



# MEMORANDUM OF UNDERSTANDING ON THE CONSERVATION AND MANAGEMENT OF MARINE TURTLES AND THEIR HABITATS OF THE INDIAN OCEAN AND SOUTH-EAST ASIA

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# **ERITREA - NATIONAL REPORT 2019**

(Prepared by Eritrea)



# Indian Ocean – South-East Asian Marine Turtle Memorandum of Understanding

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## **TEMPLATE FOR THE SUBMISSION OF NATIONAL REPORTS -2019**

## **GENERAL INFORMATION**

## Signatory State:

Which agency or institution has been primarily responsible for the preparation of this report? Research & Human Resources Development Department, Ministry of Marine Resources

List any other agencies, institutions, or NGOs that have provided input: Ministry of Marine Resources Northern Red Sea Zoba & Southern Red Sea Zoba Branch offices

Memorandum in effect in Signatory State since (dd/mm/yyyy): 24/05/2006

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

## 00/00/2008

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### **INSTRUCTIONS FOR COMPLETION:**

The purpose of completing the national report is to provide information on your country's implementation of the IOSEA Marine Turtle MoU including, as far as possible, contributions of cooperating non-governmental partners. Implementation will be assessed in terms of the six objectives of the Conservation and Management Plan (CMP). The online questionnaire is divided into these six main objectives, and asks specific questions in relation to the activities that need to be carried out to fulfil those objectives.

Please answer all questions as fully and as accurately as possible. It may seem time-consuming, but once you have completed the first report, the next time will be much easier because you can simply revise your existing report online. Comprehensive responses to the questions posed in Section 1.4 should satisfy many of the reporting requirements of the 2004 FAO Guidelines to Reduce Sea Turtle Mortality in Fishing Operations, thereby avoiding duplication of effort.

Description text is provided below some of the questions to explain what information needs to be provided. Text boxes can be expanded to accommodate longer answers or to explain and provide additional information, beyond what is requested. Details of future plans are especially encouraged. Wherever possible, please try to indicate the source of information used to answer a particular question, if a published reference is available. Remember that you are sharing information with other countries about your progress, so that it may be of benefit to them. At the same time, you may find it useful to look at other countries' reports to get ideas for marine turtle conservation that might be adapted to your context.

When working on the online questionnaire, 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. Feel free to attach additional material (published reports, maps etc) to this questionnaire. If working on a word copy only, please submit the completed report to the IOSEA Secretariat (<a href="mailto:heidrun.frisch-nwakanma@un.org">heidrun.frisch-nwakanma@un.org</a>; copy to <a href="mailto:polina.orlinskiy@un.org">polina.orlinskiy@un.org</a>) by email, as a Word attachment. Feel free to attach additional material (published reports, maps etc) to this template and send them separately by e-mail or by post

Throughout the questionnaire, alongside each question you will find one or more 3-letter abbreviations within square brackets. These are used to indicate the purpose for which the information provided will be used in the subsequent analysis of all of the national reports, as shown in the following table. To some extent, the order in which these different types of information are listed below is a reflection of their importance – ranging from critical indicators of performance to factual details that are merely informative.

Abbreviation	Туре	Treatment / Purpose
IND	Indicator	The information provided serves, in and of itself, as a key indicator of successful implementation or of pre-requisites for same (eg. of core actions undertaken, resource availability, capacity etc.)
PRI	Priorities	The collective data will be synthesized to give an indication of what has been done already (helping to avoid duplication of effort); what is generally not being done (gaps that need to be addressed); and what interventions or specific assistance may be required.
TSH	Trouble-shooting	Particular implementation problems and issues (possibly of special interest to a small group of countries) are identified/highlighted with a view to stimulating remedial action in the short-term.
BPR	Best practice	Well-documented examples of best practices / success stories will be compiled and presented as approaches that other Signatory States might consider pursuing (ie adopting or adapting to suit their own circumstances).
SAP	Self-Appraisal	Self-assessment of effectiveness and completeness of actions undertaken – intended to stimulate reflection within a given Signatory State on what more could or should be done in relation to a particular activity.
INF	Information	The information will be collected and compiled, with little or no modification, mainly for purpose of sharing of information that could be of interest or value to other readers and/or other analyses.

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

## 1.1 Introduction to marine turtle populations and habitats, challenges and conservation efforts

Please introduce and summarise, in an abstract of less than a page, the marine turtle populations and their habitats in your country. Comment on their status and highlight the main conservation challenges and achievements to date. It is <u>not</u> necessary to list here by name the individual nesting beaches, feeding areas and developmental habitats that are important for marine turtles in your country, as this information can be generated from the 'Site-Threat' data sheets to be completed in Annex 1. **[INF]** 

There are five species of marine turtles in the Eritrean Red Sea namely; Hawksbill (Eretmochelys imbricata), Green turtle (Chelonia mydas), Loggerhead (Caretta caretta), Olive ridley turtle (Lepidochelys olivacea) and Leatherback (Dermochelys coriacea). The most nesting species are mainly Hawksbill followed by Green turtles. Only a single nesting trial of an Olive ridley turtle was recorded in May of 2005. There has been a record of more than 120 nesting sites in more than 70 islands and mainland coastal areas. Observation of several feeding grounds were recorded in the different parts of the Eritrean Red Sea especially the sea sponge rich coral reef areas of the Dahlak Archipelago islands for Hawksbill while the seagrass rich southern part of the Eritrean Red Sea are abundant in Green turtles. Except for the rare events of naturally caused mass strandings, the marine turtles in the Eritrean Red Sea has been affected by the hunting for meat and poaching for their eggs. Although most of the activities are for a subsistence level; marine turtle flesh have been recorded in few and in specific areas of the coast mainly the southern part of the country. Incidents of bycatch have been logged in the booklets of the industrial fisheries mainly operated by foreigners under a contract of fishing agreement in the Eritrean waters. National TV, Radio (in different languages), Newspaper (both Tigrinya & Arabic) and other public awareness instruments has been used for the last decades especially in the last five years. But due to the increasing cost of living standard and no means of alternatives, few development has been recorded. The involvement of Yemeni Fishermen along the Eritrean waters is apparently believed to worsen the situation. But generally, since the nesting beaches are far away from the vicinity of villages and frequent visit by fishermen and of course the existence of fisheries regulations by the Ministry of Marine Resources and the Eritrean Navy active involvement in implementing puts the Marine Turtles in a relatively safe status.

## 1.2 Best practice approaches to minimizing threats

- 1.2.1 Describe any protocol or approaches practiced in your country, which you consider exemplary, for minimising threats to marine turtle populations and their habitats, which may be suitable for adaptation and adoption elsewhere. [BPR].
  - 1. The release of incidentally caught marine turtles on-board of industrial shrimp/fish trawlers.
  - 2. The change in fishing ground if more incidental catch of marine turtle incidents occur in specific area
  - 3. National mass media (TV, Radio & Newspaper) broadcasting programmes on marine conservation
  - 4. The limitation of industrial fishing near the coast according to the fisheries proclamation: 8 miles from the main coast and 4 miles from an island

# 1.3 Programmes to correct adverse economic incentives

1.3.1 Describe any socio-economic studies or activities that have been conducted among communities that interact with marine turtles and their habitats. [BPR, INF]

The Environmental & Socio-economic Impact Assessment (E&SEIA) conducted for the Australian based Southboulders Potash Company (Colulli Potash Co. Ltd) around the coastal of Tio & Anfile Bay in the Southern Eritrean Red Sea Region during the periods of 2012 – 2014.

	Eritrean Red Sea Region during the periods of 2012 – 2014.									
1.3.2	Which of these adverse economic incentives are underlying threats to marine turtles in your country? <b>[TSH]</b>									
	<ul> <li>☐ High prices commended by from turtle products relative to other commodities</li> <li>☐ Lack of affordable alternatives to turtle products</li> <li>☐ Ease of access to the turtle resource (eg. by virtue of proximity or ease of land/water access)</li> <li>☐ Low cost of land near nesting beaches</li> <li>☐ Low penalties against illegal harvesting</li> </ul>									
	☐ Other1 (describe):	Weak implementation of fisheries proclamation								
	☐ Other2 (describe):	Incidents far from the Ministry of Marine Resources Headquarters and branches								
	☐ Other3 (describe):									
	□ None of the above or Not	Applicable								
	Please use the text box below	to explain your response(s) including 'None / Not Applicable' responses.								
1.3.	YES NO NOT	measures to try to correct these adverse economic incentives? [BPR]  APPLICABLE (no adverse economic incentives exist)								
	If yes, please describe these r	neasures in detail.								
	The Ministry of Marine Resources with its extension officers and Regional administrators and representatives have tried to outreach such problems with the public and few cases of jailing locals on illegal selling of turtle meat.									
1.4	Reduction of incidental of	apture and mortality								
1.4.1	Indicate, and describe in more detail, the main fisheries occurring in the waters of your country, as well as any high seas fisheries in which flag vessels of your country participate and interact with marine turtles.									
		fishery is present and interacting with marine turtles or 'NO' to indicate that a interacting with marine turtles. <b>[INF]</b>								
	a) Shrimp trawls:	ES 🗆 NO								
		s and foreign industrial vessels mainly of Egyptians are active during the open fishing each year. The intensity and frequency of trawling varies each season but marine turtle								

incidental catch occurs especially when the shrimp trawlers illegally approach to the nearby coast or island,

b) Set gill nets:   YES  NO
Detail: Artisanal fishing using gill nets are practiced by the locals and rare incidental catch of marine turtles occur in which it manly is under reported or absolutely not reported. Only such data are gained from interviewing fishermen for a socio-economic surveys. Since the nets are usually set in deeper waters few cases are believed to occur according to the fishermen.
c) Anchored Fish Aggregating Devices (FADs):   □ YES □ NO
Detail:
d) Purse seine (with or without FADs): ☐ YES ☐ NO
Detail: Although open sea purse seining is not a common fishing activity in the Eritrean Red Sea, recently with the contract of fishing agreements done with Egyptians several purse-seiners have been practised during the last five years with little or nil impact of marine turtles since they operate in the deep and during the night. Yemeni and few locals have been recently practicing purse seining with strong light as FADs (locally known as <i>MEKBEB</i> , Arabic word meaning <b>encircling</b> ) which is still not studies for its environmental and marine turtle impact. But majority of Eritrean fishermen happen not to be happy with such activities as they reason out for the decreasing of fish resources in their fishing areas. The other locally practiced is beach seining mainly in the southern part which is much richer with small pelagic resources during certain seasons. Few incidental catch of turtles and rays (mantas and stings) occurs.
e) Longline (shallow or deepset): ☐ YES ☐ NO
Detail: Semi*industrial fishing in the waters of Eritrea use mainly use long lines in deeper waters targeting large pelagic such as Spanish mackerel, Queenfish and tuna; which happen incidental catch of marine turtles mainly hawksbill and few green turtles. Hooks and lines are used by the traditional fishermen in shallow waters targeting coral reef fishes such as groupers, snappers and emperors; with almost non-existent turtle incidental catch.
f) Driftnet:   YES  NO
Detail:
g) Other1 (Name and description):
h) Other2 (Name and description):
☐ None of the above

1.4.2 Please indicate the relative level of fishing effort and perceived impact of each of the above fisheries on marine turtles (e.g. in terms of by-catch) [TSH]. Select from one of the following descriptions: RELATIVELY HIGH, MODERATE, RELATIVELY LOW, NONE (i.e. not present), UNKNOWN (i.e. unable to answer for whatever reason).

a) Shrimp trawls				
Fishing effort:  ☐ RELATIVELY HIGH	■ MODERATE	☐ RELATIVELY LOW	□ NONE	□ UNKNOWN
Perceived impact:  ☐ RELATIVELY HIGH	■ MODERATE	☐ RELATIVELY LOW	□ NONE	□ UNKNOWN
L KLEXIIVEET HIGH	MODERVITE	L KLEXIIVLET LOW	L NONE	
Source of information / c	larification:			
Ministry of Marine Resou	irces Observers on bo	oard reports and Research D	Pivision regular	reports
b) Set gill nets				
Fishing effort:	_			
☐ RELATIVELY HIGH Perceived impact:	■ MODERATE	☐ RELATIVELY LOW	☐ NONE	□ UNKNOWN
☐ RELATIVELY HIGH	☐ MODERATE	RELATIVELY LOW	□ NONE	☐ UNKNOWN
Source of information / c	larification:			
Ministry of Marine Resou	 urces Environmental &	& Socio-economic Impact As	sessment (E&	SEIA) reports
,		·	`	, ,
c) Anchored Fish Aggre	egating Devices (FA	ADs)		
Fishing effort:				
☐ RELATIVELY HIGH	☐ MODERATE	☐ RELATIVELY LOW	□ NONE	☐ UNKNOWN
Perceived impact:  ☐ RELATIVELY HIGH	☐ MODERATE	☐ RELATIVELY LOW	□ NONE	☐ UNKNOWN
Source of information / cl	arification:			
d) Purse seine (with or	without FADs)			
Fishing effort:  □ RELATIVELY HIGH	■ MODERATE	☐ RELATIVELY LOW	□ NONE	□ UNKNOWN
Perceived impact:  ☐ RELATIVELY HIGH	☐ MODERATE	RELATIVELY LOW	□ NONE	□ UNKNOWN
Source of information / cl	arification:			
Ministry of Marine Resou	urces Observers on bo	pard reports and Research D	Pivision regular	reports

# Fishing effort: ☐ RELATIVELY HIGH ☐ MODERATE ■ RELATIVELY LOW ☐ NONE ☐ UNKNOWN Perceived impact: ☐ MODERATE ■ RELATIVELY LOW ☐ NONE ☐ UNKNOWN ☐ RELATIVELY HIGH Source of information / clarification: Ministry of Marine Resources reports from fishermen's interviews f) Driftnet Fishing effort: ☐ RELATIVELY HIGH ☐ MODERATE ☐ RELATIVELY LOW ☐ NONE ☐ UNKNOWN Perceived impact: ☐ RELATIVELY HIGH ☐ MODERATE ☐ RELATIVELY LOW ☐ NONE ☐ UNKNOWN Source of information / clarification: g) Other1 (from 1.4.1): Fishing effort: ☐ RELATIVELY HIGH ☐ MODERATE ☐ RELATIVELY LOW ☐ NONE ☐ UNKNOWN Perceived impact: ☐ RELATIVELY HIGH ☐ MODERATE ☐ RELATIVELY LOW ☐ NONE ☐ UNKNOWN Source of information / clarification: h) Other2 (from 1.4.1): Fishing effort: ☐ MODERATE ☐ NONE ☐ RELATIVELY HIGH ☐ RELATIVELY LOW ☐ UNKNOWN Perceived impact: ☐ RELATIVELY HIGH ☐ MODERATE ☐ RELATIVELY LOW ☐ NONE ☐ UNKNOWN Source of information / clarification:

e) Longline (shallow or deepset)

nere are Yemeni boats illegal fishing in the waters of the Eritrean Red Sea with a potential negative impact or parine turtles such as egg poaching and flesh feeding. The Eritrean Navy has an active role in monitoring, control and surveillances with heavy penalties on those found breaching the fisheries regulations; for example, boat on fiscation and monetary punishments. Since there are several islands who are an inhabited, there could be ficulties on full control by the Navy and other relevant authorities.  The following methods are used by your country to minimise incidental capture/mortality of marine as in fishing activities? [IND]  **ppropriate handling* of incidentally caught turtles (e.g. resuscitation or release by fishers using equipment as de-hooking, line cutting tools and scoop nets)  **PYES** UNDER INVESTIGATION or NOT APPLICABLE**  **alist/future plans: resuscitation before release is conducted on-board of vessels by industrial fishers but there is no proof that de-hooking, line cutting tools and scoop nets are used in both artisanal and dustrial fishing activities when marine turtles are incidentally caught.  **The first allow the escape of marine turtles** (e.g. turtle excluder devices (TEDs) or other measures are comparable in effectiveness)
ppropriate handling of incidentally caught turtles (e.g. resuscitation or release by fishers using equipment as de-hooking, line cutting tools and scoop nets)  YES
TYES NO UNDER INVESTIGATION or NOT APPLICABLE  rails/future plans: resuscitation before release is conducted on-board of vessels by industrial fishers but are is no proof that de-hooking, line cutting tools and scoop nets are used in both artisanal and lustrial fishing activities when marine turtles are incidentally caught.
rails/future plans: resuscitation before release is conducted on-board of vessels by industrial fishers but ere is no proof that de-hooking, line cutting tools and scoop nets are used in both artisanal and lustrial fishing activities when marine turtles are incidentally caught.
ere is no proof that de-hooking, line cutting tools and scoop nets are used in both artisanal and lustrial fishing activities when marine turtles are incidentally caught.  Previces that allow the escape of marine turtles (e.g. turtle excluder devices (TEDs) or other measure
YES NO UNDER INVESTIGATION or NOT APPLICABLE  rails/future plans: Although it is stated in the fisheries proclamation of 1998, no single application has been conducted on ustrial fishing vessels of both local and foreign except for the experimental trials during the 1994 – 1996.
leasures to avoid encirclement of marine turtles in purse seine fisheries
YES INO UNDER INVESTIGATION or NOT APPLICABLE
rails/future plans: The science of purse seine fisheries in Eritrea is in its early stages of only less than 5 or so years. It much incidental turtle catch are recorded and needs a deeper scale of study and survey on such activities. The ht duty behavior of these fishing activities might hinder the number of incidental catch which is also a blessing for rine turtles.
ppropriate combinations of hook design, type of bait, depth, gear specifications and fishing practices
YES INO UNDER INVESTIGATION or NOT APPLICABLE
t h

e) Monito	ring and recovery of fish aggregating devices (FADs)
□ YES	☐ NO ☐ UNDER INVESTIGATION or NOT APPLICABLE
Details/fut	ure plans: No use of fish aggregating devices (FADs) yet in the Eritrean Red Sea.
f) Net rete	ention and recycling schemes
□ YES	☐ NO ☐ UNDER INVESTIGATION or NOT APPLICABLE
Details/fut	ure plans: Not applicable.
g) <b>Spatia</b> l	and temporal control of fishing (e.g. seasonal closures of fishing activities)
YES	☐ NO ☐ UNDER INVESTIGATION or NOT APPLICABLE
	ure plans: Seasonal closure of industrial fishing activities has been practiced in the Eritrean Red Sea for the past
	des since the implementation of fisheries proclamation 1998. The Proclamation states that Closure season is starts and ends in October of each fishing years.
fishing ver	ure plans: Fishing block systems (13 in total and sub dived into sub-blocks) have been introduced since 2014 and ssels are allocated in specific fishing blocks for a certain time of fishing operation (20 days) with trawling depth of less than 20 meter for shrimp and 30 meter for demersal fishes. Coastal restrictions also plays a big role in these magnificent creatures from being dragged incidentally.
☐ Ot	her (list and explain):
□ No	one of the above
fisheries and morta	the following programmes has your country developed – in consultation with the fishing industry a management organisations – to promote implementation of measures to minimise incidental capt ality of turtles in national waters and in the high seas? Please use the corresponding text boxes arify each of your responses, including 'NOT APPLICABLE' responses, and indicate future plans d. [IND]
	ise the corresponding text boxes to explain/clarify each of your responses, including 'NBLE' responses, and indicate future plans in this regard. [IND]
Please de	escribe the collaboration, when/where the programmes were introduced, any difficulties encounter

available.

and general results obtained (i.e. successful and unsuccessful). Provide references to publications, where

	l observer programmes
■ Y	ES 🗆 NO 🗆 NOT APPLICABLE
assig	Is/future plans: To check the implementation of such rules, at least two observers-on-board and one researcher armond on-board of each vessel; and if marine turtles caught they are recorded on a booklet (logbook) and returned back to ea whether alive or dead.
b) <b>Ve</b>	ssel monitoring systems
■ Y	ES □ NO □ NOT APPLICABLE
	Is/future plans: The VMS is on the process of procurement and implementation stage with a project on fisheries agement with the close collaboration of the Ministry of Marine Resources, National Fisheries Corporation and the Navy.
_	spections (i.e. at sea, in port, at landing sites)
_	
obse	Is/future plans: A booklet for the fish catch and marine turtle by-catch record in each fishing operation is done by the rvers-on-board. Inspectors and quality control officers are always present during landing activities on both fishing portanding sites along the mainland coastal towns or villages.
d) Tra	
	aining programmes / worksnops to educate tisners
	aining programmes / workshops to educate fishers  ES  NO  NOT APPLICABLE
☐ Y	
☐ Y	Is/future plans: Several training programmes organized for fisher folks usually deliver a message of endangered marine
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Detai	Is/future plans: Several training programmes organized for fisher folks usually deliver a message of endangered marine ures especially marine turtles.
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Detail creat	Is/future plans: Several training programmes organized for fisher folks usually deliver a message of endangered marine ures especially marine turtles.  Formative videos, brochures, printed guidelines etc.  FES NO NOT APPLICABLE  Is/future plans: few documentary videos have been produced with aims to promote and conserve marine turtle ervation on National TV and articles on newspapers and brochures.
Detaicreat  e) Inf Y  Detaiconse	Is/future plans: Several training programmes organized for fisher folks usually deliver a message of endangered marine ures especially marine turtles.  Ormative videos, brochures, printed guidelines etc.  IES
Detaicreat  e) Inf Y  Detaiconse	Is/future plans: Several training programmes organized for fisher folks usually deliver a message of endangered marine ures especially marine turtles.  ormative videos, brochures, printed guidelines etc.  ES
Detaicreat  e) Inf Y  Detaicons  Are teffica	Is/future plans: Several training programmes organized for fisher folks usually deliver a message of endangered marine ures especially marine turtles.  ormative videos, brochures, printed guidelines etc.  ES

1.4.7	7 In your country, what types of data collection, research and development have been undertaken to support the reduction of marine turtle incidental catch (while taking into consideration the impact of various mitigation measures on other species)? [SAP]									
	Research on incidental catch on-board of industrial fishing vessels and questionnaire based survey on gill net incidental catch of turtles have been actively conducted by Researchers of Ministry of Marine Resources.									
1.4.8	Has your country exchanged information and provided technical assistance (formally or informally) to other Signatory States to promote the activities described in 1.4.4, 1.4.5 and 1.4.7 above? <b>[SAP]</b>									
	■ YES □ NO □ UNSURE If yes, please give details of the exchanges/technical assistance.									
	Through the publication of articles and news updates on marine turtles, reporting on IOSEA website and participation of marine conservation related workshops Eritrea has been actively sharing its turtle information.									
1.4.9	What legislative and practical measures has your country taken in support of UN General Assembly Resolution 46/215 concerning the moratorium on the use of large-scale driftnets? <b>[SAP</b> ]									
	Large-scale driftnets is not applicable yet in Eritrea but the fisheries proclamation prohibits any gear or practice with adverse effect on marine habitat and animals.									
1.5	Addressing harvest of, and trade in, marine turtles; and protection of habitat									
1.5.1	Does your country have legislation to prohibit direct harvest and domestic trade in marine turtles, their eggs, parts and products; and to protect important turtle habitats? <b>[IND]</b>									
	Please provide details (title/date) of the relevant legislation, as well as any exemptions (e.g. for traditional harvest) under that legislation.									
	■ YES □ NO □ UNSURE									
	Prohibiting direct harvest and domestic trade in marine turtles, their eggs, parts and products; and protection of important turtle habitats are clearly stated in the fisheries proclamation of 1998/2003 with no exemption even to local subsistence use. There could be up to Eritrean Nakfa (ERN) 50,000 fine for those breaching the rules. But due the availability of less alternatives, poor knowledge of conservation and less awareness of people, several cases have been freely dismissed.									

1.5.2 Which, among the following list, are economic uses and cultural values of marine turtles in your country? **[INF]** 

Please rate the relative prevalence / importance of each consumptive or non-consumptive use.

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

USES / VALUES	RTANCE					
Meat consumption	YES	□ NO	□ HIGH	MODERATE	□ LOW	□ UNKNOWN
Egg consumption	YES	□ NO	□ HIGH	☐ MODERATE	LOW	□ UNKNOWN
Shell products	YES	□ NO	□ HIGH	☐ MODERATE	LOW	□ UNKNOWN
Fat consumption	YES	□ NO	□ HIGH	MODERATE	□ LOW	□ UNKNOWN
Traditional medicine	YES	□ NO	☐ HIGH	☐ MODERATE	LOW	□ UNKNOWN
Eco-tourism programmes	☐ YES	■ NO	□ HIGH	☐ MODERATE	□ LOW	□ UNKNOWN
Cultural / traditional significance	☐ YES	■ NO	□ HIGH	☐ MODERATE	□ LOW	UNKNOWN
Other (list and rank):						

1.5.3 Please indicate the relative level and impact of traditional harvest on marine turtles and their eggs.

	[IND, TSH]								
	Level of harvest: ☐ RELATIVELY HIGH	☐ MODERATE	RELATIVELY LOW	□ NONE	□ UNKNOWN				
	Impact of harvest:  ☐ RELATIVELY HIGH	☐ MODERATE	RELATIVELY LOW	□ NONE	□ UNKNOWN				
	Source of information / ex	planation:							
	Report and personal con	nmunication of Ministi	ry of Marine Resources and	E&SIAS.					
1.5.4	.5.4 Have any <b>domestic</b> management programmes been established to limit the levels of intentional harvest?  [SAP]  YES □ NO □ UNKNOWN Use the text box to give details.								
	Awareness programmes	and on field visits.							
1.5.5	.5 Describe any management agreements negotiated between your country and other States in relation to sustainable levels of traditional harvest, to ensure that such harvest does not undermine conservation efforts. [BPR]								
	N/A								
1.6	Minimizing mortality t	hrough nesting b	each programmes						

- 1.6.1 First, tick one of the boxes at left to indicate whether or not your country has any of the following measures in place to minimise the mortality of eggs, hatchlings and nesting females. If yes, then estimate the relative effectiveness of these measures. [IND, SAP]

Use the text boxes below each rating to elaborate on your responses, including any lessons learned that might be of value to other Signatory States, and indicate your plans for the coming year. Please explain any "Not Applicable (N/A)" responses.

# **MEASURES**

# **RELATIVE EFFECTIVENESS**

Мс	Monitoring/protection programmes									
	YES	□ NO	□ N/A	☐ EXCELLE	NT 🗆 GOO	DD LO	OW UNKNOWN			
Ed	Education/awareness programmes									
	YES	□ NO	□ N/A	☐ EXCELLENT	GOOD	□ LOW	□ UNKNOWN			
Eg	g relocat	ion/hatche	ries							
	YES	□ NO	□ N/A	☐ EXCELLENT	□ GOOD	LOW	□ UNKNOWN			
Pre	edator co	ontrol								
	YES	□ NO	□ N/A	☐ EXCELLENT	□ GOOD	□ LOW	□ UNKNOWN			
Ve	hicle / ac	cess restri	ctions							
	YES	□ NO	□ N/A	☐ EXCELLENT	□ GOOD	□ LOW	□ UNKNOWN			
Re	moval of	debris / cl	ean-up							
	YES	□ NO	□ N/A	☐ EXCELLENT	□ GOOD	□ LOW	UNKNOWN			

Re-veg	Re-vegetation of frontal dunes							
☐ YI	ES		NO	□ N/A	☐ EXCELLENT	GOOD	□ LOW	□ UNKNOWN
Buildir	Building location/design regulations							
□ YE	ES		NO	□ N/A	☐ EXCELLENT	□ GOOD	□ LOW	□ UNKNOWN
Light p	oolluti	on re	eductio	on				
□ YE	ES		NO	□ N/A	☐ EXCELLENT	□ GOOD	□ LOW	□ UNKNOWN
□ o	ther (I	ist aı	nd rate	e them)				
Has your country undertaken any evaluation of its nest and beach management programmes? [SAP]								
⊔ YE	S L	<b>■</b> NC	) Ц	NOT APPLI	CABLE Use the to	ext box to ela	borate on yo	our response, if necessary.
Please unpubli				he evaluation	n took place, and p	orovide a ref	erence/conf	tact for any published or

1.6.2

# **OBJECTIVE II: PROTECT, CONSERVE AND REHABILITATE MARINE TURTLE HABITATS**

# 2.1 Measures to protect and conserve marine turtle habitats

2.1.1 What is being done to protect critical habitats *outside* of established protected areas? (NB: It is assumed that legislation relating to established protected areas will have been described in Section 1.5.1) **[BPR, SAP]** 

Examples might include education/awareness programmes, eco-tourism, community participation, cash incentive programmes, environmental awards, legislation etc.

National Action Plan for the Conservation of Marine Turtles in Eritrea was drafted in 2006. Promotion of marine turtle on TV, Newspaper awareness articles and during national festivities and celebrations and legislations of the fisheries proclamation protecting any seagrass/seaweed habitat destruction are some of the examples.

	fisheries proclamation protecting any seagrass/seaweed habitat destruction are some of the examples.
	sessments routinely made of the environmental impact of marine and coastal development on marine turtles eir habitats? [IND, SAP]
	■ YES □ NO □ NOT APPLICABLE Use the text box to elaborate on your response.
	Few of the coastal developments (mining and port construction related) were accompanied by a vast Environmental & Socio-Economic Impact Assessment (E&SEIA) in which surveys on marine turtles and their habitats such as seaweeds and seagrasses were extensively conducted, baseline data collected and potential impact identified and finally mitigation or management plan designed.
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. <b>[SAP]</b> YES  NO  NOT APPLICABLE
	As part of rapid assessment ecological survey the Ministry of Marine Resources is conducting, marine debris are estimated as a scales of 0 to 5; 0 indicating nil while 5 with much number or coverage of coastal marine debris. But surveys on floating marine macro-debris have been recently started. Quality of water are rarely monitored generally but not specifically near nesting beached but most likely their habitats.
2.1.4	Are measures in place to prohibit the use of poisonous chemicals and explosives? [SAP]
	YES □ NO □ NOT APPLICABLE Use the text box to elaborate on your response.
	Use of poisonous chemicals and explosives is extremely offensive and is prohibited from using in the Eritrean Red Sea according to the Eritrean fisheries proclamations and fortunately yet, no uses have been reported both by locals and foreigner fisher-folks.
2.2	Rehabilitation of degraded marine turtle habitats
2.2.1	Are efforts being made to recover degraded coral reefs? If yes, give details (location, duration, effectiveness, lessons learned, future plans etc). [IND, SAP]
	Provide sufficient details of the measures taken, especially those measures shown to have been effective in recovering degraded coral reefs. Please indicate future plans in this regard.
	☐ YES ☐ NO ☐ NOT APPLICABLE (no degraded coral reefs)

2.2.2 Are efforts being made to recover degraded mangrove habitats that are important for turtles? If yes, give details (location, duration, effectiveness, lessons learned, future plans etc.) [IND, SAP]

YES NO NOT APPLICABLE (no mangrove habitats important for turtles)

Details/future plans: The Ministry of Marine Resources through its Mangrove Plantation Programme (former Manzanar Mangrove Initiative) has been planting mangroves mainly Avicenna marina in several locations of the coastal and inland areas. Up-to-date more than 80 hectares of mangrove trees have been planted and more hectares to be followed. Rehabilitation of degraded mangrove forest is also part of the programme with more than 500 hectares to be part of social fencing. Planting halophytes trees are also included with a very few effort.

2.2.3 Are efforts being made to recover degraded sea grass habitats? If yes, give details (location, duration, effectiveness, lessons learned, future plans etc.). [IND, SAP]

YES NO NOT APPLICABLE (no degraded sea grass habitats)

Details/future plans:

Details/future plans: Although degraded coral reef are recorded due to the coral bleaching during hot water temperature and few records of destruction by fishing activities (trawling and anchoring) no efforts or initiatives have been conducted yet. But

several MPAs have been proposed for the general purpose of such measures of conservation.

# 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

3.1.1	Give a list of available literature that includes baseline information from studies carried out in your country or
	marine turtle populations and their habitats. [INF]

- An Update on Eritrea's Marine Turtle Programme and First Record of Olive ridley Turtle nesting in the Red Sea. Piltcher N., Mahmud S., Howe S. A., Teclemariam Y., Weldeyohannes S., Mengistu T. & Goitom M. Marine Turtle Newsletter 111, September 2006.
- 2. Status of Leatherback Turtles in Eritrea. Piltcher N., Mahmud S. & Teclemariam Y. Eritrean Country Report IOSEA Leatherback Turtle Assessment, IOSEA Marine Turtle MoU 2006.
- 3. The incidental capture of sea turtles in industrial shrimp and fish trawlers operating on the waters of the Eritrean Red Sea (1994-2004). Teclemariam Y., Weldeyohannes S., Mengistu T. & Goitom M. Workshop Proceedings of the Incidental Catch of Non-Targeted Marine Species in the Western Indian Ocean: Problems and Mitigation Measures, 13-15 November 2006 Mayotte.
- 4. A Novel Approach to Growing Mangroves on the Coastal Mud Flats of Eritrea with the Potential for Relieving Regional Poverty and Hunger. Sato G., Fisseha A., Gebrekiros S., Abdul Kerim H., Negassi S., Fischer M., Yemane A., Teclemariam Y. & Riley R. Wetlands. Vol. 25. No. 3. September 2005, pp. 776-779.
- Marine Turtle Conservation in the Eritrean Red Sea. Yohannes Mebrahtu, Ministry of Marine Resources, Eritrea. African Sea Turtle Newsletter. No. 4 /2015.
- Marine Turtle Update from the Eritrean Red Sea. Yohannes Teclemariam Mebrahtu, Ministry of Marine Resources, Eritrea. Indian Ocean Turtle Newsletter. No. 18, 2016.
- 7. More than 12 small articles on activity reports in IOSEA Marine Turtle MoU website: ioseaturtles.org

3.1.2	Have <i>long-term</i> monitoring programmes (i.e. of at least 10 years duration) been initiated or planned for priority marine turtle populations frequenting the territory of your country? <b>[IND, BPR]</b>
	☐ YES ☐ NO ☐ UNSURE Please give details of the nature, duration and continuity of these programmes.
	Since the monitoring heavily depends on funding from external sources, there was no regular activities.
3.1.3	Has the genetic identity of marine turtle populations in your country been characterised? [INF, PRI]
	☐ YES ☐ NO ☐ UNSURE Please give details (e.g. which species, which populations?).
3.1.4	Which of the following methods have been or are being used to try to identify migration routes of turtles? Use the text boxes to provide additional details. <b>[INF, PRI]</b>
	a) Tagging YES INO
	Details/future plans: Titanium tags have been applied on the frontal flippers of marine turtles. Mainly Hawksbill with more than 150 individuals tagged and released to their natural habitats. Nesting female turtles were the main target.
	b) Satellite tracking
	Details/future plans:

	Other (list and provide details):
	□ None of the above
3.1.5	Have studies been carried out on marine turtle population dynamics and survival rates (e.g. including studies into the survival rates of incidentally caught and released turtles)? [INF, PRI]
	■ YES □ NO □ UNSURE
	Incidental catch of marine turtles during industrial fish trawling activities have been recorded alongside the fish booklet which are used for secondary data extraction for survival rate studies. Direct observation on-board of those fishing vessels were also part of the study aiming to verify the observer's on-board data from Monitoring, Control and Surveillance activities of the Ministry of Marine Resources.
3.1.6	Has research been conducted on the frequency and pathology of diseases in marine turtles? [INF, PRI]
	☐ YES ☐ NO ☐ UNSURE
3.1.7	Is the use of traditional ecological knowledge in research studies being promoted? [BPR, PRI]
	☐ YES ☐ NO ☐ UNSURE
	Socio-economic studies conducted on coastal and island villages have been always integrated traditional knowledge of marine turtles and other resources, use and customs. Coastal elders are always part of such resource-full studies.
3.2	Collaborative research and monitoring
3.2.1	List any <i>regional</i> or <i>sub-regional action plans</i> in which your country is already participating, which may serve the purpose of identifying priority research and monitoring needs. <b>[INF]</b>
	Use the text box to elaborate on your response.
	Eritrea is participating CBD initiated workshops of identifying regional ecologically sensitive areas for all marine biodiversity aspects (Dubai meeting, 2016) and also for marine mammal (Oman meeting, 2019).
3.2.2	On which of the following themes have <i>collaborative</i> studies and monitoring been conducted? Use the tex boxes to describe the nature of this international collaboration or to clarify your response. Answer 'NO' if the studies/monitoring undertaken do not involve <i>international</i> collaboration. [INF, PRI]
	a) Genetic identity

Details/future plans:			

_	ations	■ NO □ NOT A	PPLICABLE
Detail	s/future plans:		
d) <b>Oth</b> e	er biological and ecolo	gical aspects	☐ YES ■ NO ☐ NOT APPLICABLE
Detail	s/future plans:		
☐ Oth	er (describe)		
Data a	nalysis and applied	research	
List, in		narine turtle populat	ons in your country in need of conservation action
List, in indicate	order of priority, the me their population trends.	narine turtle populat . <b>[PRI]</b>	ons in your country in need of conservation action
List, in indicate	order of priority, the me their population trends.  Green turtles More Olive ridley turtles	narine turtle populat . <b>[PRI]</b>	
List, in indicate	order of priority, the me their population trends.	narine turtle populat . <b>[PRI]</b>	
List, in indicate	order of priority, the metheir population trends.  Green turtles More Olive ridley turtles Loggerhead turtles Leatherback turtles	narine turtle populat . [PRI] e consumed for its me	
List, in indicate	order of priority, the metheir population trends.  Green turtles More Olive ridley turtles Loggerhead turtles Leatherback turtles Hawksbill turtles rehigher population of research	narine turtle populat . [PRI] e consumed for its me	eat and eggs, and for its medicinal use
List, in indicate	order of priority, the metheir population trends.  Green turtles More Olive ridley turtles Loggerhead turtles Leatherback turtles Hawksbill turtles re	narine turtle populat . [PRI] e consumed for its me	eat and eggs, and for its medicinal use
List, in indicate	order of priority, the metheir population trends.  Green turtles More Olive ridley turtles Loggerhead turtles Leatherback turtles Hawksbill turtles rehigher population of repulation trend studies co	narine turtle populat . [PRI] e consumed for its me elatively moderately conesting females. anducted yet.	eat and eggs, and for its medicinal use

3.3.3	Describe how research results are being applied to improve management practices and mitigation of threats (in relation to the priority populations identified in 3.3.1, among others). <b>[SAP]</b>
	Incidental catch are used estimate the destruction by fisheries activity and areas with much incidental catch are temporally avoided for further trawling. Nesting activities of few sites are compared in different years for any population change.
3.4 lr	oformation exchange
3.4.1	Has your country undertaken any initiatives (nationally or through collaboration with other Range States) to standardise methods and levels of data collection? <b>[BPR, INF]</b>
	☐ YES ☐ NO ☐ UNSURE If yes, please give details of the agreed protocol(s).
	Nationally yes, turtle study data collection forms are usually standardized using references of literatures from PERSGA & other countries.
3.4.2	To what extent does your country exchange scientific and technical information and expertise with other Range States? [SAP, IND]  □ OFTEN (SYSTEMATICALLY) □ OCCASIONALLY □ RARELY □ NEVER
3.4.3	If your country shares scientific and technical information and expertise with other Range States, what mechanisms have commonly been used for this purpose? Comment on any positive benefits/outcomes achieved through these interactions. <b>[INF]</b>
	Our main way of information exchange is mainly through IOSEA. Technical assistance with the support of projects helps us to broaden our expertise on marine turtle research and surveys.
3.4.4	Does your country compile and make available to other countries data on marine turtle populations of a regional interest?
	☐ YES ☐ NO ☐ UNSURE Please give details. [INF]
	Yes, again mostly through IOSEA National Reports and event articles; as well as scientific articles have been published in different marine turtle related newsletters such as African Sea Turtle Newsletter, Indian Ocean Newsletter and Marine Turtle Newsletter.

# 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

4.1.1 Describe the educational materials, including mass media information programmes that your country has collected, developed and/or disseminated. [INF, PRI]

Details/future plans: several articles on margarine turtles have been published in the National Newspaper 'Hadas Eritrea' both in Tigrinya and Arabic languages. Bi-weekly TV programmes mainly targeting on marine conservation have included interviews and documentaries on related issues of turtle conservation. National Radio program have been broadcasting marine conservation related subjects. Posters and brochure have been exposed in different occasion of national and zonal level during different national events such as February 8 – 10 Fenkil Military Operation Event in Northern Eritrean Red Sea Region, May 24th Independence Day of National level and National Eritrean Festival Week each year in August for two weeks in the capital. During the Festival, Ministry of Marine Resources, Northern Red Sea Regional Administration and Southern Red Sea Regional Administration promotes on marine turtle conservation issues with live and staffed turtle specimens. In addition to that the Northern Red Sea Regional Administration puts marine turtle as its regional logo posted on caps, T-shirts and big posters/banners.

	Region, May 24 <sup>th</sup> Independence Day of National level and National Eritrean Festival Week each year in August for two weeks in the capital. During the Festival, Ministry of Marine Resources, Northern Red Sea Regional Administration and Southern Red Sea Regional Administration promotes on marine turtle conservation issues with live and staffed turtle specimens. In addition to that the Northern Red Sea Regional Administration puts marine turtle as its regional logo posted on caps, T-shirts and big posters/banners.
4.1.2	Which of the following groups have been the targets of these focused education and awareness programmes described in above in Section 4.1.1? <b>[PRI, INF]</b>
	Policy makers Fishing industry Local/Fishing communities Indigenous groups Tourists Media Teachers Students Military, Navy, Police Scientists Other (describe):  None of the above  Please give further details:
	A free boat ride to a one mile far island (Sheikh Said Island) marine environment awareness programme have been introduced by the Marine Research Division of the Ministry of Marine Resources with a full awareness explanation and practical exercise on swimming and snorkelling activities on coral reef areas. The programme was introduced in 2014 and up to now more than 1,000 people from different part of the country have been participated.
4.1.3	Have any community learning / information centres been established in your country? [BPR, SAP]  YES  NO Please give details and indicate future plans.
	Massawa Digital Marine Library at Massawa, Northern Red Sea with audio-visual and poster presentations established in 2015. A Sea Turtle Club by the name 'Bisa' was also established by the National Union of Eritrean Youth and Students (NUEYS) with the financial support of the Ministry of Marine Resources.

## 4.2 Alternative livelihood opportunities

Describe initiatives already undertaken or planned to identify and facilitate alternative livelihoods (including incomegenerating activities) for local communities. [IND, BPR]

New Projects from FAO and IFAD have emerged recently with components on alternative income generating activities such as fish processing and net making. Mangrove planting initiative with a potential income on from the raising of animals with production of milk and meat could be also an alternative way to shift the exploitation of ages and meat.

## 4.3 Stakeholder participation

4.3.1 Describe initiatives already undertaken or planned by your country to involve *local communities*, in particular, in the planning and implementation of marine turtle conservation programmes. Please include details of any incentives that have been used to encourage public participation, and indicate their efficacy. **[BPR, IND]** 

A small grant from Global Environmental Facility (GEF Small Programme) have initiated a marine turtle conservation in an Island called Dessei with the support of the Ministry of Marine Resources. But the initiative was unsuccessful as it was missing several important elements of sustainability.

4.3.2 Describe initiatives already undertaken or planned to involve and encourage the cooperation of **Government** *institutions*, **NGOs** and the *private sector* in marine turtle conservation programmes. **[IND, BPR]** 

All relevant institution, local communities and local CBOs are involved in any projects related to marine and coastal activities. Local Government with the Regional Administration, the Navy, Local fishermen/villagers, local organizations such as National Union of Eritrean youth and Students (NUEYS) and National Union of Eritrean Women (NUEW) are usually involved.

# OBJECTIVE V: ENHANCE NATIONAL, REGIONAL AND INTERNATIONAL COOPERATION

5.1	Collaboration with, and assistance to, signatory and non-signatory States
5.1.1	Has your country undertaken a national review of its compliance with the Convention on International Trade in Endangered Species (CITES) obligations in relation to marine turtles? <b>[SAP]</b>
	■ YES □ NO □ NOT APPLICABLE If yes, please elaborate briefly.
	The Ministry of Agriculture are the focal point for CITES and follow the compliance involving key stakeholders such as Ministry of Marine Resources.
5.1.2	Does your country have, or participate/cooperate in, CITES training programmes for relevant authorities? [SAP]
	■ YES □ NO □ NOT APPLICABLE
	If yes, please provide details of these training programmes.
	But the information can be found more from the Ministry of Agriculture. The Forestry & Wildlife Authority might have a lion's share for such related activities.
5.1.3	Does your country have in place mechanisms to identify <i>international</i> illegal trade routes (for marine turtle products etc.)? Please use the text box to elaborate on how your country is cooperating with other States to prevent/deter/eliminate illegal trade. <b>[SAP]</b> Please give details of particularly successful interventions and prosecutions; and/or mention any difficulties experienced that impede progress in this area. Please provide references to any published reports (e.g. already prepared for CITES purposes) that give a more ample explanation.
	☐ YES ☐ NO ☐ NOT APPLICABLE
5.1.4	Which international compliance and trade issues related to marine turtles has your country raised for discussion (e.g. through the IOSEA MoU Secretariat, at meetings of Signatory States etc.)? [INF]
5.1.5	Describe measures in place to prevent, deter and eliminate <i>domestic</i> illegal trade in marine turtle products particularly with a view to enforcing the legislation identified in Section 1.5.1. <b>[INF]</b>
	The Fisheries Proclamation prohibits illegal use of marine turtles and their products with offence more than ER NKF 50,000 (Eritrean Currency Nakfa). The penalty could range to 6 months imprisonment if not paid in cash.

#### 5.2 Prioritisation, development and implementation of national action plans

5.2.1	Has your country already developed a national <b>action plan</b> or a set of <b>key management measures</b> that could eventually serve as a basis for a more specific action plan at a national level? <b>[IND]</b>					
	YES	□NO	Please explain.			
			ervation of Marine Turtles was drafted in 2006 but have not been properly veral elements of the NAP have been practiced unofficially.			

5.2.2 From your country's perspective, which **conservation and management activities**, and/or which particular **sites or locations**, ought to be among the highest priorities for action?

(List up to 10 activities from the IOSEA Conservation and Management Plan). [PRI]

- Establish baseline data collection and monitoring programmes to gather information on the nature and magnitude of threats
- ❖ Determine the cultural and traditional values and economic uses of marine turtles (both consumptive and non-consumptive)
- Enhance recovery of degraded mangrove and seagrass habitats
- Identify migratory routes through the use of tagging, genetic studies and/or satellite tracking
- Identify, prevent, deter and, where possible, eliminate domestic illegal trade through monitoring, implementation of legislation, identification of gaps in enforcement capabilities in each country, and training of enforcement officers
- Conduct collaborative studies and monitoring on genetic identity, conservation status, migrations, and other biological and ecological aspects of marine turtles
- Identify desired modifications to the economic incentives in order to reduce threats and mortality, and develop programmes to implement the modifications
- Develop procedures and training programmes to promote implementation of these measures, such as vessel monitoring systems and inspections at sea, in port and at landing sites, and national onboard observer programmes
- Identify needs for capacity-building in terms of human resources, knowledge and facilities
- ❖ Develop a website and/or newsletter to facilitate networking and exchange of information
- Identify and facilitate alternative livelihoods (including income generating activities) that are not detrimental to marine turtles and their habitats, in consultation with local communities and other stakeholders
- Initiate and/or continue long-term monitoring of priority marine turtle populations in order to assess conservation status
- Encourage the incorporation of marine turtle biology and conservation issues into school curricula
- Organise special events related to marine turtle conservation and biology (e.g. Turtle Day, Year of the Turtle, symposia, Track-a-turtle)
- Prioritise conservation and management activities for funding
- Explore funding options with Governments and other donors such as the Asian Development Bank, World Bank, UNDP, European Union, UNEP, GEF, etc.
- Establish relationships with regional fisheries bodies with a view to obtaining data on incidental capture and encourage them to adopt marine turtle conservation measures within EEZs and on the high seas
- Involve stakeholders, and local communities in particular, in planning and implementation of conservation and management measures
- Identify and strengthen existing mechanisms for cooperation at the sub-regional level
- Cooperate where possible in the establishment of transboundary marine protected areas using ecological rather than political boundaries
- Develop partnerships with universities, research institutions, training bodies and other relevant organisations
- Arrange sub-regional workshops involving non-signatory States to raise awareness of the MoU

5.2.3	3 Please indicate, from your country's standpoint, the extent to which the following <i>local</i> management issues require <i>international</i> cooperation in order to achieve progress. [PRI]					
	In other words, how important is <i>international</i> cooperation for addressing these issues?					
	Illegal fishing in territorial waters Incidental capture by foreign fleets Enforcement/patrolling of territorial waters Hunting/harvest by neighboring countries Poaching, illegal trade in turtle products Development of gear technology Oil spills, pollution, marine debris Training / capacity-building Alternative livelihood development Identification of turtle populations Identification of migration routes Tagging / satellite tracking Habitat studies Genetics studies  Use the text box to list and rank any other	□ ESSENTIAL	IMPORTANT	LIMITED	NOT AT ALL	
<b>5.3</b> 5.3.1	Cooperation and information exchange Identify existing frameworks/organisations that turtle conservation at the sub-regional level capacity to take on a broader coordinating rot turtle conservation. [INF, BPR]	at are, or could be, u l. Please comment c	on the strengths of	f these instrum	nents, their	
	National Union of Eritrean youth and Stude have a key role and with the coordination of Administration a better conservation efforts co	f the Ministry of Marin		<u>.</u>	•	
5.3.2	Has your country developed, or is it participat populations? [BPR, INF]  YES NO NOT APPLICABLE		·	nagement of sl	nared turtle	

5.3.3 What steps has your country taken to encourage Regional Fishery Bodies (RFBs) to adopt marine turtle

interventions made in this regard, referring to specific RFBs. <b>[SAP]</b>						
N/A						

conservation measures within Exclusive Economic Zones (EEZs) and on the high seas? Please describe the

# 5.4 Capacity-building

5.4.1 Describe your country's needs, in terms of human resources, knowledge and facilities, in order to build capacity to strengthen marine turtle conservation measures. **[PRI]** 

Capacity building one of the most important issues. The marine turtle conservation experts in Eritrea could deal with nesting, egg counting, hatching success and incidental catch surveys and researches. But activities such as community based conservation, alternative livelihood development, incidental catch reduction (TEDs) and migration and genetic studies some of the important ones to deal with the Eritrean case.

5.4.2	Describe any training provided in marine turtle conservation and management techniques (e.g. workshops held, training manuals produced etc.), and indicate your plans for the coming year. <b>[PRI, INF]</b>						
	The first door opening training and workshop was provided by Dr. Nicholas Piltcher in 2005. After that all trainings and workshops and practical exercise were conducted by local experts such as Yohannes Teclemariam Mebrahtu, Mahta Goitom and Tekle Mengstu. Routine in-house training is regularly delivered to newly recruited staff every years but no major plan have been indicated yet certainly due to material and funding problems						
5.4.3	Specifically in relation to <b>capacity-building</b> , describe any partnerships developed or planned with universities research institutions, training bodies and other relevant organisations. <b>[BPR]</b>						
	No relations built but locally the Research Division and the Hirgigo Fisheries Training Centre have been mainly involved.						
5.5	Enforcement of conservation legislation						
5.5.1	National policies and laws concerning the conservation of marine turtles and their habitats will have been described in Section 1.5.1. Please indicate their effectiveness, in terms of their practical application and enforcement. <b>[SAP, TSH]</b>						
	The Fisheries Proclamation have been in place since 1998 but still enforcement is very weak due to less integration of the offences of the proclamation in to the public laws and legislations. And due to the less alternative livelihood provision excuses mainly oppress the legal application of such proclamtions.						
5.5.2	Has your country conducted a review of policies and laws to address any gaps, inconsistencies of impediments in relation to marine turtle conservation? If not, indicate any obstacles encountered in this regard and when this review is expected to be done. <b>[SAP]</b>						
	☐ YES ☐ NO ☐ UNSURE Please give details.						
	The country was under economic sanction for more than two decades which also hinder conservation related projects to deal with the countries issues, The countries priority was also full-fledged winded to the major goal: country defending which is now coming to a normalized situation and things getting better.						
5.5.3	From the standpoint of law enforcement, has your country experienced any difficulties achieving cooperation to ensure compatible application of laws across and between jurisdictions? <b>[TSH]</b>						
	☐ YES ☐ NO ☐ UNSURE Please give details.						

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

6.1	IOSEA Marine Turtle MoU membership and activities							
6.1.1	What has your country already done, or will it do, to encourage other States to sign the IOSEA MoU? <b>[INF]</b>							
	Eritrea's role as a country of Red Sea could encourage counties to join the MoU by providing exemplary scientific data sharing and collaboration of expertise.							
6.1.2	Is your country <i>currently</i> favourable, in principle, to amending the MoU to make it a legally binding instrument? <b>[INF]</b>							
	■ YES □ NO □ NO VIEW							
6.1.3	Would your country be favourable, over a <i>longer time horizon</i> , to amending the MoU to make it a legally binding instrument? <b>[INF]</b>							
	■ YES □ NO □ NO VIEW Use the text box to elaborate on your response, if necessary.							
6.2	Secretariat and Advisory Committee							
V	What efforts has your country made, or can it make, to secure funding to support the core operations of the IOSEA MoU (Secretariat and Advisory Committee, and related activities)? [IND]							
	The Ministry of Marine Resources have provided the Ministry of Finance the regular contribution invoice and hopefully it will be paid in the near future.							
6.3	Resources to support implementation of the MoU							
6.3.1	What funding has your country mobilised for <i>domestic</i> implementation of marine turtle conservation activities related to the IOSEA Marine Turtle MoU? Where possible, indicate the specific monetary values attached to these activities/programmes, as well as future plans. <b>[IND]</b>							
	Only nesting survey and tagging activities have been funded by the Ministry of Marine Resources.							
6.3.2	Has your country tried to solicit funds from, or seek partnerships with, other Governments, major dono organisations, industry, private sector, foundations or NGOs for marine turtle conservation activities? <b>[IND]</b>							
	☐ YES ☐ NO If yes, give details of the approaches made (both successful and unsuccessful).							

6.3.3		-	ives made to explo itats. <b>[BPR]</b>	ore the use	of economic instru	ments for the co	nservation of mari	ne
	N/A yet							
6.4 C	coordinatio	n amon	g government a	gencies				
6.4.1		jement p			nsible for coordinati rmation expected to			
	☐ YES		)	Ple	ase elaborate, as ne	cessary.		
	communic	cated or	not. Recently the De	partment of	Resources has been to Marine Research & Marine Research & Munication with IOSEA	Human Resource	s Development of	
6.4.2			sponsibilities of all neir habitats clearly		agencies related to	the conservation	and management	0
	☐ YES	□NO	UNSURE	Use	e the text box to elaborate	orate.		
	Draft The	National	Action Plan states ev	very role of k	ey stakeholders but n	eed updating.		
6.4.3	-	-	er conducted a revi	-	cy roles and respons and when? <b>[SAP]</b>	ibilities? If so, wh	en, and what was t	he
	☐ YES	<b>□</b> NO	□UNSURE	Use	e the text box to elab	orate.		
role to		ne turtle	conservation, either		made a serious exa ndirectly, and which			
					es has been or will be ear and not in need o		ase elaborate if onl	<b>/</b>
			ties and responsibil t quarter of 2020.	ities have t	peen revised for suc	h purposes but	recently could be	

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

Feel free to include additional information not covered above:

# ANNEX 1: SPECIES, HABITAT AND THREAT DATA [PRI, INF]

PLEASE COMPLETE A SEPARATE SHEET FOR EACH SITE (COPY AND APPEND)

Name of site/area: Mojei	di	Province / State: Northern Red Sea				
Geographic Coordinates	Degree	Minute	Second	Name of person / agency who has provided the information:		
Select: North ☐ South ☐	15°N 30'		15.1"	Research Division, Ministry of Marine Resources		
	40°	51'	19.4"E	Information was last updated: (dd/mm/2008)		
On-site research activities: ☐ Tagging ☐ Genetic sampling ☐ Satellite tracking ☐ Foraging surveys						
Short description of the site (	optional) – e	esary:				

# Indicate the species occurrence / use and relative importance of the site:

Species / Habitat type	CC Loggerhead	LO Olive ridley	CM Green	EI Hawksbill	DC Leatherback	ND Flatback
Nesting			✓	√ H h		
Feeding	<b>✓</b>	<b>✓</b>	<b>√</b> H	<b>√</b> H	<b>√</b>	
Developmental						

Abbreviations: Loggerhead Caretta caretta (CC); Olive Ridley Lepidochelys olivacea (LO); Green Chelonia mydas CM); Hawksbill Eretmochelys imbricata (EI); Leatherback Dermochelys coriacea (DC); Flatback Natator depressus (ND)

Use one of the following symbols or letters to indicate the presence or absence of a species at this site in the table above, including details (if known) about the relative importance of the site for nesting, feeding or development

	Insufficient information is available on the presence or absence of the species (leave box empty)
	The species is <b>not present</b> or does not use this particular habitat type at this site.
?	It is speculated (only) that the species is present at this site and may be using one or more particular habitat types. In the absence of definitive information, place a? in the appropriate box(es).
✓	The species is definitely <b>known to be present</b> at this site; however no information is available on the relative importance of the site for nesting, feeding or development.
<b>√</b> H	The species is known to be present at this site and definitely uses this particular habitat. The site is considered to be of high <b>importance</b> for this species, relative to other sites in the country.
✓ A	The species is known to be present at this site and definitely uses this particular habitat. The site is considered to be of average <b>importance</b> for this species, relative to other sites in the country.
√ L	The species is known to be present at this site and definitely uses this particular habitat. The site is considered to be of lower <b>importance</b> for this species, relative to other sites in the country.
a - h	Additional information on nesting habitat (where available):  Indicate the estimated number of nests per year for each species by inserting, in the appropriate boxes, one of the letters 'a' through 'f', 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; <b>h</b> : more than 100,000 nests
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# Describe the nature and intensity of threats to marine turtles at this site:

	INTENSITY OF THREAT Mark with an 'X'				
NATURE OF THREAT	Unknown	None	Low	Medium	High
			(rare event)		(common occurrence)
Exploitation of nesting females (i.e. direct harvest on land)					Х
Direct harvest of animals in coastal waters at or near the site				Х	
Egg collection (i.e. direct harvest by humans)				Х	
Incidental capture in coastal fisheries			Х		
Boat strikes			Х		
Marine debris (e.g. plastics at sea, flotsam)	Х				
Industrial effluent			Х		
Inshore oil pollution			Х		
Agricultural/urban/tourism development (e.g. construction that disrupts nesting activities)			Х		
Artificial lighting (on land or near shore)			Х		
Habitat degradation (e.g. coastal erosion, debris that obstructs nesting etc.)			Х		
Vehicles		Х			
Sand mining / removal		Х			
Natural threats, disease, predation of nests/nesting females (e.g. by domestic / feral animals), or natural predation at sea	Х				
Other (type in):					

# What measures have been introduced to remove threats to marine turtles at this site?

	Monitoring / protection programmes					
	Education / awareness programmes					
	Egg relocation / hatcheries					
	Requirements for modification of fishing gear or fishing practices (e.g seasonal or temporal closures)					
	Designation / management of protected areas, sanctuaries, exclusion zones etc.					
	Regulations on building location / design					
	Regulations on artificial lighting					
	Vehicle / access restrictions					
	Removal of debris / beach clean-up					
	Predator control					
	Other 1 (list)					
	Other 2 (list)					
Ple	ase give further details or clarification about any of the information provided, as appropriate / necessary.					