

**3rd Meeting of Signatories of the Memorandum of Understanding
Concerning Conservation Measures for Marine Turtles of the Atlantic
Coast of Africa**

Saly, Senegal, 4-5 September 2023

CMS/Atlantic-Turtle-MOU/MOS3/Inf.4.I

NATIONAL REPORT FOR THE YEAR: 2023

CABO VERDE

Signatory State:	CABO VERDE
Memorandum in effect in Signatory State since (day/month/year):	08.01.2007
Full contact details of the agency or institution that has been primarily responsible for the preparation of this report:	National Directorate of Environment
Name and affiliation of the person completing this report	Liza Alves Lima NFP CMS
List any other agencies, institutions, or NGOs that have provided input:	Rede TAOLA (Sea Turtle Conservation Network of Cabo Verde), Cabo Verde Natura 2000, Projeto Biodiversidade, Bios.CV
Date of completion of the National Report (day/month/year):	21/08/2023

1. BACKGROUND:

1.1 Provide an update on sea turtle species present in your country:

Species	Select one for each species	Number of nests per year	Trend	Ref.#
Loggerhead (<i>Caretta caretta</i>)	Nesting	10,001-100,000 nests	Increasing	Presentation of Results of monitoring campaigns (based on reports of DNA) - on the TAOLA Network (May 2023) Obs: data of 2022 Swot Report vol XVII 2022 Patiño et al 2021 Laloe et al.2020
Green (<i>Chelonia mydas</i>)	Occurs only in-water	Choose an item.	Unknown	Obs: sporadic occurrence of nesting
Leatherback (<i>Dermochelys coriacea</i>)	Occurs only in-water	Choose an item.	Choose an item.	
Hawksbill (<i>Eretmochelys imbricata</i>)	Occurs only in-water	Choose an item.	Choose an item.	Obs: sporadic occurrence of nesting
Olive ridley (<i>Lepidochelys olivacea</i>)	Occurs only in-water	Choose an item.	Choose an item.	Obs: sporadic occurrence of nesting
Kemp's ridley (<i>Lepidochelys kempii</i>)	No sighting	Choose an item.	Choose an item.	

1.2 What is the total length of your coastline?

The total length is 1020 km.

1.3 What percentage of the coastline has nesting beaches?

1.4 What percentage of the nesting beaches is currently monitored at regular intervals? (Ref.#)

In 2022, 214,41 km of beach was monitored.

1.5 Are there currently in-water projects in your country that monitor/characterize:

- a. habitats? yes no
 b. sea turtle populations? yes no

1.6 Are there currently:

- a. bycatch monitoring projects in your country? yes no
 b. bycatch reduction projects in your country? yes no

1.7 List the national laws and regional/international agreements in your country that protect sea turtles and/or their habitats

Resolução nº72/2010, de 18 de dezembro - approves the National Plan for the Conservation of sea turtles in Cabo Verde
Decreto-legislativo nº 1/2018, de 21 de maio, establishes the special legal regime for protection and conservation of sea turtles in Cabo Verde.
Decreto-lei nº8/2022, de 6 de abril - establishes measures for the conservation and protection of species of flora and fauna subject to special protection
Decreto-Lei nº3/2003, 24 de fevereiro - establishes the legal regime of natural spaces - declares protected areas (some are sea turtle habitats)
Decreto-Lei no. 53/2005, 8 de agosto(establishes the General Principles of the policy for the sustainable use of fishing resources), article 40º: "It is expressly prohibited to capture, possess, simply detain or acquire, landing, sell and consume sea turtles"
Decreto-Lei nº 54/2005, which prohibits fishing of protected species.
Decreto-lei nº 17/87 (defines the principles of the policy for the exploitation of fishery resources) – article prohibits the capture during nesting period
Resolução nº 94/2020, de 9 de julho (approves the 2020-2024 Fishery Resources Management Plan)- Fishing of protected species is prohibited

Memorandum of understanding concerning conservation measures for marine turtles of the Atlantic Coast of Africa
Decreto nº. 13 /2005, that approves the accession to the Convention on the Conservation of Migratory Species of Wild Animals (CMS)
Decreto nº. 1 /2005, that approves the accession to the Convention on International Trade in Endangered Species (CITES)
Resolução nº. 73/IV/94, that approves the accession to the Convention on Biological Diversity

1.8 List protected areas (PAs), sanctuaries or temporary exclusion zones that were created to protect marine turtle habitat.

Parque Natural Cruzinha (Santo Antão)
Reserva Natural Santa Luzia (Santa Luzia)
Reserva Natural Integral Ilhéus Branco e Raso
(Sal) Reserva Natural Costa da Fragata; Reserva Natural Ponta do Sinó; Reserva Natural Serra Negra; and Reserva Natural Baía da Murdeira
(Boa Vista) Reserva Natural Boa Esperança; Reserva Natural Morro de Areia; Reserva Natural Tartaruga; and Parque Natural Norte da Boa Vista
(Maio) Reserva Natural Casas Velhas; Reserva Natural Lagoa Cimidor; Reserva Natural Praia do Morro; Paisagem Protegida Salinas de Porto Inglês; and Parque Natural Norte do Maio
Reserva Natural Integral Ilhéu Rombo

1.9 List government agencies that play a role in the conservation and management of marine turtles and their habitats in your country. Very briefly list their responsibilities in relation to protecting marine turtles and their habitats.

Name of the agency	Role in the conservation of marine turtles and their habitats
Ministério da Agricultura e Ambiente (MAA) <i>Ministry of Agriculture and Environment</i>	MAA is responsible to design, coordinate, control, execute and evaluate the specific policies defined by the Government for the environmental sectors.
Direção Nacional do Ambiente (DNA) <i>National Directorate for the Environment</i>	DNA is a central service of the MAA with functions of design, regulation, coordination, execution and direct support to the Minister, in the areas of the environment, namely the prevention and assessment of impacts,

	nature conservation, environmental information and monitoring of environmental quality.
<p>Ministério do Mar (MM) <i>Ministry of Sea</i></p>	MM is the government department responsible for designing, proposing, coordinating, implementing and evaluating government public policies in the fields of maritime policy, the blue economy, the sea industry, marine resources, fisheries, aquaculture, ports and maritime transport.
<p>Direção Nacional de Pesca e Aquacultura (DNPA) <i>National Directorate of Fisheries and Aquaculture</i></p>	DNPA is the service responsible for carrying out activities to support the development of fisheries and aquaculture, as well as for coordinating the processes of research, valuation and sustainable exploitation of national marine resources.
<p>Inspeção Geral das Pescas (IGP) <i>General Fisheries Inspection</i></p>	IGP exercises the functions of the National Fisheries Authority, with powers to monitor compliance with laws, regulations, standards and technical requirements applicable within the scope of its attributions, aiming to guarantee the legality and compliance of fishing activities and of fishery products.
<p>Instituto do Mar (IMAR) <i>Institute of Sea</i></p>	IMAR has as its objective the application of research focused on the natural resources of the sea.
<p>Ministério do Turismo e Transportes (MTT) <i>Ministry of Tourism and Transport</i></p> <p>Instituto do Turismo de Cabo Verde (ITCV) <i>Cape Verde Tourism Institute</i></p>	<p>MTT is the government department whose attribution is to grant, propose, coordinate, execute and evaluate public policies in the areas of tourism</p> <p>ITCV's mission is to regulate and supervise the tourism sector, implement national policies and studies and analyzes and international trends in the sector and promote Cape Verde as a tourist destination.</p>
<p>Ministério das Infraestruturas, ordenamento do território e habitação (MIOTH) <i>Ministry of Infrastructure, Land Planning and Housing</i></p>	MIOTH is the department in charge of proposing, coordinating and executing Government policies in matters of public works, civil construction, infrastructure, land use planning, cartography, geodesy, land registration and housing.

Instituto Nacional de Gestão do Território (INGT) <i>National Institute of Territorial Management</i>	INGT is the entity that ensures the good organization of its territory, through the promotion of policies and practices that aim to guarantee the harmonious and sustainable development of the country
Sociedade de Desenvolvimento Turístico das Ilhas de Boa Vista e Maio (SDTIBM) <i>Tourist Development Society of the Islands of Boa Vista and Maio</i>	SDTIBM's mission is to manage and promote private sector investment and the development of sustainable tourism in the tourist development zones (coastlines) of the islands of Boa Vista and Maio.
Polícia Nacional (PN) <i>National Police</i>	The PN has the general mission of defending democratic legality, preventing crime and guaranteeing internal security, public tranquility and the exercise of citizens' rights, freedoms and guarantees; Control air and sea borders. Defend and preserve the national environment and ensure compliance with maritime laws and regulations.
Polícia Marítima (PM) <i>Maritime Police</i>	
Forças Armadas (FA) Armed Forces	Armed Forces are exclusively responsible for executing the military component of national defence, being responsible for ensuring the military defense of the Republic against any external threat or aggression.

1.10 List the names and locations of NGOs and other institutions working on sea turtles in your country

Name of the NGO/Institution	Location
Associação Cruzinha Terrimar	Santo Antão Island
Associação Pescadores de Ponta d'Pom Associação Pescadores de Salamansa Associação Terra Terra Biosfera I	São Vicente Island
Biosfera I	Santa Luzia Island
ABI-CV	São Nicolau Island
Associação Projeto Biodiversidade	Sal Island
Associação Onze Estrelas Associação Varandinha Bios.cv Cabo Verde Natura 2000 Fundação Tartaruga	Boa Vista Island

Fundação Maio Biodiversidade	Maio Island
Lantuna Associação Caretta caretta Associação Fauna e Flora ECOCV	Santiago Island
Associação Projeto Vitó	Fogo Island
Biflores	Brava Island

2. THREATS

2.1 Indicate the intensity of threats currently to marine turtles at the nesting beach and/or in the water in your country

Nature of Threat	Intensity of Threat	Ref.#
Illegal exploitation of nesting females (i.e. direct harvest on land)	Medium	Annual reports Loureiro, N.S.& Torrão, M.M.F. 2008 Hancock et al 2017 Oryx. Marco A, et al 2021 Endangered Species Research
Illegal intentional harvest of animals in coastal waters	Unknown	Hancock et al 2017 Oryx. Martins, S., Tiwari, M., Rocha, F. et al. Evaluating loggerhead sea turtle (<i>Caretta caretta</i>) bycatch in the small-scale fisheries of Cabo Verde. <i>Reviews in Fish Biology and Fisheries</i> , 32, 1001–1015 (2022). Reischig, T., Resende, E. and Cordes, H. (2018). Drones for turtles: Controlling poaching of nesting loggerhead sea turtles with night vision unmanned aerial vehicles on Boavista Island, Cabo Verde. <i>African Sea Turtle Newsletter</i> 10:9–13.
Use: Meat consumption	Medium	Hancock et al 2017 Oryx Martins, S., Tiwari, M., Rocha, F. et al. Evaluating loggerhead sea turtle (<i>Caretta caretta</i>) bycatch in the small-scale fisheries of Cabo Verde. <i>Reviews in Fish Biology and Fisheries</i> , 32, 1001–1015 (2022).
Use: Egg consumption	Low / rare event	Hancock et al 2017 Oryx
Use: Fat and oil consumption	Unknown	Martins, S., Rocha, F., Rodrigues, E., Araújo, S., Abella, A., Loureiro, N. & Marco, M. (2015). Sea turtles used in traditional

		medicines in the Cape Verde Archipelago, West Africa. African Sea Turtle Newsletter, 4: 12-15.
Use: Traditional medicine	Unknown	Martins, S., Rocha, F., Rodrigues, E., Araújo, S., Abella, A., Loureiro, N. & Marco, M. (2015). Sea turtles used in traditional medicines in the Cape Verde Archipelago, West Africa. African Sea Turtle Newsletter, 4: 12-15.
Use: Carapace	Unknown	Martins, S., Rocha, F., Rodrigues, E., Araújo, S., Abella, A., Loureiro, N. & Marco, M. (2015). Sea turtles used in traditional medicines in the Cape Verde Archipelago, West Africa. African Sea Turtle Newsletter, 4: 12-15.
Use: Scutes for ornaments	Unknown	Martins, S., Rocha, F., Rodrigues, E., Araújo, S., Abella, A., Loureiro, N. & Marco, M. (2015). Sea turtles used in traditional medicines in the Cape Verde Archipelago, West Africa. African Sea Turtle Newsletter, 4: 12-15.
Use: Traditional ceremony	Unknown	Martins, S., Rocha, F., Rodrigues, E., Araújo, S., Abella, A., Loureiro, N. & Marco, M. (2015). Sea turtles used in traditional medicines in the Cape Verde Archipelago, West Africa. African Sea Turtle Newsletter, 4: 12-15.
Use: Other — please specify retention in captivity for exhibition and pets	Choose an item.	
International trade in sea turtle meat/eggs/parts	Unknown	
Incidental capture in artisanal fisheries	Unknown	Roast et al 2023, Martins et al 2022 Rev Fish Biol Fisheries. Schilling, C. H., Diame, A., Ríos, A.H., Mingarro, M. & Jabado R. W. (2023). Nowhere to hide: Sea turtle bycatch in Northwest Africa. Aquatic Conservation: Marine and Freshwater Ecosystems. Montrond, G. (2020). Assessing sea turtle, seabird and shark bycatch in artisanal, semi-industrial and industrial of fisheries in the Cabo Verde Archipelago. Master's thesis, University of Cape Town.
Incidental capture in industrial fisheries	Unknown	Roast, M. J., Martins, S., Fernández-Peralta, L., Báez, J. C., Diame, A., March, D., ... & Cardona, L. (2023). Hidden

		<p>demographic impacts of fishing and environmental drivers of fecundity in a sea turtle population. Conservation Biology.</p> <p>Schilling, C. H., Diame, A., Ríos, A.H., Mingarro, M. & Jabado R. W. (2023). Nowhere to hide: Sea turtle bycatch in Northwest Africa. Aquatic Conservation: Marine and Freshwater Ecosystems.</p> <p>Montrond, G. (2020). Assessing sea turtle, seabird and shark bycatch in artisanal, semi-industrial and industrial of fisheries in the Cabo Verde Archipelago. Master's thesis, University of Cape Town.</p>
IUU fishing	Unknown	
Boat strikes	Unknown	
Marine debris (e.g. plastics at sea, flotsam)	Unknown	<p>Veiga, J., Charles, G. & Patino-Martinez, J. (2021). Macroplastic Ingestion by Loggerhead Turtles on the Island of Maio, Cabo Verde. African Sea Turtle Newsletter. 17, 7–11.</p>
Degradation of in-water habitats (seagrass beds, coral reefs, etc.)	Unknown	
Industrial effluent	Unknown	
Inshore oil pollution	None	
Coastal/beach degradation from Agricultural/urban/tourism development or construction	Low / rare event	<p>Taylor, H. and Cozens, J. (2010). The effects of tourism, beachfront development and increased light pollution on nesting loggerhead turtles. <i>Zoologia Caboverdiana</i> 1:100–111.</p>
Artificial lighting (on land or near shore)	Low / rare event	<p>Sal</p> <p>Taylor, H. and Cozens, J. (2010). The effects of tourism, beachfront development and increased light pollution on nesting loggerhead turtles. <i>Zoologia Caboverdiana</i> 1:100–111.</p>
Coastal erosion, debris that obstructs nesting, hatchlings, etc.	Low / rare event	<p>Aguilera, M., Medina-Suárez, M., Pinós, J., Liria-Loza, A. and Benejam, L. (2018). Marine debris as a barrier: Assessing the impacts on sea turtle hatchlings on their way</p>

		to the ocean. Marine Pollution Bulletin 137:481–487. Sousa-Guedes, D., Sillero, N., Bessa, F., & Marco, A. (2022). Plastic pollution can affect the emergence patterns of the loggerhead turtle hatchlings. Animal Conservation.
Vehicles driving on the beach	Low / rare event	
Unregulated tourism	Medium	
Sand mining / removal	Low / rare event	
Predation by domestic / feral animals	Low / rare event	S. Vicente, Sal
Increasing sand temperature	Unknown	
Other (specify)	Choose an item.	

2.2 Provide more details on the fisheries in your waters (including territorial waters and the EEZ)

ARTISANAL FISHERIES			
	Intensity of Threat	Species impacted (please select all that apply)	Ref.#
			<p>Martins, S., Tiwari, M., Rocha, F. et al. Evaluating loggerhead sea turtle (<i>Caretta caretta</i>) bycatch in the small-scale fisheries of Cabo Verde. <i>Reviews in Fish Biology and Fisheries</i>, 32, 1001–1015 (2022). https://doi.org/10.1007/s11160-022-09718-7</p> <p>Montrond, G. (2020). Assessing sea turtle, seabird and shark bycatch in artisanal, semi-industrial and industrial of fisheries in the Cabo Verde Archipelago. Master's thesis, University of Cape Town.</p> <p>Lopes, K., Rodrigues, J.G., Koenen, F., Stiebens, V.A., Székely, T.T., et al. (2016). Sea turtle, shark and dolphin</p>

			<p>bycatch rates by artisanal and semi-industrial fishers in the Island of Maio, Cape Verde. <i>Chelonian Conservation and Biology</i> 15:279–288.</p> <p>Schilling, C. H., Diame, A., Ríos, A.H., Mingarro, M. & Jabado R. W. (2023). Nowhere to hide: Sea turtle bycatch in Northwest Africa. <i>Aquatic Conservation: Marine and Freshwater Ecosystems</i>.</p> <p>Five species are reported Loggerhead, Green, Leatherback, Hawksbill, Olive ridley</p>
Trawls	Unknown	<p>Loggerhead (<i>Caretta caretta</i>) <input type="checkbox"/></p> <p>Green (<i>Chelonia mydas</i>) <input type="checkbox"/></p> <p>Leatherback (<i>Dermochelys coriacea</i>) <input type="checkbox"/></p> <p>Hawksbill (<i>Eretmochelys imbricata</i>) <input type="checkbox"/></p> <p>Olive ridley (<i>Lepidochelys olivacea</i>) <input type="checkbox"/></p> <p>Kemp's ridley (<i>Lepidochelys kempii</i>) <input type="checkbox"/></p> <p>Unknown <input type="checkbox"/></p> <p>Unsure <input type="checkbox"/></p>	
Set gill nets	Unknown	<p>Loggerhead <input type="checkbox"/></p> <p>Green <input type="checkbox"/></p> <p>Leatherback <input type="checkbox"/></p> <p>Hawksbill <input type="checkbox"/></p> <p>Olive ridley <input type="checkbox"/></p> <p>Kemp's ridley <input type="checkbox"/></p> <p>Unknown <input type="checkbox"/></p> <p>Unsure <input type="checkbox"/></p>	
Driftnets	Unknown	<p>Loggerhead <input type="checkbox"/></p> <p>Green <input type="checkbox"/></p> <p>Leatherback <input type="checkbox"/></p> <p>Hawksbill <input type="checkbox"/></p> <p>Olive ridley <input type="checkbox"/></p> <p>Kemp's ridley <input type="checkbox"/></p> <p>Unknown <input type="checkbox"/></p>	

		Unsure <input type="checkbox"/>	
Purse seine	Unknown	Loggerhead <input checked="" type="checkbox"/> Green <input type="checkbox"/> Leatherback <input type="checkbox"/> Hawksbill <input type="checkbox"/> Olive ridley <input type="checkbox"/> Kemp's ridley <input type="checkbox"/> Unknown <input type="checkbox"/> Unsure <input type="checkbox"/>	
Longline	Not Applicable	Loggerhead <input type="checkbox"/> Green <input type="checkbox"/> Leatherback <input type="checkbox"/> Hawksbill <input type="checkbox"/> Olive ridley <input type="checkbox"/> Kemp's ridley <input type="checkbox"/> Unknown <input type="checkbox"/> Unsure <input type="checkbox"/>	
Beach seine	Unknown	Loggerhead <input type="checkbox"/> Green <input type="checkbox"/> Leatherback <input type="checkbox"/> Hawksbill <input type="checkbox"/> Olive ridley <input type="checkbox"/> Kemp's ridley <input type="checkbox"/> Unknown <input type="checkbox"/> Unsure <input type="checkbox"/>	
Stownet	Not Applicable	Loggerhead <input type="checkbox"/> Green <input type="checkbox"/> Leatherback <input type="checkbox"/> Hawksbill <input type="checkbox"/> Olive ridley <input type="checkbox"/> Kemp's ridley <input type="checkbox"/> Unknown <input type="checkbox"/> Unsure <input type="checkbox"/>	
Other (specify) Hand line and hook	Unknown	Loggerhead <input type="checkbox"/> Green <input type="checkbox"/> Leatherback <input type="checkbox"/> Hawksbill <input type="checkbox"/> Olive ridley <input type="checkbox"/> Kemp's ridley <input type="checkbox"/> Unknown <input type="checkbox"/> Unsure <input type="checkbox"/>	Martins, S., Tiwari, M., Rocha, F. et al. Evaluating loggerhead sea turtle (<i>Caretta caretta</i>) bycatch in the small-scale fisheries of Cabo Verde. <i>Reviews in Fish Biology and Fisheries</i> , 32, 1001–1015 (2022). https://doi.org/10.1007/s11160-022-09718-7 Montrond, G. (2020). Assessing sea turtle, seabird

			<p>and shark bycatch in artisanal, semi-industrial and industrial of fisheries in the Cabo Verde Archipelago. Master's thesis, University of Cape Town.</p> <p>Lopes, K., Rodrigues, J.G., Koenen, F., Stiebens, V.A., Székely, T.T., et al. (2016). Sea turtle, shark and dolphin bycatch rates by artisanal and semi-industrial fishers in the Island of Maio, Cape Verde. <i>Chelonian Conservation and Biology</i> 15:279–288.</p>
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INDUSTRIAL FISHERIES			
	Intensity of Threat	Species impacted (please select all that apply)	Ref.#
Bottom trawls (including shrimp trawls)	Not Applicable	Loggerhead (<i>Caretta caretta</i>) <input type="checkbox"/> Green (<i>Chelonia mydas</i>) <input type="checkbox"/> Leatherback (<i>Dermochelys coriacea</i>) <input type="checkbox"/> Hawksbill (<i>Eretmochelys imbricata</i>) <input type="checkbox"/> Olive ridley (<i>Lepidochelys olivacea</i>) <input type="checkbox"/> Kemp's ridley (<i>Lepidochelys kempii</i>) <input type="checkbox"/> Unknown <input type="checkbox"/> Unsure <input type="checkbox"/>	
Pelagic trawls	Unknown	Loggerhead <input type="checkbox"/> Green <input type="checkbox"/> Leatherback <input type="checkbox"/> Hawksbill <input type="checkbox"/> Olive ridley <input type="checkbox"/> Kemp's ridley <input type="checkbox"/>	

		Unknown <input type="checkbox"/> Unsure <input type="checkbox"/>	
Driftnets	Unknown	Loggerhead <input type="checkbox"/> Green <input type="checkbox"/> Leatherback <input type="checkbox"/> Hawksbill <input type="checkbox"/> Olive ridley <input type="checkbox"/> Kemp's ridley <input type="checkbox"/> Unknown <input type="checkbox"/> Unsure <input type="checkbox"/>	
Purse seine	Unknown	Loggerhead <input type="checkbox"/> Green <input type="checkbox"/> Leatherback <input type="checkbox"/> Hawksbill <input type="checkbox"/> Olive ridley <input type="checkbox"/> Kemp's ridley <input type="checkbox"/> Unknown <input type="checkbox"/> Unsure <input type="checkbox"/>	
Longline	Unknown	Loggerhead <input checked="" type="checkbox"/> Green <input checked="" type="checkbox"/> Leatherback <input checked="" type="checkbox"/> Hawksbill <input checked="" type="checkbox"/> Olive ridley <input checked="" type="checkbox"/> Kemp's ridley <input type="checkbox"/> Unknown <input type="checkbox"/> Unsure <input type="checkbox"/>	<p>Coelho, R., Santos, M. N., Fernandez-carvalho, J. and Amorim, S. (2015). Effects of hook and bait in a tropical northeast Atlantic pelagic longline fishery: Part I—Incidental sea turtle bycatch. <i>Fisheries Research</i> 164:302–311.</p> <p>Montrond, G. (2020). Assessing sea turtle, seabird and shark bycatch in artisanal, semi-industrial and industrial of fisheries in the Cabo Verde Archipelago. Master's thesis, University of Cape Town.</p> <p>Schilling, C. H., Diame, A., Ríos, A.H., Mingarro, M. & Jabado R. W. (2023). Nowhere to hide: Sea turtle bycatch in Northwest Africa. <i>Aquatic Conservation: Marine and Freshwater Ecosystems</i>.</p>
Other (specify)	Choose an item.	Loggerhead <input type="checkbox"/> Green <input type="checkbox"/> Leatherback <input type="checkbox"/> Hawksbill <input type="checkbox"/> Olive ridley <input type="checkbox"/> Kemp's ridley <input type="checkbox"/> Unknown <input type="checkbox"/> Unsure <input type="checkbox"/>	

2.3 Which of the following are encouraging illegal take of marine turtles in your country? Provide Ref.#s

- Relatively high prices, relatively high revenues earned from selling turtle parts and products (any of the following: meat, eggs, crafts)
- Lack of affordable alternatives to turtle parts and products
- Lack of culturally acceptable alternatives to turtle parts and products
- Ease of access to the turtle resource (e.g. proximity to nesting beaches, or ease of land/water access)
- Lack of patrolling and enforcement at nesting beaches and nearshore areas
- Low cost of land near nesting beaches
- Low penalties against illegal take
- Source of easy income
- Other (specify):
- None of the above
- Not Applicable

3. THREAT REDUCTION ACTIVITIES

3.1 Indicate activities implemented currently at the nesting beach and the level of implementation based on the need for the activity

ACTIVITY	Need for the activity	IMPLEMENTATION	Ref.#
Monitoring eggs and nesting females (day time)	Medium	Moderate	
Monitoring nesting females (night patrols)	High	Extensive	
Predator control	Low	Choose an item.	
In-situ nest protection from predators/ high sand temperatures	Choose an item.	Choose an item.	
Nest relocation (hatcheries, other sections of beach)	Medium	Moderate	
Vehicle access restrictions	Medium	Moderate	
Regular removal of debris/ beach clean ups	Medium	Moderate	
Beach restoration	Low	Low	
Coastal protection from development/sand mining/pollution	Low	Low	
Light pollution reduction	Medium	Low	
Law enforcement	Low	Moderate	
Other (specify)	Choose an item.	Choose an item.	

3.2 List the fisheries where the below methods are being used currently to address bycatch of marine turtles in your country, and indicate level of implementation

METHOD	FISHERIES (please list)	IMPLEMENTATION (mark with X) for each listed fishery			Ref.#
		Low	Moderate	Extensive	
Safe handling of incidentally caught turtles (e.g. resuscitation or release using de-hooking tools, line cutting tools and scoop nets)	Artisanal Fisheries	x			
Devices that allow the escape of marine turtles (e.g. turtle excluder devices (TEDs))					

Devices that allow marine turtles to avoid the nets (e.g. lights)					
Measures to avoid encirclement of marine turtles in purse seine fisheries					
Measures to release the turtles before the purse seine is hauled in					
Appropriate combinations of hook size and design, type of bait, depth, gear specifications and fishing practices					
Monitoring and recovery of fish aggregating devices (FADs)					
Use of eco-friendly FADs					
Spatial and temporal control of fishing (e.g. seasonal closures of fishing activities)					
Onboard observer programmes					
Vessel monitoring systems	Longline and purse seine industrial and purse seine semi industrial			x	
Inspections (i.e. at sea, in port, at landing sites)	all	x			
Law enforcement at sea	all		x		
Training programmes / workshops to train fishers on the use of bycatch reduction methods	all		x		
Informative videos, brochures, printed guidelines etc.	all		x		
Proper disposal of discarded gear to prevent ghost fishing					
Other (specify)					
None of the above					

3.3 Are there efforts currently to recover degraded marine turtle habitats?

Provide Ref.#

- a. Coral reefs: yes no unsure not applicable
- b. Seagrass: yes no unsure not applicable
- c. Other (specify): yes no unsure not applicable

3.4 Touristic Activities

3.4.1 Are there currently touristic activities linked to marine turtles in your country?

- yes no unsure

If yes, indicate which type:		Ref.#
a. Nesting turtle observation	yes <input checked="" type="checkbox"/> no <input type="checkbox"/>	
b. Hatchling releases	yes <input checked="" type="checkbox"/> no <input type="checkbox"/>	
c. Swimming/ snorkeling activities	yes <input checked="" type="checkbox"/> no <input type="checkbox"/>	
Other (please describe)		

3.4.2 Are there any standard and government-certified protocols to ensure that touristic activities do not harm turtles and/or hatchlings?

- yes no unsure obs: the turtle watching is not regulated.

If yes, have they been implemented?

- yes no unsure

If they have been implemented, are they effective?

- yes no unsure

3.5 Are education/awareness programmes currently in place?

For each group indicate the extent of the programme nationally and provide Ref.#s

Target audience	Extent of the programme	Ref.#
Policy makers	Low	
Fishing industry	None	
Communities that interact with marine turtles and their habitats	High	
Local/Fishing communities	High	
Women's groups	Unsure	
Indigenous groups	Not applicable	
Tourists	Low	

Media	Medium	
Teachers	Low	
Students	Medium	
Military, Navy, Police	Medium	
Scientists	Low	
NGOs	Choose an item.	
Enforcement personnel	Low	
Judicial personnel	Low	
Others (describe)	Choose an item.	

3.6 Involvement of Indigenous Peoples and Local Communities

3.6.1 Is traditional knowledge (including beliefs, taboos, etc.) being incorporated into conservation efforts?

yes no unsure not applicable

If yes, please provide Ref.#

3.6.2 Do indigenous peoples and local communities participate in conservation and management planning/decision making?

yes no unsure not applicable

If yes, please provide Ref.#

3.7 Are indigenous peoples and local communities benefitting from the presence of sea turtles and sea turtle projects?

yes no unsure not applicable

If yes, explain how by selecting from the following and provide Ref#:

Benefits		Ref.#
a. financially (hired by the project)	yes <input checked="" type="checkbox"/> no <input type="checkbox"/>	
b. ecotourism	yes <input checked="" type="checkbox"/> no <input type="checkbox"/>	
c. community development (infrastructure)	yes <input checked="" type="checkbox"/> no <input type="checkbox"/>	
d. community members' skill development	yes <input checked="" type="checkbox"/> no <input type="checkbox"/>	
e. education (children/adults)	yes <input type="checkbox"/> no <input type="checkbox"/>	
f. alternative livelihoods (specify)	yes <input type="checkbox"/> no <input type="checkbox"/>	
g. other (specify)	yes <input type="checkbox"/> no <input type="checkbox"/>	

3.8 Are there any studies currently in your country to investigate the effects of climate change?

yes no unsure

If yes, specify very briefly and provide Ref.#s:

4. STAKEHOLDER PARTICIPATION

4.1 Are there programmes currently to involve local stakeholders in activities to conserve marine turtles?

Indicate the level of engagement, at the national level, for each stakeholder and provide Ref.#s

Stakeholder	Level of Engagement	Ref.#
Fishing industry	None	
Communities that interact with marine turtles and their habitats	Low	
Local/Fishing communities	Low	*some island is medium
Women's groups	Unsure	
Indigenous groups	Not applicable	
Tourists	Low	
Media	Low	
Teachers	Low	
Students	Medium	
Military, Navy, Police	Medium	
Scientists	Medium	
NGOs	High	
Enforcement personnel	Low	
Judicial personnel	Low	
Others (describe)	Choose an item.	

5. CAPACITY-BUILDING

5.1 For which of the following is capacity-building /training/technical expertise needed in your country:

Capacity-building needs		Further details (if needed)
a. Nesting beach monitoring	yes <input type="checkbox"/>	
b. In-situ nest protection/predator control	yes <input checked="" type="checkbox"/>	
c. Hatcheries	yes <input type="checkbox"/>	
d. Bycatch monitoring	yes <input checked="" type="checkbox"/>	
e. Bycatch reduction	yes <input checked="" type="checkbox"/>	
f. In-water habitat monitoring	yes <input checked="" type="checkbox"/>	
g. In-water sea turtle population monitoring	yes <input checked="" type="checkbox"/>	

h. Community engagement/empowerment	yes <input type="checkbox"/>	
i. Ecotourism	yes <input checked="" type="checkbox"/>	
j. Training of law enforcement personnel	yes <input checked="" type="checkbox"/>	
k. Habitat restoration	yes <input checked="" type="checkbox"/>	
l. Light pollution control	yes <input checked="" type="checkbox"/>	
m. Socio-economic studies	yes <input checked="" type="checkbox"/>	
n. National database	yes <input checked="" type="checkbox"/>	
o. Data management	yes <input checked="" type="checkbox"/>	
p. Grant writing	yes <input checked="" type="checkbox"/>	
q. Research	yes <input type="checkbox"/>	
r. Other	yes <input checked="" type="checkbox"/>	Turtle rescue

6. ABIDJAN MARINE TURTLE MOU

6.1 How would you describe the current sea turtle conservation and management efforts in your country?

- a. Nothing is being done
- b. Ineffective
- c. Partially effective
- d. Very effective

6.2 Do you believe that the « Memorandum of Understanding Concerning Conservation Measures for Marine Turtles of the Atlantic Coast of Africa » is a useful framework for conservation and management in your country?

yes no unsure

7. REFERENCES

Provide details for all the references used in your above responses:

Loureiro, N.S. & Torrão, M.M.F. (2008). Homens e tartarugas marinhas. Seis séculos de história e histórias nas ilhas de Cabo Verde. *Anais de história de alémmar*. 9:37-78.

López-Jurado, L.F., Cabrera, I., Cejudo, D., Évora, C. & Alfama, P. (1999). Distribution of marine turtles in the Archipelago of Cape Verde, Western Africa. Pages 245-247. *In: Kaalb, H.J. & Wibbels, T. (compilers). Proceeding of the Nineteenth Annual Symposium on Sea Turtle Biology and Conservation. NOAA Technical Memorandum NMFS-SEFSC-443: 291p.*

Marco, A., Graça, J. Da, García-Cerdá, R., Abella, E. & Freitas, R. (2015). Patterns and intensity of ghost crab predation on the nests of an important endangered loggerhead turtle population. *Journal of experimental marine biology and ecology*. 468: 74-82.

Marco, A., Abella, E., Liria, A., Martins, S., Loureiro, N.S. & López-Jurado, L.F. (2012a). Manual para monitorização das tartarugas marinhas nas ilhas de Cabo Verde. *Zoologia Cabo-verdiana*. 3: 24-47.

Marco, A., Martins, S., Martín-Rábano, A., Lopes, S., Clarke, L. J., & Abella, E. (2021). Risk assessment of wildlife-watching tourism in an important endangered loggerhead turtle rookery. *Endangered Species Research*, 45, 195-207. <https://doi.org/10.3354/esr01130>

Martins, M.S., Alvarez, I. & Marco, A. (2012). Impacto del cambio climático en la incubación de *Caretta caretta* en Cabo Verde: estimaciones actuales y proyecciones futuras. *Avances en ciencias de la tierra*. 3: 75-94.

Martins, S., Monteiro, R., Abella, E., Abu-Raya, M. & Marco, A. (2012). Prospective analysis about the impact of artisanal fishing, artisanal bycatch and illegal trade over loggerheads in Cape Verde Islands. *Proceedings of the Thirty-two Annual Symposium on Sea Turtle Biology and Conservation*, Oaxaca, México

Martins, S., Tiwari, M., Rocha, F. et al. Evaluating loggerhead sea turtle (*Caretta caretta*) bycatch in the small-scale fisheries of Cabo Verde. *Reviews in Fish Biology and Fisheries*, 32, 1001–1015 (2022). <https://doi.org/10.1007/s11160-022-09718-7>

Martins, S., Ferreira-Veiga, N., Rodrigues, Z. et al (2021). Hatchery efficiency for turtle conservation in Cabo Verde. *Ocean & Coastal Management*, vol 8, 101518.

Melo, J. & Melo, T. (2013). Interviews with fishers suggest European longlining threatens sea turtles populations in cape Verdean waters. *Marine Turtle Newsletter*, 138: 18-19.

Fretwell, J., *Biogeography and Conservation of Marine Turtles of the Atlantic Coast of Africa / Biogéographie et conservation des tortues marines de la côte atlantique de l'Afrique*, CMS Technical Series Publication, n.º 6, Bonn, UNEP/CMS Secretariat, 2001, pp. 71-87.

Ehrhart, L. M. et al «Loggerhead Turtles in the Atlantic Ocean: Geographic Distribution, Abundance, and Population Status» in A. B. Bolten e B. E. Witherington (eds.), *Loggerhead Sea Turtles*, Washington, D.C., Smithsonian Books, 2003, pp. 157-174.

Montrond, G. (2020). Assessing sea turtle, seabird and shark bycatch in artisanal, semi-industrial and industrial of fisheries in the Cabo Verde Archipelago. Master's thesis, University of Cape Town.

Martins, S., Rocha, F., Rodrigues, E., Araújo, S., Abella, A., Loureiro, N. & Marco, M. (2015). Sea turtles used in traditional medicines in the Cape Verde Archipelago, West Africa. *African Sea Turtle Newsletter*, 4: 12-15.

Hancock, J.M., Furtado, S., Merino, S.E., Godley, B.J., Merino, S.E., Godley, B.J., et al. (2017). Exploring drivers and deterrents of the illegal consumption and trade of marine turtle products in Cape Verde, and implications for conservation planning. *Oryx* 51:428–436.

Roast, M. J., Martins, S., Fernández-Peralta, L., Báez, J. C., Diame, A., March, D., ... & Cardona, L. (2023). Hidden demographic impacts of fishing and environmental drivers of fecundity in a sea turtle population. *Conservation Biology*. <https://doi.org/10.1111/cobi.14110>

Schilling, C. H., Diame, A., Ríos, A.H., Mingarro, M. & Jabado R. W. (2023). Nowhere to hide: Sea turtle bycatch in Northwest Africa. *Aquatic Conservation: Marine and Freshwater Ecosystems*.

Aguilera, M., Medina-Suárez, M., Pinós, J., Liria-Loza, A. and Benejam, L. (2018). Marine debris as a barrier: Assessing the impacts on sea turtle hatchlings on their way to the ocean. *Marine Pollution Bulletin* 137:481–487.

Sousa-Guedes, D., Sillero, N., Bessa, F., & Marco, A. (2022). Plastic pollution can affect the emergence patterns of the loggerhead turtle hatchlings. *Animal Conservation*.

Veiga, J., Charles, G. & Patino-Martinez, J. (2021). Macroplastic Ingestion by Loggerhead Turtles on the Island of Maio, Cabo Verde. *African Sea Turtle Newsletter*. 17, 7–11.

Taylor, H. and Cozens, J. (2010). The effects of tourism, beachfront development and increased light pollution on nesting loggerhead turtles. *Zoologia Caboverdiana* 1:100–111.

Coelho, R., Santos, M. N., Fernandez-carvalho, J. and Amorim, S. (2015). Effects of hook and bait in a tropical northeast Atlantic pelagic longline fishery: Part I—Incidental sea turtle bycatch. *Fisheries Research* 164:302–311.

Patiño et al.2021. Globally important refuge for the loggerhead sea turtle:Maio island, Cabo Verde

Laloe et al.2020. Conservation importance of previously undescribed abundance trends: Increase in loggerhead turtle number nesting on an Atlantic island

Martins et al. (In press) New nesting site for the expanding green, olive ridley and hawksbill turtle populations in Cabo Verde

Liria-Loza, A. Medina-Suárez, M., Martins, S., Marco, A., Nicolau, J., Reischig, T., et al. (2018). *Unusual green and olive ridley nest events in Cape Verde in the last 15 years. In Proceedings of the thirty-eighth Annual Symposium on Sea Turtle Conservation and Biology.*

Ribeiro, M. C., Patino-Martinez, J., Agues, J., Marçal-Correia, A., & Nuno, A. (2022). Exploring a Comprehensive Behavioural Model to Investigate Illegal Sea Turtle Trade in Cabo Verde. *Conservation & Society*, 20(4), 325-335. DOI: 10.4103/cs.cs_98_21

National legislation - Boletim Oficial de Cabo Verde

Annual Reports (NGO/DNA)

etc