

CMS

IOSEA Marine Turtles Memorandum of Understanding - National Report 2024

INSTRUCTIONS FOR COMPLETING THE NATIONAL REPORTING QUETIONNAIRE:

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

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

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

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

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

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

GENERAL INFORMATION

Signatory State:

>>> Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation, Government of the Union of Myanmar

List any other agencies, institutions, or NGOs that have provided input: >>> Forest Department, Ministry of Environental Conservation Forest (MOECAF) Myanmar Programme Fauna and Flora International (FFI), Myanmar Programme, Marine Science Department, University

Memorandum in effect in Signatory State since (dd/mm/yyyy): >>> (01/09/2001)

This report was last modified: (dd/mm/yyyy): >>> 5/2/2024

Designated Focal Point (and full contact details):

>>> Ms. (Daw) Thida Moe, Deputy Director, Department of Fisheries, Ministry of Agriculture, Livestock and Irrigation,

The Republic of the Union of Myanmar

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Other relevant contacts:

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The Republic of the Union of Myanmar

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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.

Geographic area	Type of habitat (nesting, feeding developmental)?	Species, genetic stock	Number of egg clutches per year	Population trend (increase, decrease, stable, unknown)
decrease from average clutches 233 to 86 from during 1986 to 2023	86 (2013-2023)	Green Turtle		Thamee Hla Island
decrease	8	Green Turtle		Long Lone Boke Island
decrease	Total 332 clutches in 1999 to 7 clutches in 2023	Olive Riddley Turtle		Bogalay Township

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

☑ NO

You have attached the following documents to this answer.

Turtle Nest.xlsx

Name of database:

- >>> When Myanmar Scientist attend to the regional workshop, they submit the data to SEAFDEC.
- c) Does your country have index nesting beaches in the IOSEA region? $\hfill \square$ $\hfill \hfill \hfi$
- d) Does your country have an IOSEA Network site?

You have attached the following documents to this answer.

(2) IOSEA Site Network-Thameehla Island Myanmar-revised 31 August 2016.pdf

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

1.1 BEST PRACTICE APPROACHES TO MINMIZING 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 secretarat at iosea@un.org

Title of best practice protocol or approach	What does this approach/ protocol help to achieve	Has the effectiveness of this approach been evaluated? What was the result?	References and links
		reduce bycatch for sea turtle	Public awareness, participation of local people especially fisheries communities, even environmental education
	About 0.6 million of Green Turtle hatchling released from 1986 to 2023	enhance the turtle resource	Egg protection and hatching
	-	escape the Turtle	Using Turtle Excluder Devices (TEDs) in trawler

1.2 REDUCTION OF INCIDENTAL CAPTURE AND MORTALITY

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

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

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

- 1) Bottoms trawls (including shrimp trawls)
- a) Fishing effort:

☑ PRESENT

Please provide the information below:

Number of vessels: >>> 1436 nos in 2021

Boat size (range or average): >>> average GRT is 135 and average HP is 458

Number of trips per year:

>>> arround 5 trip (Myanamr Government allow 60 days per trip to catch fish for off shore fishing vessels.

Mesh size used:

>>> 1.5 inches

If known, turtle species affected:

>>> Unknown

Number of bycaught turtles per year:

>>> Unknown

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)

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

You have attached the following documents to this answer.

<u>Dof notification 3 2022 ClosedSeason.pdf</u> - Closed Season for 2022 (April to June)

Dof noti 6 2018 TEDs.pdf - TED (to sue TED for shrimp trawl)

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

>>> Myanmar Marine Fisheries Law (1990), Article (23): The Director General may, for the purpose of carrying out the fishery systematically, and for the conservation and protection of the fish, issue conditions, prohibitions, orders, and directives relating to fishery.

You have attached the following documents to this answer.

<u>DoF Noti 3 2020 SeaTurtle Conservation.PDF</u> - To Conserve Sea Turtles

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

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

You have attached the following documents to this answer.

<u>Dof Noti 5 2020 VMS Vessel Owner Directive.pdf</u> - Rule on Vessels owner with lelated VMS used <u>Dof Noti 5 2018 VMS Directive.pdf</u> - To install VMS in off shore fishing vessels

Vessel monitoring systems

The measure is mandatory under the following regulation:

>>> Myanmar Marine Fisheries Law (1990), Article (23): The Director General may, for the purpose of carrying out the fishery systematically, and for the conservation and protection of the fish, issue conditions, prohibitions, orders, and directives relating to fishery.

2) Pelagic trawling

a) Fishing effort:

☑ UNKNOWN

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)

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

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

☑ Vessel monitoring systems

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

3) Set nets

a) Fishing effort:

4) Driftnet

a) Fishing effort

☑ PRESENT

Please provide the information below:

Number of vessels:

>>> 370 nos in 2021

Boat size (range or average):

>>> average HP 130 (20 to 700), sd=86

Number of trips per year:

>>> Arround 5 trips (Government allow to catch 60 days per trip)

Mesh size used:

>>> 4 inches

If known, turtle species affected:

>>> unknown

Number of bycaught turtles per year:

>>> unknown

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

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

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

☑ Vessel monitoring systems

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

5) Purse seine (with or without FADs)

a) Fishing effort

✓ PRESENT

Please provide the information below:

Number of vessels:

>>> 315 nos in 2021

Boat size (range or average):

>>> average GRT 82 (40 -217), sd=57 and average HP 323 (45-820), sd=188

Number of trips per year:

>>> Arround 5 trips (Government allow to catch 60 days per trip)

>>> 2 inches If known, turtle species affected: >>> Unknown Number of bycaught turtles per year: >>> Unknown b) Methods used by your country to minimise bycatch of marine turtles in this fishery ☑ Spatial and temporal control of fishing (e.g. seasonal closures of fishing activities) c) Programmes to promote implementation of measures to minimise bycatch of turtles. Please tick the boxes that apply in your country and provide details in the text boxes below. ☑ Vessel monitoring systems ☑ Training programmes / workshops to train fishers on the use of bycatch reduction methods 6) longline a) Fishing effort ✓ PRESENT Please provide the information below: Number of vessels: >>> 7 nos Boat size (range or average): >>> average 35 GRT Number of trips per year: >>> Arround 5 trips Mesh size used: If known, turtle species affected: >>> Unknown Number of bycaught turtles per year: >>> Unknown b) Methods used by your country to minimise bycatch of marine turtles in this fishery ☑ Spatial and temporal control of fishing (e.g. seasonal closures of fishing activities) c) Programmes to promote implementation of measures to minimise bycatch of turtles. Please tick the boxes that apply in your country and provide details in the text boxes below. ☑ Vessel monitoring systems ☑ Training programmes / workshops to train fishers on the use of bycatch reduction methods 7) Artisanal fishing gear a) Fishing effort

Mesh size used:

□ PRESENT

Please provide any available information below:

Number of vessels:
>>> 11239
Boat size (range or average):
>>> less than GRT (5) and 50 HP
Number of trips per year: >>> Unknown (Artisanal fishing vessel are always catch one trip per day or night near the shore which inshore are.
If known, turtle species affected:
>>> Unknown
Number of bycaught turtles per year:
>>> Unknown
b) Methods used by your country to minimise bycatch of marine turtles in this fishery ☑ Spatial and temporal control of fishing (e.g. seasonal closures of fishing activities)
c) Programmes to promote implementation of measures to minimise bycatch of turtles. Please tick the boxes that apply in your country and provide details in the text boxes below. ☐ Training programmes / workshops to train fishers on the use of bycatch reduction methods
8) Other types of fisheries
Type of description:
>>> Trap
a) Fishing effort
☑ PRESENT
Please provide any available information below:
Number of vessels:
>>> 102 nos in 2021
Boat size (range or average):
>>> average GRT (90) and HP (230)
Number of trips per year:
>>> Arround 5 trips
Mesh size used:
>>> -
If known, turtle species affected:
>>> Unknown
If known, turtle species affected:
>>> Unknown

Number of bycaught turtles per year:

>>> Unknown

- b) Methods used by your country to minimise bycatch of marine turtles in this fishery
- ☑ Spatial and temporal control of fishing (e.g. seasonal closures of fishing activities)
- ☑ Technical expertise to enhance conservation or management at the site
- 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
- ☑ Training programmes / workshops to train fishers on the use of bycatch reduction methods
- 1.2.2 Provide sources of information supporting the responses in 1.2.1, 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 digital files to this report.

References and links:

>>> Fisheries Statistic 20221

You have attached the following documents to this answer.

Fisheries Statistic Year book 2021-1.pdf

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

☑ NO

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

☑ NO

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

☑ YES

1.3 ADDRESSING HARVEST OF, AND TRADE IN, MARINE TURTLES

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

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

 $\ \ \square$ NO

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

⋈ NO

b) Egg consumption

☑ YES

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

c) Fat and oil consumption

☑ NO

d) Traditional medicine

☑ NO

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e	. 3	п	e	ı	ı

☑ NO

f) Making of tortoise shell products (bekko)

☑ UNKNOWN

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: >>> Egg

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 secretarat at iosea@un.org

Legislation title	Legislation date	Is traditional use allowed under this legislation?	Is the legislation enforced?	What are the challenges?
	Yes	No	24-2-1993 and 3-6- 2020	
	·			

You have attached the following documents to this answer.

DoF Noti 3 2020 SeaTurtle Conservation.PDF

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.

a) Please provide the regulation, which allows traditional harvest of marine turtles in your country.

Details: >>> No

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

f) Where does traditional harvest occur, and which species are affected?

Details:

>>> Unknown

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?

☑ NO

1.3.7 Which of the following adverse economic incentives are encouraging illegal take of marine turtles in your country?

☑ Lack of patrolling and enforcement at nesting beaches and nearshore areas

1.3.13 Has you 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. \square NO

OBJECTIVE II: PROTECT, CONSERVE AND RESTORE MARINE TURTLE HABITATS

2.1 MEASURES TO PROTECT AND CONSERVE MARINE TURTLE HABITATS

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

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

Details:

>>> Thamee Hla (Diamond) Island was established Marine Protected Area to conserve Marine Turtle and their habitats.

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

Details:

>>> There are many islands where sea turtles lay their eggs in Myanmar, although they have not been designated as Marine Protected Area (MPA), but they are being protected and conserved Marine Turtle and their habitats as MPA. (Kadon Gani Island, Gayet Gyi Island, Coco Island, and Nanthar Island). Among these islands, some islands and marine areas are being piloted to be designated as MPAs (Nanthar Island).

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. \square YES

Details:

>>> In Myanmar, environmental degradation is still minimal and DoF staff has monitored water quality near turtle habitats only in Aveyarwady Division. But not scientifically. There are eight major ports in Myanmar coastal areas, namely Sittwe, Than Dwe, Kyauk Phyu, Yangon, Mawlamyaing, Dawei, Myeik and Kawthoung, Ports and shipping operations are inherently hazardous to the marine environment. Fortunately, there has been no significant pollution incident recorded at these ports. One deep sea port is being constructed at Dawei Districti in Taninthayi Region The port is only 20 miles far from Longlone Bok Marine Turtle Island. Major marine sources of pollution include ship-borne pollution and land based pollution. Land-based pollutants originate from municipal, agricultural and industrial activities. Hence, major land-based sources of pollution are domestic sewage, solid wastes, agricultural wastes, and industrial effluents and wastes. Under normal operations, most cargo and oil/gas ports are not major sources of pollution. Fishing ports exist in every coastal area and they are usually near to major urban areas, thus making it difficult to separate the contribution from the two sources. There are probably over 23,000 fishing boats of various sizes registered and being operated in Myanmar coastal waters. All of the discharged oil is believed to be discharged into the sea. In addition, leaks and spills of fuel (diesel) oil during filling and transfer occur but amount cannot be estimated. Marine accidents, although still low in frequency, could release significant amounts of oil into the sea. However, no data are currently being collected to accurately assess the impact of oil pollution on the marine and coastal environment and its living resources.

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:

>>> Myanmar Marine Fisheries Law (1990) Chapter I -Title and Definition: - Section 2 (g)- Fish mean all Aquatic organisms spending the whole of or a part of their life cycles in the water, their spawns, larvae, fry and seeds. This expression also includes aquatic plants, their seedlings and seeds; - Section 2 (r)- Marine Products means fishes obtained from the sea, aquatic organisms, there excreta, scales, bones, skins, plants, non -living things. This expression also includes marine turtle and eggs, crocodile and eggs, crab, ambergris, oyster shell, clam shell, mussel, coral, sea sponge, sea weed, moss, algae etcetera; Chapter XI - Prohibition: - Section 38- No person shall keep on board the fishing vessel, explosive substances, poisons, chemicals and such other

dangerous substances not permitted for use in fishing. - Section 39- No person shall dispose of living aquatic creatures or any material into the Myanmar Fisheries Water to cause pollution of water or to harass fishes and other marine organisms.

- No person shall search for and collect any marine products without license. Chapter XII- Offences and Penalties; - Section 45-Whoever is found guilty of violating any of the provisions of section 39 and 40, shall be liable to be punished with fine which may extend to kyats 10,000 or with imprisonment which may extend to 1 year or with both. - Section 47- Whoever is found guilty of violating any of the provisions of section 38 shall be liable to be punished with fine which may extend to kyats 50,000 or with imprisonment which may extend to 3 year or with both. Law Amending The Myanmar Marine Fisheries Law (1993) No. 4- Section 44 to 49 of the Myanmar Marine Fisheries Law shall be substituted by the following Sections: - Section 44- Whoever violate any provision of Section 40 shall, on conviction be punished with imprisonment for a term which may extend to 10 years or with fine which may extend to kyat 300,000 or with both. - Section 47- Whoever violate any provision of Section 38 shall, on conviction be punished with imprisonment for a term which may extend to 10 years or with fine which may extend to kyat 500,000 or with both. The State Law and Order Restoration Council promulgated The Protection of Wildlife and Conservation of Natural Areas Law in June, 1994 (The State Law and Order Restoration Council Law No. 6/94) We were trying to promulgate to the Union fisheries law in line with the policies of the new government. Now we were summiting the final drift to parliament.

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:

>>> Fauna and Flora International (FFI) conducted the coral reef survey in Tanintharyi Region from 2013 to 2017.MOECAF and Other Agencies rehabilitating thhe mangroves. Ref: Howard, R. 2018. Marine Biodiversity of Myeik Archipelago Survey Results 2013-2017 and Conservation Recommendations

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

☑ YES see below

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

Details/future plans:

>>> Forest Department and some NGOs are rehabilitating degraded mangroves in Rakhine State, Ayeyarwaddy Division, and Mon State, Tanintharyi Division. In the aftermath of Cyclone Nargis most of the mangrove forests were damaged or destroyed.

See: Pe, M. (2003). National Report Of Myanmar on the Sustainable Management of The Bay of Bengal Large Marine Ecosystem (BOBLME). GCP/RAS/179/WBG

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

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 secretarat at iosea@un.org

	Site geographical name (refer to questions 0.1 and 0.2)	Species genetic stock	Start year	Duration of the monitoring programme	Nature of monitori ng	Populat ion trend	Is this a protected area?
	Yes	decrease	Stay at island	the whole year	1986	Green Turtle	Thamee Hla Island
	Yes	decrease	Stay at Island	the whole year	1986	Olive Riddley Turtle	Thamee Hla Island
	No	decrease	October to April (Stay at Island- Staff and Volunteer)	October to April	1998	Olive Riddley Turtle	Gadon Galaly Island, Bogalay Township
	No	decrease	October to April (Stay at Island- Staff and Volunteer)	October to April	1999	Olive Riddley Turtle	Gayet Gyi Island, Bogalay Township
	No	decrease	October to April (Stay at Island- Staff and Volunteer)	October to April	2001	Olive Riddley Turtle	Nga Man Thaung, Bogalay Township
	Yes	decrease	Volunteer	the whole year	2006	Green Turtle	Long Lone Boke Island
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3.1.2 Has you country undertaken an evaluation of its marine turtle monitoring programmes?
☑ YES

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):

>>> In spite of having many islands and turtle beaches, tagging activities are being carried out at only four turtle beaches at present. They are: Thameehla Island in Ngaputaw Township, and Turtle Islands in Bogalay Township. Myanmar participated in the Second Meeting on Regional Tagging Programme and Population

Statistics on Sea Turtle held in Kuala Terengganu in Malaysia from 20 to 22 November 2000. In that workshop a resolution was passed to provide Myanmar and Cambodia with applicators and Inconel Tags (Numbers MM-0001 to MM-3000) by Marine Fisheries Resources Development and Management Department (MFRDMD) under SEAFDEC.

In order to successfully carry out the activity of tagging and tracking of sea turtles, applicators and Inconel Tags were received by DoF Myanmar in November 2001. Accordingly, the applicators and Inconel Tags were sent to Bogalay and Ngaputaw Townships Sea Turtle Conservation Centers in Ayeyarwady Division where nesting turtles were tagged starting 23 December 2001. In Myanmar, 453 green turtles; 391 olive ridley turtles; 35 hawksbill turtles; 18 loggerhead turtles (may be Olive) have been tagged until reporting period. Serial numbers of tags used on the green, olive ridley and hawksbill turtles and data on tag recoveries in Gayet Gyi Island and Kadon Galay Island of Bogalay Township, Amatt Gyi Beach and War Taw Gone Beach of Lutputta Township, Thameehla Island of Ngaputaw Township, Ayeyarwady Division were recorded. The DoF has also received PIT Microchips and scanners from SEAFDEC through MFRDMD in April 2003, PIT tagging activities were started in March 2004 on 25 green turtles at Thameehla Island (Diamond Island). Data on recovered PITtagged sea turtles in Thameehla Island of Ngaputaw Township, Ayeyarwady Division was also recorded. In summary, 25 PITs, and 3,000 Inconel Tags were provided by SEAFDEC-MFRDMD. Studies are on-going, and DoF Myanmar has distributed a Notification about "Tag Wanted" to local people and fishermen through State/ Division/District/Township DoF Officers. See: references listed in section 3.1.1 and Proceeding of Third Regional Consultation On Research For Stock Enhancement of Sea Turtle (Japanese Trust Fund IV Programme, Kuala Lumpur, Malaysia (15-17 October 2008). SEAFDEC Publication, ISBN 978-983-9114-43-0, SEAFDEC-MFRDMD/RM/29. March 2009

b) Satellite tracking

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

>>> In line with the Japanese Trust Fund IV, a PTT was installed on an Olive Ridley Turtle in Kadon Galay Island on 1st January 2007. At the same time the research officer from MFRDMD conducted training on Turtle Conservation and Installation of PTTs (from 24-12-2006 to 28-12-2006). But the transmitter stopped giving signal on 14 January 2007. The last position was 15 degree 24minute 47 second N; 94 degree 36 minute 00 second E. according to SEAFDEC-MFRDMD researcher. (See: references listed in section 3.1.1 and Proceeding of Third Regional Consultation On Research For Stock Enhancement of Sea Turtle (Japanese Trust Fund IV Programme, Kuala Lumpur, Malaysia (15-17 October 2008). SEAFDEC Publication, ISBN 978-983-9114-43-0, SEAFDEC- MFRDMD/RM/29. March 2009) 2nd Time PTTs was deployed on olive ridely turtle in Kadongalay Island on 17 December 2009 and at the same time the research officer from SEAFDEC-MFRDMD conducted training on Installation of PTTs. After that PTTs deployed turtle was released from Gayetgyi Island. Inconel Tagging with Tag No. MM-0491 on Left Flipper For satellite tracking information it was informed by MFRDMD signal of an olive ridley turtle fitted with Platform Terminal Transmitter (PTTs) was lost at '95° 14' 56" E 15° 22' 24"N on 26 December 2009. Considered Possible Factors of Stopped Signal: - Fishing Gears in Remote Areas (eq. Trawler, Gill Net, Set Stowed, etc.) - Technical Error (eq. Battery, Antenna) - Happening in Mating Period(eg .Lost Antenna, Destroyed Antenna) Following action should be done: - Avoid heavy fishing pressure area and release at possible area - Public awareness activities - Communication ways - Should be announced officially to fishers and the fish coastal regions before releasing -Make sure deployment of PTTs

c) Genetic studies

☑ YES

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

>>> Study of marine turtle population genetic and tagging has been done in collaboration with SEAFDECMFRDMD since 2005. The first study was conducted on Coco Island and Tharmeehla Island by sending 30 tissue samples each to SEAFDEC-MFRDMD for DNA analysis. Later on the on-site training for tissue sampling and tagging of sea turtle course was conducted from 29 October 2005 to 3 November 2005 at Ayeyawady Division, Ngaputaw Township, and Thameehla Island. Nine trainees from DoF and two experts from MFRDMD were involved. DoF staff continues to survey the nesting ground and foraging ground of Hawksbill turtles for tissue sampling for population genetics study.

d) Other (list and provide details)

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

e) None of the above

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 ecologial knowledge in research being promoted? $\ \ \square$ NO

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.

a) Bycatch mitigation measures

Details (e.g. numbers and species of released turtles, type of fishery and gear used, method for monitoring survival, result):

>>> The Department of Fisheries is conducting a questionnaire survey to find out about sea turtle bycatch in fishing gear. Between Years 2017 and 2019; 6 Green Turtles, 11 Olive Riddley Turtles, 1 Loggerhead Turtle and 10 Hawksbill Turtles were caught and touched. Of these 28 sea turtles, only 1 Olive Riddley Turtle caught in 2018 was died and the remaining 27 were released back into the sea. The main fishing gear to volunteer sea turtle as a bycatch were Inshore drift net, Trawl, Stow net and Purse seine fishing gear. Government staff from Sea Turtle conservation unit under the Department of Fisheries, conduct public awareness program to the local fishermen.

d) Genetic studies

Details (species and genetic stock):

>>> Study of marine turtle population genetic and tagging has been done in collaboration with SEAFDECMFRDMD since 2005. The first study was conducted on Coco Island and Tharmeehla Island by sending 30 tissue samples each to SEAFDEC-MFRDMD for DNA analysis. Later on the on-site training for tissue sampling and tagging of sea turtle course was conducted from 29 October 2005 to 3 November 2005 at Ayeyawady Division, Ngaputaw Township, and Thameehla Island. Nine trainees from DoF and two experts from MFRDMD were involved. DoF staff continues to survey the nesting ground and foraging ground of Hawksbill turtles for tissue sampling for population genetics study

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

Details (aim of study, methods, results):

>>> -

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

4.1 PUBLIC EDUCATION AND INFORMATION PROGRAMMES

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

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

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

Details

>>> Public awareness program were conducted directly to local fishermen near Thamee Hla Island and Bogalay Township.

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

Details/future plans:

>>> Ministry of Agriculture, Livestock and Irrigatioon distributes pamphlets, inserting educational programmes in newspapers, magazines, Journals and television. Other awareness tools include: Videos, CD, identification charts and Posters. Since sea turtles tagged in Myanmar can reach remote lying islands and beaches, which are out of the range of DoF, the Department of Fisheries has endeavored to gather information, and distribute pamphlets and a "Tag wanted notification 1/2004" to fisherman living in the coastal regions to immediately inform the nearest DoF office with complete record of the turtles with tags. The DoF has also requested the media and TV to assist in these ventures

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

☑ Fishing industry

☑ Local/Fishing communities

☑ Indigenous groups

☑ Media

☑ Teachers

☑ Students

☑ Scientists

✓ NGOs

☑ Enforcement personnel

☑ Other (describe)

>>> Dof Staff and local Authorities

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

☑ YES

Details/future plans:

>>> Marine Turtle Conservation and Management Unit, Department of Fisheries. An information centre was established at Kadonkani, Bogalay Township, Ayeyawady Region in 2005. The importance of sea turtles and conservation techniques are being communicated to coastal communities. However, cyclone Nargis totally destroyed the Information Centre at Kadonkani, Bogalaay Township, Ayeyawady Region.

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? ☑ Fishing industry ☑ Communities that interact with marine turtles and their habitats ☑ Local/Fishing communities

☑ Military, Navy, Police

☑ Scientists

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

Details/future plans:

>>> Thamee Hla Island and Bogalay Township

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

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

☑ YES

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

Details, examples:

>>> Yes

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:

>>> NGOs

Fauna and Flora International (FFI) carried out sea turtle conservation program at Thamee Hla Island and Bogalay Township.

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
- ☑ IMPORTANT
- d) Illegal fishing in EEZ
- ☑ IMPORTANT
- e) Incidental capture by foreign fleets in EEZ
- **☑** IMPORTANT
- f) Enforcement/patrolling of EEZ
- ☑ IMPORTANT
- g) Harvest exploitation of turtles and eggs
- ☑ IMPORTANT
- h) Illegal trade in turtle parts and products
- ☑ IMPORTANT
- i) Development of gear technology to reduce bycatch of marine turtles
- ☑ IMPORTANT
- j) Marine pollution, including oil spills and marine debris
- ☑ LIMITED
- k) Training / capacity-building
- ☑ ESSENTIAL
- I) Alternative livelihood development
- **☑** IMPORTANT
- m) Characterisation of turtle populations/genetic stocks
- ☑ IMPORTANT
- n) Identification of migration routes
- ☑ IMPORTANT
- o) Tagging / satellite tracking

☑ IMPORTANT

p) Habitat studies

☑ IMPORTANT

q) Genetic studies

☑ IMPORTANT

Other:

>>> Training / capacity building is the most important to achieve progress and to prevent illegal trade, to encourage hatchery best-practices, research activity, and compliance of fishermen with the existing laws and regulations

5.2 COOPERATION AND INFORMATION EXCHANGE

5.2.1 Regional cooperation to enhance marine turtle conservation and management

a) Which regional/bilateral agreements for marine turtle conservation and management does your country participate in?

Details:

>>> Southeast Asia

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

Details:

>>> SEAFDEC -MFRDMD

c) Do these agreements and organizations have an associated action plan for the conservation of marine turtles and their habitats? Please list the respective actions plans.

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

Name of the regional/sub-regional action plan (include web links to plan if available)	Species covered	Geographic coverage	Objectives	Threats addressed by the plan
Htaching	to enhance sea turtle hatchling	Thamee Hla	Green Turtle	
Hatching	to enhance sea turtle hatchling	Bogalay Township	Olive Riddley Turtle	
Hatching	to enhance sea turtle hatchling	Long Lone Boke Island	Green Turtle	
Tagging	to study migratory rote	Thamee Hla	Green Turtle and Hawksbill	
Tagging	to study migratory rote	Bogalay Township	Olive Riddley Turtle	
Tagging	to study migratory rote	Long Lone Boke Island	Green Turtle and Hawksbill Turtle	
Tissue Smapling	To study population structure	Thamee Hla	Green Turtle and Hawksbill Turtle	
Tissue Smapling	To study population structure	Coco Island	Hawksbill Turtle	
PTTs	to study migratory rote	Gadon Galay Island, Bogalay Township	Olive Riddley	

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:

- >>> The following capacity/resource needs have to be addressed in Myanmar:
- Inadequacy of skilled workers and staff (insufficient technical experience and expertise) Difficulty to control and educate egg poachers in remote areas.
- Communication and transportation problem in reaching rookeries in remote areas. Requirement for modern equipment and materials, particularly: radio, telephone, boats, engines, generators, freshwater tube wells.
- Need for research methodology and literature.
- Weakness in feedback system and information.

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

Details/future plans:

>>> Myanmar Marine Turtle Working Group Meeting was conducted in Diamond Condo, Yangon Region on 13th June 2018 with the collaboration of FFI and DoF.

Training on Sea Turtle Monitoring, Research and Conservation Management was conducted in Thamee Hla Island, Ayeyarwaddy Region on 8th to 11th Nov, 2018 with the collaboration of FFI and DoF. Training on Sea Turtle Monitoring, Research and Conservation Management was conducted in Tanintharyi Region on 12th Nov to 16th Dec, 2018 with the collaboration of FFI and DoF.

Training on Sea Turtle Monitoring, Research and Conservation Management was conducted in Tanintharyi Region on 14th to 15th Nov, 2018 with the collaboration of FFI and DoF.

Myanmar Marine Turtle Working Group Meeting was conducted in Diamond Condo, Yangon Region on 13th June 2018 with the collaboration of FFI and DoF.

Every year, DoF staffs from Sea Turtle Conservation, Gadon Kani and Thamee Hla Island conduct the public awareness program to the local fishermen to gain the knowledge of Sea Turtle Conservation and their habitats during the raining season.

Public awareness to fishermen in Haing Gyi Island (Chaung Wa village, War Kone village, Didu Kone Village, Pyinsalu Village, Khamouk Maw Village, Kan Chaing Village, Kyar Kan Village and Zee Chaing) near Thamee Hla Island during 22-7-2019 to 31-7-2019.

Public awareness to fishermen in Gadon Gani Village, Ayar village, Thaungtar village, Kadon galay Island during 12-8-2019 to 28-9-2019.

Sea Turtle gallery show for the purpose of conservation in Pathein City during 1-3-2020 to 3-3-2020.

Sea Turtle Biology and Incubation Training in Thamee Hla Island during 4-3-2020 to 7-3-2020. (16 participants) Erecting Educational Sign Boad and distributing Pamphlets in Haing Gyi Island, Zee Chaing Village, Kyar Kan Village during 13-7-2020 to 28-7-2020.

Public awareness and collecting questionaries survey of sea turtle bycatch in Kaing Thaung village, Mingalar Thaung Tan Village, Kwin Pauk Village and Amet Gyi village during 25-11-2021 to 1-12-2021.

Sharing on Sea Turtle Conservation Activities (Online Training) during 28-5-2022 to 29-5-2022. (45 Participants)

Educational Conservation to High School Students in Haing Gyi Island, Kan Chaing village, Kyar Kan village and Zee Chaing village during 20-8-2022 to 23-8-2022.

Erecting Educational Sign Boad in Haing Gyi Island, Zee Chaing Village, Kyar Kan Village during 19-10-2022 to 26-10-2022.

Educative talk on Sea turtle conservation awareness at meeting hall of Kokoe Kyun Township General Administrative Department was carried out 1st Jan, 2023.

Information gathering on sea turtle was conducted in Lampi Marine National Park in Tanintharyi Region 1 January, 2023 to 5 Februay, 2023

Educational gallery on Myanmar's Sea Turtle Conservation was showed at Myat-maw-tin Pagoda festival, Higyi Kyun City 19 Feb to 5 Mar 2023.

Information gathering on the status of sea turtle of Kokoe Island, Yangon Region was conducte 6 March, 2023. Training on Guideline of safe handling remove from bycatch in Haing Gyi Island, Kan Chaing village, Kyar Kan village and Zee Chaing village from 18-9-2023 to 28-9-2023.

Capacity building on Sea Turtle Conservation in Thamee Hla Island from 11-10-2023 to 20-10-2023. (16 Participants)

Public awareness in Coco Island 2-12-2023.

Talk Show on Sea Turtle Conservation activities in Myanmar Television, Coco Island at 3-12-2023. Sharing on Sea Turtle Conservation Activities in Coco Island from 4-12-2023 to 21-12-2023. (20 Participants) Public awareness activities on sea turtles conservation and marine debris were conducted in Kyarkan village, Zee Chai village, high school in Kan Chai village December 1 to 12,2024.

5.3.3 Specifically in relation to capacity-building for the conservation of marine turtles and

their habitats, describe any partnerships with universities, research institutions, training bodies and other relevant organisations, national, regional, and/or international.

Details/future plans:

>>> Sea Turtle Biology and Incubation Training in Thamee Hla Island during 4-3-2020 to 7-3-2020. (16 participants)

Educational Conservation to High School Students in Haing Gyi Island, Kan Chaing village, Kyar Kan village and Zee Chaing village during 20-8-2022 to 23-8-2022.

Training on Guideline of safe handling remove from bycatch in Haing Gyi Island, Kan Chaing village, Kyar Kan village and Zee Chaing village from 18-9-2023 to 28-9-2023.

Capacity building on Sea Turtle Conservation in Thamee Hla Island from 11-10-2023 to 20-10-2023. (16 Participants)

Sharing on Sea Turtle Conservation Activities in Coco Island from 4-12-2023 to 21-12-2023. (20 Participants)

5.4 STRATEGY AND LEGISLATION

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

5.4.1 Development of a national action plan

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

✓ NO

- b) If there is no action plan yet, has a set of key management measures been identified that could eventually serve as a basis for a more specific action plan at a national or local level?
 ☑ YES
- 5.4.2 Which are the main threats to marine turtles in your country per species and the most urgent management activites to address them?

Please list up to 5 corresponding activities from the IOSEA Conservation and Management Plan (**CMP**). >>> - Lost habitat to lay.

- Local people knowledge rise to conserve

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

6.1 IOSEA MARINE TURTLE MOU MEMBERSHIP AND ACTIVITIES

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

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

Details/future plans:

>>> None

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

☑ NO

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.

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

☑ YES

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

- >>> Government support fund to conserve Sea Turtle .
- Fauna and Flora International Fund support (FFI)

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 secretarat at iosea@un.org

Name of the agency	Role in the conservation of marine turtles and their habitats
lead agency responsible for coordinating national marine turtle conservation and management policy	Department of Fisheries
-	Forest Department
-	Navy

OTHER REMARKS

Please provide any comments/suggestions to improve the present reporting format. >>> IOSEA(MoU) should provide more capacity building programme to the DoF staff.