



**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](mailto:iosea@un.org)); with a copy to the Coordinator ([heidrun.frisch-nwakanma@un.org](mailto:heidrun.frisch-nwakanma@un.org)), as a Word attachment.

## GENERAL INFORMATION

Signatory State:

>>> MADAGASCAR

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

>>> Conservation Centrée sur la Communauté (C3) Madagascar

Blue Ventures Conservation

WCS-Madagascar

Madagascar National Parks

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

>>> 22/01/2003

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

>>> 14/02/2024

Designated Focal Point (and full contact details):

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# MARINE TURTLE SPECIES AND HABITATS

Provide sources of information supporting the 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 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, 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.

### 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.

	Population trend (increase, decrease, stable, unknown)	Number of egg clutches per year	Species, genetic stock	Type of habitat (nesting, feeding developmental)?	Geographic area
	Unknown		Chelonia mydas	Nesting, Feeding, Developmental	North, Western coast
	Unknown		Eretmochelys imbricata	Nesting, Feeding, Developmental	North, Western coast
	Unknown		Caretta caretta	Nesting, Feeding, Developmental	South, South-western
	Unknown		Lepidochelys olivacea	Feeding, Developmental	Southern
	Unknown		Dermochelys coriacea	Feeding, Developmental	Southern

### 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?

☒ N/A

### d) Does your country have an IOSEA Network site?

☒ N/A

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

## 1.1 BEST PRACTICE APPROACHES TO MINIMIZING THREATS

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.

**1.1.1. Are there any best practice protocols relating to the protection of marine turtles and their habitats used in your country that you would like to share with other IOSEA Signatories? Please name the protocols and describe briefly, providing references or links to more detailed reports or online texts.**

If more rows are required, please contact the secretariat at [iosea@un.org](mailto:iosea@un.org)

	References and links	Has the effectiveness of this approach been evaluated? What was the result?	What does this approach/ protocol help to achieve	Title of best practice protocol or approach
	<a href="https://c-3.org.uk/endangered-species-madagascar/">https://c-3.org.uk/endangered-species-madagascar/</a>		Mortality reducing	Local community involvement
	<a href="https://blueventures.org/fr/marine-turtle-festival-spreads-up-the-west-coast-of-madagascar-2/">https://blueventures.org/fr/marine-turtle-festival-spreads-up-the-west-coast-of-madagascar-2/</a>		Conservation and protection	Community based conservation
	<a href="https://baleinesrandeau.com/espece/tortues-vertes/">https://baleinesrandeau.com/espece/tortues-vertes/</a>		Conservation	Ecotourism development
	<a href="https://www.gapcm.org/">https://www.gapcm.org/</a>		Mortality and bycatch reducing	TED (Turtle Excluder Device)

## 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:

☒ UNKNOWN

**Please provide the information below:**

Number of vessels:

>>> 60

Geographic distribution:

>>> Western coast of Madagascar

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

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

If applicable, the measures are mandatory under the following regulation:

>>> Order no. 12666/2014 of 28 March 2014 regulating the conservation of sea turtles caught by fisheries

**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.**

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

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

The measure is mandatory under the following regulation:

>>> Order no. 12666/2014 of 28 March 2014 regulating the conservation of sea turtles caught by fisheries

**2) Pelagic trawling**

**a) Fishing effort:**

☒ UNKNOWN

**Please provide the information below:**

Geographic distribution:

>>> Wester coast of Madagascar

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

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

**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.**

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

**3) Set nets**

**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)

If applicable, the measures are mandatory under the following regulations:

>>> Order no. 12666/2014 of 28 March 2014 regulating the conservation of sea turtles caught by fisheries

**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.**

☒ Vessel monitoring systems

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

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

The measure is mandatory under the following regulation:

>>> Order no. 12666/2014 of 28 March 2014 regulating the conservation of sea turtles caught by fisheries

**4) Driftnet**

**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)

**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**

☒ Vessel monitoring systems

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

**5) Purse seine (with or without FADs)**

**a) Fishing effort**

☒ UNKNOWN

**6) longline**

**a) Fishing effort**

☒ UNKNOWN

**7) Artisanal fishing gear**

Type and description:

>>> Navigation using engine 15cv < 50cv

**a) Fishing effort**

☒ UNKNOWN

**Please provide any available information below:**

Main gear used (beach seine, traps, nets, handline, other?):

>>> Nets, Handline, Fishing rifle

If known, turtle species affected:

>>> Chelonia mydas, Caretta caretta, Eretmochelys imbricata

**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)

If applicable, the measures are mandatory under the following regulation:

>>> Order no. 12666/2014 of 28 March 2014 regulating the conservation of sea turtles caught by fisheries

**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.**

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

**8) Other types of fisheries**

Type of description:

>>> Small-scale fisheries, navigation using engine < 15Cv

**a) Fishing effort**

☒ UNKNOWN

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

☒ Appropriate combinations (as per existing guidelines e.g., FAO guidelines) of hook size and design, type of bait, depth, gear specifications and fishing practices

If applicable, the measures are mandatory under the following regulation:

>>> Order no. 12666/2014 of 28 March 2014 regulating the conservation of sea turtles caught by fisheries

**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**

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

**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?**

☒ UNSURE

**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

Details:

>>> Chelonia mydas  
Caretta caretta  
Eretmochelys imbricata  
Dermochelys coriacea  
Lepidochelys olivacea

**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):

>>> Exception of the Mahafaly tribe, all Malagasy communities eat turtle meat

**b) Egg consumption**

☒ YES

**c) Fat and oil consumption**

☒ NO

**d) Traditional medicine**

☒ UNKNOWN

**e) Shell**

☒ YES

**f) Making of tortoise shell products (bekko)**

☒ YES

### g) Other

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

>>> Cultural / traditional significance

### h) Which type(s) of consumptive use of marine turtles are the most common in your country?

Please list the most common types of consumption:

>>> Meat consumption

Egg consumption

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

☒ YES

If yes, please provide details (title/date) of the relevant legislation, as well as any exemptions (e.g. for traditional use) under that legislation and comment on effectiveness of the legislation in terms of enforcement.

If more rows are required, please contact the secretariat at [iosea@un.org](mailto:iosea@un.org)

	What are the challenges ?	Is the legislation enforced?	Is traditional use allowed under this legislation?	Legislation date	Legislation title
	Conservation and Protection	YES		Mars 28, 2014	Regulations on the conservation of marine turtles caught in fisheries
	Conservation and Protection	YES		Décret n° 2006 - 400	Classification of wildlife species, protected species status with absolute protection throughout the national territory
	Conservation and Protection	YES		Jan 31, 2006 - Décret n°2006-098	Publication of the revised appendices to the Convention on International Trade in Endangered Species of Wild Fauna and Flora

### 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.

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

☒ 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

#### 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:

>>> Decrease in population and nesting marine turtle

### 1.3.7 Which of the following adverse economic incentives are encouraging illegal take of



### marine turtles in your country?

- ☒ 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
- ☒ 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

### 1.3.8 Has your country taken any measures to try to correct these adverse incentives?

- ☒ NOT APPLICABLE (no adverse economic incentives exist)

### 1.3.9 Are there touristic activities linked in marine turtles in your country?

- ☒ YES

If yes, please indicate which type:

	N o	Ye s
Other (please describe)	<input type="checkbox"/>	<input type="checkbox"/>
c) Swimming/ snorkeling activities	<input type="checkbox"/>	<input type="checkbox"/>
b) Hatching releases	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a) Nesting turtle observation	<input type="checkbox"/>	<input type="checkbox"/>

### 1.3.12 Please describe any activities/projects that aim(ed) to reduce illegal take of and/or trade in marine turtles in your country.

If more rows are required, please contact the secretariat at [iosea@un.org](mailto:iosea@un.org)

	Project website or other links with project description	Lessons learned	How does the project involve local communities?	End year (if completed)	Start year	Implemented by	Title of the project/activity
	<a href="https://www.seaturtlestatus.org/swot-grantees/2022/6/16/cnre-centre-national-de-recherch-sur-lenvironnement-madagascar-2021">https://www.seaturtlestatus.org/swot-grantees/2022/6/16/cnre-centre-national-de-recherch-sur-lenvironnement-madagascar-2021</a>	Working with local communities	Catch monitoring	2021	2021	CNRE and stakeholders	Marine turtle conservation network
	<a href="https://www.environnement.mg/?p=3421">https://www.environnement.mg/?p=3421</a>		Involving local communities in the sustainable management of marine resources		2022	MEDD and PNUE	Conservation inclusive des tortues marines et des herbiers marins dans le nord-ouest de Madagascar
	<a href="https://c-3.org.uk/c3-madagascar/">https://c-3.org.uk/c3-madagascar/</a>		Involving schoolchildren and fishermen		2009	C3 Madagascar	Sea turtle and dugong conservation in Madagascar

### 1.3.13 Has your country submitted the annual illegal trade report to CITES, including information relevant for marine turtles?

Please provide a copy of this report or a link to the published report online, if possible.

- ☒ YES

## 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:

>>> C3 and Madagascar National Parks have been actively engaged in monitoring nests .

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

>>> North Madagascar : Nosy Hara, Nosy Fotsy, Nosy Hao, Nosy Vaha, Ambolobozokely, Ampmbofofo, Ambodivahibe

**b) Nesting beach protection (patrolling)**

☒ YES

Details:

>>> North of Madagascar

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

>>> Nosy Hara, Nosy Fotsy, Nosy Hao, Nosy Vaha, Ambolobozokely, Ampmbofofo, Ambodivahibe

**c) Predator control**

☒ N/A

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

☒ N/A

**e) Vehicle access restrictions**

☒ N/A

**f) Regular removal of debris / clean-up programmes**

☒ YES

**g) Has re-vegetation of dunes at nesting beaches been carried out, using native vegetation?**

☒ N/A

**h) Building location design regulations (coastal protection)**

☒ N/A

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

☒ N/A

**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.

**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?**

☒ NOT APPLICABLE

## 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:

You have attached the following documents to this answer.

[List\\_AMPs.xlsx](#) - List of MPA Madagascar

#### 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.

☒ NOT APPLICABLE

#### 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:

>>> The utilization of poisonous chemicals and explosives in fishing activities is prohibited under Article 17 of Law no. 2015-053, which pertains to the Fishing and Aquaculture Code in Madagascar.

References and links:

You have attached the following documents to this answer.

[Code\\_pêche.pdf](#)

### 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).

☒ YES see below

Details/future plans:

>>> - The NGO "Tany Ifandovana," in partnership with MPEB - SWIOFISH 2 Project, initiated a coral reef restoration activity on 28/02/2023. They are restoring 4000 m2 of damaged reefs in Île aux Prunes, Tamatave, located in the East Region of Madagascar. The aim is to achieve a 20 to 30% increase in coral coverage in the restoration zones.

- The NGO Reef Doctor is currently working on reef construction in the Bay Ranobe area, Ifaty, Toliara, Madagascar. The goal is to build approximately 6 hectares of coral reefs.

- A research team at IHSM has filed a patent for the creation of an experimental artificial reef tested in the large Toliara reef.

References and links:

>>> <https://www.tany-ifandovana.org/nos-projets/2-restauration-de-r%C3%A9cifs-coralliens-%C3%A0-Île-aux-prunestamatave#:~:text=Nous%20restaurons%204000%20m2%20de,coralliens%20qui%20font%20l'attracti>

on  
<https://www.goodplanet.org/fr/projet/preservation-restauration-de-biodiversite/restauration-coraux-resilience-cotiere-madagascar/>

**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:

>>> The project "Inclusive Conservation of Marine Turtles and Seagrasses in Northwestern Madagascar" (MEDD) has undertaken the assessment of the current state and management of this ecosystem within their intervention zone.

References and links:

>>> <https://www.environnement.mg/?p=3421>

## 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](mailto:iosea@un.org)

	Is this a protected area?	Population trend	Nature of monitoring	Duration of the monitoring programme	Start year	Species genetic stock	Site geographical name (refer to questions 0.1 and 0.2)
	No		Species and habitats	12 months	2024	Chelonia mydas, Eretmochelys imbricata, Caretta caretta	West Madagascar
	LMMA		Species and habitats	In process	2016	Chelonia mydas, Eretmochelys imbricata, Caretta caretta	North Madagascar

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

☒ NOT APPLICABLE

#### 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):

>>> C3, WWF Madagascar, and Reef Doctor have implemented this approach.

#### 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?

☒ YES

#### 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.**

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

Details (aim of study, methods, results):

>>> - RAKOTONIRINA, B., 1989. Exploitation des tortues marines à Madagascar - rapport d'enquête. Station marine de Toliara.

**f) Evaluation of the efficacy of conservation activities for marine turtles and their habitats**

Details (types of activities assessed, participation of local communities in the evaluation, methods, results):

>>> - Humber, F., Godley, B.J., Nicolas, T., Raynaud, O., Pichon, F. et Broderick, A.C. (2016) Placer les populations de tortues marines de Madagascar dans un contexte régional à l'aide d'un suivi communautaire, Oryx, 2016, DOI <http://dx.doi.org/10.1017/S0030605315001398>

- Humber F. et al. (2011) Using community members to assess artisanal fisheries: the marine turtle fishery in Madagascar. Animal conservation p 175-185

- RAKOTONIRINA, B., COOKE, A., 1994. Sea turtles of Madagascar - their status, exploitation and conservation. In Oryx, vol 28 n°1. pp. 51-59.

- RAKOTONIRINA, B., 1999. Les tortues marines à Madagascar. IHSM - Université de Toliara: note préparée pour le séminaire sur les tortues marines, 29 nov - 2 déc Saint Leu, La Réunion, 11 p.

**g) Other**

Details (aim of study, results):

>>> - PASCAL, B., 2003. Requins et tortues de mer chez les Vezo du sud-ouest de Madagascar : Enjeux écologiques ou enjeux sociaux?. DEA. Université d'Orléans. 106 p.

- TSIRILAZA, B., 2016. La vulnérabilité des tortues marines face aux changements climatiques : étude de cas à Ambohibola, Sud-ouest de Madagascar. DEA. Université de Toliara.

- RAKOTONIRINA, B., 1985. Etude préliminaire sur les tortues marines dans le Sud de Madagascar, Centre universitaire de Tuléar.

- BONNET, R (éd.), 1986. Les tortues marines du Sud-Ouest de l'Océan Indien. Rapport de l'atelier régional «ressources biologiques aquatiques» 21-24 oct. 1985, St Denis de la Réunion, 69 p.

- Dalleau M. (2013) Écologie spatiale des tortues marines dans le Sud-ouest de l'océan Indien : apport de la géomatique et de la modélisation pour la conservation. Biologie animale. Université de la Réunion. 331 pages. Online : <https://tel.archives-ouvertes.fr/tel-02172111>

**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?**

☒ NOT APPLICABLE

**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.)**

☒ NOT APPLICABLE

**b) Genetic characterization**

☒ NOT APPLICABLE

**c) Migratory and dispersal routes**

☒ NOT APPLICABLE

**d) Other biological and ecological aspects**

☒ NOT APPLICABLE

## **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

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

Details/future plans:

>>> C3, in collaboration with the Ministry of National Education, has developed a Marine Turtle Training Handbook for students.

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

☒ Local/Fishing communities

☒ Students

### **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?

☒ Local/Fishing communities

☒ NGOs

#### **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:

>>> The National Centre for Integrated Coastal Zone Management (CNGIZC) conducts workshops focused on planning for the conservation of marine turtles, bringing together various stakeholders dedicated to the preservation of this species. Participants include government institutions (CNRE, IHSM, CSP, Fisheries Administration) and NGOs (WWF, WCS, Blue Ventures, C3, SAGE).

## **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**

☒ IMPORTANT

##### **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**

☒ IMPORTANT

##### **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**

☒ IMPORTANT

##### **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

**5.3 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:

>>> - Scientific Research: Funding and support for scientific research

- National Strategy: Funding and support for the establishment of marine turtles conservation action plan and activities coordination system

- International Collaboration: Strengthening collaboration with other countries in the IOSEA region, knowledge exchange, and participation in international conservation initiatives.

- Education: Development of educational programs to raise awareness among local communities.

**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.

**5.4.2 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**).

You have attached the following documents to this answer.

[Prior\\_Activities.xlsx](#)

**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?**

☒ UNSURE

**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?**

☒ NOT APPLICABLE

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

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:  
>>> 2011: Workshop to develop a national conservation plan for marine turtle in Madagascar

References and links:

>>> <https://blueventures.org/fr/vers-un-plan-national-de-conservation-des-tortues-marines-%C3%A0-madagascar-2/#:~:text=L'atelier%20rassemble%20des%20dirigeants,gestion%20des%20tortues%20de%20Madagascar>.

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

☒ NO

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?

☒ UNKNOWN

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](mailto:iosea@un.org)

	Role in the conservation of marine turtles and their habitats	Name of the agency
	National focal point for the CMS Memorandum of Understanding on the Conservation and Management of Marine Turtles and their Habitats of the Indian Ocean and South-East Asia (IOSEA Marine Turtles MoU)	Centre National de Recherches sur l'Environnement (CNRE)
	Promoting and ensuring the sustainable, responsible, rational and ethical use of natural resources and the environment	Ministère de l'Environnement et du Développement Durable (MEDD)
	Formulates, implements and coordinates policy on marine resources and fisheries	Ministère de la pêche et de l'économie bleue (MPEB)
	Implementation of law enforcement operations	Brigades inter-agences d' application de la loi ( Organisme Mixte de Conception , OMC)

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:  
>>> Institutional incapacity resulting in:  
- Absence of law enforcement  
- Lack of supervision and enforcement of the law on commercial fishing practices;

- Low number and low capacity of personnel responsible for law enforcement;

