



CMS

IOSEA Marine Turtles Memorandum of Understanding - National Report 2024

INSTRUCTIONS FOR COMPLETING THE NATIONAL REPORTING QUESTIONNAIRE:

The main purpose of completing the National Reporting Questionnaire (NRQ) is to provide information on your country's implementation of the IOSEA Marine Turtle MOU, including its Conservation and Management Plan (CMP) and the IOSEA Work Programme adopted by the 8th Meeting of Signatory States. Please include activities undertaken by the government, non-governmental organizations, private sector and other relevant stakeholders.

The IOSEA Secretariat will analyze national reports and use the provided information to facilitate marine turtle conservation work using the resources at its disposal, as well as in fundraising efforts. The information will also be used to raise any issues, as mandated by IOSEA Signatories, at relevant political fora, such as CMS, CITES, or Regional Fisheries Management Organizations.

Most importantly, collecting information of relevance to marine turtle conservation in the NRQ can help national decision makers to plan marine turtle conservation activities within countries and sub-regions, and guide national and international project planners and donors.

The NRQ is structured to reflect progress in implementation of the six objectives of the CMP: There are two modalities of the NRQ: it can be accessed via the online reporting system (ORS) or filled out using an MS Word file. However, the Word version should be used only if using the online questionnaire is not possible for technical reasons (e.g. the internet connection is too unreliable).

Please answer all questions as fully and as accurately as possible. Wherever possible, please indicate the source of information used to answer the question, particularly if a published reference or report is available. Comprehensive responses to the questions posed in Section 1.4 should also satisfy many of the reporting requirements of the 2009 FAO Guidelines to Reduce Sea Turtle Mortality in Fishing Operations, thereby avoiding duplication of effort.

When working on the online version of the NRQ, save your information by clicking on the "Save all" button inside each section. An auto-save feature also saves any changed responses every 30 seconds, and whenever you move between sections. If additional information is available (e.g. published reports, maps) please attach it to this questionnaire. If working on an offline MS Word file, please submit the completed NRQ by email to the IOSEA Secretariat (iosea@un.org); with a copy to the Coordinator (heidrun.frisch-nwakanma@un.org), as a Word attachment.

GENERAL INFORMATION

Signatory State:

>>> Republic of Mozambique

List any other agencies, institutions, or NGOs that have provided input:

>>> Ministry of Land and Environment (MTA), National Directorate of Environment (DINAB), Tel: +258-823062390/3081516, MTA, DINAB, Rua de Resistência, 1746/7, P.O.Box: 2020, Maputo, Mozambique.

Memorandum in effect in Signatory State since (dd/mm/yyyy):

>>> 02/12/2008

This report was last modified: (dd/mm/yyyy):

>>> 14/01/2024

Designated Focal Point (and full contact details):

>>> Anselmo César Gaspar, Email: anselmogaspar.ag.65@gmail.com / anselmogaspar@yahoo.com.br, Tel: +258-845105514 / 822647960, MTA, DINAB, Rua de Resistencia, 1746/7, P.O.Box: 2020, Maputo, Mozambique.

Other relevant contacts:

>>> Cristina Louro, Email: cristinamlouro@gmail.com, clouro@ctv.org.mz, Tel: +258-827851107, Centro Terra Viva, Maputo, Mozambique

MARINE TURTLE SPECIES AND HABITATS

Provide sources of information supporting the responses, include reports (governmental, departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources, and attach digital files if necessary.

0.1 Overview of marine turtles and their habitats in the IOSEA MOU Signatory States within the IOSEA region.

Provide sources of information supporting the above responses, include reports (governmental, departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

a) Please list marine turtle species and genetic stocks in your country, give a general population estimate and trend for your country and indicate where they occur.

	Geographic area	Type of habitat (nesting, feeding developmental)?	Species, genetic stock	Number of egg clutches per year	Population trend (increase, decrease, stable, unknown)
	Decrease	* data is not conclusive	CC, DC	Nesting	Maputo National Park (PNAM)
	Unknown	* data is not conclusive	CC, CM, DC, EI	Nesting, feeding, developmental	Bazaruto Archipelago National Park (PNAB)
				Nesting, feeding, developmental.	Vamizi Island

b) Do government agencies and/or scientific institutions submit data on the occurrence and population numbers of marine turtles to an international database?

N/A

c) Does your country have index nesting beaches in the IOSEA region?

NO

d) Does your country have an IOSEA Network site?

NO

0.2 Site-specific information

Provide sources of information supporting the above responses, include reports (governmental, departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

Please fill out the following section for index beaches and/or IOSEA Site Network Sites in your country. If there are no such beaches or sites in your country, please leave this section blank. **An index beach is defined as a marine turtle nesting beach, which has been monitored for at least five years using a standardized set of methods and which will continue to be monitored in the long term.** An index beach may be located in a remote area or close to human settlements with influence of anthropogenic activities.

Please complete a separate section for each site.

Sites

Site 1

a) Provide the name, location and length of the site

Name of the site:

>>> Maputo National Park

State/province:

>>> Maputo

Latitude and longitude (middle of the beach or two from either end of the beach):

>>> 26.520670; 32.919230

Length:

>>> 90 Km

b) Is this an index beach (An index beach is defined as a marine turtle nesting beach, which has been monitored for at least five years using a standardized set of methods and which will continue to be monitored in the long term)?

YES

c) Is this an IOSEA Network Site?

NO

d) Does this site have any other international or national status (e.g. protected area, Ramsar, UNESCO)?

YES

Details:

>>> Protected Area - National Park

UNESCO - nomination dossier submitted by Mozambican Government in 2024

Environmental Protected Area

e) When did marine turtle monitoring start at this location (year) and how often is monitoring carried out?

>>> Started in 1994.

Often: from October - March, annually

f) Indicate the species present at this site, estimated number of nests per year for each species by inserting, in the appropriate boxes, one of the letters ' a ' through ' h ', corresponding to the following scale: a: 1 - 10 nests ; b: 11 - 100 nests ; c: 101 - 500 nests ; d: 501 - 1,000 nests ; e: 1,001 - 5,000 nests ; f: 5,001 - 10,000 nests ; g: 10,001 - 100,000 nests; h: more than 100,000 nests. If trend information is available, add "increasing", "decreasing" or "stable". If information on population and trend is not available, simply indicate which species are present at each location by inserting "yes" or "no" in the appropriate boxes.

	Species present at this location?	Number of clutches per year	Trend (decreasing, increasing, stable)	Monitored since (year)	How often is this species monitored?
Flatback (<i>Natator depressus</i>)					
Olive ridley (<i>Lepidochelys olivacea</i>)					
Hawksbill (<i>Eretmochelys imbricata</i>)					
Leatherback (<i>Dermochelys coriacea</i>)	Continuously	1994			Yes
Green (<i>Chelonia mydas</i>)					
Loggerhead (<i>Caretta caretta</i>)	Continuously	1994			Yes

g) Please estimate the approximate area of adjacent in-water habitat for this site.

10-15 km²

Please describe the approximate area of the in-water habitat near the site and provide any references and links:

>>> Mozambique Republic Bulletin no 253 I Serie, 31st December 2021

h) Please fill out the following table for the in-water habitat of the site. Please include information on population number and trend, if available.

	Species present at this location	Are marine turtles monitored in water?	Population number	Trend (decreasing, increasing, stable)	Monitored since (year)	How often is this species monitored?
Flatback (<i>Natator depressus</i>)						
Olive ridley (<i>Lepidochelys olivacea</i>)	No	No				
Hawksbill (<i>Eretmochelys imbricata</i>)	Yes	No				
Leatherback (<i>Dermochelys coriacea</i>)	Yes	No				
Green (<i>Chelonia mydas</i>)	Yes	No				
Loggerhead (<i>Caretta caretta</i>)	Yes	No				

i) Please describe the main threats to marine turtles at this site (both at the nesting beach and in the water).

	Unknown	None	Low (rare event)	Medium	High (common occurrence)
Other (type in)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Predation by domestic / feral animals (cats, dogs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Natural threats, disease, predation of nests/nesting females or natural predation at sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sand mining / removal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat degradation (e.g. coastal erosion, debris that obstructs nesting etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Artificial lighting (on land or near shore)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Agricultural/urban/tourism development (e.g. construction that disrupts nesting activities)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Inshore oil pollution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Industrial effluent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Marine debris (e.g. plastics at sea, flotsam)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Boat strikes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Incidental capture in coastal fisheries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Egg collection (i.e. direct harvest by humans)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Direct harvest of animals in coastal waters at or near the site	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exploitation of nesting females (i.e. direct harvest on land)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

j) What assistance for conservation and management at this site would be useful, including through the IOSEA Capacity-building programme? Please choose from the list below:

- Training/ capacity building for researchers and field workers
- Training/ capacity building for authorities and/or managers
- Training/ capacity building for people from coastal communities
- Training/capacity building for community-based activities
- Training/capacity building for onboard observer programmes
- Training/capacity building for project development, fundraising, execution, evaluation
- Scientific equipment and/or technical support
- Technical expertise to enhance conservation or management at the site

Please provide details:

>>> Overall, the MNAP has made a great effort to continuously implement the marine turtle programme. However, in terms of research, there is only a small group that does research, but mostly monitoring. So, there needs to be a greater involvement from the local universities do support with the research in the site. With regards to the remaining capacity building programmes, I believe that the PNAM authority possesses the capacity to train their authorities, managers. However, I believe that there is need to improve capacity building for community based initiatives, project development and fundraising.

l) Provide sources of information supporting the above responses, include reports (governmental, departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources, and attach digital files if necessary.

>>> Fernandes, RS, JL Williams, CMM Louro & MAM Pereira (2014). Monitoring, tagging and conservation of marine turtles in Mozambique: annual report 2013/14, 6 pp. Maputo, CTV.
 Fernandes, RS, JL Williams, J Trindade & MAM Pereira (2015). Monitoring, tagging and conservation of marine turtles in Mozambique: annual report 2014/15, 21 pp. Maputo, CTV.
 Fernandes, RS, JL Williams & J Trindade (2016). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2015/16, 28 pp. Maputo, CTV.
 Fernandes, RS, JL Williams, S Gonzalez-Valladolid, L Muaves, CMM Louro & MAM Pereira (2017). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2016/17, 30 pp. Maputo, CTV.
 Fernandes, RS, JL Williams, S Gonzalez-Valladolid, L Muaves & MAM Pereira (2018). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2017/18, 36 pp. Maputo, CTV.
 Fernandes, RS, GE Inteca, JL Williams, A Taju, L Muaves & MAM Pereira (2020). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2018/19, 36 pp. Maputo, CTV.
 Fernandes, RS, GE Inteca, JL Williams, L Muaves & M Xavier (2021). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2019/20. 59 pp. Maputo, CTV.
 Fernandes, RS & CMM Louro (2021). Marine turtle monitoring at the Ponta do Ouro Partial Marine Reserve: 2020-2021. 21 pp. Maputo, CTV.
 Julien, VCM, AT Guissamulo, AF da Silva & AAM Júnior (2017). Temporal Nesting Variation of Sea Turtles Species at the Eastern Coast of Inhaca Island. Advances in Ecological and Environmental Research: 43-55.
 Louro, C. M. M e C. M. Mutatisse (2023). Monitoria das tartarugas marinhas, Parque Nacional de Maputo. Época de desova 2021-2022 & 2022-2023. 16 pp. Maputo, Centro Terra Viva.
 Louro, CMM & RS Fernandes (2012). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2012/13, 11 pp. Maputo, CTV.
 Louro, CMM & RS Fernandes (2013). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2012/13, 10 pp. Maputo, CTV.
 Pereira, MAM, EJS Videira & DA Narane (2009). Monitoring, tagging and conservation of marine turtles in Mozambique: 2008/09 annual report, 4 pp. Maputo, AICM/GTT.
 Videira, EJS, MAM Pereira, CMM Louro & DA Narane (2008). Monitoring, tagging and conservation of marine turtles in Mozambique: historical data and annual report 2007/08, 85 pp. Maputo, Mozambique Marine Turtle Working Group (GTT):
 Videira, EJS, MAM Pereira, DA Narane & CMM Louro (2010). Monitoring, tagging and conservation of marine turtles in Mozambique: 2009/10 annual report. Maputo. AICM/GTT: 7.
 Videira, EJS, MAM Pereira, DA Narane & CMM Louro (2011). Monitoring, tagging and conservation of marine turtles in Mozambique: 2010/11 annual report. Maputo. AICM/GTT: 10.

OBJECTIVE I: REDUCE DIRECT AND INDIRECT CAUSES OF MARINE TURTLE MORTALITY

1.2 REDUCTION OF INCIDENTAL CAPTURE AND MORTALITY

Provide sources of information supporting the above responses, include reports (governmental, departamental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

1.2.1 Indicate, and describe in more detail, the main fisheries occurring in the waters of your country (including territorial waters and the EEZ), as well as any high seas fisheries in which flag vessels of your country participate and interact with marine turtles within the IOSEA region.

For each of the different fisheries listed below, please indicate whether the fishery is present and use the text box below to provide more detailed information. Please include information on what marine turtle species are affected and number of reported interactions, if known.

1) Bottoms trawls (including shrimp trawls)

a) Fishing effort:

PRESENT

Please provide the information below:

Number of vessels:

>>> Not available

Boat size (range or average):

>>> Not available

Number of trips per year:

>>> Not available

Mesh size used:

>>> Not available

Geographic distribution:

>>> Sofala Bank Maputo

If known, turtle species affected:

>>> Not available

Number of bycaught turtles per year:

>>> Not available

b) Methods used by your country to minimise bycatch of marine turtles in this fishery

Safe handling (as per existing protocols e.g., FAO guidelines) of incidentally caught turtles (e.g. resuscitation or release by fishers using equipment such as de-hooking, line cutting tools and scoop nets)

Devices that allow the escape of marine turtles (e.g. turtle excluder devices (TEDs))

Spatial and temporal control of fishing (e.g. seasonal closures of fishing activities)

c) Programmes to promote implementation of measures to minimise bycatch of turtles. Please tick the boxes that apply in your country and provide details in the text boxes below.

Onboard observer programmes

Vessel monitoring systems

Inspections (i.e. at sea, in port, at landing sites)

Training programmes / workshops to train fishers on the use of bycatch reduction methods

Informative videos, brochures, printed guidelines etc.

2) Pelagic trawling

a) Fishing effort:

UNKNOWN

b) Methods used by your country to minimise bycatch of marine turtles in this fishery

- Safe handling (as per existing protocols e.g., FAO guidelines) of incidentally caught turtles (e.g. resuscitation or release by fishers using equipment such as de-hooking, line cutting tools and scoop nets)
- Devices that allow the escape of marine turtles (e.g. turtle excluder devices (TEDs))
- Spatial and temporal control of fishing (e.g. seasonal closures of fishing activities)
- Effort management control

c) Programmes to promote implementation of measures to minimise bycatch of turtles. Please tick the boxes that apply in your country and provide details in the text boxes below.

- Onboard observer programmes
- Vessel monitoring systems
- Inspections (i.e. at sea, in port, at landing sites)
- Training programmes / workshops to train fishers on the use of bycatch reduction methods
- Informative videos, brochures, printed guidelines etc.

3) Set nets

a) Fishing effort:

UNKNOWN

Please provide the information below:

Geographic distribution:

>>> All coastal zone

b) Methods used by your country to minimise bycatch of marine turtles in this fishery

- Safe handling (as per existing protocols e.g., FAO guidelines) of incidentally caught turtles (e.g. resuscitation or release by fishers using equipment such as de-hooking, line cutting tools and scoop nets)
- Devices that allow marine turtles to avoid the nets (e.g. stick lights)
- Net retention and recycling schemes
- Spatial and temporal control of fishing (e.g. seasonal closures of fishing activities)
- Effort management control

4) Driftnet

a) Fishing effort

NONE

b) Methods used by your country to minimise bycatch of marine turtles in this fishery

- Safe handling (as per existing protocols e.g., FAO guidelines) of incidentally caught turtles (e.g. resuscitation or release by fishers using equipment such as de-hooking, line cutting tools and scoop nets)
- Devices that allow marine turtles to avoid the nets (e.g. stick lights)
- Net retention and recycling schemes
- Spatial and temporal control of fishing (e.g. seasonal closures of fishing activities)
- Effort management control

5) Purse seine (with or without FADs)

a) Fishing effort

UNKNOWN

b) Methods used by your country to minimise bycatch of marine turtles in this fishery

- Safe handling (as per existing protocols e.g., FAO guidelines) of incidentally caught turtles (e.g. resuscitation or release by fishers using equipment such as de-hooking, line cutting tools and scoop nets)
- Monitoring and recovery of fish aggregating devices (FADs)
- Net retention and recycling schemes

- Spatial and temporal control of fishing (e.g. seasonal closures of fishing activities)
- Effort management control

6) longline

a) Fishing effort

- PRESENT

Please provide the information below:

Geographic distribution:

>>> All coastal zone

b) Methods used by your country to minimise bycatch of marine turtles in this fishery

- Safe handling (as per existing protocols e.g., FAO guidelines) of incidentally caught turtles (e.g. resuscitation or release by fishers using equipment such as de-hooking, line cutting tools and scoop nets)
- Appropriate combinations (as per existing guidelines e.g., FAO, IOTC guidelines) of hook size and design, type of bait, depth, gear specifications and fishing practices
- Rope retention and recycling schemes
- Spatial and temporal control of fishing (e.g. seasonal closures of fishing activities)
- Technical expertise to enhance conservation or management at the site
- Effort management control

7) Artisanal fishing gear

a) Fishing effort

- UNKNOWN

8) Other types of fisheries

a) Fishing effort

- UNKNOWN

1.2.3 Are the bycatch mitigation measures described above (in 1.2.1) periodically reviewed and evaluated for their efficacy?

- UNSURE

1.2.4 Has your country provided technical assistance (formally or informally) to other Signatory States of the IOSEA MOU to promote the activities to mitigate incidental catch of marine turtles in fisheries?

- NO

1.2.6 Describe illegal unreported and unregulated (IUU) fishing that is known to occur in the territorial waters of the exclusive economic zone of your country that may impact marine turtles. Does IUU fishing occur in your country?

- YES

1.3 ADDRESSING HARVEST OF, AND TRADE IN, MARINE TURTLES

Provide sources of information supporting the above responses, include reports (governmental, departamental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

1.3.1 Are marine turtles and/or their eggs harvest in your country? Please indicate which species are harvested.

- YES

References and links:

>>> Fernandes. RS, JL Williams, CMM Louro & MAM Pereira (2014). Monitoring, tagging and conservation of marine turtles in Mozambique: annual report 2013/14, 6 pp. Maputo, CTV.

Fernandes, RS, JL Williams, J Trindade & MAM Pereira (2015). Monitoring, tagging and conservation of marine turtles in Mozambique: annual report 2014/15, 21 pp. Maputo, CTV.

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Videira, EJS, MAM Pereira, CMM Louro & DA Narane (2008). Monitoring, tagging and conservation of marine turtles in Mozambique: historical data and annual report 2007/08, 85 pp. Maputo, Mozambique Marine Turtle Working Group (GTT):

Videira, EJS, MAM Pereira, DA Narane & CMM Louro (2010). Monitoring, tagging and conservation of marine turtles in Mozambique: 2009/10 annual report. Maputo. AICM/GTT: 7.

Videira, EJS, MAM Pereira, DA Narane & CMM Louro (2011). Monitoring, tagging and conservation of marine turtles in Mozambique: 2010/11 annual report. Maputo. AICM/GTT: 10.

1.3.2 Which types of consumptive use of turtles are practiced in your country?

Use the text boxes below each rating to explain or clarify your responses.

a) Meat consumption

YES

Details (e.g. species, estimated number taken per year, location, if known):

>>> Unknown

b) Egg consumption

YES

Details (e.g. species, estimated number taken per year, location, if known):

>>> Unknown

c) Fat and oil consumption

YES

Details (e.g. species, estimated number taken per year, location, if known):

>>> Unknown

d) Traditional medicine

UNKNOWN

Details (e.g. species, estimated number taken per year, location, if known):

>>> A current research is being made and people, in southern Mozambique mostly, consume meat and eggs for protein, not for traditional medicine (Louro et al. in prep.)

e) Shell

UNKNOWN

Details (e.g. species, estimated number taken per year, location, if known):

>>> Unknown

f) Making of tortoise shell products (bekko)

UNKNOWN

1.3.3 Does your country have active legislation to prohibit direct harvest and domestic trade in marine turtles, their eggs, parts and products?

NO

1.3.4 Please describe the LEGAL traditional harvest of marine turtles, their parts and products in your country by answering the questions below.

NOTE: If there is no legal harvest of marine turtles in your country, please skip question 1.3.4 and 1.3.5.

b) Does this or another regulation limit the level of traditional take?

NO

c) Does your country have a harvest quote for traditional use of marine turtles?

NO

d) If there is a quota, does it take into account existing quotes in other States that share marine turtle populations in your country?

NO

1.3.6 Please describe the ILLEGAL harvest of marine turtles and eggs in your country by answering the questions below.

a) Does illegal harvest of marine turtles occur in your country?

YES

b) Please list the specific locations where illegal harvest is known to occur, if possible.

Details (examples of areas where illegal harvest is known to occur):

>>> Praia de Bilene, District of Macia, Province of Gaza

c) What is the impact of this illegal harvest on the populations of marine turtles? In case of illegal egg collection, what is the impact on marine turtle recruitment?

Details:

>>> The illegal harvesting impact negatively the growth of marine turtle population and marine turtle recruitment

1.4. MINIMIZING MORTALITY THROUGH NESTING BEACH PROGRAMMES

Provide sources of information supporting the above responses, include reports (governmental, departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

1.4.1 Tick the boxes that apply to indicate whether your country has any of the following measures in place to minimise the mortality of eggs, hatchlings and/or nesting females.

Please indicate if these measures are being implemented at the IOSEA Network sites and index beaches that you described in question 0.2.

Measures

a) Nesting beach monitoring (eggs and nesting females)

YES

Details:

>>> MNAP

BANP

Cabo de Sao Sebastiao

Ilhas Primeiras and Segundas - to be confirmed
Quirimbas National Park - to be confirmed
Vamizi Island

References and links:

>>> The references of the national reports listed.

b) Nesting beach protection (patrolling)

YES

Details:

>>> MNAP
BANP
Cabo de Sao Sebastiao
Ilhas Primeiras and Segundas - to be confirmed
Quirimbas National Park - to be confirmed
Vamizi Island

References and links:

>>> The references of the national reports listed.

c) Predator control

YES

Details:

>>> Implemented at the sites described in question 0.2 (name the sites, where this applies):
MNAP - efforts are being made but more needs to be done.

d) Nest screening (placing wire screens over the buried nests)

NO

e) Vehicle access restrictions

YES

Details:

>>> Implemented at the sites described in question 0.2 (name the sites, where this applies):
It is a requisite of the law. It is mainly applied in MPAs. All along the coastline is still a concern.

References and links:

Decree No. 45/2006 approving the Regulation for the prevention of marine pollution. Date of text: 30 November 2006

References and links:

>>> Decree No. 45/2006 approving the Regulation for the prevention of marine pollution. Date of text: 30 November 2006

f) Regular removal of debris / clean-up programmes

YES

Implemented at the sites described in question 0.2 (name the sites, where this applies):

>>> MNAP

References and links:

>>> No information available

Implemented at the sites described in question 0.2 (name the sites, where this applies):

>>> MNAP

References and links:

>>> No information available

h) Building location design regulations (coastal protection)

N/A

i) Light pollution reduction (direct lights visible from the beach)

YES

Details:

>>> Efforts are being made, but light pollution is still a great concern, especially at the MNAP.

References and links:

>>> Please refer to the list of national reports

k) Are these measures in place in protected areas only, or also outside of established protected areas?

In protected areas only (list the measures above e.g. a, b, c, etc.):

>>> a, b, e, g, i

Outside of protected areas (list the measures above e.g. a, b, c etc.):

>>> no measures in place

1.4.2 To what extent is egg relocation practiced in your country (including relocation to hatcheries)?

Egg relocation is practiced on less than 5% of nesting beaches.

Please provide the reasons:

>>> Egg relocation is performed randomly, if a nest is in danger and with adequate training, the nest is relocated. BANP has received the training in 2022. The training was simulated, not hands on due to the remoteness of the nesting areas. In general, the lack of resources and training.

References and links:

>>> No information available

1.4.3 Has your country undertaken an evaluation of the effectiveness of its nesting beach management programmes in terms of maximizing the recruitment of marine turtle hatchlings?

NO

OBJECTIVE II: PROTECT, CONSERVE AND RESTORE MARINE TURTLE HABITATS

2.1 MEASURES TO PROTECT AND CONSERVE MARINE TURTLE HABITATS

Provide sources of information supporting the above responses, include reports (governmental, departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

2.1.1 Please list Protected Areas (PAs), sanctuaries or temporary exclusion zones that were created to protect marine turtle habitat. Please provide the official name and date of establishment.

Details:

- >>> 1. Ponta do Ouro Marine Partial Reserve (RMPPPO; 2009), Maputo National Park (MNAP; 2021).
- 2. Bazaruto National Park (BNP; 1971), Bazaruto Archipelago National Park (BNAP; 2001).
- 3. Primeiras and Segundas Islands Environmental Protection Area (APAIPS; 2012).

Maputo National Park, re-established by Decree 100/2021, from extinction of the Maputo Special Reserve, created from the Legislative Diploma no. 994/1960, of 23/07/and Ponta do Ouro Partial Marine Reserve, Decree 42/2009, of 21/August

References and links:

>>> Decree No. 100/2021 creating the Maputo National Park and establishing the respective Buffer Zone. Date of text: 31 December 2021

Decree No. 14/2002 on the National Park of Quirimbas. Date of text: 06 June 2002

Decree No. 43/2009 creating the Ponta do Ouro Partial Marine Reserve. Date of text: 21 August 2009

Decree No. 18/2003 establishing a protected area in "São Sebastião" Cape. Date of text: 29 April 2003

Decree No. 39/2001 modifying the borders of the "Bazaruto" National Park. Date of text: 27 November 2001

2.1.2 Has your country developed any incentives to encourage protection of marine turtle habitat outside of protected areas?

Details:

>>> Marine turtles and their associated habitats are protected by law inside and outside protected areas.

References and links:

>>> Please refer to the listed laws and regulations listed above.

2.1.3 Is marine water quality (including marine debris) monitored near turtle habitats? If yes, describe the nature of this monitoring and any remedial measures that may have been taken.

NO

References and links:

>>> No information available

2.1.4 Are measures in place to prohibit the use of poisonous chemicals and explosives in the marine environment?

YES

Use the text box to elaborate on your response.

Details:

>>> According to national legislation, the use of explosives or chemical substances in fishing is not allowed.

2.2 RESTORATION OF DEGRADED MARINE TURTLE HABITATS

Provide sources of information supporting the above responses, include reports (governmental, departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

2.2.1 What efforts are being made to recover degraded coral reef habitat? Give details (location, how long efforts have been carried out, effectiveness, lessons learned, future plans,

etc).

No efforts to recover degraded coral reefs

Details/future plans:

>>> Within and outside marine conservation areas there are monitoring programmes taking place (e.g. MNAP, BNAP, APAIPS, and Vamizi). We have knowledge that there are some efforts in the northern section of the country, but with no details.

2.2.2 Are efforts being made to recover degraded mangrove habitats that are important for turtles?

YES see below

If yes, give details (location, duration, effectiveness, lessons learned, future plans etc.)

Details/future plans:

>>> There is great effort by the country to restore degraded mangroves. It has an experience of success (Mangrove Restoration Program Based on the Community, In the Estuary of Limpopo). National legislation promotes degraded mangrove restoration efforts.

There is a Strategy and National Action Plan for Mangrove Management, 2019-2023 which constitutes a more significant operational instrument with all mangrove management actions in the country. There is also a National Reforestation Strategy, a national adaptation strategy for climate change, and the national strategy for wetlands.

References and links:

>>> No current information available.

2.2.3 What efforts are being made to recover degraded seagrass habitats? Give details (location, duration, effectiveness, lessons learned, future plans etc.).

YES, see below

Details/future plans:

>>> Currently, there are efforts being made to map, study and recover seagrass habitats. Knowledge is that efforts are being made, especially in conservation areas. However, other organizations, outside conservation areas are also making these efforts. These efforts are being made by research institutions, government and NGOs.

Also, there is great effort in the country for restoration of the sea grasses, but still in an experimental regime at Eduardo Mondlane University (UEM).

References and links:

>>> No current information available.

OBJECTIVE III: IMPROVE UNDERSTANDING OF MARINE TURTLE ECOLOGY AND POPULATIONS THROUGH RESEARCH, MONITORING AND INFORMATION EXCHANGE

3.1 STUDIES ON MARINE TURTLES AND THEIR HABITATS

provide sources of information supporting the above responses, include reports (governmental, departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

3.1.1 Please list monitoring programmes that are currently in place or are being planned in your country.

Please enter details in the following table. If more rows are required, please contact the secretariat at iosea@un.org

	Site geographical name (refer to questions 0.1 and 0.2)	Species genetic stock	Start year	Duration of the monitoring programme	Nature of monitoring	Population trend	Is this a protected area?
	Yes	CC - possible decline DC - unknown	Nesting females	30	1994	CC and DC	MNAP
	Yes	Unkonwn	Nests	•	•	CM, CC, DC, EI	BANP
	Yes					•	Cabo de Sao Sebatiao
	Yes	Unkonwn	Nesting females			CM	APAIPS
	No	Unkonwn	Nesting females			CM	Vamizi Island

3.1.2 Has your country undertaken an evaluation of its marine turtle monitoring programmes?

NO

3.1.3 Which of the following methods have been or are being used to identify migration routes of turtles?

Use the text boxes to provide details

a) Tagging (flipper)

YES

Details (e.g., list species, duration of programme, start and end year):

>>> The tagging programme started in 2004 and tags were shared across all the programmes along the coastline. Unfortunately, tags and tag applicators were not being used accordingly. In 2007, the tagging programme only focused on those areas where the tagging was active and is still ongoing, like for example in the MNAP.

MNAP - CC and DC

References and links:

>>> Fernandes, RS, JL Williams, CMM Louro & MAM Pereira (2014). Monitoring, tagging and conservation of marine turtles in Mozambique: annual report 2013/14, 6 pp. Maputo, CTV.
 Fernandes, RS, JL Williams, J Trindade & MAM Pereira (2015). Monitoring, tagging and conservation of marine turtles in Mozambique: annual report 2014/15, 21 pp. Maputo, CTV.
 Fernandes, RS, JL Williams & J Trindade (2016). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2015/16, 28 pp. Maputo, CTV.
 Fernandes, RS, JL Williams, S Gonzalez-Valladolid, L Muaves, CMM Louro & MAM Pereira (2017). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2016/17, 30 pp. Maputo, CTV.
 Fernandes, RS, JL Williams, S Gonzalez-Valladolid, L Muaves & MAM Pereira (2018). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2017/18, 36 pp. Maputo, CTV.
 Fernandes, RS, GE Inteca, JL Williams, A Taju, L Muaves & MAM Pereira (2020). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2018/19, 36 pp. Maputo, CTV.
 Fernandes, RS, GE Inteca, JL Williams, L Muaves & M Xavier (2021). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2019/20. 59 pp. Maputo, CTV.
 Louro, CMM & RS Fernandes (2012). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2012/13, 11 pp. Maputo, CTV.
 Louro, CMM & RS Fernandes (2013). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2012/13, 10 pp. Maputo, CTV.
 Pereira, MAM, EJS Videira & DA Narane (2009). Monitoring, tagging and conservation of marine turtles in Mozambique: 2008/09 annual report, 4 pp. Maputo, AICM/GTT.
 Videira, EJS, MAM Pereira, CMM Louro & DA Narane (2008). Monitoring, tagging and conservation of marine turtles in Mozambique: historical data and annual report 2007/08, 85 pp. Maputo, Mozambique Marine Turtle Working Group (GTT):

b) Satellite tracking

Yes

Details (e.g. species, genetic stock):

>>> MNAP - 2014 - CC
 Primeiras and Segundas Islands Environmental Protection Area (APAIPS) - 2023 - CM

References and links:

>>> Pereira, M. A. M., et al. (2014). "Post-nesting migration of loggerhead turtles (*Caretta caretta*) from Southern Mozambique." *African Sea Turtle Newsletter* 1: 48 - 51.

c) Genetic studies

YES

References and links:

>>> Fernandes, R. S. (2015). Estrutura da população nidificante de tartarugas cabeçudas (*Caretta caretta*) na Reserva Marinha Parcial da Ponta do Ouro, sul de Moçambique. Departamento de Ciências Biológicas. Maputo, Universidade Eduardo Mondlane: 139.

3.1.4 Have the studies mentioned in 3.1.3 helped to identify foraging and migration areas of marine turtles in your country?

UNSURE

3.1.5 Is the use of traditional ecological knowledge in research being promoted?

UNSURE

3.1.6 Give a list of relevant literature that includes information from studies carried out in your country on marine turtle populations and their habitats, sorting them by topic.

d) Genetic studies

Details (species and genetic stock):

>>> *Caretta caretta*,

References and links:

>>> Fernandes, R. S. (2015). Estrutura da população nidificante de tartarugas cabeçudas (*Caretta caretta*) na Reserva Marinha Parcial da Ponta do Ouro, sul de Moçambique. Departamento de Ciências Biológicas. Maputo, Universidade Eduardo Mondlane: 139.

e) Socio-economic studies within communities that interact with marine turtles and their habitats

Details (aim of study, methods, results):

>>> Assess people's perceptions on the value and conservation of sea turtles, Community Voice Method and Participatory Planning. In prep.

References and links:

>>> Louro et al. (in prep). Perceptions of people in the conservation of sea turtles and their associated habitats along the Ponta do Ouro Kosi Bay TFCA.

3.2 COLLABORATIVE RESEARCH AND MONITORING

Provide sources of information supporting the above responses, include reports (governmental, departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

3.2.1 Does your country participate in any regional or sub-regional action plans that identify regional priorities in terms of research and monitoring needs?

NO

3.2.2 On which of the following themes have regional collaborative studies and monitoring been conducted? Use the text boxes to describe the nature of this international collaboration or to clarify your response. Answer 'NO' if the studies/monitoring undertaken do not involve international collaboration.

a) Reproductive biology (including any of the following: nesting data, hatchling survival, nest protection, recruitment, etc.)

NO

References and links:

>>> Anastacio, R., et al. (2014). "Reproductive biology and genetic diversity of the green turtle (*Chelonia mydas*) in Vamizi island, Mozambique." SpringerPlus 3(540): 16.

Fernandes, R. S. (2015). Estrutura da população nidificante de tartarugas cabeçudas (*Caretta caretta*) na Reserva Marinha Parcial da Ponta do Ouro, sul de Moçambique. Departamento de Ciências Biológicas. Maputo, Universidade Eduardo Mondlane: 139.

b) Genetic characterization

YES

References and links:

>>> Fernandes, R. S. (2015). Estrutura da população nidificante de tartarugas cabeçudas (*Caretta caretta*) na Reserva Marinha Parcial da Ponta do Ouro, sul de Moçambique. Departamento de Ciências Biológicas. Maputo, Universidade Eduardo Mondlane: 139.

c) Migratory and dispersal routes

YES

References and links:

>>> Harris, L., et al. (2015). "Paper-efficient multi-species conservation and management are not always field-effective: The status and future of Western Indian Ocean leatherbacks." *Biological Conservation* 19: 383-390.
Le Gouvello et al. (2024). Dispersal corridors of neonate sea turtles from dominant rookeries in the Western Indian Ocean. *Ecological Modelling* 487 (2024): 110542.

d) Other biological and ecological aspects

YES

References and links:

>>> Harris, L. R., et al. (2018). "Managing conflicts between economic activities and threatened migratory marine species toward creating a multi-objective blue economy." *Conservation Biology* 32(2): 411- 423.
Van de Geer, C. et al. (2022). Marine turtles of the African east coast: current knowledge and priorities for conservation and research. *Endangered Species Research* 47: 297-331.

3.3 DATA ANALYSIS AND APPLIED RESEARCH

Provide sources of information supporting the above responses, include reports (governmental, departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

3.3.1 Describe how research results are being applied to improve management practices and mitigation of threats.

Details:

>>> In general, research results are being applied to improve adaptive management, especially in Marine Protected Areas (MPAs). In the MNAP, monitoring results are being used to improve the monitoring programme to guarantee data quality. Results are shared with the different stakeholders (e.g. community monitors, rangers, community members, tourism operators, among others). In the BANP, the monitoring programme has hired both men and women from the community to be turtle monitors. Results of data monitoring are shared every season. We tend to believe that in other areas, like Vamizi Island, these efforts are also done. However, in some MPAs and outside of these MPAs the results of potential or reported illegal take are presented in national reports, articles, and other mechanisms (e.g. radio, television, whatsapp, others) but due to the lack of resources, enforcement is scarce.

3.3.2 Is traditional knowledge on marine turtles and their habitats being used for conservation and management?

YES

Details, future plans:

>>> In Mozambique, especially in southern Mozambique, traditional knowledge on marine turtles is scarce. Marine turtles are valuable for their meat and eggs.

3.4 INFORMATION EXCHANGE

Provide sources of information supporting the above responses, include reports (governmental, departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

3.4.1 Has your country undertaken any initiatives (nationally or through collaboration with other IOSEA Signatory States) to standardise methods of data collection?

YES

If yes, please give details of the agreed protocol(s).

Details:

>>> Nationally, the various programmes have made efforts to standardise methods of data collection. But unfortunately, standardisation of methods is a challenge. Data collection sheets have been shared with all the programmes along the coastline.

Reference and links:

>>> Mozambique National Report on the tagging, monitoring and conservation of marine turtles. The efforts to share these reports are done annually. However, due to several setbacks these can miss a year or two but are always done yearly.

References and links¹:

Fernandes, RS, JL Williams, CMM Louro & MAM Pereira (2014). Monitoring, tagging and conservation of marine turtles in Mozambique: annual report 2013/14, 6 pp. Maputo, CTV.

Fernandes, RS, JL Williams, J Trindade & MAM Pereira (2015). Monitoring, tagging and conservation of marine turtles in Mozambique: annual report 2014/15, 21 pp. Maputo, CTV.

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Videira, EJS, MAM Pereira, CMM Louro & DA Narane (2008). Monitoring, tagging and conservation of marine turtles in Mozambique: historical data and annual report 2007/08, 85 pp. Maputo, Mozambique Marine Turtle Working Group (GTT):

3.4.2 Has your country taken part in producing IUCN regional status reports for red list assessments?

NO

3.4.3 How often does your country share information on marine turtle populations of regional interest with other IOSEA Signatories?

Once a year

Details:

>>> Mozambique National Report on the tagging, monitoring and conservation of marine turtles. The efforts to share these reports are done annually. However, due to several setbacks these can miss a year or two but are always done yearly.

References and links:

>>> Fernandes, RS, JL Williams, CMM Louro & MAM Pereira (2014). Monitoring, tagging and conservation of marine turtles in Mozambique: annual report 2013/14, 6 pp. Maputo, CTV.
Fernandes, RS, JL Williams, J Trindade & MAM Pereira (2015). Monitoring, tagging and conservation of marine turtles in Mozambique: annual report 2014/15, 21 pp. Maputo, CTV.
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Fernandes, RS, JL Williams, S Gonzalez-Valladolid, L Muaves, CMM Louro & MAM Pereira (2017). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2016/17, 30 pp. Maputo, CTV.
Fernandes, RS, JL Williams, S Gonzalez-Valladolid, L Muaves & MAM Pereira (2018). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2017/18, 36 pp. Maputo, CTV.
Fernandes, RS, GE Inteca, JL Williams, A Taju, L Muaves & MAM Pereira (2020). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2018/19, 36 pp. Maputo, CTV.
Fernandes, RS, GE Inteca, JL Williams, L Muaves & M Xavier (2021). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2019/20. 59 pp. Maputo, CTV.
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Louro, CMM & RS Fernandes (2013). Monitoring. Tagging and conservation of marine turtles in Mozambique: Annual report 2012/13, 10 pp. Maputo, CTV.
Pereira, MAM, EJS Videira & DA Narane (2009). Monitoring, tagging and conservation of marine turtles in Mozambique: 2008/09 annual report, 4 pp. Maputo, AICM/GTT.
Videira, EJS, MAM Pereira, CMM Louro & DA Narane (2008). Monitoring, tagging and conservation of marine turtles in Mozambique: historical data and annual report 2007/08, 85 pp. Maputo, Mozambique Marine Turtle Working Group (GTT).

3.4.4 Since 2019, has your country taken part in any workshops or other events with participation of other countries, scientific institutions, non-governmental or international organisations in order to develop and implement best practice approaches for marine turtle conservation?

YES

Details (name of the event, year, main objective of the event):

>>> Sodwana Bay Workshop, 2021, provide knowledge on different methodologies, establish synergies between/among conservation programmes in Mozambique.

OBJECTIVE IV: INCREASE PUBLIC AWARENESS OF THE THREATS TO MARINE TURTLES AND THEIR HABITATS, AND ENHANCE PUBLIC PARTICIPATION IN CONSERVATION ACTIVITIES

4.1 PUBLIC EDUCATION AND INFORMATION PROGRAMMES

Provide sources of information supporting the above responses, include reports (governmental, departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

4.1.1 Are education/awareness programmes in place at/near nesting beaches?

YES

Please indicate at which sites, described in question 0.2 these programmes are being implemented.

Details:

>>> Educational and/or awareness programmes do occur near nesting beaches but these are dependant on resources or availability from the MPAs authorities, private sector and NGOs. Training sessions occur annually and these, directly and indirectly, contribute to education and awareness.

4.1.2 Describe the educational materials, including mass media information programmes that your country has collected, developed and/or disseminated.

Details/future plans:

>>> We do not have a strong environmental awareness program, but there are some isolated initiatives (leaflets, posters, radio, and television programmes) and specific programs in marine protected areas.

4.1.3 Which of the following groups have been the targets of focused education or awareness programmes?

- Policy makers
- Communities that interact with marine turtles and their habitats
- Local/Fishing communities
- Tourists
- Media
- Teachers
- Students
- Military, Navy, Police
- Scientists
- NGOs
- Enforcement personnel

4.1.4 Have any community learning centres or information centres been established in your country?

YES

Details/future plans:

>>> In many conservation areas there is a will to create and establish community learning centers or information centers. In some conservation areas, some information centers have been established, but these are not only for marine turtles.

4.2 STAKEHOLDER PARTICIPATION

Provide sources of information supporting the above responses, include reports (governmental, departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

4.2.1 Are there public participation programmes in place at nesting beaches to involve local stakeholders in activities to conserve marine turtles?

YES

If yes, which stakeholders are being involved?

- Communities that interact with marine turtles and their habitats
- Local/Fishing communities

- Tourists
- Teachers
- Students
- Military, Navy, Police
- Scientists
- Enforcement personnel

4.2.2. The role of local communities. Please answer the questions below, giving examples of activities that took place since 2019.

a) Is traditional knowledge used in the development of education and awareness programmes in your country?

N/A

b) Do local communities participate in the development and implementation of conservation measures?

Details, examples:

>>> We believe that it is too early to affirm that local communities participate in the development and implementation of conservation areas. Nonetheless, in some areas, like in the MNAP, local communities are aware of the conservation efforts and the value of marine turtles, and are actively involved in their conservation.

4.2.3 Describe initiatives undertaken or planned since 2019 to involve and encourage the cooperation of Government institutions, NGOs and the private sector in marine turtle conservation programmes.

Details/future plans:

>>> This effort to engage government institutions, NGOs and private sector is done on a continuous basis. For example, the MNAP has the support of NGOs (e.g. CTV, Likhulu Foundation), as well as other private sector organizations, mainly tourism operators (e.g. Pierre Lombard, Machangulo SA, Dolphin Encountours) which support the marine turtle conservation programme. Other relevant programmes, such as the Bazaruto Archipelago National Park has the support of the African Parks, and other NGOs (national and international), the same applies to the Primeiras and Segundas Islands Environmental Protection Area (APAIPS), which has the support of WWF.

OBJECTIVE V: ENHANCE NATIONAL, REGIONAL, AND INTERNATIONAL COOPERATION

5.1 COOPERATION NEEDS

Provide sources of information supporting the above responses, include reports (governmental, departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

5.1.1 Please indicate, the extent to which the following local management issues require regional and/or international cooperation in order to achieve progress.

In other words, how important is **regional/international** cooperation for addressing the issues listed below?

a) Illegal fishing in territorial waters

ESSENTIAL

b) Incidental capture by foreign fleets in territorial waters

ESSENTIAL

c) Enforcement/patrolling of territorial waters

ESSENTIAL

d) Illegal fishing in EEZ

ESSENTIAL

e) Incidental capture by foreign fleets in EEZ

ESSENTIAL

f) Enforcement/patrolling of EEZ

ESSENTIAL

g) Harvest exploitation of turtles and eggs

ESSENTIAL

h) Illegal trade in turtle parts and products

ESSENTIAL

i) Development of gear technology to reduce bycatch of marine turtles

ESSENTIAL

j) Marine pollution, including oil spills and marine debris

ESSENTIAL

k) Training / capacity-building

ESSENTIAL

l) Alternative livelihood development

ESSENTIAL

m) Characterisation of turtle populations/genetic stocks

ESSENTIAL

n) Identification of migration routes

ESSENTIAL

o) Tagging / satellite tracking

ESSENTIAL

p) Habitat studies

ESSENTIAL

q) Genetic studies

ESSENTIAL

5.2 COOPERATION AND INFORMATION EXCHANGE

5.2.1 Regional cooperation to enhance marine turtle conservation and management

b) Please list the organizations that your country cooperates with to enhance regional collaboration on marine turtle conservation in your subregion.

Details:

>>> iSimangaliso Wetland Park, World Heritage Site

Universities from: South Africa (Nelson Mandela University), Ilha Reuniao, Portugal

With South Africa the idea is to strengthen the tagging programme and monitoring of turtle nests through the Oceans Alive coordinated by the WILDOCEANS, financed by the Blue Action Fund.

5.2.3 Please describe any additional efforts of your country to enhance sub-regional turtle conservation.

Details/future plans:

>>> Sub-regional turtle conservation enhancement is still limited. There are efforts to share information regarding tagging (titanium and satellite tagging). However, efforts are minimal.

Mozambique shares its efforts and progress within regional meetings (e.g. WIOMSA, IOSEA).

5.3 CAPACITY-BUILDING

Provide sources of information supporting the above responses, include reports (governmental, departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

5.3.1 Describe your country's needs in terms of human resources, knowledge and facilities, in order to build capacity to strengthen marine turtle conservation measures in the IOSEA region.

Details:

>>> Sub-regional turtle conservation enhancement is still limited. There are efforts to share information regarding tagging (titanium and satellite tagging). However, efforts are minimal.

Mozambique shares its efforts and progress within regional meetings (e.g. WIOMSA, IOSEA).

5.3.2 Describe any training your country provided in marine turtle conservation and management in the last 5 years (e.g., workshops held, training manuals produced etc.), and indicate your plans for the coming year.

Details/future plans:

>>> Annually, depending on the MPA (e.g. Maputo National Park - MNAP) or Bazaruto Archipelago National Park (BNAP) hands on training is organized on monitoring techniques (e.g. tracks, female handling, nest count and nest relocation). Training manuals and leaflets are produced.

5.3.3 Specifically in relation to capacity-building for the conservation of marine turtles and their habitats, describe any partnerships with universities, research institutions, training bodies and other relevant organisations, national, regional, and/or international.

Details/future plans:

>>> MPAs - perform periodic exchange experience programmes to monitor training and handling of sea turtles. NMU/iSimangaliso - organized a training workshop with members of the region, especially Mozambique

Future plans:

Important to continue the training of community monitors and rangers

Important to promote greater involvement of universities and students

5.4 STRATEGY AND LEGISLATION

Provide sources of information supporting the above responses, include reports (governmental, departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

5.4.1 Development of a national action plan

a) Is there a national action plan for the conservation of marine turtles and their habitats in your country?

NO

b) If there is no action plan yet, has a set of key management measures been identified that could eventually serve as a basis for a more specific action plan at a national or local level?

NO

Details:

Title of the documents, year, link:

>>> I believe that the set of key measures has been identified in the legislation and in specific conservation area's management plans.

c) List the genetic stocks (marine turtle populations) identified as priorities in the national action plan or in other action plans for conservation of biodiversity in your country.

Details/future plans:

>>> CC and DC - Maputo National Park

CM - Northern section of the country (Primeiras and Segundas Environmental Protection Area - APAIPS and Vamizi Island)

CM - Southern section of the country (Bazaruto Archipelago National Park)

References and links:

>>> Fernandes, RS, JL Williams, CMM Louro & MAM Pereira (2014). Monitoring, tagging and conservation of marine turtles in Mozambique: annual report 2013/14, 6 pp. Maputo, CTV.
Fernandes, RS, JL Williams, J Trindade & MAM Pereira (2015). Monitoring, tagging and conservation of marine turtles in Mozambique: annual report 2014/15, 21 pp. Maputo, CTV.
Fernandes, RS, JL Williams & J Trindade (2016). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2015/16, 28 pp. Maputo, CTV.
Fernandes, RS, JL Williams, S Gonzalez-Valladolid, L Muaves, CMM Louro & MAM Pereira (2017). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2016/17, 30 pp. Maputo, CTV.
Fernandes, RS, JL Williams, S Gonzalez-Valladolid, L Muaves & MAM Pereira (2018). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2017/18, 36 pp. Maputo, CTV.
Fernandes, RS, GE Inteca, JL Williams, A Taju, L Muaves & MAM Pereira (2020). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2018/19, 36 pp. Maputo, CTV.
Fernandes, RS, GE Inteca, JL Williams, L Muaves & M Xavier (2021). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2019/20. 59 pp. Maputo, CTV.
Fernandes, RS & CMM Louro (2021). Marine turtle monitoring at the Ponta do Ouro Partial Marine Reserve: 2020-2021. 21 pp. Maputo, CTV.
Julien, VCM, AT Guissamulo, AF da Silva & AAM Júnior (2017). Temporal Nesting Variation of Sea Turtles Species at the Eastern Coast of Inhaca Island. Advances in Ecological and Environmental Research: 43-55.
Louro, C. M. M e C. M. Mutatisse (2023). Monitoria das tartarugas marinhas, Parque Nacional de Maputo. Época de desova 2021-2022 & 2022-2023. 16 pp. Maputo, Centro Terra Viva.
Louro, CMM & RS Fernandes (2012). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2012/13, 11 pp. Maputo, CTV.
Louro, CMM & RS Fernandes (2013). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2012/13, 10 pp. Maputo, CTV.
Pereira, MAM, EJS Videira & DA Narane (2009). Monitoring, tagging and conservation of marine turtles in Mozambique: 2008/09 annual report, 4 pp. Maputo, AICM/GTT.
Videira, EJS, MAM Pereira, CMM Louro & DA Narane (2008). Monitoring, tagging and conservation of marine turtles in Mozambique: historical data and annual report 2007/08, 85 pp. Maputo, Mozambique Marine Turtle Working Group (GTT):
Videira, EJS, MAM Pereira, DA Narane & CMM Louro (2010). Monitoring, tagging and conservation of marine turtles in Mozambique: 2009/10 annual report. Maputo. AICM/GTT: 7.
Videira, EJS, MAM Pereira, DA Narane & CMM Louro (2011). Monitoring, tagging and conservation of marine turtles in Mozambique: 2010/11 annual report. Maputo. AICM/GTT: 10.

5.4.2 Which are the main threats to marine turtles in your country per species and the most urgent management activities to address them?

Please list up to 5 corresponding activities from the IOSEA Conservation and Management Plan (CMP).

>>> CC and DC - loss of nesting habitats due to lights and development on coastal dunes and beaches

CM - loss of nesting habitats due to the receding shoreline
CM, CC and DC - illegal harvesting by people and by the different fisheries

References and links:

>>> References and links1:

Fernandes, RS, JL Williams, CMM Louro & MAM Pereira (2014). Monitoring, tagging and conservation of marine turtles in Mozambique: annual report 2013/14, 6 pp. Maputo, CTV.
Fernandes, RS, JL Williams, J Trindade & MAM Pereira (2015). Monitoring, tagging and conservation of marine turtles in Mozambique: annual report 2014/15, 21 pp. Maputo, CTV.
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Fernandes, RS & CMM Louro (2021). Marine turtle monitoring at the Ponta do Ouro Partial Marine Reserve: 2020-2021. 21 pp. Maputo, CTV.
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Louro, C. M. M e C. M. Mutatisse (2023). Monitoria das tartarugas marinhas, Parque Nacional de Maputo. Época de desova 2021-2022 & 2022-2023. 16 pp. Maputo, Centro Terra Viva.
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Louro, CMM & RS Fernandes (2013). Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2012/13, 10 pp. Maputo, CTV.
Pereira, MAM, EJS Videira & DA Narane (2009). Monitoring, tagging and conservation of marine turtles in Mozambique: 2008/09 annual report, 4 pp. Maputo, AICM/GTT.
Videira, EJS, MAM Pereira, CMM Louro & DA Narane (2008). Monitoring, tagging and conservation of marine turtles in Mozambique: historical data and annual report 2007/08, 85 pp. Maputo, Mozambique Marine Turtle Working Group (GTT):
Videira, EJS, MAM Pereira, DA Narane & CMM Louro (2010). Monitoring, tagging and conservation of marine turtles in Mozambique: 2009/10 annual report. Maputo. AICM/GTT: 7.

5.4.3 Has your country conducted a review of policies and laws to address any inconsistencies in relation to the conservation of marine turtles and their habitats?

YES

Details, future plans:

>>> Improved on clarifying activities that might impact protected species
Improved on fines regarding the illegal take/harvesting of protected species
Establishing or extending new protected areas (e.g. Maputo Environmental Protection Area and the Maputo National Park).

References and links:

>>> Decree No. 89/2017 regulating the Law on Protection, Conservation and Sustainable Use of Biodiversity. Date of text: 29 December 2017.
Decree No. 100/2021 creating the Maputo National Park and establishing the respective Buffer Zone. Date of text: 31 December 2021

5.4.4 Which of the threats to marine turtles are not currently addressed by any policy or law in your country?

Details:

>>> From our knowledge all threats are, directly or indirectly, addressed by the legislation. Mozambique is rich in environmental laws and regulations.

5.4.5 Does your country have legislation that explicitly requires marine and coastal development projects and natural resource extraction projects to be accompanied by an Environmental Impact Assessment (EIA) in relation to marine turtles and their habitats?

YES

a) If yes, please provide references to legal texts, date of adoption and briefly describe such legislation.

Details:

>>> Article 4 - Identifies the different categories of projects

Annex I - Activities of Category A+

Activities that due to its complexity, location and/or irreversibility and magnitude, deserve not only a high level of social and environmental surveillance, but also, (...) are part of this category the activities that refer or are located in the areas below described:

b. Activities located in areas with high biodiversity value, namely:

(i) habitats of significant importance for species critically threatened and/or threatened in accordance with the national and international legislation;

(ii) Habitats of significant importance for protected species in the country

(iii) Habitats that provide conditions for the existence of significant concentrations of migratory species and/or aggregative;

(iv) Ecosystems highly threatened and/or unique

(v) areas associated to evolution processes (...)'.

References and links:

>>> Decree No. 54/2015 approving the Regulation on the Process for the Environmental Impact Assessment (EIA).Date of text: 31 December 2015

b) Which measures are in place to ensure compliance with this regulation?

References and links:

>>> Article 8 - Pre-evaluation

All activities proposed must be evaluated by the entity that oversees the EIA processes.

Article 9 - Evaluation criteria

The results of the evaluation will be based on the following factors:

(b) Ecosystems, plants, and animals affected, and its importance for biodiversity and ecosystemic services

© identification of potential impacts

Overall, the regulation as in place several mechanisms to ensure compliance. However, the challenge is related with its applicability due to the lack of resources.

References and links1:

Decree No. 54/2015 approving the Regulation on the Process for the Environmental Impact Assessment (EIA).Date of text: 31 December 2015

OBJECTIVE VI: PROMOTE IMPLEMENTATION OF THE MOU, INCLUDING THE CMP

6.1 IOSEA MARINE TURTLE MOU MEMBERSHIP AND ACTIVITIES

Provide sources of information supporting the above responses, include reports (governmental, departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

6.1.1 What has your country already done in the past 5 years to encourage other States to sign the IOSEA MOU?

Details/future plans:

>>> The country needs to improve on this matter.

6.1.2 Is your country currently favourable, in principle, to amending the MOU to make it a legally binding instrument?

YES

Use the text box to elaborate on your response, if necessary.

>>> Mozambique is currently favourable to amend the MoU as a legally binding instrument because, as it is, the majority of the countries cannot yet foresee or understand the purpose and practicality of the MoU. The MoU is extremely important to strengthen the communication and support to improve research, monitoring, enforcement and conservation of marine turtles, which are highly migratory species and do not know boundaries and jurisdictions.

6.2 RESOURCES TO SUPPORT IMPLEMENTATION OF THE MOU

Provide sources of information supporting the above responses, include reports (governmental, departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

6.2.1 What programmes has your country funded for domestic implementation of marine turtle conservation activities related to the IOSEA Marine Turtle MOU?

Please refer to the IOSEA CMP and IOSEA Work Programme.

Name of the funded programme, corresponding CMP activity or IOSEA Work Programme measure:

>>> The details to this question can not be provided as a thorough research is required with the different partners involved in research, monitoring, and conservation of marine turtles.

6.2.2 In the last 5 years, what funding sources have been available for your country to support marine turtle conservation?

YES

Details: (national, other governments, international organisations, donor organisations, industry, private sector, foundations)

>>> Overall, within the last five years the country has received funding to support, directly or indirectly, marine turtle conservation. However, the details to this question can not be provided as a thorough research is required with the different partners involved in research, monitoring, and conservation of marine turtles.

6.2.3 In accordance with CITES decisions on marine turtles, has your country attempted to raise funds for the activities listed below through CITES?

YES

a) If yes, please indicate the number of the activity (or activities) in the text box below. Was this effort successful?

1. Training and capacity building and training on the implementation and enforcement of national and international regulations that apply to marine turtles, and on identification, monitoring, reporting and wildlife enforcement capability;
2. raise awareness on conservation status and compliance with national legislation and cites in relation to marine turtles;
3. research into the socioeconomics of harvest of marine turtles, its effect on conservation and sustainability of alternative livelihoods;
4. cooperative international/regional research to establish population estimates to evaluate the impact of illegal trade;
5. research into the impact of fisheries on marine turtles and its linkages to illegal trade.

>>> 1, 2, 3, 4, 5

b) Does your country require assistance in raising funds for any of these activities? Which ones? (provide numbers of the activities in the box)

>>> 1, 2, 3, 4, 5

6.3 COORDINATION AMONG GOVERNMENT AGENCIES

Provide sources of information supporting the above responses, include reports (governmental, departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

6.3.1 List government agencies that play a role in the conservation and management of marine turtles and their habitats in your country. Please indicate their responsibilities in relation to protecting marine turtles and their habitats.

If more rows are required, please contact the secretariat at iosea@un.org

	Name of the agency	Role in the conservation of marine turtles and their habitats
	Ministry of Land and Environment (MTA)	Management
	National Directorate of Environment (DINAB)	Management
	Ministry of the Sea, Inland Waters and Fisheries (MIMAIP)	Management
	National Administration of Fisheries (ADNAP)	Management/Research
	Mozambique national Institute of Oceanography (InOM)	Research
	Academy and Research Institutions	Research
	NGOs	Research, Monitoring, Conservation
	National Administration for Conservation Areas (ANAC)	Conservation and Management

6.3.2 What are the main limitations of enforcing the laws in relation to marine turtles and their habitats across and between jurisdictions?

Details:

- >>> 1. Lack of communication
- 2. Lack of willingness/interest
- 3. Lack of resources - mainly financial resources.

References and links:

>>> No references or links. Information is based on general perceptions.

OTHER REMARKS

Please provide any comments/suggestions to improve the present reporting format.

>>> Nothing to comment. This reporting tries to cover the maximum information as possible. However, we would request a more direct and concise approach. For example, create an online system for each country that can be updated regularly the National Report.

Feel free to include additional information not covered above:

>>> It has been difficult to get information. There is a need to allocate some funds to cover the information collection and analyze.