatic (illegal) bushmeat is obtained through harpoon hunting and netting, involving dolphins and marine turtles.
- Cabo Verde hosts the third-largest nesting area for loggerhead turtles in the world and the second in the Atlantic Ocean, however they face threats from illegal harvesting and marine pollution.

Sources: Bios Cabo Verde, 2022; CIA, 2022; CITES, 2022; ECOCV, 2021; Hancock et al., 2017; Hazevoet et al., 2010; López-Guzman et al., 2013; MAE, 2020; Macías González, 2024; NDE, 2015; Neves et al., 2022; NIE, 2022; Nova Africa, 2018; Publico.pt, 2021; Rocha & Ferreira da Silva, 2014; World Bank, 2022; WTTC, 2022.

Key messages

- Pre-pandemic, tourism was a cornerstone of Cabo Verde's economy, but COVID-19 severely affected the industry, prompting plans for revival.
- While tourism is a pillar of Cabo Verde's economy, driving significant GDP contributions and employment, rapid growth has increased environmental pressures, highlighting the urgent need for sustainable tourism development and stronger environmental
- Fishing is crucial for food security and the economy, with artisanal fishing and female fish sellers playing significant roles.
- Threats to loggerhead turtles (*Caretta caretta)* from illegal harvesting and marine pollution are key concerns for Cabo Verde's wildlife.
- Blue carbon, carbon stored in marine and coastal ecosystems, from phytoplankton to fish and whales, is one of the most effective natural tools Cabo Verde has to mitigate global climate change.
- Improved access to energy sources (both clean and fossil fuels) reduces fuelwood demand, alongside forestry initiatives, traditional knowledge, and medicinal plant use, which support sustainability efforts.

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Introduction to biodiversity and natural resources

Cabo Verde, also known as Cape Verde, is **one of five archipelagos (cluster of islands) in the Macaronesian region**. Azores (Portugal), the Canary Islands (Spain), Madeira (Portugal), and the Savage Isles (Portugal) form part of the remainder of the region, which lies in the North Atlantic Ocean between south-west Europe and north-west Africa. Cabo Verde is approximately 570 km off Africa's west coast, with Mauritania, Senegal, and The Gambia being the closest African countries.

Cabo Verde **consists of ten islands and multiple islets** (tiny islands without the ability to support human living). The islands are divided into two groups, Barlavento and Sotavento. Barlavento is located in the northern part of the archipelago and is translated as the windward islands, and Sotavento is translated as leeward winds in the southern part (Governo. cv, 2022). Santo Antão, São Vicente, Santa Luzia, São Nicolau, Sal and Boa Vista are part of Barlavento, while Maio, Santiago, Fogo and Brava are part of Sotavento (Ibid.). **Praia is the country's capital city**, located on Santiago Island. All islands are inhabited except Santa Luzia, which is currently uninhabited due to its harsh environment.

The archipelago has an **Exclusive Economic Zone (EEZ) of 734,265 km²; within the maritime territory, the land area is only 4,030 km² with a total coastline of 965 km** (Official Bulletin, 2014). Therefore, the EEZ is approx. 180 times larger than the land space (FAO, 2023). The insular marine platform (waters shallower than 200 meters) around Cabo Verde's islands spans approx. 1,900 km², accounting for just 0.2% of the country's total EEZ (Freitas, 2014). This relatively small area is currently the main operating zone for most of the artisanal fleet and a significant portion of the semi-industrial fleet (Ibid.).

Cabo Verde is an excellent destination to visit all year round due to its **moderate temperatures**, as average daily high temperatures range from 24°C in January to 29°C in September (Porton di nos Ilha, 2022; Weather & Climate, 2022). **Landscapes vary from barren interiors to stunning beaches, rugged mountain peaks and cliff-hanging villages,** attracting beach and adventure tourists (Weather & Climate, 2022). All but three of the ten islands are mountainous. The three non-mountainous eastern islands (Sal, Boa Vista and Maio) have undergone much erosion due to their older age and prevailing northeastern winds. The remaining seven montane islands lie in the western regions and have experienced less erosion, resulting in more varied topography (Gomes et al., 2014).

The **first protected areas (PAs) in Cabo Verde were designated in 1990 under the National Parks and Protected Areas Programme (NPPAP)** (NDE, 2015). To demonstrate the importance of biodiversity conservation, the National Biodiversity Strategy and Action Plan (1999) defined priority habitats for conservation in Cabo Verde. In 2003, the legal establishment of the National Protected Areas Network (Decree-Law 3/2003) served as the basis for defining **47 sites covering both terrestrial PAs and coastal and marine protected areas (MPAs)** (Official Bulletin, 2016; NDE, 2015). In Cabo Verde, the process from preliminary studies to the effective establishment of a PA is extended due to various shortcomings in the legal, institutional, supervisory, monitoring and scientific domains (MOHAT, 2014; NDE, 2015). Despite these shortcomings, the country made progress by developing various legal instruments for biodiversity conservation and sustainable use (MAHOT, 2014). As a result, in 2009, three PAs were operationalised through the support of the United Nations Development Programme (UNDP) and the Global Environmental Facility (GEF) biodiversity projects (CBD, 2022; NDE, 2015; Official Bulletin, 2016). The 2010-2013 Strategic Plan for Tourism Development highlighted the potential of the archipelago's prominent tourist islands emphasising the need to conserve and elevate the value of wildlife, flora, and scenic landscapes, positioning them as essential elements of the region's tourism offerings (Official Bulletin, 2016). **In 2014, the country made progress by increasing efforts to operationalise a higher number of PAs from three to 26** (Ibid.). All these PAs have had their limits approved, and their management plans are either approved or in the approval process (NDE, 2015). Of these 26, nine are terrestrial PAs, and 17 are MPAs exceeding 10% of the national protected area (NDE, 2015; Official Bulletin, 2016).

According to Decree-Law 3/2003, there are **six categories of PAs for Cabo Verde**: Nature Reserves, National Parks, Natural Parks, Natural Monuments, Protected Landscapes, and Areas of Scientific Interest. Nature reserves can further be subdivided into Integral Natural Reserves, Partial Natural Reserves, and Temporal Natural Reserves. Table 1 describes each of these categories.

There is no alignment between Cabo Verde's protected area (PA) categories and the International Union for Conservation of Nature (IUCN) PA categories, highlighting a legislative gap (Official Bulletin, 2016). According to Cabo Verde's PA categories, the total PA designated includes 1,640.46 km² of terrestrial, coastal and marine (Ibid.). The terrestrial and coastal PA surface is 616.95 km² and the marine PA surface is 1,023.51 km² (Official Bulletin, 2016). **In 2025, Protected Planet reported 50 protected areas, covering 718 km² (17.62%) of the total terrestrial area and 1,148 km² (0.14%) of the marine and coastal area** (UNEP-WCMC, 2025). Table 2 and 3 provides a summary of Cabo Verde's PAs and MPAs.

Text Box 1 highlights the wide variation among Cabo Verde's 47 protected areas in terms of size, accessibility, and ecological features, from well-known accessible sites to remote seabird breeding grounds and undefined areas, leading to differing management approaches, costs, and conservation priorities.

Table 1: Description of Cabo Verde's Protected Area designations

Designation	Description
Nature Reserve (Also referred to as natural reserves)	Nature reserves are natural spaces of variable size and special ecological and scientific interest, subject to a special protection regime and whose management aims to safeguard and recover the values that motivated your declaration.
National Park (no sites officially declared)	National parks are natural spaces that have one or more ecosystems, generally transformed or not by human exploitation and occupation, where plant and animal species, geomorphological zones and habitats are of special interest from a scientific, socioeconomic, educational point of view, and recreational or where there is a natural landscape of remarkable aesthetic value.
Natural Park	Natural parks are large spaces that predominantly contain natural systems with habitats, species, or representative samples of the country's biodiversity, where there may be local people who take advantage of living resources according to traditional practices.
Natural Monument	Natural monuments are natural spaces of moderate size, which contain one or more natural or cultural elements of exceptional value due to their rarity, uniqueness, scientific interest, ecological or cultural function, and which are protected to perpetuate said characteristics, eliminating any action or activity to change them.
Protected landscape	Protected landscapes are terrestrial or coastal areas where the integrated action of man and nature have shaped a landscape of aesthetic quality or cultural value that deserves conservation, with protection focusing on the maintenance and restoration of the aesthetic and cultural features that define them.
Area of Scientific Interest (no sites officially declared)	Sites of scientific interest are natural places, usually marked and of reduced size, which contain natural elements of scientific interest, samples or animal and/or plant populations that are threatened with extinction or that deserve specific measures of temporal conservation.
Integral Natural Reserve	An integral nature reserve is when the object of protection is the entire ecosystem, with all its components, as well as the prevention of human occupation alien to scientific or, eventually, educational purposes
Partial Natural Reserve (no sites officially declared)	Partial nature reserve, when the object of protection is a specific natural resource, whether it be a species, a group of them or a certain habitat.
Temporal Natural Reserve (no sites officially declared)	Temporal nature reserve, usually a site of reduced size, is established for a limited period of time to allow the recovery of the resource or punctual ecological systems under a transitory protection regime.

Source: Official Bulletin, 2003

Table 2: Summary of Cabo Verde's PA and MPA network structure

Category	Number of sites	Surface area		Network of PA/MPA
		Terrestrial (ha)	Maritime (ha)	
Locations exclusively terrestrial	**27**	**37,176.9**	**-**	**22.67%**
Protected Landscape	9	10,037.3	-	6.12%
Nature Reserves	3	2,596.8	-	1.58%
Natural Parks	9	22,985.8	-	14.02%
Natural Monuments	6	1,557.0	-	0.95%
Coastal and Marine zones (MPAs)	**20**	**24,468.5**	**102,350.9**	**77.33%**
Protected Landscape	1	400.6	134.1	0.33%
Nature Reserves	18	15,157.9	89,079.8	63.56%
Natural Parks	1	8,910.0	13,137.0	13.44%
Natural Monuments	0	0.0	0.0	0.00%

Source: Official Bulletin, 2016, p.155

Table 3: Summary of Cabo Verde Islands Protected Areas
***Boundaries have not been clarified**

Island	Designation	Name of PA/MPA	Terrestrial area (ha)	Marine area (ha)	Total (ha)
Boa Vista	Protected Landscape	Monte Caçador e Pico Forcado	3,357	0	3,357
	Integral Natural reserve	Ilhéu de Baluarte	765	87	852
	Integral Natural reserve	Ilhéu dos Pássaros	0.82	38	38.82
	Integral Natural reserve	Ilhéu de Curral Velho	0.77	41	41.77
	Natural Reserve	Ponta do Sol	465	283	748
	Natural Reserve	Boa Esperança	3,631	379	4,010
	Natural Reserve	Morro de Areia	2,131	436	2,567
	Natural Reserve	Tartaruga	1,439	13,436	1,4875
	Natural Park	PN do Norte	8,910	13,137	22,047
	Natural Monument	Ilhéu de Sal-Rei	89	0	89
	Natural Monument	Monte Santo António	459	0	459
	Natural Monument	Monte Estancia	739	0	739
	Protected Landscape	Curral Velho	1.64	0	1.64
	Natural Monument	Rocha Estancia	253	0	253
Maio	Natural Reserve	Casas Velhas	128.84	6,494.97	6,623.81
	Natural Reserve	Terras Salgadas	2,022.6	3,822.8	5,845.4
	Natural Reserve	Lagoa Cimidor	51.1	338.24	389.34
	Natural Reserve	Praia do Morro	101.15	564.83	665.98
	Natural Park	Barreiro e Figueira	1,078.19	0	1,078.19
	Protected Landscape	Salinas de Porto Inglês	400.56	134.1	534.66
	Protected Landscape	Monte Penoso e Monte Branco	1,117.22	0	1,117.22
	Protected Landscape	Monte Santo António	891.2	0	891.2
Santa Luzia	Integral Natural reserve	Santa Luzia	3,420	46,940	51,214
Ilhéu Branco		Ilhéu Branco	278		
Ilhéu Raso		Ilhéu Raso	576		
Santiago	Natural Park	Serra Malagueta	774	0	774
	Natural Park	Serra do Pico de Antónia	0	0	0

Table 3: Summary of Cabo Verde Islands Protected Areas (continued)
***Boundaries have not been clarified**

Island	Designation	Name of PA/MPA	Terrestrial area (ha)	Marine area (ha)	Total (ha)
Santo Antão	Natural Park	Moroços	818.1	0	818.1
	Protected Landscape	Pombas	311.9	0	311.9
	Natural Park	Tope de Coroa	8,491.6	0	8,491.6
	Natural Park	Cova/Paúl/R ª Torre	2,091.5	0	2,091.5
	Natural Reserve	Cruzinha	1,117.8	0	1,117.8
São Vicente	Natural Park	Monte Verde	311.9	0	311.9
São Nicolau	Natural Reserve	Monte do Alto das Cabaças	1,325	0	1,325
	Natural Park	Monte Gordo	952	0	952
Fogo	Natural Park	Fogo	8,468.5	0	8,468.5
Sal	Protected Landscape	Salinas Pedra Lume e Cagarral	802	0	802
	Natural Reserve	Costa da Fragata	346	2,347	2,693
	Natural Reserve	Ponta do Sino	96	5,651	5,747
	Natural Reserve	Rabo de Junco	154	0	154
	Natural Reserve	Serra Negra	331	2,296	2,627
	Natural Monument	Morrinho de Açúcar	5	0	5
	Natural Monument	Morrinho do Filho	12	0	12
	Protected Landscape	Monte Grande	1,309	0	1,309
	Protected Landscape	Salinas de Santa Maria	69	0	69
	Natural Reserve	Baía da Murdeira	182	5,925	6,107
	Protected Landscape	Buracona-Ragona	545	0	545
Ilhéus de Rombo*	Integral Natural reserve	Ihéus do Rombo	0	0	0

Source: Official Bulletin, 2016, p.154

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Text box 1

The costs of protecting and maintaining the system of PAs in Cabo Verde

Each of **Cabo Verde's 47 PAs** have different characteristics and sizes, ranging from easily accessible to very remote locations, breeding sites for seabirds and some areas are still unknown and undefined. Given this great diversity, there will be varying management interventions, costs and conservation priorities. In order to differentiate management costs within the Cabo Verdean PAs system, three criteria are applied to determining the costs for each of the 47 protected areas:

1. **Intensity of resource use:** tourism infrastructure, traditional and small-scale agriculture, irrigated agriculture and extractive or commercial use of land, water and forest resources (such as firewood collection, fishing, logging, leisure activities/tourism, extraction of sand and construction material, etc.).
2. **Threats to conservation:** this is a subjective measure of the potential threats and dangers that species and ecosystems are subjected to in and around any specific protected area. This criterion is directly correlated with the intensity of the resource use criterion and increases its value due to resource exploitation pressures, proximity to urban centres and large tourist developments.
3. **Access and management infrastructure:** this is a subjective measure of accessibility to the PAs (roads, trails, boats, public transport and vehicle rental) and the existing management infrastructure to make surveillance and protection more effective.

Each of the above criteria has a possible value (weight factor of 2), ranging from two to six, where two is low, four is moderate, and six is high. The total sum of these scores applied to each PA defines three groups identified with green, yellow, and red colours according to the different criteria. Each PA can thus have a minimum score of seven and a maximum score of 21. **A score of less than 10 (green) will indicate a lower need for interventions. A score of between 11 and 14 (yellow) represents PA subject to moderate resource use and conservation threats. Finally, a score above 15 (red) represents high threat levels.** The application of this methodology for Cabo Verde's PAs is represented in Table 4.

The operating costs and investment costs for each PA in Cabo Verde are calculated based on the financial information provided by the Directorate General for the Environment (DGA) and extrapolated from the two operating PA sites, Monte Gordo and Serra Malagueta, which were put into operation during the first GEF project. This calculation provides two fundamental values: **The total operational costs per year for the entire PA system are USD 4.1 million, and the total investment costs for the PA system are USD 14.6 million**. Based on experiences from Costa Rica, Colombia and Belize, it is important to note that the real total operational cost requires at least 25% additional expense for planning and administration.

Source: Official Bulletin, 2016

Table 4: Management and investment cost of Cabo Verde by protected area priority

Island	Name of PA	Total (ha)	Protection priority and level of management costs	Operational cost/ha (USD)	Total operational cost (USD)	Investment cost/ha (USD)	Total investment cost (USD)
Boa Vista	Monte Caçador e Pico Forcado	3,357	8	9.00	30,213.00	57.00	191,349.00
	Ilheu de Baluarte	94.65	8	9.00	851.85	57.00	5,395.05
	Ilheu dos Pássaros	38.82	10	9.00	349.38	57.00	2,212.74
	Ilheu de Curral Velho	41.77	12	26.51	1,107.32	114.36	4,776.82
	Ponta do Sol	748	16	80.98	60,573.04	224.41	167,858.68
	Boa Esperança	4,010	16	80.98	324,729.80	224.41	899,884.10
	Morro de Areia	2,567	14	80.98	207,875.66	224.41	576,060.47
	Tartaruga	14,875	12	26.51	394,336.25	114.36	1,701,105.00
	PN do Norte	22,047	12	26.51	584,465.97	114.36	2,521,294.92
	Ilhéu de Sal Rei	89	16	80.98	7,207.22	224.41	19,972.49
	Monte Santo António	459	7	9.00	4,131.00	57.00	26,163.00
	Monte Estancia	739	7	9.00	6,651.00	57.00	42,123.00
	Curral Velho	1,635	15	80.98	132,402.30	224.41	366,910.35
	Rocha Estancia	253	8	9.00	2,277.00	57.00	14,421.00
Maio	Casas Velhas	6,623.80	12	26.51	175,596.94	114.36	757,497.77
	Terras Salgadas	5,845.40	8	9.00	52,608.60	57.00	333,187.80
	Lagoa Cimidor	389.34	8	9.00	3,504.06	57.00	22,192.38
	Praia do Morro	665.98	8	9.00	5,993.82	57.00	37,960.86
	Barreiro e Figueira	1,078.19	8	9.00	9,703.71	57.00	61,456.83
	Salinas de Porto Inglés	534.67	12	26.51	14,174.10	114.36	61,144.86
	Monte Penoso e Monte Branco	1,117.22	8	9.00	10,054.98	57.00	63,681.54
	Monte Santo António	891.20	8	9.00	8,020.80	57.00	50,798.40
Santa Luzia	Santa Luzia	3,420	12	26.51	90,664.20	114.36	391,111.20
Santiago	Serra Malagueta	774	16	80.98	62,678.52	224.41	173,693.34
	Serra do Pico de Antónia	0.00	12	26.51	0.00	114.36	0.00

Table 4: Management and investment cost of Cabo Verde by protected area priority (continued)

Island	Name of PA	Total (ha)	Protection priority and level of management costs	Operational cost/ha (USD)	Total operational cost (USD)	Investment cost/ha (USD)	Total investment cost (USD)
Santo Antão	Morroços	818.10	12	26.51	21,687.83	114.36	93,557.92
	Pombas	311.90	8	9.00	2,807.10	57.00	17,778.30
	Topo da Coroa	8,491.60	8	9.00	76,424.40	57.00	484,021.20
	Cova/Paúl/RªTorre	2,091.50	9	9.00	18,823.50	57.00	119,215.50
	Cruzinha	1,117.80	8	9.00	10,060.20	57.00	63,714.60
São Nicolau	Monte do Alto das Cabaças	1,325	8	9.00	11,925.00	57.00	75,525.00
	Monte Gordo	952	12	26.51	25,237.52	114.36	108,870.72
São Vicente	Monte Verde	311.90	12	26.51	8,268.47	114.36	35,668.88
Fogo	Chã das Caldeiras	8,468.50	13	26.51	224,499.94	114.36	968,457.66
	Salinas Pedra Lume e Cagarral	802	12	26.51	21,261.02	114.36	91,716.72
	Costa da Fragata	2,693	16	80.98	218,079.14	224.41	604,336.13
	Ponta do Sinó	5,747	16	80.98	465,392.06	224.41	1,289,684.27
	Rabo de Junco	154	16	80.98	12,470.92	224.41	34,559.14
	Serra Negra	2,627	16	80.98	212,734.46	224.41	589,525.07
Sal	Morrinho do Açúcar	5	8	9.00	45.00	57.00	285.00
	Morrinho do Filho	12	8	9.00	108.00	57.00	684.00
	Monte Grande	1,309	8	9.00	11,781.00	57.00	74,613.00
	Salinas de Santa Maria	69	16	80.98	5,587.62	224.41	15,484.29
	Marinha Baía da Murdeira	6,057	16	80.98	490,495.86	224.41	1,359,251.37
	Buracona Ragona	545	12	26.51	14,447.95	114.36	62,326.20
Ilhéus	Ilhéus Branco e Raso* (Also part of the Santa Luzia)	854	8	9.00	7,686.00	57.00	48,678.00
	Ilhéus Rombos	0.00	8	9.00	0.00	57.00	0.00
Average		**2,490.56**			**86,170.07**		**311,280.95**
Total		**117,056.34**			**4,049,993.51**		**14,630,204.57**

*This table does not include 46,490 MPA, which was included with the Ilhéus in Table 3
Source: Official Bulletin, 2016, pp. 160-161

There are **four designated wetlands of international importance covering 2,300 ha** (Ramsar sites): Curral Velho (986 ha), Lagoa de Pedra Badejo (666 ha), Lagoa de Rabil (113 ha) and Salinas do Porto Inglês (535 ha) (Ramsar, 2023). Only Curral Velho falls within the protected landscape within the PA categories. There is potential for establishing other Ramsar sites (Official Bulletin, 2016). There are **30 Important Bird Areas (IBAs) in Cabo Verde**, with a total area of 8,582 km^2, covering both land and sea areas (BirdLife International, 2023).

Typical of tropical regions, the archipelago is relatively **rich in biodiversity but lacks abundance**. (Arechavaleta, et al., 2005; Freitas, 2014; MAHOT, 2014). The islets and seamounts (underwater mountains), usually near the islands, contribute to the rich biodiversity as marine populations adapt their abundance and density to a favourable ecophysiological environment (MAHOT, 2014). As a result, Cabo Verde is home to a **vibrant diversity of marine species, such as sea turtles, cetaceans, sharks, rays, and molluscs and provides an important stopover for many migratory birds** (BirdLife International, 2020).

Cabo Verde is recognised as a **global hotspot for marine biodiversity,** supporting a wide diversity of animals (Fauna & Flora International, 2022). The archipelago is considered part of the **23 most important marine ecoregions in the world** by the World Wildlife Fund for Nature (WWF) International in 2008 (NDE, 2015). Floeter et al. (2008) proposed that the high numbers of Cabo Verdean marine endemism could be related to the geographic isolation (from the mainland and/or between islands), volcanic complexity of submarine habitats and persistence of warm tropical waters during glacial periods.

Arechavaleta et al. (2005) reported more than **5,000 species identified in Cabo Verde, in terrestrial and marine environments**, of which 3,251 are terrestrial. However, in 2013, further taxonomy studies and species introduction increased the **terrestrial biodiversity to 3,512 species** (NDE, 2015). The endemic species were recorded as 587 species but have also increased to 697 (Ibid.). Table 5 indicates the increase in undocumented terrestrial species from 2005 to 2013.

Table 5: Cabo Verde's increase in terrestrial biodiversity between 2005 and 2013

Species classification	2005	2013
Fungi	62	108
Fauna	2,019	2,234
Flora	1,170	1,170
Endemics	587	697
Total (excluding endemics)	**3,251**	**3,512**

Source: NDE, 2015

There are over 2,000 terrestrial fauna species identified in Cabo Verde, distributed into three phyla: *Arthropods* (95%), *Chordates* (3%) and *Molluscs* (2%) (NDE, 2015). *Arthropods* are the largest of the three phyla, including 1,651 species (Ibid.). Cabo Verde has limited terrestrial mammal species, with only **ten identified land mammal species**, although most are believed to have been introduced: three rat species (*Mus muculus, Rattus rattus, Rattus norvegicus*), one monkey species (*Cercopithecus aethiops*) and six species of bats (*Thaphozous nudiventris*, *Pipistrellus savii*, *Pipistrellus kuhli*, *Plecotus austriacus*, *Miniopterus schreibersi* and *Eidolon helvum)* (NDE, 2015). Cabo Verde has one of the world's largest knowledge gaps in bat distribution and taxonomy (Borloti, 2019). Limited data from the 1960s and 1980s suggest five recorded species—mostly of European origin with recent colonisation and restricted ranges (Ibid.). These include *Taphozous nudiventris, Hypsugo savii, Pipistrellus kuhlii, Plecotus austriacus,* and *Miniopterus schreibersii.* Additionally, the African straw-coloured fruit bat (*Eidolon helvum*) has been observed, likely as a vagrant, along with an unidentified molossid species (Ibid.).

Hazevoet (1995) reported 171 bird species existing in Cabo Verde. The NDE (2015) reports **239 bird species**. However, BirdLife International (2023) reports 86 species, and seven breeding endemics (Table 6). This demonstrates the **need for a national reporting system.**

Table 6: List of endemic breeding bird species in Cabo Verde

Common name	Scientific name	Family
Alexander's Swift	*Apus alexandri*	Apodidae (Swifts)
Cape Verde Storm-petrel	*Hydrobates jabejabe*	Hydrobatidae (Northern Storm-petrels)
Cape Verde Petrel	*Pterodroma feae*	Procellariidae (Petrels, Shearwaters)
Cape Verde Shearwater	*Calonectris edwardsii*	Procellariidae (Petrels, Shearwaters)
Raso Lark	*Alauda razae*	Alaudidae (Larks)
Cape Verde Swamp-warbler	*Passer iagoensis*	Acrocephalidae (Reed-warblers)
Cape Verde Sparrow	*Passer iagoensis*	Passeridae (Old World Sparrows)

Source: BirdLife International, 2023

There are 31 terrestrial reptile species, with 22 of these being endemic (NDE, 2015; MAHOT, 2014). These species are distributed in three genera: *Hemidatylus* (5), *Tarentola* (14) and *Chioninia* (12) (NDE, 2015; Vasconcelos et al., 2013). Regarding marine reptiles, Cabo Verde has five sea turtles recorded, namely: Loggerhead sea turtle (*Caretta caretta*), Hawksbill sea turtle (*Eretmochelyes imbricata)*, Green sea turtle (*Chelonia mydas*), Olive Ridley sea turtle (*Lepidochelys olivacea*) and Leatherback sea turtle (*Dermochelys coriacea*). Additionally, the country hosts the **second-largest nesting area of Loggerhead sea turtles in the Atlantic Ocean and the third-largest one globally** (Bios Cabo Verde, 2022; NDE, 2015).

More than 2,000 marine species have been identified in the Exclusive Economic Zone (EEZ) of Cabo Verde, distributed in flora (*Cyanophytes, Chlorophytes, Rhodophytes,* and *Feofites*) and fauna (*Porifera, Cnidarians, Molluscs, Arthropods, Echinoderms,* and *Cordados*) (Freitas, 2014). Cabo Verde has made great efforts to increase knowledge of marine and coastal biodiversity

to better inform national policies on marine protected area delimitation, characterisation, and management, but scientific research in this area remains limited (CBD, 2022).

Fishbase (2023) reports **712 fish species** in Cabo Verde, from which 34 are questionable, 47 are absent due to misidentification or inventory errors, and **17 species are endemic**, see Table 7. Molluscs occupy a prominent place in Cabo Verde in terms of biodiversity, hosting about **168 marine and 39 terrestrial gastropod species** (NDE, 2015).

Forest coverage comprised 23% of the national territory, of which 11% are forest areas, 5% shrub areas, 3.4% agroforestry areas, and 2.8% open forests (NDE, 2015; CBD, 2022). **In terms of flora, the CBD (2022) reports 891 species**, 515 genera, 151 families and 73 orders, divided into *Bryophytes* (17%), *Pteridophytes* (ferns) (4%) and *Spermatophytes* (79%). **About 10% of identified species are endemic** to the archipelago (Arechavaleta et al., 2005; CBD, 2022), and **186 species (17.5%) are on the Red List** with some degree of threat (Table 8) (CBD, 2022; IUCN Red List, 2023). When people settled in Cabo Verde, many islands were converted to agriculture. Several herbaceous plant and tree species were introduced, resulting in the depletion of the natural vegetation, which is still recovering. The intact forested areas are restricted to steep slopes, mountainous peaks, and inaccessible areas (NDE, 2015). However, these areas are still threatened by legal and illegal firewood harvesting (NDE, 2015; CBD, 2022).

The NDE (2015) reports that **not having a national biodiversity monitoring centre** creates challenges in reporting knowledge on biodiversity. Studies by national institutions or foreign experts have contributed to increased biodiversity knowledge by describing new taxa and ecosystems. However, due to the lack of a national monitoring system, data is only sometimes official or validated. Many documents and reports (MAHOT, 2014; Official Bulletin, 2014) still refer to the 2005 list of 3,251 terrestrial species, leading to inconsistencies across sources. Despite these discrepancies, a common finding remains: **Cabo Verde hosts a rich diversity of fauna and flora, including globally threatened species.**

Table 7: List of endemic fish species in Cabo Verde

Common name	Family	Scientific name
Needlefish	Belonidae	*Platybelone argalus lovii*
Mané Cabeça	Blenniidae	*Parablennius salensis*
Manelinho	Blenniidae	*Scartella caboverdiana*
Mané Cabeça	Blenniidae	*Microlipophrys caboverdensis*
Barbel clingfish	Gobiesocidae	*Apletodon barbatus*
Not specified	Gobiidae	*Gobius tetrophthalmus*
Not specified	Gobiidae	*Gobius ateriformis*
Not specified	Gobiidae	*Mauligobius nigri*
Salamansa goby	Gobiidae	*Gobius Salamansa*
Salamansa goby	Gobiidae	*Didogobius janetarum*
Guinean grunt	Haemulidae	*Parapristipoma humile*
Blackfish drummer	Kyphosidae	*Girella stuebeli*
Not specified	Labrisomidae	*Malacoctenus carrowi*
Cabo Verde mullet	Mugilidae	*Chelon bispinosus*
Not specified	Pinguipedidae	*Parapercis atlantica*
Lubbock's Chromis	Pomacentridae	*Chromis lubbocki*
Cabodamsel	Pomacentridae	*Similiparma hermani*
Cabo Verde Skate	Rajidae	*Raja herwigi*
Cadenat's sole	Soleidae	*Pegusa cadenati*
Banded seabream	Sparidae	*Diplodus fasciatus*
White seabream	Sparidae	*Diplodus sargus lineatus*
Two-banded seabream	Sparidae	*Diplodus prayensis*
Bulldog dentex	Sparidae	*Viridentex acromegalus*

Source: Fishbase, 2023

Table 8: Number of threatened and endangered plant and animal species in Cabo Verde

Red List category	Number of species		
	Plants	Animals	Total
Critically Endangered	17	12	29
Endangered	28	27	55
Vulnerable	6	48	54
Near Threatened	7	41	48
Total	**58**	**128**	**186**

Source: IUCN Red List, 2023

According to the Fifth Report of the State of Biodiversity (MAHOT, 2014), **threats to biodiversity in Cabo Verde** stem from economic developments and environmental concerns, posing both direct and indirect hazards to biodiversity. These include impoverished rural communities, deterioration of coastal and forest regions, unauthorised fishing activity, contamination of marine environments, the influx of construction, shifts in climate patterns, and limited environmental awareness and participation (Ibid.).

Socio-economic overview

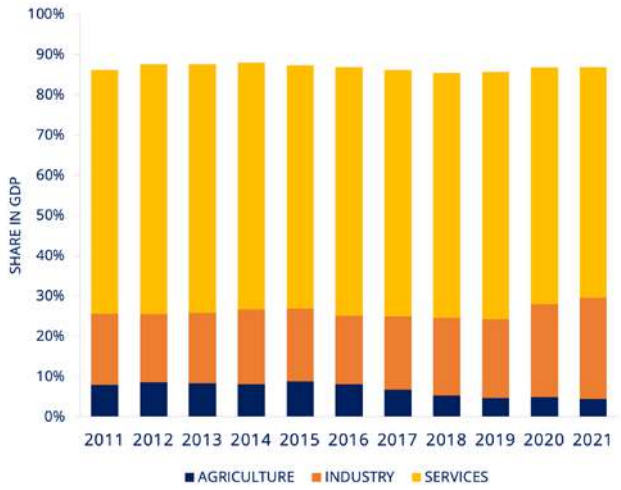
According to the World Bank (2024a), **Cabo Verde is widely recognised for its political and economic stability** and is regarded as a model of democracy in Africa. Since gaining independence from Portugal in 1975, the country's political landscape has been shaped primarily by two parties: the African Party for the Independence of Cabo Verde (PAICV) and the Movement for Democracy (MPD). From 1975 to 1990, PAICV governed under a single-party system. However, with the introduction of multi-party democracy in 1991, Cabo Verde has experienced peaceful transitions of power between PAICV and MPD through regular elections.

Cabo Verde's population and culture resulted from fusing European and various African cultural traditions and people. Text box 2 briefly examines the timeline that brought the country to gain its cultural diversity and successful independence.

In 2023, **Cabo Verde's GDP was USD 2.53 billion** (World Bank, 2025). The economy grew at 5.7% in 2019, but due to the COVID-19 pandemic and the global and regional supply chain disruption, it shrank by 8.9% in 2020 (AfDB, 2022). The country has since rebounded strongly with the return of tourism to the islands, driving a robust growth rate of 7% in 2021 and an impressive 15.4% in 2022 (World Bank,, 2024a). Economic growth slowed to 5.1 percent in 2023, reflecting the stabilisation of service exports after the post-COVID tourism rebound (Ibid.). Figure 1 indicates the share of economic sectors in GDP from 2011 to 2021.

The economy is service-oriented with commerce, transport, tourism (the mainstay of the economy), and public services accounting for about 75% of GDP. In 2020, agriculture accounted for 4.86% of the GDP, and manufacturing accounted for 7.35% (Heritage Foundation, 2022). **Foreign aid, foreign investment, remittances, tourism and related services are the main pillars supporting Cabo Verde's economy** (CIA, 2022; Heritage Foundation, 2022).

Figure 1: Share of economic sectors in GDP (2011 - 2021)



Source: O'Neill, 2023

Text box 2

Historical timeline of Cabo Verde

Prior to the 15th century - the islands were uninhabited.

1461 The first Portuguese settlement was established in Santiago, creating a centre for trading cheap manufactured items such as firearms, rum and cloth. The islands also played a key role in the Atlantic slave trade.

1495 Becomes a Portuguese crown colony.

1956 Amilcar Cabral co-founded the African Party for Independence of Guinea and Cabo Verde (PAIGC) in Guinea-Bissau.

1960 Many Cabo Verdeans joined the liberation war against Portuguese rule in Guinea-Bissau. The struggle was led by PAIGC.

1975 Cabo Verde becomes independent and adopts a constitution envisaging unity with Guinea-Bissau.

1980 Following a coup in Guinea-Bissau, Cabo Verde abandons plans for the envisaged unity. Instead, the country adopts its own constitution.

1981 The African Party for the Independence of Cabo Verde (PAICV) replaced the PAIGC and became the country's sole party.

1991 First elections in Cabo Verde.

1992 A newly revised constitution brings in a multi-party democracy system.

1995 Ratified as a member to the Convention on Biological Diversity (CBD).

2005 Cabo Verde joined as a member to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

2007 The World Trade Organization (WTO) council approves Cabo Verde's accession to the organisation.

Source: BBC, 2023; CITES, 2023

In 2023, the estimated total population was 552,331 with a **total labour force of 222,590 (40.30%)** (World Bank, 2025). According to the World Bank (2025), the **life expectancy in 2022 was 75 years** among a population where 3.4% lived on USD 1.90 or less in 2015 (last estimation). During the 20th century, severe droughts caused the deaths of approximately 200,000 people, prompting heavy emigration (BBC, 2023). **Today, more people with origins in Cabo Verde live outside the country than inside it (Ibid.).** The money that they send home brings in much-needed foreign currency in the form of remittances (Ibid.). Text box 3 provides insight into how Cabo Verde is managing its dispersed population by leveraging innovative financial mechanisms and opportunities in conjunction with its maritime resources.

The World Bank recognises that Small Island Developing States (SIDS) aggregate population is 65 million, slightly less than 1% of the world's population (UN, undated). Text box 4 describes the inherent vulnerabilities, such as small population sizes, which Cabo Verde faces as one of the SIDS.

The **Gini coefficient was 50.9 in 2019** (the most recent year), representing a decrease in comparison to 2001 (52.5) (World Bank, 2022; World Economics, 2025), indicating the **country improved in terms of equality in wealth distribution**. According to Transparency International (2025), the **Corruption Perception Index for Cabo Verde ranked 30th** out of 180 countries with a score of 64 out of 100, representing an improvement compared to the score of 60 in 2022. The country ranks **second in the Mo Ibrahim Governance Index, with a score of 69.6 out of 100** (Mo Ibrahim Foundation, 2024), ranking third in Africa, indicating that the country is stable in governance. These facts, combined with the political stability, favour the country in attracting investment, and the excellent business regulatory environment also makes it easy to start a business (Heritage Foundation, 2022). This is also reflected in the Wildlife Economy Investment Index (WEII) for Cabo Verde (Kant et al., 2024). See Text box 5 for more information on Cabo Verde's performance in the WEII.

Text box 3

Cabo Verde introduces its inaugural blue bond

A significant moment unfolded in Cabo Verde as the 2023 edition of The Ocean Race commenced with the arrival of top sailors in Mindelo. Alongside this event, Cabo Verde introduced its inaugural blue bond during the Ocean Summit, hosted jointly by The Ocean Race and the Cabo Verdean government. UN Secretary-General Antonio Guterres was the keynote speaker. The bond launched on Cabo Verde's Blu-X sustainable finance platform aims to attract investments for the country's ocean economy while divesting from industries causing sea-level rise and pollution.

This pioneering blue bond issuance, totalling USD 2.5 million, targets both microentrepreneurs and small and medium-sized enterprises (SMEs) in coastal communities, emphasising financial inclusion and structural investments in maritime and fisheries sectors. This groundbreaking moment signifies the first-ever initial public offering (IPO) featured on the Blu-X platform, extending investment opportunities globally, including to the dispersed Cabo Verdean community. The diaspora represents Cabo Verdeans living outside their homeland, often across different countries and regions, maintaining strong cultural ties and connections to their roots. This IPO's accessibility to the diaspora emphasises the platform's aim to engage and involve Cabo Verdeans worldwide in contributing to the country's economic growth and development. With a potential to increase to USD 3.5 million based on market demand, this bond signifies a test case for Cabo Verde's blue finance ambitions during the UN Ocean Decade.

Cabo Verde's blue bond, backed solely by market demand without a public guarantee, showcases the country's emergence as a global leader in defining blue finance norms. It aligns closely with sustainability principles and a triple bottom line approach, generating returns for the economy, society, and the environment. This strategic move towards sustainable finance aims to diversify the country's economy and benefit local communities reliant on marine resources, exemplifying how conserving oceans can stimulate economic growth and collective action for marine conservation.

Source: Lilyblad,2023

Blue bond issuance, totalling
USD 2.5 million

targets both
microentrepreneurs & small and medium-sized enterprises

Aims to engage and involve
Cabo Verdeans worldwide
in contributing to the country's economic growth


© Credit Julio Delgado

Text box 4

Small Island Developing States (SIDS)

In 1992, The United Nations Conference on Environment and Development (UNCED), also known as the 'Earth Summit', was held in Rio de Janeiro, Brazil. During this summit, UNCED recognised Small Island Developing States (SIDS) as special cases for their environment and development. Due to their remote geography, many SIDS have narrow resource bases, causing them to rely on external markets for goods. This creates many challenges, such as high import and export costs and reliance on irregular traffic volumes.

There are a distinct group of 39 states and 18 associate members of United Nations (UN) regional commissions, identified within three geographical regions, namely the Atlantic, Indian Ocean and South China Sea (AIS), the Caribbean Sea and Pacific Oceans. Cabo Verde and eight other UN member states (Bahrain, Comoros, Guinea-Bissau, Maldives, Mauritius, Sao Tomé and Principe, Seychelles, and Singapore) are listed within the AIS region. The SIDS face many inherent vulnerabilities, such as small population sizes, remoteness from international markets, high transportation costs, vulnerability to exogenous economic shocks and fragile land and marine ecosystems.

For many SIDS, most of their natural resources come from the ocean as, on average, the ocean under their control is 28 times the country's land size. For Cabo Verde, the total land area for the islands is 4,030 km², spread across 58,000 km² of ocean, which translates to the ocean area being just over 14 times the land area.

Due to the heavy reliance on the ocean as a source of economic activity, SIDS are particularly vulnerable to biodiversity loss and climate change impacts. The lack of alternative economic activities makes biodiversity an important issue for the livelihoods of many SIDS. Economic activities related to biodiversity include industries such as tourism and fisheries, which can constitute over half of the GDP of small island economies. Additionally, resilient biodiversity prevents additional costs from climate change impacts, soil erosion, pollution, floods, natural disasters, and other destructive phenomena.

Adopted in 2014, the SIDS Accelerated Modalities of Action (SAMOA) Pathway is an expanded mandate of the United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS) to include SIDS. The SAMOA Pathway was forged for the sustainable development of these countries as it recognised the adverse impacts of climate change on SIDS' efforts to achieve economic development, food security, disaster risk reduction and ocean management, among other challenges. In 2019, Cabo Verde hosted a SIDS National Focal Point Meeting to provide a platform to exchange information and share experiences on enhancing coherence in implementing the SAMOA Pathway.

Many SIDS are not the poorest countries and have advanced in achieving sustainable development, but their costs are greater and accessing financing remains a challenge. Additionally, their inherent vulnerabilities mean that progress for many hampers growth. Therefore, despite the progress many SIDS make, their status remains a special case for their environment and development.

Source UN, undated.

Text box 5

Wildlife Economy Investment Index (WEII) results for Cabo Verde

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

In the overall WEII rankings, **Cabo Verde ranked 21st overall in the WEII out of 53 countries** (São Tomé and Príncipe were not included in the overall WEII score due to a lack of data). The country excelled in the Investment-enabling Environment Sub-index, securing the fifth position while underperforming in the Wildlife Status Subindex at 49th place on the continent. See Figure 2 for an overview of the country's scores across the WEII, with green denoting positioned in the upper third of African countries, yellow in the middle third and red in the lower third.

According to the WEII report for Cabo Verde, the country ranked in the bottom third for overall wildlife status, as well as in the categories of wildlife management and wildlife assets. However, it performed well in the sub-categories of 'Wildlife Management Effectiveness' and 'Endemic Species,' placing in the upper third among African countries. Cabo Verde scored strongly in the Investment Enabling Environment Sub-Index, with 'Access to Markets' being the only sub-category where it ranked in the lower third.

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

- Maintain investment safety
- Promote intra-regional trade
- Formalisation of informal sector
- Promote sustainable agriculture
- Strengthen legal frameworks for protected areas
- Protection of genetic biodiversity
- Effective biodiversity monitoring and surveillance

For further details on Cabo Verde's performance and policy and practice recommendations, please refer to Cabo Verde's WEII report.

Source: Kant et al., 2024.

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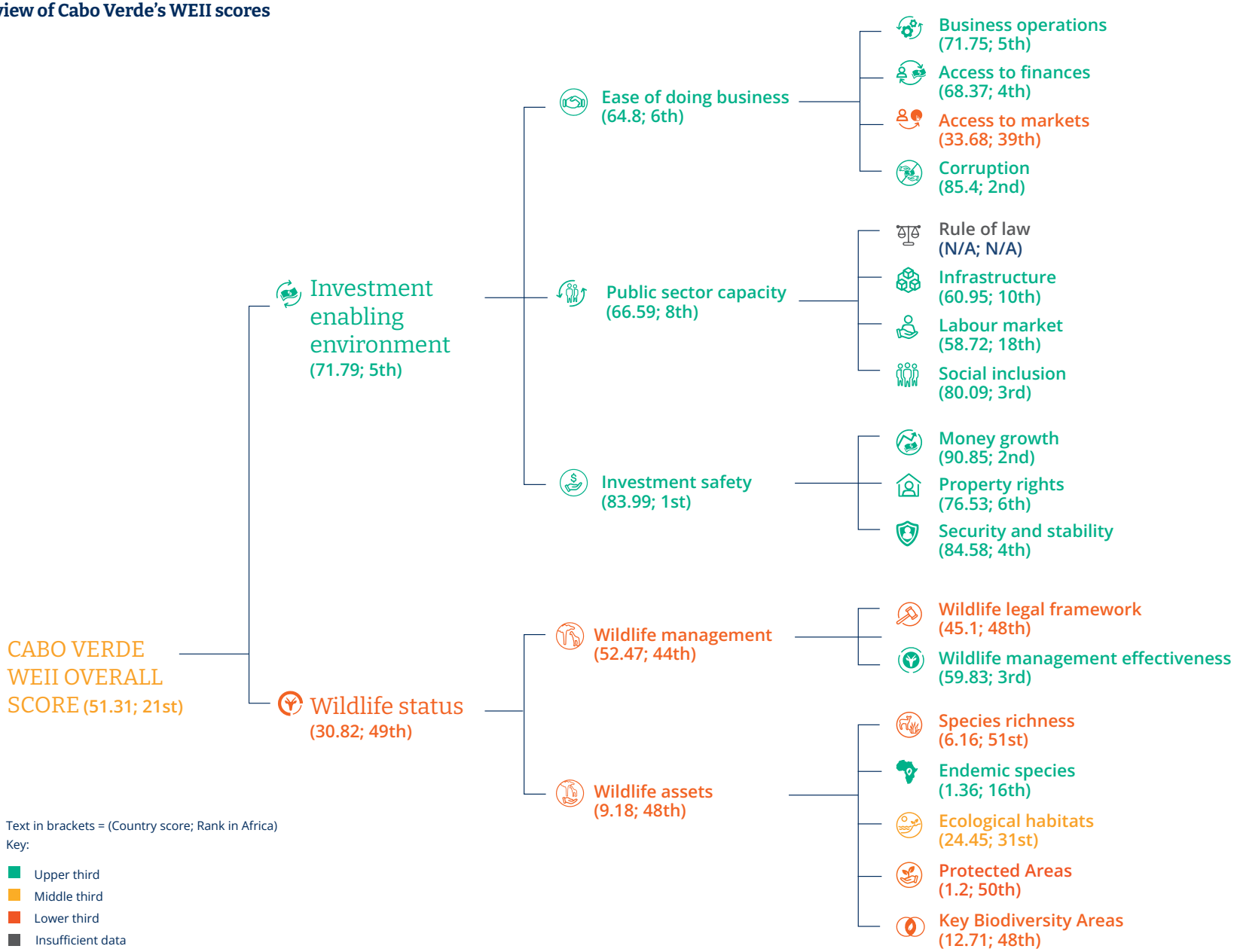
Figure 2: Overview of Cabo Verde's WEII scores



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

Key:

- Upper third
- Middle third
- Lower third
- Insufficient data

Regulatory framework for the wildlife economy

Cabo Verde has a **solid and coherent national legal and regulatory framework** for conserving the marine and terrestrial environment. Several national policies, legislations and decree-laws support biodiversity conservation, protected areas, sustainable use and environmental management. Table 9 provides a non-exhaustive overview of the regulatory framework for the wildlife economy in Cabo Verde, provided by the White Paper on the State of the Environment in Cabo Verde (Official Bulletin; 2014). However, the country only partially benefits from the regulatory framework due to a lack of means to control and effectively implement it. Cabo Verde is also a signatory to several international conventions and treaties, with the exception of the Nagoya Treaty. Table 10 provides an overview of the international conventions in the field of biodiversity and their date of ratification by Cabo Verde.

Table 9: Overview of the regulatory framework of the wildlife economy in Cabo Verde

Legal Instrument	Overview
Law No. 79/III/90, of May 26th (1990)	Considers Santa Luzia to belong to the State's public domain. It declares the island of Santa Luzia and all the islets that make up the Cabo Verde archipelago as natural reserves, namely the Ilhéus Branco, Raso, Santa Maria, Seco or Rombo, de Cima and Ilhéu Grande, from Curral Velho and Baluarte.
Decree-Law no. 44/2006, of August 28th	Amends some articles of Decree-Law no. 3/2003, of 24 February, establishing the legal regime for protected areas.
Regulatory Decree no. 10/2007, of September 3rd	Approves the delimitation of the Natural Park of Monte Gordo on the Island of São Nicolau, belonging to the National Network of Protected Areas.
Regulatory Decree No. 19/2007, of December 31st	Approves the delimitation of the Serra da Malagueta Natural Park on Santiago Island, belonging to the National Network of Protected Areas.
Regulatory Decree no. 3/2008, of June 2nd	Approves the delimitation of the Fogo National Park, which covers the locations of Chã das Caldeiras, Pico Novo, Orela and Bordeira on Ilha do Fogo, belonging to the National Network of Protected Areas.
Resolution no. 40/2008, of December 8th	Approves the Management Plan for the Serra da Malagueta Natural Park, Santiago Island.
Resolution no. 40/2008, of December 8th	Approves the Management Plan for Monte Gordo, S. Nicolau Island.
Law No. 29/VIII/2013	Establishes phytosanitary protection norms within the territory of Cabo Verde.
Decree-Law No. 9/1997, of May 8th	Reviews system of criminal sanctions under the plant protection regime – Official bulletin IS nº 17, supplement, of May 8, 1997.
Ordinance nº 55/1997, of September 9th	Indicates the ports and airports from which plants or plant products are introduced into the country and exported – Official Bulletin IS nº 34, a supplement of September 9, 1997.
Ordinance No. 57/97, September 9th	Indicates the plants and plant products subject to import authorisation by the DG of Agriculture - Official Bulletin IS nº 34, supplement of September 9, 1997.
Law No. 48/V/98, of April 6th 1998	Regulates forestry activities – Official Bulletin IS nº 13.
Decree No. 97/87, of September 5th, 1887	Establishes standards for the protection of fishery resources, such as lobsters, sea turtles and tuna, as well as the definition of conservation measures and supervision of fishing activities.
Decree-law no. 53/2005, of August 8th	Defines the general principles of the policy for the sustainable use of fishery resources.
Legislative Decree No. 2/2020, of March 19th	Approving the general regime regulating fishing activities in national maritime waters and the high seas.
Decree-Law No. 54/2005, of August 22nd	Regulates Amateur Fishing activity in waters under national jurisdiction.
Resolution nº3/2005, of February 21st	Approves the Resource Management Plan of the Fishing.
Resolution no. 11/2007, of April 2nd	Approves the Fisheries Resources Management Plan for the period from March 1, 2007 to December 31, 2008.

Source: Official Bulletin, 2014

Table 10: List of biodiversity-related conventions ratified by Cabo Verde

Convention	Date ratified	Source
United Nations Convention on the Law of the Sea	10th August 1987	Available at https://treaties.un.org/pages/ViewDetailsIII.aspx?src=TREATY&mtdsg_no=XXI-6&chapter=21&Temp=mtdsg3&clang=_en [Accessed 2nd August 2023]
United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa	8th March 1995	Available at https://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsg_no=XXVII-10&chapter=27&clang=_en#:~:text=The%20Convention%20was%20adopted%20on,1883%20of%20the%20General [Accessed 2nd August 2023]
United Nations Framework Convention on Climate Change	29th March 1995	Available at https://treaties.un.org/pages/ViewDetailsIII.aspx?src=IND&mtdsg_no=XXVII-7&chapter=27&Temp=mtdsg3&clang=_en [Accessed 2nd August 2023]
Convention on Biological Diversity	29th March 1995	Available at https://treaties.un.org/pages/ViewDetails.aspx?src=IND&mtdsg_no=XXVII-8&chapter=27&clang=_en [Accessed 2nd August 2023]
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal	2nd July 1999	Available at https://treaties.un.org/pages/ViewDetails.aspx?src=IND&mtdsg_no=XXVII-3&chapter=27&clang=_en [Accessed 2nd August 2023]
Vienna Convention for the Protection of the Ozone Layer	6th July 2001	Available at https://treaties.un.org/pages/ViewDetails.aspx?src=IND&mtdsg_no=XXVII-2&chapter=27&clang=_en [Accessed 2nd August 2023]
The Convention on International Trade in Endangered Species of Wild Fauna and Flora	10th August 2005	Available at https://cites.org/eng [Accessed 2nd August 2023]
The Ramsar Convention on the Conservation of Wetlands	18th November 2005	Available at https://www.ramsar.org/ [Accessed 2nd August 2023]
Convention on the Conservation of Migratory Species of Wild Animals	18th January 2006	Available at https://www.cms.int/#:~:text=The%20Convention%20on%20Migratory%20Species%20(CMS)%2C%20also%20known%20as,migratory%20animals%20and%20their%20habitats [Accessed 2nd August 2023]
Kyoto Protocol to the United Nations Framework Convention on Climate Change	10th February 2006	Available at https://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsg_no=XXVII-7-a&chapter=27&clang=_en [Accessed 2nd August 2023]
Stockholm Convention on Persistent Organic Pollutants	1st March 2006	Available at https://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsg_no=XXVII-15&chapter=27 [Accessed 2nd August 2023]

Institutions managing the wildlife economy

In 2025, the Prime Minister heads the government with currently 16 ministries. Most of the ministries have a single Cabinet Minister. Table 11 lists the 16 ministries of the Cabo Verde government.

Table 11 : Composition of the government of Cabo Verde

Deputy Minister to the Prime Minister for Youth and Sports
Deputy Prime Minister, Minister of Finance and Business Development and Minister of Digital Economy
Minister of Agriculture and Environment
Minister of the Sea
Minister of Culture and Creative Industries
Minister of Education
Minister of Foreign Affairs, Cooperation and Regional Integration
Minister of Health
Minister of Industry, Trade and Energy
Minister of Infrastructure, Spatial Planning and Housing
Minister of Internal Affairs
Minister of Justice
Minister of State Modernization and Public Administration
Minister of State, Family, Inclusion and Social Development
Minister of State, National Defense, Minister of Territorial Cohesion and Minister of the Presidency of the Council of Ministers and Parliamentary Affairs
Minister of Tourism and Transport

Source: Governo.cv (2025)

Government functions and agencies are highly decentralised. **Mandates for marine conservation and use are not fully clarified and are spread across multiple agencies.** At least five core ministries and over a dozen sub-agencies are pertinent to the wildlife economy. Each entity is legally responsible for some aspect of marine biodiversity conservation. The two **most relevant ministries for the wildlife economy are the Ministry of Agriculture and Environment and the Ministry of the Sea.** Table 12 provides an overview of the leading institutions managing the wildlife economy in Cabo Verde.

Cabo Verde has **22 municipalities scattered across the nine inhabited islands**, with authority over various aspects of resource management, education, health, and police and municipal investments (OECD/UCLG, 2022). Most national ministries have representation at the municipal level that executes national and municipal level mandates through "Island Delegations".

Wildlife economy activities in Cabo Verde

Cabo Verde's natural resources underpin vital economic sectors, including agriculture, fishing, and tourism, fostering economic expansion and its populace's well-being. **The archipelago's biodiversity potential, coupled with local cultural diversity and favourable year-round climate, collectively enhance the country's capacity to cultivate a range of wildlife-related economic activities**. The subsequent sections elaborate on several key wildlife economy activities within the country. Data on the economic value of these activities was not always available and data which was available was often outdated and limited to site-level, rather than for the country as a whole. **Accurate, ongoing collation of data to understand and measure the wildlife economy over time is important for sustainability, adaptive management and to measure impact.**

Tourism

The **tourism products in Cabo Verde are centred on sun, sea, and sand.** In contrast, the negative aspects include its small surface area, insularity, remoteness, environmental concerns, and human resource limits (López-Guzmán et al., 2013). The islands of Sal and Boa Vista are known as typical beach and sun resorts, São Vicente is known for culture and ecotourism, and Santiago, which includes the country's capital, Praia, is known for corporate tourism. Santo Antão, São Nicolau, Fogo, and parts of Santiago are popular for rural and mountain tourism experiences. Most international visitors visit the beach tourism islands of Sal and Boa Vista (CapeVerdeIslands.org, 2022; Mitchell, 2008).

For over two decades, before the onset of the COVID-19 pandemic, Cabo Verde's economy thrived on tourism, showcasing uninterrupted growth in this sector (AfDB, 2021; World Bank, 2022). This growth is illustrated in Figures 3 and 4. However, this has put increasing pressure on the environment. These pressures have been felt not only in locations directly experiencing tourism growth (e.g. the islands of Boa Vista, Sal and Maio) but also in other locations that may have experienced negative externalities, such as greater water and energy consumption, poor waste management, air and sea pollution, and a loss of plant and animal species (AfDB, 2021). Thus, the implications of this rapid development extend beyond the work of business licensing and involve regulations in many other areas, such as land use planning, tourism, public utilities, conservation of natural and animal resources, and waste management, amongst others (UN, 2018).

The **government aims to broaden the tourism sector** by encouraging diverse attractions, such as sea turtle nesting sites, big game fishing, various water sports such as sailing, yachting, wind and kite surfing, hiking, volcanic exploration, birdwatching, canyoning, cultural experiences such as music, festivals, and heritage, along with opportunities for cruise ships and retirement options catering to senior citizens (ITA, 2022).

Mitchell (2008) highlighted a significant surge in tourist receipts, emphasising that by 2008, tourism constituted a substantial one-fifth of Cabo Verde's GDP and a significant portion of its overall exports. Subsequent reports from the United Nations Development Assistance Framework (UNDAF, 2013) shed light on the sector's employment impact, noting that in 2013, the hotel and restaurant industry engaged 7.3% of the country's workforce. This included **19,140 direct tourist employment opportunities alongside 22,000 indirect employment positions** within the hotel, restaurant, and transportation sectors (UNDAF, 2013). Notably, by the end of 2016, recorded employment in inventoried hotel establishments had increased by 20.5%, totalling 7,742 individuals—an 84.2% contribution from hotels, followed by 4.6% from *pensão* (small hotels or guesthouses) (WTTC, 2021 & 2022).

Table 12: Leading institutions managing the wildlife economy in Cabo Verde

Institution	Mission
Ministry of the Sea	Has the authority over most marine and fisheries issues, and maritime infrastructures (fishing and commercial ports)
National Direction for Fisheries and Aquaculture	Responsible for the design, planning, implementation, and evaluation of economic policies for the marine sector
General Inspection for Fisheries	Responsible for: • fisheries monitoring, control, and surveillance • fenforcing of fisheries policies, in general, including the health, legality, and quality of fishery products
Institute for Maritime and Ports	Responsible for: • regulating ports • vessel licensing, including artisanal fishing boats • International Maritime Organisation (IMO) protocols • maintains a database of all vessels
Institute of the Sea	Responsible for: • marine research • statistical data collecting on fisheries • assisting with capacity building for academia and private stakeholders
School of the Sea (IMar)	Responsible for capacity building, non-degree, among stakeholders of the fisheries sector and related ones
Ministry of Agriculture and Environment	Ministry that oversees the National Directorate for Environment
National Directorate for Environment	Responsible for: • the designing, regulation, execution, and direct support to the Minister in the fields of the environment, namely, the prevention and assessment of impacts, nature conservation, environmental information, climate change, and monitoring of environmental quality • both protected and endangered species conservation and protected areas management, through its Nature Conservation Service (DSCN) • species management plans for protected and endangered species (created corals and drafted the ones for sharks and seabirds)
Ministry of Finance	Defines, promotes, and implements the government's fiscal policies including defining each Ministry's budget, including amounts attributed to conservation programmes
Ministry of Tourism	Overseas the General Directorate of Tourism
General Directorate of Tourism (DGT)	Responsible for: • tourism planning and projects • policy development, laws, and regulations • licensing and certification
Ministry of Defence	Overseas the Coast Guard
Coast Guard	Responsible for: • monitoring fishing activity in the water of Cabo Verde, including reporting illegal fishing activities • enforcement and prosecution of fisheries-related violations is under maritime jurisdiction
National Fisheries Council	Responsible for: • meets annually and has representation from private, government, and NGO stakeholders • responsible for vetting fisheries policies proposed by the Ministry of the Sea and providing recommendations to the cabinet and parliament regarding their adoption • have representation from artisanal fishing "community-based" organisations as well as the *Associação dos Armadores de Pesca Cabo Verde* (APESC), which represents most of the national semi-industrial fleet
NGOs	Promote individual and collective initiatives to protect the environment and wildlife associated. Some of these NGOs include: • Biosfera • Conserve Africa • Fauna & Flora International • National Oceanography Centre • Partnership For Observation Of The Global Ocean • The Travel Foundation

Source: Governo.cv, 2022

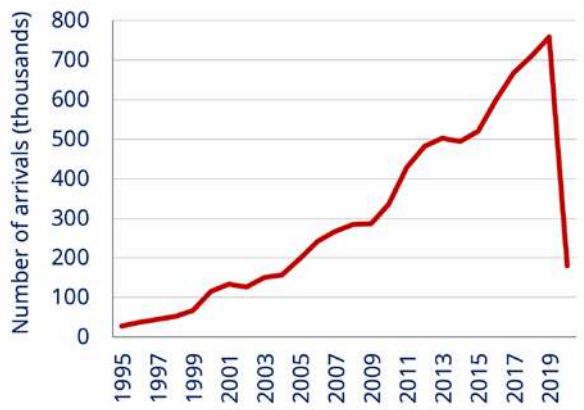
Cabo Verde welcomed 758,000 tourists in 2019, generating a significant USD 567 million from tourism alone. This accounted for 33.28% of the country's GDP and 16% of all international tourism revenues in West Africa (Macrotrends, 2022). The industry has continued to grow, with **tourist arrivals reaching approx. one million in 2023**, a 23% increase over the 2019 record (Air News, 2024). Notably, the islands of Sal and Boa Vista have remained the main tourism hubs, together making up 90% of the country's total overnight stays in 2017 (Bernardo & Jorge, 2019).

Tourism is a cornerstone of Cabo Verde's economy, serving as the primary recipient of foreign direct investment in the country (ITA, 2022). However, the onset of the COVID-19 pandemic precipitated a substantial decline in tourism numbers and associated receipts. In 2020, tourism receipts plummeted from USD 567 million in 2019 to USD 169 million, reflecting the pandemic's severe impact on the sector (ITA, 2022; World Bank, 2022). While the government aimed to attain one million tourists by 2021 after nearly reaching 800,000 visitors in 2019 (ITA, 2022), the pandemic disrupted these plans, resulting in a decline in tourism numbers and associated revenue in 2020. A decline in tourism arrivals and receipts is indicated by Figures 3 and 4, respectively.

In 2021, tourism's negative trends persisted, leading to a decline in its contribution to the national GDP, which fell to 13.5% (WTTC, 2022). The number of jobs generated also decreased to 60,600 due to a drop in visitor expenditure (WTTC, 2022). Simultaneously, domestic tourist spending saw an increase, rising from USD 52.8 million in 2020 to USD 63.1 million in 2021 (WTTC; 2022). As per the World Travel and Tourism Council's findings for 2021, the top countries of Cabo Verde's tourist origin were ranked as follows: France (18%), Portugal (17%), Belgium (13%), Germany (13%), United Kingdom (10%), while the remainder of the world constituted 29%.

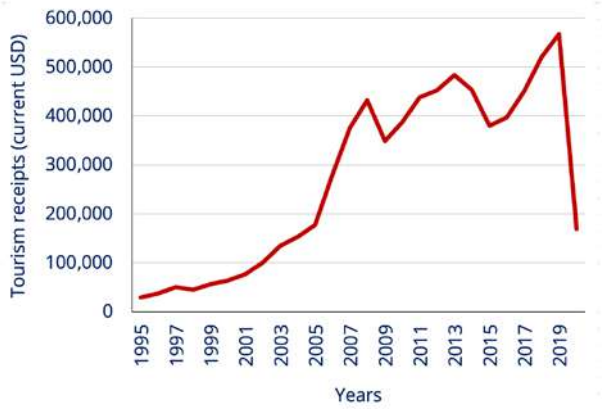
Despite the pandemic's impact, tourism is expected to remain the primary economic driver and the government's tourism operational plan for 2022-2026 aims to attract 1.2 million tourists by 2026 (ITA, 2022). Cabo Verde's effective response to the pandemic, with over 85% of its adult population fully vaccinated, positioned it as a model for tourism recovery (ITA, 2022).

Figure 3: International tourism arrivals in Cabo Verde (1995-2020)



Source: World Bank, 2022

Figure 4: International tourism receipts in Cabo Verde (1995-2020)



Source: World Bank, 2022

Ecotourism

The Cabo Verde environment offers diverse attractions, from birdwatching and trekking through lush hill ecosystems to exploring volcanic landscapes (see Text box 6). It is also **home to one of the world's top three loggerhead sea turtle nesting sites** and boasts vibrant coraline communities (a mix of sponges, some species of corals, volcanic rock, coraline algae, forming complex ecossystems) for snorkelling and diving adventures (Neves et al., 2022). The ocean plays an important role in Cabo Verde's ecotourism due to its desert-like island features. The traditional lure of "sun and sea" is not sufficient anymore, leading to a rising interest in scuba diving. Cabo Verde is also using marketing initiatives, see Text box 7, to create diverse tourism interests.

Ecotourism activities such as observing loggerhead sea turtles during their breeding season are well-established, contributing significantly to the economy. For example, on Boa Vista Island alone, ecotourism brought in CVE 59 million (approx. USD 0.5 million) in 2012 (MAHOT, 2014). Moreover, emerging practices such as observing marine mammals, particularly the Humpback whale (*Megaptera novaeangliae*) in places such as Boa Vista Island's Bay of Sal-Rei and Santa Monica, have gained attention (Boavista Official, 2022). These areas are vital for this species' mating and breeding habitats in the archipelago (Hazevoet et al., 2010).

Text box 6

Geotourism

Besides water-based activities, geotourism initiatives are underway, particularly focusing on the potential for a geopark on Fogo Island, leveraging its geological advantages. This includes exploring geomedical possibilities, which delve into the impact of trace elements on organisms, linking earth sciences and medicine. Additionally, efforts extend to utilising the carbonated sands of Boa Vista and Maio islands, geophagic clays of Boa Vista, clayey salt marshes of Sal Island, São Nicolau and Santo Antão island volcanic muds. Geotourism on Sal Island is in its nascent stages and operates on a smaller scale, mainly offering "safari" activities within sun and beach tourism services, highlighting the unique Pedra Lume salt marshes.

Source: Rocha & Ferreira da Silva, 2014

Text box 7

The seven natural wonders of Cabo Verde

Cabo Verde has ten different islands, each with their own unique characteristics and tourism offering. To improve the protection and conservation of these natural wonders, Cabo Verde identified and evaluated '**seven natural wonders of Cabo Verde.**' Along with protecting this natural heritage, it attracts tourists to travel between islands. The categories of the seven natural wonders of Cabo Verde islands:

- **Mountains:** Monte Cara on São Vicente;
- **Volcanic mountains**: Fogo on the island of Fogo;
- **Islands, rocky areas and cliffs**: Carbeirinho on São Nicolau;
- **Bays and humid areas**: the Salt Lake and mines of Pedra de Lume on Sal;
- **Beach:** Santa Maria Beach on Sal;
- **Dunes:** the Viana desert on Boa Vista;
- **Landscapes of scientific interest:** Monte Gordo National Park on São Nicolau.

Source: CapeVerdeIslands.org, 2022

Fisheries

Fishing holds substantial socioeconomic importance for Cabo Verde, contributing significantly to various aspects such as food security, poverty alleviation, job creation, and the country's GDP (González et al., 2020). The coastal fishing sector is a vital source of nourishment and income for Cabo Verde's communities (FAO, 2023). Fish consumption stood at an estimated 11 kgs per person annually in 2017, representing approximately 12% of the overall animal protein intake (FAO, 2023; Wabnitz & Harper, 2023). **The primary source of fish is from artisanal fishing**, and the majority is consumed in its fresh state (Wabnitz & Harper, 2023).

Fisheries and fish processing stand as Cabo Verde's primary non-service economic activities, exerting significant influence over the country's exports (Wabnitz & Harper, 2023). The fisheries sector also gains supplementary income through repair services and port activities. Mindelo's Porto Grande managed approx. 350 operations with foreign fishing vessels in 2019, resulting in revenue of about EUR 17 million (approx. USD 18.6 million) (Enapor, 2020). Between 2007 and 2017, the fisheries sector's contribution to GDP was recorded at a mere 0.87%, however, this figure is likely underestimated due to the significant informal nature of artisanal fisheries (Wabnitz & Harper, 2023). Macías González (2024) suggests that the sector's contribution to the GDP is approx 0.8%, but if the processing industry, whose products are mainly destined for export, is included, this could be between 7% and 10%.

Cabo Verde has a fishing potential between 36,000 and 46,000 tonnes through its 800,000 km^2 Exclusive Economic Zone (EEZ) and extensive coastline, with the catch mainly composed of tuna, but with other important coastal species, small pelagic (mid-water) and demersal (bottom-feeding) (DGRM, 2016). The national catch mainly comprises coastal pelagic species such as mackerel (*Decapterus macarelus and D. punctatus*), chicharro (*Selar chrumenophthalmus)*, and Dobrada (*Spicara melanurus*), oceanic pelagic species including Albacore (*Thunnus albacares*), Patudo (*Thunnus obesus*), Gaiado (*Katswuonus pelamis*), Merma (*Euthinus aliteratus*), and Melva (*Auxis thazard*), as well as various shark species (over ten species) (Fortes, 2019). Table 13 indicates that **in 2019, national exports of fisheries products**

totalled 16,880 tonnes, generating USD 47.4 million in revenue (Selina Wamucii, 2022).

In 2019, processed and unprocessed fish constituted 72% of the country's total exports, reaching a value of USD 61 million (FAO, 2023). However, during the COVID-19 pandemic, exports experienced a notable decline, resulting in fish products representing approximately 17% of all Cabo Verdean exports in 2020 (Ibid.). Nevertheless, this sector remains a crucial source of income for the country (Wabnitz & Harper, 2023).

Table 13: Cabo Verde fisheries products exports in 2019

Product		Quantity in tonnes	Value in USD
Fish	Bonito	2,479	10,898,000
	Mackerel	2,252	13,823,000
	Tuna	10,399	9,585,000
	Other	1,487	12,445,000
Processed fish products	Molluscs	2	5,000
Seafood	Cuttlefish & Squid	208	360,000
	Other Molluscs	1	68,000
Total		**16,828**	**47,184,000**

Source: Selina Wamucii, 2022

The **fishing industry in Cabo Verde employs roughly 5.2% of the active workforce and 2.1% of the total population** (primary and secondary sector) (FAO, 2023). Its socio-economic significance has always been profound for the coastal communities in the country. Numerous landing points mean fishing does not lead to significant relocation of communities; fishermen and their families tend to settle within their communities (Ibid.).

Industrial and semi-industrial fisheries, including pole-and-line tuna vessels, purse seiners, and lobster boats, operate with engine power between 19 and 500 HP and crew sizes of eight to 14 members (FAO, 2023; DGRM, 2018; SRCF, 2016). In 2016, total landings reached 9,840 tonnes, with tuna comprising 66%, small pelagic species 22%, and demersal fish 10% (SRCF, 2016). Most tuna is processed for export, while a smaller portion serves the domestic tourism market (hotels and restaurants).

The tourism industry plays a significant role in the consumption of fishery products. **The influx of tourists has heightened demand for fish in local markets**, particularly in areas with high tourist activity (UN Cabo Verde, 2021). This trend suggests that a portion of the catch is indeed directed towards meeting the needs of the tourism sector, especially in the Sotavento region, which includes the capital city, Praia, a hub for corporate tourism (Ibid.).

The operations of the semi-industrial and industrial fishing fleet in Cabo Verde are regulated by Decree-Law 2/2020 and the Fisheries Resources Management Plan 2020–2024 (PGRP 2020–2024). Both frameworks are guided by core principles of sustainable use and conservation of marine resources. However, as commercial and industrial fishing primarily focus on resource extraction rather than conservation, they do not align with wildlife economy principles. Therefore, commercial and industrial fishing will not be covered in the report.

Recreational fishing

Cabo Verde is renowned for "big-game" fishing tourism, also known as recreational or sport fishing, drawing enthusiasts targeting larger oceanic species such as tuna (*Thunnus spp.)*, swordfish (*Xiphias gladius*) and Atlantic blue marlin (*Makaira nigricans)* (Capeverdeislands.org, 2022). It is considered **the prime location worldwide for fishing Atlantic blue marlin** (Ibid.). According to the regulations governing this pursuit, fishermen are allowed a maximum daily catch of three demersal fish (bottom-feeding) (FAO, 2023). In organised sport fishing competitions, each fisherman's limit for pelagic (mid-water) species cannot surpass five (Ibid.). According to Fishbase (2023), there are **reports of 140 game fish species in Cabo Verde**. Among them, 119 are confirmed as current, while 10 species are under question. Additionally, 11 species might have been misidentified and are not established in the region (Fishbase, 2023).

The International Game Fish Association (IGFA, 2019) highlights the fishing industry in Cabo Verde, which offers diverse charter boat options, ranging from 28 to 46-foot vessels accommodating various budgets. These boats are designed for this activity equipped with lines, rods, and hooks, which are allowed, but the quantity of these devices must not exceed three; instruments such as knives are permitted while using weapons and chemicals is strictly prohibited (FAO, 2023). Fishing excursions, accommodating one to four passengers, range from USD 900 to USD 1,800 for a full day on a vessel, and alternatively, water moto experiences, a water wheel-driven activity, can cost around USD 120 (Tom's Catch, 2017). The primary technique involves bait-and-switch with stand-up gear, creating an exciting fishing experience (IGFA, 2019). Jigging, another fishing technique using weighted lures, particularly thrives between July and December for species such as amberjack (*Seriola*), blackjack (*Caranx lugubris*), island grouper (*Mycteroperca fusca*), and tuna (*Thunnus spp.)* (Tom's Catch, 2017).

Artisanal fisheries

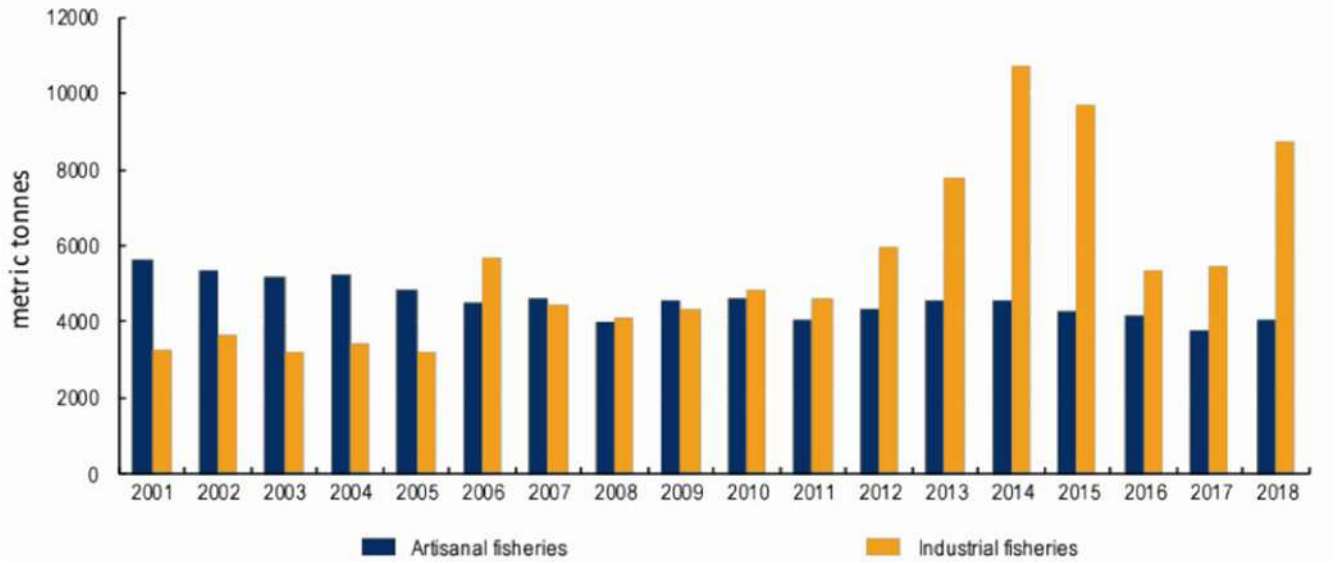
Caboverde-info (2019) suggests that **artisanal fishery is the oldest practice in Cabo Verde**, even before the permanent settlement on the islands. It provides essential income to a considerable number of families from fishing communities, mainly in São Vicente-Santo Antão and São Nicolau (26.6% of the population) and Santiago (54%), composed of large pelagic fish (41% in weight), small pelagic (40%), demersal fish (13%) and lobsters (0.5%) (Nuno, 2020). **Cabo Verde has 77 artisanal fishing landing sites distributed across its nine inhabited islands.** Of these, 17 are regularly monitored by statistical services from the Institute of the Sea (Instituto do Mar – IMar), formerly known as the National Fisheries Development Institute (Instituto Nacional de Desenvolvimento das Pescas – INDP) (FAO, 2023).

The artisanal fisheries in Cabo Verde are carried out by **more than 5,000 fishers**, using more than 1,500 small vessels, three to eight metres long, distributed to 77 landing sites (DGRM, 2018; FAO, 2023). These fishermen engage in nearly year-round operations, embarking on daily trips from the coastline, with their equipment significantly relying on handlines trailed by beach and ring seines (FAO, 2023). They contribute between 40% and 60% of the national catch (Fortes, 2019). Figure 5

illustrates the increase of the catch between 1997 and 2017, where a slight declining trend is visible over the last few years (OECD, 2022). **Overfishing and the influence of climate change** have significantly impacted this activity, resulting in various adverse effects, such as the decline of traditional fishing methods, decreased income and job opportunities, and concerns regarding stock sustainability (FAO, 2023).

Women play a crucial role in Cabo Verde's fishing sector, particularly in the post-harvest stages (Wabnitz & Harper, 2023). **An estimated 3,500 women are involved in fish selling across the islands, with the highest concentrations in Praia and Mindelo** (FAO, 2023; World Bank, 2024b). However, according to the 2021 Fishing Census conducted by INE/IMAR, approximately 1,881 individuals were officially recorded as fish sellers, representing 1.06% of total national employment, of which 86% are women (Macías González, 2024). Text box 8 highlights the role women play in Cabo Verde's fisheries.

Figure 5: Artisanal and industrial catch in Cabo Verde (2001-2018)



Source: OECD, 2022

Text box 8

Women in fisheries

In Cabo Verde's fisheries sector, **women play a critical role in subsistence activities and traditional post-harvest methods** such as salting and drying fish, which are vital for preserving fish in local communities. Despite constitutional equality, social norms and institutional barriers often marginalise women, especially in rural areas. The country has tried to strengthen gender equality through policy enhancements and institutional support.

Approximately 3,500 women manage fisheries sales, primarily in Praia and Mindelo, operating in public markets and sometimes door-to-door. Studies show 956 women registered along the fisheries value chain at Praia's wharf, with the Illuminating Hidden Harvests (IHH) initiative estimating 2,488 active women in fisheries, predominantly engaging in small-scale fishing. Women contribute significantly to subsistence fishing, fish processing, and trading, constituting a considerable percentage in these sectors.

While men are more involved in fishing and wharf management, women exhibit versatility across the fisheries value chain, handling various responsibilities such as owning boats, managing finances, processing catches, and trading fish products. Despite their diverse involvement, this multifaceted participation can render women more susceptible to market fluctuations. To support women's economic empowerment, Spain pledged EUR 160,000 (approx. USD 175,516) for a project in Cabo Verde's blue economy, aiming to benefit 40% of women. In collaboration with FAO, this initiative focuses on capacity building, knowledge transfer, and fostering entrepreneurship. Ongoing studies analyse gender dynamics in artisanal fisheries, evaluate public fisheries policies, and provide training to key stakeholders in the fisheries sector. Additionally, FAO's Coastal Fisheries Initiative in West Africa is strengthening the capacities of women fish processors and sellers, fostering exchange visits to share experiences and practices for safer and healthier work environments.

Source: Wabnitz & Harper, 2023

Aquaculture

Aquaculture in Cabo Verde is nearly nonexistent, and no production data has yet to be reported to FAO (FAO, 2023). However, steps towards developing aquaculture in Cabo Verde have started, with many projects and research done by the national institution for fisheries development (IMar – Institute of the Sea), which is responsible for conducting research in the fisheries sector (Ibid.).

In response to the absence of locally sourced shrimp in Cabo Verde, an aquaculture initiative was launched in Calhau on São Vicente Island in the late 2000s, initially aiming to meet the country's demand for shrimp, which was entirely reliant on imports (AUC/OECD, 2023). During 2022, one shrimp farm (the Fazenda do Camarão) produced about 40 tonnes of shrimp and plans to double that by 2023 (Ibid.). Although there is a chance to export, the main focus is on serving the local market, as Cabo Verde consumes around 115 tonnes of shrimp annually (AUC/OECD, 2023). Additionally, a project to produce bluefin tuna (*Thunnus thynnus*) is being implemented in the zone of Flamengo, a Norwegian investment of about EUR 2.5 million (approx. USD 2.7 million) and intends to create roughly 3,000 direct and indirect jobs (Smith, 2021). Text box 9 presents additional information regarding the prospective Norwegian investment in aquaculture.

Fishing is a vital sector in Cabo Verde, underpinning food security, livelihoods, and exports, particularly through artisanal fisheries. Although its official GDP contribution is small, the

Text box 9

Norwegian tuna aquaculture project

Nortuna Holding, a Norwegian company, launched a pioneering tuna production venture via aquaculture on São Vicente island in Cabo Verde. The project's initial phase targets an annual export of 500 tonnes of Atlantic Bluefin Tuna (ABFT) (*Thunnus thynnus*), with plans to scale up production to 10,000 tonnes.

An Environmental Impact Study outlines an initial investment of EUR 2.5 million (approx. USD 2.7 million), with an additional EUR 6 million (approx. USD 6.6 million) designated for ABFT species research and development. The overall project investment may total EUR 240 million (approx. USD 263 million) and is expected to create roughly 3,000 jobs directly and indirectly.

The project's pilot phase involves constructing an incubator, essential equipment, and quality check infrastructure. Subsequent phases will expand production to the sea near Flamengo and extend the project to other Cabo Verdean islands, such as Santo Antão and São Nicolau, representing a phased approach to growth and development.

Source: Smith, 2021

Text box 10

Sustainable from sea to plate

The Biosfera sustainable fishing initiative launched in 2019 aimed at counteracting the over-exploitation of marine resources, concentrating efforts on the Santa Luzia marine reserve and Branco and Raso islets. Its primary goal is to restore these ecosystems and their species. The project emphasises the importance of responsible artisanal fishing, aligning with national standards. It promotes sustainable fishing certification for fish caught under these standards, aiming to integrate them into local markets and restaurant menus.

This project also emphasises consumer awareness by promoting sustainably caught fish and informing consumers of the fishing sector's challenges. Initially centred on the Salamansa fishing community, the initiative collaborated with local vendors at the Fish Market, selling high-quality, sustainably caught grouper to the public and partner restaurants marked with the project's logo. Following initial success, the project has expanded to other islands, engaging new national and international partners to contribute to the conservation of vital species supporting local livelihoods. The project aims to achieve the following:

- Advocate for sustainable management of fishing resources to conserve marine ecosystem integrity and biodiversity.
- Establish an inclusive fishing model integrating environmental, economic, social, and commercial aspects.
- Foster a co-management structure involving the community, governmental bodies, and Cabo Verdean NGOs.
- Adhere to national jurisdictional regulations and international fishing agreements.
- Cultivate a participatory system where voluntary engagement and collaboration among fishermen ensure the revival and continuity of traditional fishing practices.

The project focuses on artisanal fishers as beneficiaries. It was developed by the fishing community of Salamansa, a fishing village in the north of the island of São Vicente that uses the Santa Luzia marine reserve to fish. Salamansa is one of the few communities, if not the last, where fisheries are still carried out in an environmentally friendly way, using only hand lines and sailing using recycled materials. Biosfera believes that, with the creation of a sustainable fishing certificate for Santa Luzia, they will promote and contribute to the long-term development of this activity within the Reserve.

Source: Biosfera, 2019

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Text box 11

Cabo Verde's maritime economy

Cabo Verde strategically positions itself as a maritime and logistics hub, with São Vicente island at the centre of its Exclusive Economic Maritime Zone (Zona Económica Especial de Economia Marítima em São Vicente) (ZEEEM-SV). This initiative aims to prioritise the blue economy, focusing on ocean and coastal impact while economically integrating coastal communities. The country's nine ports, dominated by fisheries, drive 80% of its exports.

Efforts are underway to enhance port facilities, fisheries, and aquaculture sectors. São Vicente's Porto Grande is pivotal, drawing attention to potential improvements and the planned cruise ship terminal, which is planned to be ready by the end of 2025. Despite pandemic setbacks, domestic maritime transportation shows promise, while cruise ship visits are gradually rebounding.

The ZEEEM-SV's establishment offers substantial investment prospects, emphasising port improvements, bunkering, ship repair, renewable energy, and transit services. Managed by its authority since 2021, this maritime zone encourages global partnerships, offering specific incentives for projects contributing to its development.

Source: ITA, 2022

sector's informal nature suggests a greater economic impact. Tuna and pelagic species dominate catches, but overfishing and climate change pose growing threats. Text box 10 highlights the Biosfera initiative to combat marine resource over-exploitation, while Text box 11 outlines Cabo Verde's strategy to position São Vicente as a blue economy and logistics hub through the Zona Económica Especial de Economia Marítima em São Vicente (ZEEEM-SV) initiative.

Wildlife trade

CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) regulates the international trade of endangered species with the purpose of ensuring their survival and safeguarding biodiversity (CITES, 2023). Cabo Verde, joined as a member in August 2005 and entered into force in November 2005, and is an active participant in CITES, employing its regulations to manage and monitor the trade of endangered species (Ibid.). Table 14 provides a detailed breakdown of Cabo Verde CITES exports from 2011 to 2021. **During this 11-year period, the country exported 4,499 specimens, with the majority (95.6%) being for scientific purposes**.

Determining the precise count of individual organisms traded through the CITES database poses a challenge. The quantities reported within CITES records warrant thorough scrutiny as they might not accurately represent the actual number of imported organisms. While the taxon count provides insights into the number of entries on the database, it's important to note that one entry can encompass multiple organisms. For example, a single entry in the database might indicate three live Barn Owls (*Tyto alba*). Alternatively, relying on the reported quantity poses its own set of challenges. For example, an entry for melon-headed whale (*Peponocephala electra*) might specify a reported quantity of 36; however, the trade terms could specify that these are 36kgs. Consequently, despite originating from one animal, this entry may be perceived as representing 36 individual animals. Additionally, some specimen units may be recorded as grams or kilograms, which could significantly conflate the sum or reported quantity. Despite these inconsistencies, this report will present the reported quantities as this is how the number of specimens is documented on the CITES Wildlife Tradeview website (www.tradeview.cites.org), although a count of taxon entries will be used for comparative purposes. Reported quantities were determined by adopting the highest reported quantity (i.e. the importer reported quantity was used if it exceeded the exported reported quantity, and vice versa).

Aquatic bushmeat trade

Harvesting 'aquatic bushmeat' or 'aquatic wildmeat' poses a challenge in fisheries management and lies beyond the typical scope of bushmeat discussions (OceanCare, 2017). Aquatic bushmeat is primarily acquired through harpoon hunting, netting, and utilising stranded animals, whether deceased or alive. It often involves illegal, unreported or unregulated fishing practices. Table 15 indicates the species traded within the aquatic bushmeat trade. Text box 12 discusses how the illegal shell trade threatens Cabo Verde's endemic Conus snails.

The Cabo Verde archipelago holds the world's third-largest nesting area for loggerhead turtles (*Caretta caretta*), encompassing over 95% of all nests in the eastern Atlantic (Ribeiro, 2020). The illegal harvesting of sea turtles has emerged as a prominent challenge in the aquatic bushmeat trade, primarily conducted by fishermen and predominantly involving the sale of turtle products by women (Hancock et al., 2017). Efforts to safeguard the loggerhead turtle population across all islands involve measures such as reinforcing trade restrictions, monitoring beaches, enhancing public awareness, and involving local communities (NDE, 2015). In 1987, Cabo Verde implemented initial laws safeguarding sea turtles, banning their capture during spawning seasons. However, a more comprehensive law has been in effect since 2018, encompassing various crimes such as intentional killing, acquisition, marketing, transportation, landing, export, and consumption of sea turtles (Expresso das Ilhas, 2021). Despite these actions, sea turtle trade persists in some coastal areas, where their meat, eggs, and other products are still utilised for various purposes (Ribeiro, 2020). Prices for sea turtles range from ECV 15,000 to 25,000 (approx. USD 135 to USD 225)

Table 14: Reported quantity of CITES specimens exported from Cabo Verde (2011-2022)

Taxon	Common name	Reported quantity
Balaenoptera spp.	Whale species	11
Carcharhinus falciformis	Silky shark	1
Caretta caretta	Loggerhead sea turtle	4,083
Chelonia mydas	Green sea turtle	1
Cheloniidae spp.	Sea turtle species	1
Columba livia	Rock dove	10
Enallopsammia rostrata	Sea coral species	12.5
Eretmochelys imbricata	Hawksbill sea turtle	1
Glaucostegus cemiculus	Blackchin guitarfish	47
Megaptera novaeangliae	Humpback whale	80.8
Mobula birostris	Giant oceanic manta ray	1
Neophron percnopterus	Egyptian vulture	50.1
Peponocephala electra	Melon-headed whale	72
Rhincodon typus	Whale shark	1
Scleractinia spp.	Sea coral species	17.5
Sphyrna lewini	Scalloped hammerhead	26
Tubastraea coccinea	Orange cup coral	40
Tubastraea spp.	Sea coral species	20
Tubastraea tagusensis	Sea coral species	20
Tyto alba	Barn owl	3
Total		**4,498.9**

Source: CITES, 2023

Table 15: Aquatic bushmeat species traded in Cabo Verde

Species	Uses
Dolphins	The use of dolphins for human consumption and handicraft production dates back several decades (Reiner et al., 1996). Dolphin carcasses obtained opportunistically, mostly from stranding events, are used for food, handicrafts and decorations (Reiner et al., 1996; Hazevoet et al., 2010; Brito & Carvalho, 2013).
Marine turtles	Marine turtles are still illegally caught in local fisheries, with their meat, fat, eggs, and shells used for consumption, traditional medicine, and tourist souvenirs—despite laws criminalising the use of any turtle parts (UNEP/CMS, 2000).

Source: OceanCare, 2017

Text box 12

Illegal shell trade threatens Cabo Verde's endemic Conus snails

Cabo Verde's waters harbour dozens of cone snail species (genus Conus) found nowhere else on earth, including several critically endangered ones. These rare molluscs are prized by shell collectors for their striking patterns, and a black-market trade has emerged to supply demand. Illegally gathered Conus shells from Cabo Verde are frequently sold on online marketplaces such as eBay and Etsy. For example, a single *Conus venulatus* specimen from Boa Vista Island was recently offered for approx USD 22.50 on eBay (eBay, 2025), and a dealer listed a tiny *Conus salreiensis* (a snail found only in one bay of Boa Vista) for EUR 30 (Pennaceus, 2025). Exceptional specimens of rare cones have even changed hands for hundreds of dollars on the collector market. Experts warn that this shell trade, often done without permits, is driving vulnerable species closer to extinction.

Cabo Verde has begun to recognise these endemic snails in its conservation plans – Conus shells are flagged as a priority for protection in marine reserves. In practice, however, enforcement is difficult. Cone snails are not listed under CITES (the global wildlife trade treaty), and there is an "almost total lack of regulatory controls" on the mollusk shell trade. Local laws nominally forbid removing shells from nature, but policing beaches and luggage is a challenge. Researchers have noted that relying on customs checks is unrealistic and have urged a ban on all Conus exports from Cabo Verde except for scientific research (Peters et al., 2016). Despite these measures, the illicit shell trade persists, as small, high-value shells are easy to smuggle and often slip through enforcement cracks, undermining efforts to save Cabo Verde's unique cone snails.

Source: Peters, 2013.

Cabo Verde's harbours dozens of cone snail species

found nowhere else on earth

Need to recognise. these endemic snails in its conservation plans

Text box 13

Conservation dogs and drones for the protection of endangered sea turtles

Cabo Verde shelters an endangered population of loggerhead turtles, which are persistently targeted for their meat through poaching activities. In response, a project was launched in 2018 on Boa Vista Island to implement alternative conservation measures. Led by the Turtle Foundation in partnership with the local organisation Fundação Tartaruga, this initiative provided substantial professional, financial, and logistical aid to strengthen law enforcement actions against sea turtle poaching. The project introduced innovative methods such as protection dogs and modern night vision technology, such as drones and thermal imaging binoculars, to deter poachers and aid in prosecution efforts by authorities. Supported by the European Union (EU) and the Organisation of Africa, Caribbean, and Pacific States (OACPS) through the Biodiversity and Protected Areas Management (BIOPAMA) programme, this initiative aimed to revolutionise the prevention of poaching, notably reducing the need for extensive and costly beach patrols.

The combination of conservation dogs and drone technology resulted in a new operational strategy, significantly enhancing patrol efficiency across 66kms of beach within five protected areas on Boa Vista Island. Remarkably, the project's first year witnessed a dramatic 90% decrease in recorded killed turtles, plunging from 4.5% to 0.5%. Subsequent nesting seasons continued to show a decline, reaching a minimal 0.3% in 2022, with the Sea Turtle Dog and Drone Team's efforts leading to the arrest of three poachers by the police. The reduction in poaching activities is attributed to various factors, including stricter penalties for poaching and the expansion of NGO community programmes. However, firsthand accounts from former poachers reveal that the heightened risk of apprehension has been a key deterrent for potential offenders.

Over the past five years, the project's experimental strategies in sea turtle conservation have evolved, improving operations and tactics. Strengthened partnerships with local authorities and the cohesion of team members with diverse expertise have forged a seasoned and efficient anti-sea turtle poaching unit.

Source: Bartoschek, 2023

(Publico.pt, 2021). Text box 13 highlights an initiative that uses dogs and drones to support the conservation and protection of endangered sea turtles in Cabo Verde.

In the mid-18th century, American whalers initiated whaling in Cabo Verde, drawing international whaling ships, targeting the humpback whale (*Megaptera novaeangliae*), to the archipelago's seas for two centuries (Cabral & Hazevoet, 2011). Meanwhile, residents from islands such as Brava, Fogo, and São Nicolau sought refuge on American whaling ships during the late 18th century, becoming skilled harpooners. Despite this involvement, local efforts in whale hunting were scarce, with no establishment of a Portuguese whaling fleet due to a lack of profitable whale processing industries (Cabral & Hazevoet, 2011). Although hints of shore-based whaling on Sal and Boa Vista islands exist in the mid-19th century, details are limited, suggesting minimal catches.

Forest products

Cabo Verde's forests, soils, and ecosystems are under pressure due to fuelwood demand, driven by reliance on costly imported petroleum and biomass energy (MAE, 2021). The scarcity of local biomass and fossil fuels, such as firewood and coal, drives a high demand for liquefied petroleum gas (LPG), particularly challenging for rural households urgently requiring biomass energy for cooking (AFREC, n.d.). The Ministry of Agriculture and Environment reports an annual fuelwood production volume of around 268,000 tonnes/year (MAE, 2020).

In Cabo Verde, conserving agrobiodiversity hinges on valuing the traditional knowledge of its population, pivotal in identifying and managing beneficial plant species and their ecosystems (Duarte et al., 2022). **Native species are predominantly used for food and medicinal purposes, while introduced ones often serve as ornamentals or as sources for firewood and construction materials** (Ibid.). Regardless of origin, numerous species act as vital sources for food, medicine, building materials, fibre, and fuel, especially for local communities (Duarte et al., 2022). Notably, Santo Antão, followed by Santiago and Fogo, stand out with the highest diversity of plant species, while Santo Antão, São Nicolau, and Fogo boast the greatest endemism, whereas Santa Luzia and its surrounding islets exhibit the lowest levels of endemism (NDE, 2015).

The next sections highlight some of the important forest products in Cabo Verde. Data related to the USD values and employment created from these was not found during the development of this report.

Apiculture

In 2018, the Minister of Agriculture and Environment, Gilberto Silva, announced that Cabo Verde would start developing beekeeping (apiculture) to increase agricultural production through pollination to guarantee its population's food and

nutrition (Nova Africa, 2018). According to Silva (2014), beekeeping was established not only for hive product production, such as honey, but also to support pollination, enhancing fruit and vegetable yields. Cabo Verde's honey bees are closely related to bees from West Africa and especially bees from The Gambia (Pederson, 2001).

According to Straka and Engel (2012), **two endemic bees are identified in the Cabo Verde islands, however these are not honey bees, but rather parasitic bees:**

- Sweat bee *(Ceylalictus capverdensis)* – this species belongs to the Halictidea family, found within the Apoidea superfamily. Cabo Verde's species belongs to the smaller group, commonly known as 'sweat bees' since they are attracted to perspiration;
- Cuckoo Bee – Cabo Verde has five different types of endemic cuckoo bee, including the *Thyreus schwarzi,* which is in the Apoidea superfamily.

Medicinal plants

Gomes et al. (2008) conducted a comprehensive study identifying 57 taxa across 68 families, highlighting 27 taxa with known medicinal properties and aromatic interest distributed among 21 families. These plant species are predominantly introduced (allochthonous) and naturalised or cultivated (subspontaneous). However, their full potential for medicinal value has remained relatively unexplored, prompting the authors to advocate for further investigations into their potential. Additionally, Tavares et al., (2011) observed that **approximately 40% of Cabo Verde's 80 endemic vascular flora taxa are utilised in traditional medicine,** emphasising the significance of these endemic medicinal plants, some of which are detailed in Table 16.

Rocha and Ferreira da Silva (2014) emphasise the profound historical significance of empirical knowledge regarding medicinal plants in Cabo Verde, shaping their widespread use in traditional medicine and various applications, including infusions, plasters, essential oils, and even fumigation to repel insects. **While specific national economic values related to this practice remain undisclosed, many individuals derive their livelihoods from selling these products.** This presents a promising avenue for local communities to generate revenue and enhance economic opportunities.

Table 16: Cabo Verde's most important endemic medicinal plants

Scientific name	Common names	Use
Sarcostemma daltonii	Gestiba, Sistiba, Ervatão	Used as a remedy for decayed teeth, alleviating pain and fragmenting the tooth
Artemisia gorgonum	Losna	Elimination of intestinal parasites (vermifuge) and aids digestion
Conyza feae	Losna-brabo, Matocontrário, Marcelinha, Palha santa	Menstruation treatment (Bath made with the infusion)
Echium stenosiphon	Língua-de-Vaca	Dietary
Micromeria forbesii	Erva-cidreira, Cidreirinha	Sleep-inducing, relieves headaches and intestinal gas, with sedative, analgesic, calming, diuretic, hypotensive, depurative and expectorant properties
Lavandula rotundifolia	Aipo, Gilbão, Lisbom	For the cough (boiled with sugar)
Forsskaolea procridifolia	Urtiga, Rapa saia, Mato-Gonçalo, Palha renda	Treatment of toothaches (smoking dry rolled leaves). Infusion against asthma
Verbascum capitisviridis	Sabão-de-feiticeira, Palha lagartixa	Leaves and unripe fruit are hemostatic astringents, stomachic carminative and vermifuge sap (used in liver diseases)
Erysimum caboverdeanum	Cravo-brabo	Infused, as an emmenagogue (a substance that stimulates or increases menstrual flow)

Sources: Gomes et al., 2008; Tavares et al., 2011.

Fuelwood

Throughout history, people in Cabo Verde relied heavily on forest wood for cooking and other cultural activities such as local crafts and arts, generating income for local people. MAHOT (2014) estimated the substantial value of wood production within Monte Gordo Park's forest perimeter alone, potentially projecting it to reach CVE 19.8 million (approx. USD 175,834). This assessment highlights the economic advantages of sustainable forest management within the park, suggesting that extending this evaluation to other island forest perimeters could amplify the country's economic growth and conservation efforts.

In 2012, approx. 26% of the population relied on firewood as their primary cooking fuel (NDE, 2015; CBD, 2022). However, by 2020, 81% of the national population had gained access to cleaner fuels and cooking technologies (World Bank, 2022), significantly reducing dependence on fuelwood. Over time, **Cabo Verde's forests have undergone significant changes due to population growth, agricultural expansion, and climate change** (Praia, 2017). Despite these challenges, efforts to encourage sustainable forest management and conservation have emerged, such as the collaborative initiative between the Food and Agriculture Organization (FAO) and the European Union (EU) known as the "*Building Adaptive Capacity and Resilience of the Forestry Sector in Cabo Verde*" project. This initiative aims to strengthen adaptive capacities and resilience in combating climate change risks such as desertification and land degradation (Praia, 2017).

Remarkably, Cabo Verde's forests stand out as a positive model of land-use change in West Africa despite heavy utilisation by local populations to meet diverse needs (CILSS, 2016). Over four decades, these forests have actively fought desertification through natural regeneration, aiding in vegetation restoration, fulfilling energy requirements, providing forage and fostering agrosilvopastoral systems in Cabo Verde (CILSS, 2016).

The carbon market

Cabo Verde has a relatively low level of air pollution, with 31.99 micrograms per m^2 (2016 est.), 0.54 megatonnes of CO2 emission (2016 est.) and 0.13 megatonnes of methane emission (2020 est.) (CIA, 2022). According to the World Bank (2022), the CO2 emission reached 0.65 megatonnes in 2019.

Cabo Verde is particularly vulnerable to the impacts of climate change, with data from the World Bank Group (2021) showing more frequent extreme events such as storms, floods, and droughts, as well as shorter rainy seasons, having immediate impacts on livelihoods, infrastructure, sanitary conditions, recharge of reservoirs, and crop productivity. Cabo Verde's vulnerability to natural hazards is expected to intensify further floods and droughts, as well as exacerbate sea-level rise, sandy beach erosion, and coral reef bleaching, making increasing resilience to such shocks and promoting proactive climate adaptation actions urgent priorities (IMF, 2023).

UN Secretary-General António Guterres has recently raised concerns about the impact of climate change on Cabo Verde (UN, 2023). According to Guterres, the island country is at the forefront of an existential crisis caused by rising sea levels and the loss of biodiversity and ecosystems (Ibid.). However, **Cabo Verde has taken significant steps towards combating climate change** by showcasing climate leadership through various actions and initiatives, such as converting debt into climate projects and investing in the blue economy (UN, 2023).

Cabo Verde aims to decrease greenhouse gas (GHG) emissions by 18% below the business-as-usual (BAU) levels by 2030 (UN, 2023). This objective has been laid out in the summary of Nationally Determined Contribution (NDC) 2030 and the long-term decarbonisation vision (2050). The reduction target will increase to 24% if sufficient international support is provided. The long-term commitment is to achieve a decarbonised economy by 2050 and to boost electricity production from renewable energy, including the construction of pumped storage and other energy storage capacities (MAE, 2020).

Cabo Verde's National Adaptation Plan aims to minimise the impacts of climate change through planned and concerted actions at all levels. The goal is to become a safe small island state with all the necessary capacities to take advantage of the opportunities provided by climate change to become more sustainable, innovative, and resilient (UN, 2023). The plan focuses on institutional interventions for climate change adaptation, mainstreaming climate issues into the Blue Economy, and critical vulnerabilities and adaptation measures. It prioritises enhancing adaptation, climate justice, gender equality, transparency, and good governance, with specific areas of adaptation and resilience, including water, agriculture, coastal zones, health, and disaster risk management (MAE, 2021). **Cabo Verde also plays its role in carbon sequestration, mainly through its aboveground biomass (wood and leaves) in forest areas, of 801,000 tonnes, which stores 400,600 tonnes of sequestered carbon** (NDE, 2015).

Blue carbon, carbon stored in marine and coastal ecosystems, is one of Cabo Verde's most promising natural tools for mitigating global climate change (ECOCV, 2021). While organisms such as phytoplankton, fish, whales, and coralline algae contribute to oceanic carbon cycling, they are not considered primary blue carbon systems, as they do not store carbon long-term in sediments (Hutto et al., 2021). In contrast, mangroves, seagrasses, and salt marshes are well-recognised for their ability to sequester carbon in both plant biomass and sediment over extended periods (Ibid.).

Despite its potential, **blue carbon remains a relatively underexplored area in Cabo Verde**, presenting an opportunity for future development and policy focus. Notably, the country has entered into a debt-for-nature swap with Portugal, converting national debt into funding for environmental initiatives (EuroNews, 2023). Coralline algae may also contribute to carbon storage through calcium carbonate deposition, yet their role in long-term sequestration is still not fully understood and requires further scientific investigation (Arina et al., 2020).
Cabo Verde utilises abundant sunshine with 6-8 Wh/m^2/day for small-scale solar systems in rural areas and regional renewable projects (ITA, 2023). The country has a master plan of tax incentives and aims for 50% renewable penetration, driven by rising energy prices (Ibid.). Funding from partners including Luxembourg Cooperation, German Cooperation, and the World Bank supports the initiative, requiring 150MWp of solar and 60MW of wind projects (ITA, 2023).

In Cabo Verde, the REDD+ initiative is currently limited but exists, with state funding exclusively supporting implemented activities in the forestry sector (ECREE, 2015). However, there has been a decline in investment in forestry efforts (Ibid.). To address this, there is a crucial need for a strategy to mobilise resources, leveraging innovative financing mechanisms at both national and international levels (ECREE, 2015).

Opportunities and challenges of the wildlife economy in Cabo Verde

Opportunities

- **Tourism development leveraging biodiversity:** Cabo Verde's diverse landscapes and rich biodiversity present a unique opportunity for sustainable and diverse tourism development. The archipelago's natural beauty, ranging from stunning beaches to rugged mountain peaks and unique wildlife, can be a significant draw for ecotourism and adventure enthusiasts. By strategically promoting these attributes, the country can attract tourists interested in experiencing and conserving its natural resources. Initiatives focused on responsible tourism, eco-lodges, guided nature tours, and conservation-oriented activities can further enhance this opportunity, benefiting both the economy and biodiversity conservation efforts.
- **Diversification of tourism offerings:** Cabo Verde has the potential to expand its tourism sector beyond traditional sun-and-beach destinations. Ecotourism initiatives, such as birdwatching, marine mammal observation, and volcano exploration, along with geotourism focusing on geological features, present opportunities for unique experiences. By diversifying its attractions and catering to various interests, the country can attract a broader range of tourists, stimulating sustainable growth and mitigating environmental pressures on tourist-heavy locations.
- **Fishing tourism development:** The archipelago's reputation for big-game fishing, especially targeting species such as tuna, swordfish, and Atlantic blue marlin, presents an opportunity for niche tourism development. Strengthening fishing tourism infrastructure, regulating practices to ensure sustainability, and promoting charter boat excursions for fishing enthusiasts could create a niche market within the broader tourism industry, stimulating

local economies and attracting fishing enthusiasts worldwide.

- **Aquaculture development:** Despite its current infancy, aquaculture represents a significant opportunity for Cabo Verde's economic diversification and food security. Initiatives such as the development of shrimp farms and projects targeting bluefin tuna production demonstrate a growing interest in cultivating local seafood to meet domestic demand. By investing in and expanding aquaculture ventures, the country can reduce reliance on imports, strengthen local supply chains, and potentially become an exporter of aquaculture products.
- **Sustainable fisheries management:** With a vast Exclusive Economic Zone (EEZ) and abundant fishing potential, there's an opportunity to enhance sustainable fishing practices. Implementing robust management strategies, including regulations on catch limits, gear usage, and seasonal restrictions, can ensure the conservation of fish stocks. Collaborative efforts between artisanal, industrial, and semi-industrial fisheries can promote responsible fishing practices, safeguarding marine biodiversity and securing the long-term viability of the sector.
- **Developing apiculture for agricultural enhancement:** Cabo Verde aims to boost agricultural productivity through apiculture by leveraging pollination. This initiative not only seeks to produce honey but also aims to improve food security by enhancing pollination for fruits and vegetables. Investing in apiculture can contribute to diversified crop production and increased yields through enhanced pollination services, thereby supporting the country's agricultural output and potentially reducing dependence on imported agricultural products.
- **Leveraging blue carbon for climate mitigation:** Cabo Verde possesses significant potential in blue carbon sequestration, encompassing marine and coastal ecosystems. The exploration and understanding of this resource could offer an untapped opportunity for the country's climate mitigation efforts. By investing in research and initiatives focused on conserving and enhancing marine habitats and other coastal ecosystems, Cabo Verde can harness blue carbon's natural capacity to sequester carbon dioxide, aiding in global climate change mitigation, while at the same time potentially generating revenues for conservation.

Challenges

- **Biodiversity conservation and monitoring:** Despite Cabo Verde's rich biodiversity, there are challenges in effectively conserving and monitoring its diverse ecosystems. The fragmented and isolated nature of the islands, combined with limited resources, present obstacles to establish a robust national monitoring system. The absence of a centralised biodiversity monitoring centre and the reliance on sporadic data collection from various sources hinder comprehensive and up-to-date assessments of species and ecosystems. Overcoming these challenges requires efforts in capacity building, establishing a unified monitoring framework, and promoting collaborations among local and international entities to gather consistent and validated data. Addressing threats such as habitat loss, climate change impacts, and unregulated activities such as fishing is key to safeguarding Cabo Verde's unique biodiversity.
- **Environmental pressures and sustainable management:** The rapid growth of tourism, particularly in concentrated areas such as Boa Vista and Sal, has led to significant environmental pressures. Challenges include increased water and energy consumption, inadequate waste management, air and sea pollution, and a loss of biodiversity. Balancing tourism-driven economic expansion with sustainable environmental management poses a significant challenge. The need to implement strict regulations and comprehensive planning, especially in land use, waste management, and conservation, is vital to address these environmental concerns while ensuring continued economic growth.
- **Overfishing and climate change impact:** Overfishing, aggravated by the influence of climate change, presents a significant challenge to Cabo Verde's fishing industry. Declines in traditional fishing methods, reduced incomes, and job opportunities, and concerns about stock sustainability are evident consequences. Balancing the increasing demand for seafood with conserving marine ecosystems requires comprehensive measures to combat overfishing, address climate-related impacts, and restore fish populations to sustainable levels.
- **Environmental vulnerability:** Cabo Verde's vulnerability to climate change-induced hazards such as storms, floods, droughts, and rising sea levels poses a significant challenge. Building resilience against these threats demands substantial efforts in infrastructure development, adaptation measures, and community empowerment. Balancing economic development with environmental protection, particularly in critical sectors such as water management, agriculture, and disaster risk reduction, presents a complex challenge that requires comprehensive strategies and coordinated actions to enhance resilience and adaptation capacities.
- **Reducing dependency on fuelwood:** While Cabo Verde has made strides in improving access to cleaner cooking fuels for a significant portion of its population, there remains a substantial demand for fuelwood, particularly in rural areas. This reliance poses a challenge due to the strain on local forests, contributing to deforestation, land degradation, and ecosystem strain. Balancing the cultural and economic importance of fuelwood with sustainable forest management practices is crucial to mitigate environmental degradation while ensuring continued access to energy resources for local communities. Efforts to reduce dependency on fuelwood while promoting sustainable alternatives require comprehensive strategies, technological innovation, and community engagement to address this complex challenge sustainably.
- **Limited transport:** A key challenge for Cabo Verde's wildlife economy is the limited domestic transport infrastructure, which significantly constrains the movement of goods, services, and people between islands. This lack of connectivity hampers the development and scaling of wildlife-based industries, including sustainable tourism, fisheries, and the legal trade of marine resources.
- **Data collection and availability:** The lack of consistent and reliable data related to its wildlife resources poses a challenge addressing the pressing need for effective conservation strategies in Cabo Verde. Without accurate information, crafting sustainable policies to protect biodiversity and to utilise its potential will remain restricted, requiring urgent attention and robust, consistent data-gathering efforts.

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Conclusion

Cabo Verde stands at an essential crossroads, balancing the potential for leveraging its abundant opportunities against the complexities of overcoming challenges to achieve sustainable development. The archipelago, which has diverse ecosystems and cultural richness, holds opportunities in sectors such as tourism, aquaculture, and sustainable fisheries. Embracing the potential for ecotourism, diversified tourism offerings, and other innovative wildlife economy approaches such as apiculture and blue carbon utilisation can drive economic growth while conserving natural resources. However, challenges in biodiversity conservation, environmental sustainability, overfishing, climate vulnerability, and fuelwood dependency persist. To address these challenges effectively, it is essential to undertake concerted efforts, placing emphasis on integrated biodiversity monitoring, rigorous environmental management practices, sustainable fishing policies, climate resilience strategies, and the adoption of alternative energy sources. Overcoming these obstacles requires collaborative action, innovation, and a commitment to balancing economic progress with environmental stewardship, ensuring a vibrant and sustainable future for Cabo Verde's diverse landscapes and communities.

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