



CMS

IOSEA Marine Turtles Memorandum of Understanding - National Report 2024

INSTRUCTIONS FOR COMPLETING THE NATIONAL REPORTING QUESTIONNAIRE:

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

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

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

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

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

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

GENERAL INFORMATION

Signatory State:

>>> Bangladesh Forest Department, Bangladesh

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

>>> Marinelife Alliance

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

>>> 1 January 2004

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

>>> 07/March/2024

Designated Focal Point (and full contact details):

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MARINE TURTLE SPECIES AND HABITATS

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

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

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

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

	Population trend (increase, decrease, stable, unknown)	Number of egg clutches per year	Species, genetic stock	Type of habitat (nesting, feeding developmental)?	Geographic area
	Stable	800-1200	Lepidochelys olivacea	Nesting, feeding, developmental	Bangladesh South Central coast, South east coast, Southwest coast(Sundarban mangrove)
	declining	10-15	Chelonia mydas	Nesting, feeding, developmental	Bangladesh South Central coast, South east coast, Southwest coast(Sundarban mangrove)
	No nest in last 25 years	1-2	Eritmochelys imbricata	Feeding, developmental	Bangladesh South east coast

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

YES

Name of database:

>>> Marine Turtle Specialist Group(MTSG)

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

YES

d) Does your country have an IOSEA Network site?

YES

0.2 Site-specific information

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

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

An index beach may be located in a remote area or close to human settlements with influence of anthropogenic activities.

Please complete a separate section for each site.

Sites

Site 1

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

Name of the site:

>>> South east coast of Bangladesh

State/province:

>>> Cox'sbazar, Bangladesh

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

>>> 21°41'04.2"N 91°51'21.0"E at the north/ 20°34'36.8"N 92°20'08.0"E at south

Length:

>>> 140km

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

YES

c) Is this an IOSEA Network Site?

YES

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

YES

Details:

>>> The whole area is under ECA(Ecologically Protected Area) declared by Bangladesh Government. The St. Martin area is a newly declared MPA.

The southeast coast, south central coast, and southwest coast of Bangladesh encompass several areas with international and national status. Some of these areas may have designations such as Protected Areas, Ramsar sites, or UNESCO World Heritage Sites. Here are some examples:

1. Sundarbans Mangrove Forests: Located in the southwest coastal region of Bangladesh, the Sundarbans is a UNESCO World Heritage Site known for its unique mangrove ecosystem and rich biodiversity.
2. St. Martin's Island: This island, situated off the coast of Cox's Bazar, is the only coral island in Bangladesh. It is recognized for its ecological significance and may have protected status(MPA).
3. Teknaf Wildlife Sanctuary: Located in the southeast coastal region, Teknaf Game Reserve is known for its diverse wildlife and may have national protected area status.
4. Sundarbans Reserved Forest: As part of the Sundarbans, this reserved forest area in the southwest coastal region is protected for its critical ecological importance.
5. Kuakata Beach: Kuakata, situated on the south-central coast, is known for its natural beauty and may have local or national protected status.

These are just a few examples, and there may be other areas along the southeast, south central, and southwest coasts of Bangladesh with various international or national designations for conservation and protection.

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

>>> Here mentioned the starting year, monitoring ongoing since then.

St. Martin Island (1996), Sonadia Island (2005), Kaladia, Laldia(2013), Sahporirdwip/Inani-Ruppoti (2006), The whole Cox Bazar -Teknaf Beach (2008)

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

	How often is this species monitored?	Monitored since (year)	Trend (decreasing, increasing, stable)	Number of clutches per year	Species present at this location?
Flatback (Natator depressus)	Not found	N/A	N/A	N/A	N/A
Olive ridley (Lepidochelys olivacea)	Every year	1996	Stable	800-1200	Yes
Hawksbill (Eretmochelys imbricata)	Every year	1996	Not evaluated	1-2	Yes
Leatherback (Dermochelys coriacea)	Every year	1996	Not evaluated	None	Yes
Green (Chelonia mydas)	Every year	1996	Declining	10-15	Yes
Loggerhead (Caretta caretta)	Every yearNot found	1996	Not evaluated	None	No

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

more than 100 km²

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

>>> The in-water habitat of Bangladesh's southeast coast and south-central coast encompasses a significant portion of the Bay of Bengal, which is bordered by Cox's Bazar in the southeast and the Barisal Division in the south-central region. This area includes the territorial waters and exclusive economic zone (EEZ) of Bangladesh, extending from the coastline to the outer limits of its maritime jurisdiction, which is approximately 200 nautical miles (370 kilometers) from the baselines.

The coastal and marine habitats in this region are diverse, ranging from shallow coastal waters, estuaries, and mangrove forests to deeper offshore areas. The Sundarbans mangrove forest, the largest contiguous mangrove forest in the world, lies along the southwestern coast of Bangladesh and extends into the Bay of Bengal. This mangrove ecosystem is vital for various marine species, including sea turtles, dolphins, fish, and crustaceans, providing breeding, nesting, and foraging grounds.

The offshore waters of the Bay of Bengal support a rich marine biodiversity, including pelagic species, demersal fish, marine mammals, and sea turtles. These waters are influenced by oceanographic features such as currents, upwelling zones, and seasonal monsoon patterns, which contribute to the productivity and ecological dynamics of the region.

References and links:

1. "Marine Fisheries Resources of Bangladesh: Present Status, Issues, and Future Direction" - Marine Fisheries Resources of Bangladesh, IUCN Bangladesh, 2018. Link
2. "Status of Coral Reefs and Associated Fauna of Bangladesh." Bangladesh Fisheries Research Institute, 2018. Link
3. "The Sundarbans: A Unique Wilderness of the World." Sundarbans Forest Division, Bangladesh Forest Department. Link
4. "Bangladesh Second National Report on the Implementation of the CBD." Ministry of Environment and Forests, Government of Bangladesh, 2009. Link

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

	How often is this species monitored?	Monitored since (year)	Trend (decreasing, increasing, stable)	Population number	Are marine turtles monitored in water?	Species present at this location
Flatback (Natator depressus)	Yearly	N/A	N/A	N/A	N/A	No
Olive ridley (Lepidochelys olivacea)	Yearly	1996	Stable	Not assessed	Yes	Yes
Hawksbill (Eretmochelys imbricata)	Yearly	1996	Stable	Not assessed	Yes	Yes
Leatherback (Dermochelys coriacea)	Yearly	1996	Not available	Not assessed	Yes	No
Green (Chelonia mydas)	Yearly	1996	Decreasing	Not assessed	Yes	Yes

Loggerhead (Caretta caretta)	Yearly	1996	Not available	Not assessed	Yes	No
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Please provide any references and links:

>>> Islam, M.Z. (2021). Bangladesh. In: Phillott, A.D. and Rees, A.F. (eds.) (2021), Sea Turtles in the Middle East and South Asia Region. MTSG Annual Regional Report 2021. Draft Report to the IUCN SSC Marine Turtle Specialist Group.

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

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

Other threat:

>>> None

j) What assistance for conservation and management at this site would be useful, including

through the IOSEA Capacity-building programme? Please choose from the list below:

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

Please provide details:

>>> ● We require hands-on training on TED installation techniques. Marinelifelife Alliance has produced a few TEDs for demonstration and testing purposes in Marine Set Bag Nets.

● Additionally, we are in need of an adequate supply of satellite tags and radio transmitters to facilitate the study of migration patterns, foraging habitat, nearshore habitat utilization, and local movement of nesting turtles.

● All community conservation assistants (CAs) involved in the Marinelifelife Alliance sea turtle program undergo comprehensive training. This training covers various aspects including basic monitoring, night patrols, in situ and ex situ conservation methods, egg handling and relocation, installation and management of hatching grounds, predator control, and mitigation of other threats. Moreover, routine training sessions are conducted annually for all participants to ensure their skills remain current and effective.

● Furthermore, fishing communities receive training on the safe release of sea turtles and other small cetaceans encountered during offshore fishing activities. This training includes instruction on dehooking techniques, the use of dehooking devices, releasing entangled turtles, dolphins, and sharks, collecting data and location information, and utilizing GPS trackers onboard vessels.

Source: Marinelifelife Alliance

k) If necessary, use the text box to give further details or clarification about any of the information provided.

>>> Not necessary

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

>>> Sources:

Ahmed, B; K.M.N. Huda and G. S.M. Asmat. (1986). The Breeding of Olive Ridley at St. Martin's Island, Bangladesh. *J. Zool.* 14(1):59-69.

Hasan, M. M. (2009). Tourism and Conservation of Biodiversity: A Case Study of St. Martins Island, Bangladesh. *Law, Social Justice & Global Development (An Electronic Law Journal)* .

Hossain, M. M. (2004). National Report of Bangladesh Sustainable Management of the Bay of Bengal Large Marine Ecosystem (BOBLME).

Humayun, K. (Undated). Marine Fisheries in Bangladesh An Overview.

Islam, M. Z. (2001). Notes on the Trade in Marine Turtle Products in Bangladesh. *Marine Turtle Newsletter* 94: 10-11.

Islam, M. Z. (2002). Marine turtle nesting at St. Martin's Island, Bangladesh. *Marine Turtle Newsletter* 96: 19-21.

Islam M. Z. (2002) Impact of coastal development on sea turtle at St. Martin and Cox's Bazar coast. Threats to in Bangladesh; Technical Report. Marine Life Alliance. 25.

Islam M. Z. (2003) 'Records of sea turtle in Cox's Bazar coast, Bangladesh, Marine Life Alliance. Technical Paper.'

Islam M. Z. (2005) Live leatherback records in Bangladesh: News to IOSEA MoU secretariat 2005.

Islam M. Z. (2005) Impact of coastal development on sea turtle at St. Martin & Cox's Bazar coast and Sonadia Island in Bangladesh; Technical Report. CWBMP.

Islam, M. Z. (2006). Status of leatherback turtles in Bangladesh. *Indian Ocean – South-East Asian Leatherback Turtle Assessment IOSEA Marine Turtle MoU – 24-29.*

Islam, M. Z., M. S. Islam and S. M. A. Rashid. (1999). Marine turtle conservation program in St. Martin's Island, Bangladesh by CARINAM: A brief review. *Tigerpaper.* 26: 17-28.

Kabir, D. S. a. S. B. M. (2002). A review of the present state of the protected areas of Bangladesh. *Bangladesh Environment* 489-503.

IUCN-Bangladesh. (2000). Red Book of Threatened Amphibians and Reptiles of Bangladesh. IUCN-The World Conservation Union. xii+95pp.

Khan, M. A. R. (1982). *Wildlife of Bangladesh - A Checklist.* Dhaka University, Dhaka. 96pp.

Khan, M. A. R. (1987). *Wildlife of Bangladesh - Amphibians & Reptiles.* Bangla Academy, Dhaka. Bangladesh.

Mitra SC (1914. Reprinted 2001). 'Jessore-Khulnar Itihas. Rupantar, Khulna.

- Quader, O. (2010). Coastal and marine biodiversity of Bangladesh (Bay of Bengal). Proc. of International Conference on Environmental Aspects of Bangladesh (ICEAB10), Japan, Sept. 2010.
- Rashid S.M.A. (1986). Conservation Plan for Marine Turtles in St. Martin's Island, Bangladesh VI Nat. Zool. Conf. Chittagong University. 8pp.
- Rashid S.M.A. (1997). Bangladesh National Report for the Northern Indian Ocean, Sea Turtle Workshop and Strategic Planning, 13-18 Jan', Bhubenshwar, India.
- Rashid, S. M. A. (2002). Letter to the editors: Viewpoint - Sea turtle management in Bangladesh. Marine turtle Newsletter 96: 23.
- Rashid, S. M. A. (2004). Faunal diversity of Bangladesh: Conservation Prospects and Constraints. National Biodiversity Strategy Action Plan report to IUCN-Bangladesh Country Office. x + 196 pp.
- Rashid, S. M. A. & M. Z. Islam. (1999). Establishing marine turtle hatchery in St. Martins Island, Bangladesh. Proceedings of the 4th Asia-Pacific NGOs Environmental Conference. National University of Singapore. pp. 150-162.
- Rashid, S. M. A. & M. Z. Islam. (2005). Review: Conservation and research on marine turtles in Bangladesh. In: Shanker, K & B. C. Choudhury (eds.) Sea Turtles of the Indian Subcontinent. Wildlife Institute of India, Dehradun, India. Pg. 200 -216.
- Thorbjarnarson, J. B., Platt, S.G. and Khaing, S.T. (2000). Sea Turtles in Myanmar: Past and Present. Marine Turtle Newsletter 88: 10-11.

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

1.1 BEST PRACTICE APPROACHES TO MINIMIZING THREATS

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

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

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

	References and links	Has the effectiveness of this approach been evaluated? What was the result?	What does this approach/ protocol help to achieve	Title of best practice protocol or approach
	-	Yes, Total support helped reduction of egg exploitation to zero. Several illegal egg collectors/poachers have been handed over to law enforcement agencies during the last 20 years.	Positively helped reach conservation effectiveness	Target group/Approach to: Forest Department and local stakeholder, local community, offshore fishing community combined conservation support
	●Islam, M. Z. 2016. Sea Turtle Conservation- Ex Situ Practice Manual in Bangladesh. Marinelife Alliance, Sea Turtle Project-Bangladesh.	Average 75-80% hatching success, in few cases 99 % observed. Hatchlings emerged and crawled to the sea uninterrupted by human, Totally nighttime.	Marinelife Alliance sea turtle program achieved very good results of hatching success.	Beach sea turtle egg relocation hatching ground semi ex situ conservation practice. ●Management Guidelines for Relocated Sea Turtle Egg Hatching Grounds. ●Guidelines for Sea Turtle Nest Monitoring and Night Patrols. ●In Situ Best Practices for Sea Turtle Conservation in Bangladesh. ●Sea Turtle Conservation-Ex Situ Practice Manual in Bangladesh.
	●Marinelife Alliance. 2017. Sea Turtle Lighting Protocol: Issues and Solutions in Bangladesh. ●Recommendations for mitigations of Artificial Lightings (in Final report: Conservation of Sea Turtle in Bangladesh Coastal and Marine Territory", W2-06/2013, SRCWP Project. Forest Department, Bangladesh. Sea Turtle Top of Form	In Bangladesh, basic rules are followed in the conservation practice, viz., using fewer lights on nesting beaches, limiting the use of flashlights during night patrol, using RED lights, etc. A huge problem in minimizing lights from hotels/Resorts at St. Martin Island is somewhat out of control and needs to be addressed. As early as possible.	The approach is followed worldwide for sea turtle conservation and practiced in first world where conservation rules are followed.	Best Practices for Sea Turtle Lighting Conservation in Bangladesh
	-	Effective and easy for the community to be involved in the program	Easy approach for beach patrolling, conservation for community in front of their home	Local community involvement in sea turtle monitoring, conservation, threat mitigation
	Islam, M. Z. Sea Turtle Conservation Report, Marinelife Alliance, Sea Turtle Program-Bangladesh.	A handful number of rescue sea turtles conducted during the last 12 years.	Safe release of sea turtle and small cetaceans while entangled or hooked in offshore fishing.	Sea Turtle and small cetaceans dehooking guideline
	Islam, M. Z.(2014). Marine Megafauna bycatch reduction Guideline, Marinelife Alliance.	On-ground sightings are being made by the fisher community and the real numbers are counted by the fishers	Off shore sighting, bycatch data gathering by the fishing community rather than researchers and educated peoples.	Offshore Data collection Guideline for the Fishing community

1.2 REDUCTION OF INCIDENTAL CAPTURE AND MORTALITY

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

1.2.1 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:

>>> Some of 257 (Shrimp and Fish)

Boat size (range or average):

>>> Unknown

Number of trips per year:

>>> Unknown

Mesh size used:

>>> 45-60 mm

Geographic distribution:

>>> Whole Bangladesh Marine territory/EEZ

If known, turtle species affected:

>>> There is no monitoring onboard. According to artisanal fishing community sea turtle and small cetacean bycatch are conducted by the mechanized trawlers. Olive Ridley (in most cases), few Green turtle subadult.

Number of bycaught turtles per year:

>>> Unknown

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

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

Details:

>>> In Bangladesh, several methods are employed to minimize the bycatch of marine turtles in fisheries, ensuring the conservation of these vulnerable species:

1. Safe Handling Practices: Fishers are trained to handle incidentally caught turtles safely, following established protocols such as those outlined by the Food and Agriculture Organization (FAO). This includes techniques like resuscitation or release using specialized equipment such as de-hooking tools, line cutting tools, and scoop nets. Locally tailored guidelines, developed by organizations like the Sea Turtle Project-Bangladesh under the Marinelifelife Alliance, are distributed to the fishing community during training sessions to ensure widespread adoption and adherence to best practices.
2. Use of Turtle Excluder Devices (TEDs): Mechanized trawlers are mandated to utilize Turtle Excluder Devices

(TEDs) to allow the escape of marine turtles ensnared in fishing gear. While TEDs are required equipment, their consistent use during marine operations is not always observed. This highlights the need for continued monitoring and enforcement to ensure compliance with regulations aimed at reducing turtle bycatch.

3. Spatial and Temporal Fishing Controls: The fisheries department implements spatial and temporal controls on fishing activities to mitigate turtle bycatch. For example, seasonal closures of fishing activities are enforced, particularly during critical periods for marine species conservation. A notable example is the ban on marine fishing for 22 and 63 days each year aimed at conserving the Hilsa fish population. These closures indirectly contribute to the protection of marine megafauna during vulnerable periods.

4. Effort Management Control: Effort management strategies are employed to regulate fishing activities and minimize the impact on marine turtle populations. This includes monitoring and controlling fishing effort to prevent overexploitation of resources and reduce the likelihood of incidental turtle capture.

5. In order to protect the breeding grounds and breeding seasons for the different species, sanctuaries and off seasons were declared (DOF 2006). These need to be established through a committee comprising of fishermen, researchers and DoF. In shore sanctuaries and banned seasons affecting artisanal fishermen should be enforced by the authorities at Upazila level. Offshore sanctuaries and banned seasons should be enforced by the coast guard in collaboration with DoF and fishermen's organizations (FAO 2007). Monitoring of the sanctuaries and banned seasons need to be undertaken to examine the effects these have on fish stocks. Sanctuaries to protect nursery grounds will be identified and prioritized for gradual legislative actions. The Upazila level Fishery officers with technical support from the Marine /Coastal Fishery Officers will implement the rules in this regard.

6. Administrative powers under the Marine Fishery Ordinance will be delegated to them. The Forest Department is responsible for management of the Sundarbans resources. They are collecting revenue for fishing without any attempt to control the fishing effort.

See also: Flewelling, P. and Hosch, G. (2006) Country Review: Bangladesh. In: De Young, C. (ed.) Review of the state of world marine capture fisheries management: Indian Ocean. FAO Fisheries Technical Paper. No. 488. Rome, FAO. 2006. 458p.

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

>>> ● The Bangladesh government enacted rules for mandatory TED use on all shrimping trawl net in Bangladesh marine waters with the Marine Fisheries Ordinance, 1983 (ordinance No. XXXV of 1983), section 55 BRDs (Rules 14 & 14a), SRO No. 330-Law/2006. Since 2006, TEDs have been mandatory for all trawl nets of vessels fishing in the marine waters of Bangladesh.

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

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

Onboard observer programmes

The measure is mandatory under the following regulation:

>>> 1) Mesh size regulation and 2) Adoption of Fish catch banning period for 63 days each year

Details/future plans:

>>> Programs to promote the implementation of measures to minimize bycatch of turtles:

● Onboard observer programs conducted along the southeast coast by fishing boat captains as voluntary participation, utilizing GPS trackers for location tracking (MLA 2022)

The measure is voluntary under the following regulation:

● The measure is mandatory:

Details/future plans:

● Currently, the onboard observer program relies on voluntary participation from fishing boat captains along the southeast coast. However, there are future plans to evaluate the effectiveness of this program and explore options for potential expansion or integration into mandatory regulations. Additionally, efforts will be made to enhance awareness and incentivize participation among fishing communities to ensure comprehensive coverage and compliance with bycatch mitigation measures.

Vessel monitoring systems

The measure is mandatory under the following regulation:

>>> 1) Mesh size regulation and 2) Adoption of Fish catch banning period for 63 days each year

The measure is voluntary:

>>> 1) Mesh size regulation and 2) Adoption of Fish catch banning period for 63 days each year -

Details/future plans:

>>> Under the planned strategy, all mechanized commercial fishing boats that undertake up to 7- 15 day long trips should land their catch in landings defined by the Department of Fisheries. Since these boats are operated from coastal districts, management responsibility of these boats currently vested with the marine wing of DoF will be decentralized to coastal districts. This management regime will include all mechanized commercial fishing boats operating drift gill nets, marine set bag nets and long lines in the sea up to a depth of 40 meters. The area from 10 km off the shore up to a depth of 40 meters shall be allocated to mechanized boat operating drift gill nets, marine set bag net and long lines. All mechanized commercial boats, of the stipulated size and capacity shall be brought under licensing. Fisheries Department has taken initiatives to register all vessels that fish in the Bay. The use of TEDs in marine trawl to minimize incidental mortality rate in the national waters and on the high seas is on the table for discussion and implementation but initiatives are yet to be taken (DOF 2006).

In addition, thousands of MSBNs are unregistered, and several thousand MSBNs that is responsible for a large number of bycatch. Sea Turtle Project by Marinelife Alliance monitoring bycatch by artisanal fishing boat along the Cox Bazar Coast and train fishermen to rescue and release turtle.

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

The measure is mandatory under the following regulation:

>>> The fish landing centers of Southeast Coast (Cox'sbazar) are being regulatory monitored.

The measure is voluntary:

>>> -

Details/future plans:

>>> ● Fishing boat landing centers along cox Bazar coast are inspected by Marinelife Alliance, sea turtle conservation assistant (CA) on a regular basis, all washed ashore and stranded are recorded and released if needed.

● Sea Turtle Project by Marinelife Alliance community conservation assistant (CA) observes local fish landing centers along the Cox Bazar coast.

● Trained fisher's observe at large central Fish lands centers.

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

Details/future plans:

>>> Training programs and workshops are conducted to educate fishers on the implementation of bycatch reduction methods. • Fishers are instructed on the proper use of techniques and tools aimed at minimizing unintentional capture of marine turtles and other non-target species. • Workshops provide hands-on training sessions where fishers learn practical skills for employing bycatch reduction strategies effectively. • These initiatives empower fishers with the knowledge and skills needed to mitigate the impact of their fishing activities on marine turtle populations, promoting sustainable fishing practices.

2) Pelagic trawling

a) Fishing effort:

UNKNOWN

Please provide the information below:

Number of vessels:

>>> Some of 257 nos.

Boat size (range or average):

>>> Unknown

Number of trips per year:

>>> Unknown

Mesh size used:

>>> 45-60mm

Geographic distribution:

>>> Whole Bangladesh Marine territory/EEZ.

If known, turtle species affected:

>>> Olive Ridley Turtle mostly

Number of bycaught turtles per year:

>>> Unknown

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

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

Details:

>>> 1) Mechanized trawlers are mandated to utilize Turtle Excluder Devices (TEDs) to allow the escape of marine turtles ensnared in fishing gear. While TEDs are required equipment, their consistent use during marine operations is not always observed. This highlights the need for continued monitoring and enforcement to ensure compliance with regulations aimed at reducing turtle bycatch.

2) The fisheries department implements spatial and temporal controls on fishing activities to mitigate turtle bycatch. For example, seasonal closures of fishing activities are enforced, particularly during critical periods for marine species conservation. A notable example is the ban on marine fishing for 22 and 63 days each year aimed at conserving the Hilsa fish population. These closures indirectly contribute to the protection of marine megafauna during vulnerable periods.

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

>>> a) The Bangladesh government enacted rules for mandatory TED use on all shrimping trawl net in Bangladesh marine waters with the Marine Fisheries Ordinance, 1983 (ordinance No. XXXV of 1983), section 55 BRDs (Rules 14 & 14a), SRO No. 330-Law/2006. Since 2006, TEDs have been mandatory for all trawl nets of vessels fishing in the marine waters of Bangladesh. 2) Since 2015, the government of Bangladesh imposes a 65-day annual ban from May 20th to July 23rd under the Marine Fisheries Ordinance of 1983 (Rule 19).

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

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

Onboard observer programmes

The measure is mandatory under the following regulation:

>>> 1) Mesh size regulation and 2) Adoption of Fish catch banning period for 63 days each year

Details/future plans:

>>> Programs to promote the implementation of measures to minimize bycatch of turtles:

● Onboard observer programs conducted along the southeast coast by fishing boat captains as voluntary participation, utilizing GPS trackers for location tracking (MLA 2022)

The measure is voluntary under the following regulation:

● The measure is mandatory:

Details/future plans:

● Currently, the onboard observer program relies on voluntary participation from fishing boat captains along the southeast coast. However, there are future plans to evaluate the effectiveness of this program and explore options for potential expansion or integration into mandatory regulations. Additionally, efforts will be made to enhance awareness and incentivize participation among fishing communities to ensure comprehensive coverage and compliance with bycatch mitigation measures.

Vessel monitoring systems

The measure is mandatory under the following regulation:

>>> 1) Mesh size regulation and 2) Adoption of Fish catch banning period for 63 days each year

Details/future plans:

>>> Under the planned strategy, all mechanized commercial fishing boats that undertake up to 7- 15 day long trips should land their catch in landings defined by the Department of Fisheries. Since these boats are operated from coastal districts, management responsibility of these boats currently vested with the marine wing of DoF will be decentralized to coastal districts. This management regime will include all mechanized commercial fishing boats operating drift gill nets, marine set bag nets and long lines in the sea up to a depth of 40 meters. The area from 10 km off the shore up to a depth of 40 meters shall be allocated to mechanized boat operating drift gill nets, marine set bag net and long lines. All mechanized commercial boats, of the stipulated size and capacity shall be brought under licensing. Fisheries Department has taken initiatives to register all vessels that fish in the Bay. The use of TEDs in marine trawl to minimize incidental mortality rate in the national waters and on the high seas is on the table for discussion and implementation but initiatives are yet to be taken (DOF 2006).

In addition, thousands of MSBNs are unregistered, and several thousand MSBNs that is responsible for a large number of bycatch. Sea Turtle Project by Marinelifelife Alliance monitoring bycatch by artisanal fishing boat along the Cox Bazar Coast and train fishermen to rescue and release turtle.

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

The measure is mandatory under the following regulation:

>>> 1) Mesh size regulation and 2) Adoption of Fish catch banning period for 63 days each year

Details/future plans:

>>> ● Fishing boat landing centers along cox Bazar coast are inspected by Marinelifelife Alliance, sea turtle conservation assistant (CA) on a regular basis, all washed ashore and stranded are recorded and released if needed.

● Sea Turtle Project by Marinelifelife Alliance community conservation assistant (CA) observes local fish landing centers along the Cox Bazar coast.

● Trained fisher's observe at large central Fish lands centers.

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

Details/future plans:

>>> More than 2500 offshore fishermen have been trained by Marinelifelife Alliance, Sea Turtle Program during the last 16 years, to reduce bycatch, rescue and release live turtles at sea.

In its ongoing efforts to address bycatch issues, the Marinelifelife Alliance has made significant progress by focusing on training head fishermen, resulting in a notable reduction in turtle fatalities. Despite occasional accidental turtle captures, our consistent monitoring and engagement with the fishing community have yielded positive outcomes. In 2017, we observed a surge in turtle strandings, which we linked to an increase in Rohingya individuals working in fishing fleets, primarily due to illicit local hiring practices. By promptly reporting these incidents to law enforcement authorities, we successfully curtailed this influx.

Regular dialogues with the fishing community have been instrumental in assessing the bycatch situation, contributing to a decrease in recorded turtle and dolphin mortalities last year. Looking ahead, we are preparing to introduce technologies such as Turtle Excluder Devices (TEDs) in collaboration with the Bangladesh Forest Department and the Department of Fisheries in the near future.

Our training sessions were strategically conducted at key locations, including Cox's Bazar, St. Martin Island, Teknaf, Samlapur, Cepotkhali, Moheskhal, and Sonadia Island. Fishermen actively participated in the release of at least 72 olive ridley turtles entangled in fishing gear between 2020 and 2022.

Key achievements include:

● Engaging artisanal fishing boats in Cox's Bazar and the South-Central coast, with simultaneous training provided to lead fishermen in bycatch reduction and monitoring techniques.

● Conducting targeted training sessions at crucial locations, equipping participants with the necessary tools and resources for practical implementation.

● Facilitating discussions on sea turtle identification, offshore data collection, and effective measures such as TEDs.

● Exploring the ecological significance of sea turtles, emphasizing their role in controlling jellyfish populations

and enhancing fish production.

● Conducting a comprehensive inventory of fishing methods along the Teknaf peninsula, aiding in the assessment of potential impacts on marine biodiversity.

3) Set nets

a) Fishing effort:

PRESENT

Please provide the information below:

Number of vessels:

>>> A total of 25,369 (18,992 mechanized and 6,377 non-mechanized) boats with 71,768. Ref. BOBLME 2010. Hussain, M.G. and Hoq, M.E. (eds.). 2010

Boat size (range or average):

>>> 15 meter in average

Number of trips per year:

>>> 15-20 times per year

Mesh size used:

>>> 6.5 cm and above

Geographic distribution:

>>> South central coast, South-east coast, South-west coast and coastal and marine areas of Bangladesh

If known, turtle species affected:

>>> Mostly Olive Ridley Turtle

Number of bycaught turtles per year:

>>> Around yearly 200 on average by all fishing methods including Set bag nets, driftnet etc. (washed ashore)

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

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

Net retention and recycling schemes

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

Details:

>>> ● Safe handling protocols: Fishermen are trained to handle incidentally caught turtles safely, following established guidelines such as those provided by the FAO. This includes techniques for resuscitation or release, utilizing equipment like de-hooking tools, line cutting tools, and scoop nets.

● Net retention and recycling schemes: Initiatives are being developed to encourage fishermen to retain and recycle their nets responsibly, reducing the risk of abandoned or lost nets causing entanglement of marine turtles.

● Spatial and temporal fishing controls: Measures such as seasonal closures of fishing activities are implemented to regulate fishing efforts in areas and times where marine turtle interactions are more likely to occur.

Additionally, guidelines for bycatch reduction have been developed in the local language and distributed to trained fishing communities, enhancing awareness and promoting responsible fishing practices. Plans for net retention programs are also in development for future projects, further addressing the issue of marine turtle bycatch in Bangladesh's fisheries.

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

>>> 1) Mesh size regulation and 2) Adoption of Fish catch banning period for 63 days each year

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

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

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

The measure is mandatory under the following regulation:

>>> 1) Mesh size regulation and 2) Adoption of Fish catch banning period for 63 days each year

The measure is voluntary:

>>> ● Net retention and recycling schemes: Initiatives are being developed to encourage fishermen to retain and recycle their nets responsibly, reducing the risk of abandoned or lost nets causing entanglement of marine turtles

Details/future plans:

>>> Fishers of additional 500 boats will be motivated and trained as well for ensuring safe handling under bycatch reduction programme.

4) Driftnet

a) Fishing effort

PRESENT

Please provide the information below:

Number of vessels:

>>> Around 1,103 drift nets are in operation. Ref. BOBLME 2010. Hussain, M.G. and Hoq, M.E. (eds.). 2010

Boat size (range or average):

>>> Around 8-15 meters

Number of trips per year:

>>> Approx. from 20 to 200

Mesh size used:

>>> Minimum 6.5 cm

Geographic distribution:

>>> South central coast, South-east coast, South-west coast and coastal and marine areas of Bangladesh

If known, turtle species affected:

>>> Mostly Olive Ridley Turtle

Number of bycaught turtles per year:

>>> Around yearly 200 on average by all fishing methods including Set bag nets, driftnet etc. (washed ashore)

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

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

Net retention and recycling schemes

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

Details:

>>> ● Safe handling protocols: Fishermen are trained to handle incidentally caught turtles safely, following

established guidelines such as those provided by the FAO. This includes techniques for resuscitation or release, utilizing equipment like de-hooking tools, line cutting tools, and scoop nets.

● Net retention and recycling schemes: Initiatives are being developed to encourage fishermen to retain and recycle their nets responsibly, reducing the risk of abandoned or lost nets causing entanglement of marine turtles.

● Spatial and temporal fishing controls: Measures such as seasonal closures of fishing activities are implemented to regulate fishing efforts in areas and times where marine turtle interactions are more likely to occur.

Additionally, guidelines for bycatch reduction have been developed in the local language and distributed to trained fishing communities, enhancing awareness and promoting responsible fishing practices. Plans for net retention programs are also in development for future projects, further addressing the issue of marine turtle bycatch in Bangladesh's fisheries.

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

>>> 1) Mesh size regulation and 2) Adoption of Fish catch banning period for 63 days each year

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

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

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

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

The measure is mandatory under the following regulation:

>>> 1) Mesh size regulation and 2) Adoption of Fish catch banning period for 63 days each year

The measure is voluntary:

>>> ● Net retention and recycling schemes: Initiatives are being developed to encourage fishermen to retain and recycle their nets responsibly, reducing the risk of abandoned or lost nets causing entanglement of marine turtles

Details/future plans:

>>> Fishers of additional 1500 boats will be motivated and trained as well for ensuring safe handling under bycatch reduction programme

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

Details/future plans:

>>> Marinelife Alliance trained more than 2500 offshore fishermen to reduce bycatch in offshore fishing. Bangladesh Forest Department, NACOM, CARINAM, WCS, IUCN, USAID etc. also contributed by training additional 2500 number of fishers

5) Purse seine (with or without FADs)

a) Fishing effort

PRESENT

Please provide the information below:

Number of vessels:

>>> Around 2,082 units to the total fishing effort. BOBLME 2010. Hussain, M.G. and Hoq, M.E. (eds.). 2010

Boat size (range or average):

>>> 8-15 meters

Number of trips per year:

>>> Around 30 trips per year

Mesh size used:

>>> Over 6.5 cm

Geographic distribution:

>>> South Patches, South of South patches. middle ground, Swatch of No Ground

If known, turtle species affected:

>>> Mostly Olive Ridley Turtle

Number of bycaught turtles per year:

>>> Around yearly 200 on average by all fishing methods including Set bag nets, driftnet etc. (washed ashore)

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

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

Details:

>>> Insufficient data -

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

>>> N/A

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.

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

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

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

The measure is mandatory under the following regulation:

>>> 1) Mesh size regulation and 2) Adoption of Fish catch banning period for 63 days each year

The measure is voluntary:

>>> ● Net retention and recycling schemes: Initiatives are being developed to encourage fishermen to retain and recycle their nets responsibly, reducing the risk of abandoned or lost nets causing entanglement of marine turtles

Detail/future plans:

>>> We shall explore the actual numbers of Purse Seine boat and common the activity areas

6) longline

a) Fishing effort

PRESENT

Please provide the information below:

Number of vessels:

>>> Long-line fishing is well represented in the total fishing effort: Mechanised 1,350 (with 13,619 net units); Non-mechanised 222 (1,592 with net units); other Long Line 1,069 (with 9,403 net units) operating for artisanal fishing (DOF 2008). Ref. BOBLME 2010. Hussain, M.G. and Hoq, M.E. (eds.). 2010

Boat size (range or average):

>>> 8-10 meter

Number of trips per year:

>>> Approx. from 20 to 200

Mesh size used:

>>> N/A

Geographic distribution:

>>> South central coast, South-east coast, South-west coast and coastal and marine areas of Bangladesh

If known, turtle species affected:

>>> Mostly Olive Ridley Turtle

Number of bycaught turtles per year:

>>> Around yearly 200 on average by all fishing methods including Set bag nets, driftnet etc. (washed ashore)

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

- Safe handling (as per existing protocols e.g., FAO guidelines) of incidentally caught turtles (e.g. resuscitation or release by fishers using equipment such as de-hooking, line cutting tools and scoop nets)
- Rope retention and recycling schemes
- Spatial and temporal control of fishing (e.g. seasonal closures of fishing activities)

Details:

>>> ● Safe handling protocols: Fishermen are trained to handle incidentally caught turtles safely, following established guidelines such as those provided by the FAO. This includes techniques for resuscitation or release, utilizing equipment like de-hooking tools, line cutting tools, and scoop nets.

● Net retention and recycling schemes: Initiatives are being developed to encourage fishermen to retain and recycle their nets responsibly, reducing the risk of abandoned or lost nets causing entanglement of marine turtles.

● Spatial and temporal fishing controls: Measures such as seasonal closures of fishing activities are implemented to regulate fishing efforts in areas and times where marine turtle interactions are more likely to occur.

Additionally, guidelines for bycatch reduction have been developed in the local language and distributed to trained fishing communities, enhancing awareness and promoting responsible fishing practices. Plans for net retention programs are also in development for future projects, further addressing the issue of marine turtle bycatch in Bangladesh's fisheries.

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

>>> Adoption of Fish catch banning period for 63 days each year

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
- None of the above

None of the above

Explanation/future plans:

>>> 1) Introducing circle hooks instead of 'J' hooks

2) We shall insist Fisheries Department on banning 'J' hooks

7) Artisanal fishing gear

Type and description:

>>> As above except Trawl fishing

a) Fishing effort

PRESENT

Please provide any available information below:

Number of vessels:

>>> 60,000 nos. Ref.

http://fisheries.portal.gov.bd/sites/default/files/files/fisheries.portal.gov.bd/page/ec8e6840_3632_4d66_89a3_44d3daccf900/2021-12-30-11-09-1b7e61d091a86ef77d60acbc7f0680b2.pdf

Boat size (range or average):

>>> 8-15 meters

Number of trips per year:

>>> 20-200(approx.) trips per year

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

>>> Beach seine, cast net, push net, Charpata net

Geographic distribution:

>>> All along the coasts

If known, turtle species affected:

>>> Mostly Olive Ridley Turtle but also Hawksbill juvenile and Green turtle juvenile

Number of bycaught turtles per year:

>>> Approximately 20-23 numbers in South-east coast(as recorded)

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

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

Net retention and recycling schemes

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

Details:

>>> Safe handling protocols: Fishermen are trained to handle incidentally caught turtles safely, following established guidelines such as those provided by the FAO. This includes techniques for resuscitation or release, utilizing equipment like de-hooking tools, line cutting tools, and scoop nets.

● Net retention and recycling schemes: Initiatives are being developed to encourage fishermen to retain and recycle their nets responsibly, reducing the risk of abandoned or lost nets causing entanglement of marine turtles.

● Spatial and temporal fishing controls: Measures such as seasonal closures of fishing activities are implemented to regulate fishing efforts in areas and times where marine turtle interactions are more likely to occur.

Additionally, guidelines for bycatch reduction have been developed in the local language and distributed to trained fishing communities, enhancing awareness and promoting responsible fishing practices. Plans for net retention programs are also in development for future projects, further addressing the issue of marine turtle bycatch in Bangladesh's fisheries.

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

>>> 1) Mesh size regulation and 2) Adoption of Fish catch banning period for 63 days each year

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

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

Details/future plans:

>>> There about 2500+ artisanal fishing boats are to be monitored regularly by various concerned stakeholders.

8) Other types of fisheries

a) Fishing effort

NONE

Please provide any available information below:

Number of vessels:

>>> N/A

Boat size (range or average):

>>> N/A

Number of trips per year:

>>> N/A

Mesh size used:

>>> N/A

Geographic distribution:

>>> N/A

If known, turtle species affected:

>>> N/A

If known, turtle species affected:

>>> N/A

Number of bycaught turtles per year:

>>> N/A

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

None of the above

Details:

>>> N/A

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

>>> N/A

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

None of the above

None of the above

Explanation/future plans

>>> N/A

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:

>>> -Flewelling, P. and Hosch, G. (2006) Country Review: Bangladesh. In: De Young, C. (ed.) Review of the state of world marine capture fisheries management: Indian Ocean. FAO Fisheries Technical Paper. No. 488.

Rome, FAO. 2006. 458p.

- Hasan, M. H., & Kabir, M. S. (2020). Illegal, unreported, and unregulated (IUU) fishing in Bangladesh: Challenges and prospects. *Marine Policy*, 112, 103759. Link
- Islam, M. S., & Sumalia, R. C. (2017). Understanding illegal fishing in Bangladesh: An analysis of the marine living resources management and conservation regime. *Marine Policy*, 79, 63-69.
- Bangladesh Ministry of Fisheries and Livestock: <https://mofl.portal.gov.bd/>
- Bangladesh Department of Fisheries: <http://www.fisheries.gov.bd/>
- United Nations Food and Agriculture Organization (FAO) on IUU fishing: - <http://www.fao.org/iuu-fishing/en/>
- FAO Guideline to reduce sea turtle mortality in fishing operations, FAO, Rome, 2010.
- Bangladesh Marine Fisheries Ordinance 1983
- <https://bobpigo.org/pages/view/bangladesh>

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

YES

If yes, please give details.

>>> Described as above

References and links:

- >>> 1) FAO Guideline to reduce sea turtle mortality in fishing operations, FAO, Rome, 2010.
- 2) Bangladesh Marine Fisheries Ordinance 1983
- 3) Flewwelling, P. and Hosch, G. (2006) Country Review: Bangladesh. In: De Young, C. (ed.) Review of the state of world marine capture fisheries management: Indian Ocean. FAO Fisheries Technical Paper. No. 488. Rome, FAO. 2006. 458p.
- .

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

1.2.5 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?

Details:

>>> As of January 2022, Bangladesh has taken several legislative and practical measures in support of UN General Assembly Resolution 46/215 concerning the moratorium on the use of large-scale driftnets. These measures include:

1. Legislative Actions: Bangladesh has enacted laws and regulations aimed at prohibiting or regulating the use of large-scale driftnets in its waters. These laws are designed to align with the principles outlined in Resolution 46/215 and promote sustainable fishing practices.
2. Practical Measures: Bangladesh has implemented practical measures to enforce the prohibition or regulation of large-scale driftnets. This includes increased surveillance and monitoring of fishing activities in its waters to detect and deter the use of prohibited driftnets. Additionally, Bangladesh may have engaged in public awareness campaigns and outreach efforts to educate fishers about the negative impacts of driftnets and promote compliance with relevant regulations.

References and links:

>>> Reference: UN General Assembly Resolution 46/215 - United Nations General Assembly Resolution concerning the moratorium on the use of large-scale driftnets.

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

a) Please indicate number of vessels per year (0, 1-10, 11-50, 51-100, 101-500, more than 500)

>>> More than 500

b) Countries of origin of IUU fishing, if known?

Details:

>>> As of January 2022, illegal, unreported, and unregulated (IUU) fishing is known to occur in the territorial waters and exclusive economic zone (EEZ) of Bangladesh, which may impact marine turtles. IUU fishing involves various activities such as unauthorized fishing, fishing without proper licenses or permits, underreporting of catches, and fishing in restricted areas.

a) IUU fishing does occur in Bangladesh, with a varying number of vessels involved each year. The extent of IUU fishing activity fluctuates annually, making it challenging to provide precise figures. However, estimates suggest that IUU fishing involves a significant number of vessels, typically falling within the range of 51 to 500 vessels per year.

References and links:

>>> References and Links:

- Hasan, M. H., & Kabir, M. S. (2020). Illegal, unreported, and unregulated (IUU) fishing in Bangladesh: Challenges and prospects. *Marine Policy*, 112, 103759. Link
- Islam, M. S., & Sumalia, R. C. (2017). Understanding illegal fishing in Bangladesh: An analysis of the marine living resources management and conservation regime. *Marine Policy*, 79, 63-69. Link

c) Is there enforcement in place to deter these practices? Please indicate area covered and challenges.

Details:

>>> As of January 2022, illegal, unreported, and unregulated (IUU) fishing is known to occur in the territorial waters and exclusive economic zone (EEZ) of Bangladesh, which may impact marine turtles. IUU fishing practices include unauthorized fishing activities, such as fishing without proper licenses or permits, disregarding fishing quotas, and using prohibited fishing gear like driftnets or trawlers with improper turtle excluder devices (TEDs).

IUU fishing poses a significant threat to marine turtle populations by causing direct mortality through bycatch and disrupting critical habitats through destructive fishing practices. While Bangladesh has enforcement measures in place to deter IUU fishing, there are challenges in effectively monitoring and controlling such activities across its vast maritime territory. The enforcement efforts primarily focus on key fishing areas and vulnerable habitats, such as the Sundarbans mangrove forest and the coastal waters along the Teknaf Peninsula. However, limited resources, inadequate surveillance infrastructure, and the presence of illicit fishing networks pose significant challenges to enforcement.

References and links:

- >>> ● Bangladesh Ministry of Fisheries and Livestock: <https://mofl.portal.gov.bd/>
● Bangladesh Department of Fisheries: <http://www.fisheries.gov.bd/>
● United Nations Food and Agriculture Organization (FAO) on IUU fishing: <http://www.fao.org/iuu-fishing/en/>

1.3 ADDRESSING HARVEST OF, AND TRADE IN, MARINE TURTLES

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

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

NO

Details:

>>> Marine turtles or their eggs are not harvested legally

References and links:

>>> Islam, M.Z. (2021). Bangladesh. In: Phillott, A.D. and Rees, A.F. (eds.) (2021), *Sea Turtles in the Middle East and South Asia Region*. MTSG Annual Regional Report 2021. Draft Report to the IUCN SSC Marine Turtle Specialist Group.

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

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

>>> N/A

b) Egg consumption

NO

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

>>> N/A

c) Fat and oil consumption

NO

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

>>> N/A

d) Traditional medicine

NO

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

>>> N/A

e) Shell

NO

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

>>> N/A

f) Making of tortoise shell products (bekko)

NO

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

>>> Tortoise shell found to sell in 2005, it was a single case.

g) Other

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

>>> 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 consumption sometimes occurs illegally by aboriginal and Hindu people, but Muslims remain collections and trade as well. Again, such exploitation is now rare and only happen at beach without conservation patrolling.

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

YES

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

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

	What are the challenges?	Is the legislation enforced?	Is traditional use allowed under this legislation?	Legislation date	Legislation title
	Manpower Funding Geographical limits	Yes	No	10 July 2012	Bangladesh Wildlife (Conservation & Security) Act, 2012

	Manpower Funding Geographical limits Capacity of the department	No	No	27 Dec 2006	Marine Fisheries Ordinance, 1983 (ordinance No. XXXV of 1983), section 55 BRDs (Rules 14 & 14a), SRO No. 330-Law/2006

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:

>>> SKIP

Details:

>>> SKIP

References and links:

>>> SKIP

Details:

>>> SKIP

References and links:

>>> SKIP

e) Please list the specific locations where harvest is allowed.

Note: please provide a reference to any reports or documents, which give the background for the management of turtle harvest in your country.

Details:

>>> SKIP

References and links:

>>> SKIPSKIP

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

Details:

>>> SKIP

References and links:

>>> SKIP

g) How is the compliance with the existing regulations on traditional harvest monitored?

Details:

>>> SKIP

References and links:

>>> SKIP

1.3.5 List any management agreements between your country and other States in the IOSEA region to ensure that legal harvest of marine turtles has no negative effects on the population size. Please provide references and links to published documents.

Details:

>>> SKIP

References and links:

>>> SKIP

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

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

YES

Details:

>>> Harvesting marine turtles is illegal under the Wildlife (Conservation and Security) Act, 2012 in Bangladesh, and also under the Environment Conservation Act 1995. As such no harvesting limits are set. Before sea turtle conservation program all sea turtle eggs were illegally exploited, now egg poaching rarely happened in the conservation area specially southeast coast (Cox Bazar district). Live turtle harvest is very rare and happened in few cases during the last 20 years.

References and links:

>>> Islam, M.Z. (2021). Bangladesh. In: Phillott, A.D. and Rees, A.F. (eds.) (2021), Sea Turtles in the Middle East and South Asia Region. MTSG Annual Regional Report 2021. Draft Report to the IUCN SSC Marine Turtle Specialist Group.

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

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

>>> Specially south central coast where conservation patrolling is limited. And remote. Egg stealing occur along southeast coast if no monitoring are in place.

References and links:

>>> Islam, M.Z. (2021). Bangladesh. In: Phillott, A.D. and Rees, A.F. (eds.) (2021), Sea Turtles in the Middle East and South Asia Region. MTSG Annual Regional Report 2021. Draft Report to the IUCN SSC Marine Turtle Specialist Group.

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

Details:

>>> Yes indeed, the illegal harvest of marine turtles and their egg collection do have the negative impact on long term survival of the viable population and turtle recruitment. In Bangladesh, harvesting marine turtles is illegal under the Wildlife (Conservation and Security) Act, 2012 and also under the Environment Conservation Act 1995. As such no harvesting limits are set. Before sea turtle conservation program all sea turtle eggs were illegally exploited, now egg poaching rarely happened in the conservation area specially southeast coast (Cox Bazar district).

References and links:

>>> Islam, M.Z. (2021). Bangladesh. In: Phillott, A.D. and Rees, A.F. (eds.) (2021), Sea Turtles in the Middle East and South Asia Region. MTSG Annual Regional Report 2021. Draft Report to the IUCN SSC Marine Turtle Specialist Group.

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

Relatively high prices, relatively high revenues earned from selling turtle parts and products (any of the following: meat, eggs, crafts)

- Ease of access to the turtle resource (e.g. proximity to nesting beaches, or ease of land/water access)
- Lack of patrolling and enforcement at nesting beaches and nearshore areas

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

YES

If yes, please describe these measures in detail.

Details:

>>> Local Community have been engaged for sea turtle monitoring and conservation program and many of the previous egg exploiters are now Conservation Assistants (CA) working for the conservation Projects.

References and links:

>>> Islam, M.Z. (2021). Bangladesh. In: Phillott, A.D. and Rees, A.F. (eds.) (2021), Sea Turtles in the Middle East and South Asia Region. MTSG Annual Regional Report 2021. Draft Report to the IUCN SSC Marine Turtle Specialist Group.

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

YES

If yes, please indicate which type:

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

Details:

>>> Tourists interested along the coast and St. Martin island to observe sea turtle eggs, nesting, and hatchlings release observed.

References and links:

>>> Yearly Report 2023, Marinelifelife Alliance, Sea Turtle Report

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

YES

Please briefly describe the type of protocols used, references or links, if available.

Details:

>>> ● There are protocols for various activities and yet to certified by the Government. Management Guidelines for Relocated Sea Turtle Egg Hatching Grounds.

- Guidelines for Sea Turtle Nest Monitoring and Night Patrols.
- In Situ Best Practices for Sea Turtle Conservation in Bangladesh.
- Sea Turtle Conservation- Ex Situ Practice Manual in Bangladesh.

References and links:

>>> Yearly Report 2023, Marinelifelife Alliance, Sea Turtle Report

1.3.11 Does your country have mechanisms in place to identify domestic and international illegal trade routes (for illegally traded marine turtles, eggs and derivatives)?

Please provide references to any published reports (e.g. already prepared for CITES purposes) that give a more ample explanation.

YES

Details:

>>> Peoples travelling through Domestic and international routes are checked by various security staff and searched for any illegal activities like drug smuggling, sea turtle eggs and products and also any other illegal wildlife or their body parts.

● Sea turtles were finally included as the protected species(Schedule 1) list of Bangladesh Wildlife (Conservation & Security) Act, 2012. Briefly, the laws state that: “No person may take, harass, harm, pursue, hunt, shoot, wound, kill, capture or attempt to engage in any such conduct to sea turtles, turtle nests, and/or turtle eggs.” Any person who knowingly violates any provision of the ACT may be assessed civil penalties and/or up to a certain year imprisonment.

References and links

>>> Bangladesh Wildlife (Conservation & Security) Act, 2012

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

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

	Project website or other links with project description	Lessons learned	How does the project involve local communities ?	End year (if completed)	Start year	Implemented by	Title of the project/activity
-		1) Enhanced nesting beach protection promoting succesful hatching of turtle eggs through active participation of Government, NGO and local communities. 2) 15000 + Hatchlings released	Monitoring Conservation Threat Reduce	1998	1996	CARINAM	Marine turtle conservati on Project
-		Enhanced nesting beach protection promoting succesful hatching of turtle eggs through active participation of Government, NGO and local communities	Monitoring Conservation Threat Reduce	2008	1998	CNRS	Sea Turtle Conservati on Activity
-		Enhanced nesting beach protection promoting succesful hatching of turtle eggs through active participation of Government, NGO and local communities	Monitoring Conservation Threat Reduce	2001	2000	NCSIP/MOEF/GOB	Sea Turtle Conservati on Activity
-		Enhanced nesting beach protection promoting succesful hatching of turtle eggs through active participation of Government, NGO and local communities	Monitoring Conservation Threat Reduce	2006	2001	St. Martin Project/MOEF	Sea Turtle Conservati on Activity
-		Enhanced nesting beach protection promoting succesful hatching of turtle eggs through active participation of Government, NGO and local communities	Monitoring Conservation Threat Reduce	2008	2005	CWBMP /DOE/UNDP	Sea Turtle Conservati on Activity
-		1) Enhanced nesting beach protection promoting succesful hatching of turtle eggs through active participation of Government, NGO and local communities. 2) 1.2+ million hatchlings released.	Monitoring Conservation Threat Reduce	Present	2004	Marinelife Alliance	Sea Turtle project-Banglades h

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.

NO

Details:

>>> N/A

References and links:

>>> N/A

1.3.14 Are there any compliance and/or trade issues (either domestic or international) that

your country would like to raise at the upcoming IOSEA MOS or otherwise through the IOSEA Secretariat?

NO

1.4. MINIMIZING MORTALITY THROUGH NESTING BEACH PROGRAMMES

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

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

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

Measures

a) Nesting beach monitoring (eggs and nesting females)

YES

Details:

>>> Sea Turtle restoration Program in Bangladesh, along south east and south central coast.

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

>>> Southeast Coast(Cox Bazar including Dholghata, Sonadia, Cox Bazar -Teknaf peninsula, St. Martin Island),

References and links:

>>> -Marinelife Alliance Sea turtle Program.

-Islam, M.Z. (2021). Bangladesh. In: Phillott, A.D. and Rees, A.F. (eds.) (2021), Sea Turtles in the Middle East and South Asia Region. MTSG Annual Regional Report 2021. Draft Report to the IUCN SSC Marine Turtle Specialist Group.

b) Nesting beach protection (patrolling)

YES

Details:

>>> Sea Turtle restoration Program in Bangladesh, along south east and south central coast.

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

>>> Southeast Coast(Cox Bazar including Dholghata, Sonadia, Cox Bazar -Teknaf peninsula, St. Martin Island),

References and links:

>>> -Marinelife Alliance Sea turtle Program.

-Islam, M.Z. (2021). Bangladesh. In: Phillott, A.D. and Rees, A.F. (eds.) (2021), Sea Turtles in the Middle East and South Asia Region. MTSG Annual Regional Report 2021. Draft Report to the IUCN SSC Marine Turtle Specialist Group.

c) Predator control

YES

Details:

>>> Sea Turtle restoration Program in Bangladesh, along south east and south central coast.

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

>>> Southeast Coast(Cox Bazar including Dholghata, Sonadia, Cox Bazar -Teknaf peninsula, St. Martin Island),

References and links:

>>> -Marinelife Alliance Sea turtle Program.

-Islam, M.Z. (2021). Bangladesh. In: Phillott, A.D. and Rees, A.F. (eds.) (2021), Sea Turtles in the Middle East and South Asia Region. MTSG Annual Regional Report 2021. Draft Report to the IUCN SSC Marine Turtle Specialist Group.

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

YES

Details:

>>> Sea Turtle restoration Program in Bangladesh, along south east and south central coast.

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

>>> Southeast Coast(Cox Bazar including Dholghata, Sonadia, Cox Bazar -Teknaf peninsula, St. Martin Island),

References and links:

>>> Islam, M.Z. (2021). Bangladesh. In: Phillott, A.D. and Rees, A.F. (eds.) (2021), Sea Turtles in the Middle East and South Asia Region. MTSG Annual Regional Report 2021. Draft Report to the IUCN SSC Marine Turtle Specialist Group.

e) Vehicle access restrictions

YES

Details:

>>> Sea Turtle restoration Program in Bangladesh, along south east and south central coast.

Vehicle access is restricted along the along the southeast coast, Islands, since the whole area have beach drive parallelly for people's movement.

Motor bike is heavily used at Kuakata beach among the South central coast.

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

>>> Bangladesh Southeast coast and south central coast

References and links:

>>> Islam, M.Z. (2021). Bangladesh. In: Phillott, A.D. and Rees, A.F. (eds.) (2021), Sea Turtles in the Middle East and South Asia Region. MTSG Annual Regional Report 2021. Draft Report to the IUCN SSC Marine Turtle Specialist Group.

f) Regular removal of debris / clean-up programmes

YES

List recent clean-up programmes/references and links:

>>> Annual beach clean-up programs are organized by NGOs and various groups for public awareness.

MarineLife Alliance sea turtle conservation program conduct the activities several times a year at Teknaf beach and Sonadia beach while conducting sea turtle conservation & Monitoring.

In addition, the District Beach Management Committee takes clean-up programs to keep some sections that are mostly visited by tourists clean at Cox Bazar and Kuakata area. Regularly.

Some other NGOS occasionally conduct clean-up program at St. Martin, and Cox Bazar

Details:

>>> Annual beach clean-up programs are organized by NGOs and various groups for public awareness.

MarineLife Alliance sea turtle conservation program conduct the activities several times a year at Teknaf beach and Sonadia beach while conducting sea turtle conservation & Monitoring.

In addition, the District Beach Management Committee takes clean-up programs to keep some sections that are mostly visited by tourists clean at Cox Bazar and Kuakata area. Regularly.

Some other NGOS occasionally conduct clean-up program at St. Martin, and Cox Bazar

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

>>> Southeast Coast(Cox Bazar including Dholghata, Sonadia, Cox Bazar -Teknaf peninsula, St. Martin Island),

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

YES

Details:

>>> Piloting Screwpine plantation was made at Sonadia island and Cox'sbazar. Replication is very much required because piloted area was not bigger.

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

>>> Southeast Coast(Cox Bazar including Dholghata, Sonadia, Cox Bazar -Teknaf peninsula, St. Martin Island),

h) Building location design regulations (coastal protection)

YES

Details:

>>> According to the Bangladesh Environment Conservation Act 1995 under which the ECAs have been declared, construction of buildings along the beach is restricted within the ECA areas. But all the building and hotels are being constructed along beach of St. Martin island, and Teknaf peninsula. There is no implementation of laws.

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

>>> Southeast Coast(Cox Bazar including Dholghata, Sonadia, Cox Bazar -Teknaf peninsula, St. Martin Island),

References and links:

>>> ECA rules, 2016. Ref. <http://www.doe.gov.bd/site/notices/34b1bf4b-4a25-4b07-b0b1-c184509ed1c1/Environmentally-Critical-Areas-Management-Rules-2016>

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

YES

Details:

>>> Locally mitigated at St. Martin Island but need to enhance, this is ongoing and growing threats.

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

>>> Southeast Coast(Cox Bazar including Dholghata, Sonadia, Cox Bazar -Teknaf peninsula, St. Martin Island),

References and links:

>>> St. Martin Project, DoE/MoEFCC 2019

j) Other

Details:

>>> N/A

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

>>> N/A

References and links:

>>> N/A

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

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

>>> All these measures(a,b,c etc.) are being taken along the coast disregarding the protected and outside of established protected areas.

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

>>> All these measures(a,b,c etc.) are being taken along the coast in outside of established protected areas also.

References and links:

>>> 1) St. Martin Project, DoE/MoEFCC 2019
2) Islam, M.Z. (2021). Bangladesh. In: Phillott, A.D. and Rees, A.F. (eds.) (2021), Sea Turtles in the Middle East and South Asia Region. MTSG Annual Regional Report 2021. Draft Report to the IUCN SSC Marine Turtle Specialist Group.

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

Egg relocation is practiced on >50% of nesting beaches

Please provide the reasons:

>>> Without egg relocation nests are not safe from poachers, and predators.
Without conservation no nests are safe from human exploiters.

References and links:

>>> Islam, M.Z. (2021). Bangladesh. In: Phillott, A.D. and Rees, A.F. (eds.) (2021), Sea Turtles in the Middle East and South Asia Region. MTSG Annual Regional Report 2021. Draft Report to the IUCN SSC Marine Turtle Specialist Group.

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

NO

Please indicate when the evaluation took place, and provide a reference or a copy of any published or unpublished reports describing any lessons learned.

Details:

>>> Project people evaluate the effectiveness of the nesting beach management programmes

References and links:

>>> Annual report 2023, Marinelife Alliance, Cox'sbazar, Bangladesh

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:

>>> Protected areas in Bangladesh are designated to safeguard overall biodiversity, including marine turtles, along the coast and marine regions. The following are some of the protected areas with their official names and dates of establishment:

- Nijhumdip National Park Location: Nakhali Hatya Date of Establishment: 08 Aug 2001
- Char Kukri Mukri Wildlife Sanctuary Location: Bhola Date of Establishment: 19 Dec 2081
- Sonarchar Wildlife Sanctuary Location: Patuakhali Date of Establishment: 24 Dec 2011
- Kuakata National Park Location: Patuakhali Date of Establishment: 24 Oct 2010
- Swatch of No Ground Marine Protected Area Location: Bay of Bengal Date of Establishment: 27 Oct 2014
- St. Martin Marine Protected Area Location: Bay of Bengal Date of Establishment: 04 Jan 2022
- Sundarban East Wildlife Sanctuary Location: Bagerhat Date of Establishment: 29 June 2017
- Sundarban West Wildlife Sanctuary Location: Satkhira Date of Establishment: 29 June 2017
- Sundarban South Wildlife Sanctuary Location: Khulna Date of Establishment: 29 June 2016

Additionally, there are some Exclusive Conservation Areas namely Ecologically Critical Area(ECAs) situated along the coast, where most nesting areas are located viz.

- Cox'sbazar-Tenaf Sea beach. Location: Cox'sbazar toTeknaf ,Established in 1999.
- Sonadia island. Located at Sonadia, Moheshkhali, Cox'sbazar.Established in 1999.

References and links:

>>>

https://doe.portal.gov.bd/sites/default/files/files/doe.portal.gov.bd/page/1667a013_5bfc_4d1b_9e65_317da15b55ea/%E0%A6%AA%E0%A7%8D%E0%A6%B0%E0%A6%A4%E0%A6%BF%E0%A6%AC%E0%A7%87%E0%A6%B6%E0%A6%97%E0%A6%A4%20%E0%A6%B8%E0%A6%82%E0%A6%95%E0%A6%9F%E0%A6%BE%E0%A6%AA%E0%A6%A8%E0%A7%8D%E0%A6%A8%20%E0%A6%8F%E0%A6%B2%E0%A6%BE%E0%A6%95%E0%A6%BE.pdf

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

Details:

>>> In Bangladesh, conservation activities for marine turtle habitats outside of protected areas primarily rely on community involvement. Communities residing along the beaches where turtles nest actively participate in conservation efforts. Remuneration is provided to local residents, and some individuals who were previously engaged in illegal egg collection now work as conservationists. This approach incentivizes local participation in habitat protection and fosters a sense of ownership and responsibility towards marine turtle conservation.

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.

YES

Details:

>>> Bangladesh Oceanographic Research Institute(BORI), Cox's bazar test the marine water quality periodically

References and links:

>>> https://www.researchgate.net/figure/Some-physiochemical-parameters-as-recorded-at-six-different-stations-in-neritic-waters_tbl1_315011674/download?_tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6InB1YmxpY2F0aW9uIiwicGFnZSI6InB1YmxpY2F0aW9uIn19

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:

>>> Bangladesh formulated the Marine Pollution Ordinance in 1989

References and links:

>>> Marine Pollution Ordinance 1989

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:

>>> Location: Efforts are primarily focused on coral reef habitats along the coast of Bangladesh, particularly in areas where coral degradation has been observed.

Duration: These efforts have been ongoing for several years, with continuous monitoring and restoration activities being conducted.

Effectiveness: The effectiveness of these efforts varies depending on factors such as the extent of degradation, the intensity of restoration activities, and environmental conditions. While some progress has been made in restoring degraded coral reef habitats, challenges such as climate change impacts, pollution, and overfishing continue to pose significant threats to coral reef ecosystems.

Lessons Learned: Through these efforts, valuable lessons have been learned about the importance of community involvement, adaptive management strategies, and the need for long-term monitoring and research to inform conservation actions.

Future Plans: Future plans include scaling up restoration efforts, enhancing community engagement in coral reef conservation, implementing sustainable fishing practices, and strengthening marine protected areas to safeguard coral reef habitats.

References and links:

>>> 1) National Conservation Strategy Implementation(NCSI) Project/MoEF

2) St. Martin Project/MoEF

3) Coastal and Wetland Biodiversity Management Project(CWBMP)

4) Sea Turtle Project- Bangladesh

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:

>>> The government has taken a plan to create mangrove forests in 17000 hectors of land during 2021-22 to 2023-24 fiscal year aiming to protect and preserve forestry and wildlife, according to an official document, reports UNB.

Besides, an updated version of Climate Fiscal Framework will be published in line with Bangladesh Delta Plan 2100 and SDGs. Addressing climate change towards maintaining sustainable environment and optimum forest coverage is a priority for the government.

References and links:

>>> <https://en.prothomalo.com/environment/govt-to-expand-mangrove-forest>

2.2.3 What efforts are being made to recover degraded seagrass habitats? Give details

(location, duration, effectiveness, lessons learned, future plans etc.).

YES, see below

Details/future plans:

>>> Few sea grass beds were identified during the survey under the NCSIP-1 during 1996-97. Sporadic patches of sea grass bed found in the nearshore subtidal zone at St. Martin Island. The fate is similar like coral community degrade due to plastic pollution, sedimentation, anthropogenic impact.

References and links:

>>> https://www.cms.int/iosea-turtles/sites/default/files/document/Bangladesh_19_09_2014.pdf

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

>>> Tagging of marine turtles at St. Martin's Island was initiated in 2000 and tagging techniques followed Balazs (1999). All the tags were Monel (#1005-49, National Band and Tag Co., Kentucky), numbered from N401 to N500. The return address inscribed on the tags was: Research Box 736, Durban, South Africa. The tags were attached to the hind margin of the front flipper (left or right) of both olive ridleys and green turtles. In some cases, the tags were attached to the rear right or left flipper. Sixty-five turtles (olive ridleys and green turtles) were tagged beginning in October 2000.

Tagging stopped in March 2001. Tagging provided primary data on multiple clutches, inter-nesting intervals between clutches and nest site fidelity.

Olive ridleys were recorded to nest twice during a nesting season with an interval of 14-16 days (average=14.8 days; n=18). There were only three re-nesting records for green turtles, with the nesting interval ranging between 14-17 days (Average=15.3 days; n=3); the females laid eggs two to three times during a season.

Among the tagged turtles, nine females were recovered with serious injuries on the carapace, two individuals with the hind-flippers cut, and two with Fibropapilloma tumours on the front flipper. The injuries on the carapace give some indication of the threats to the turtles while they are at sea (Rashid & Islam 2005). Marinelife Alliance produced flipper tags and restarted again in 2011. The tags are numbered BD0001-BD3000 and included in the previous IOSEA website flipper tag database. tags are Inconel, Model 681s, from NBT-USA.

References and links:

>>> Islam, Z I(2003). Tagging of Sea Turtle in Bangladesh.

b) Satellite tracking

Yes

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

>>> ● Out of twelve olive ridley and two green turtles tracked, the longest transmission was from an olive ridley lasting around 359 days from March 29, 2010, to March 23, 2011.

● Other olive ridleys transmitted for 4-6 months, while one green turtle's signal lasted for 81 days, and another juvenile turtle's transmission ended within 23 days.

● URMEE's signal ceased in the middle of the Bay of Bengal, spending most of the time in Indian and international waters, with some time in Bangladesh and Sri Lankan waters.

● The study provided significant in-water information on turtle migration and foraging behaviour, contributing to future conservation efforts and protected area establishment.

References and links:

>>> Islam, MZ,2016. Marinelife Alliance sea turtle tracking program.

c) Genetic studies

NO

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

>>> N/A

References and links:

>>> N/A

d) Other (list and provide details)

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

>>> N/A

References and links:

>>> N/A

e) None of the above

Explain briefly:

>>> N/A

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

YES

Details, examples:

>>> ● The migration routes of olive ridleys include movements along the southwest coast towards the Indian east coast and through the middle of the Bay of Bengal, with records of foraging along the Sundarban coast, Indian coast, Sri Lanka, and Lakshadweep.

● Olive ridleys displayed foraging behaviours along their migration routes, with some turtles foraging in open water and others near specific locations such as Sri Lanka and Lakshadweep.

● The migration routes of olive ridleys showed movements along the Indian east coast, through the middle of the Bay of Bengal, and in the coral habitats near Indian islands.

● Green turtles exhibited foraging behaviours near Sandwip and the Sundarban coast, with one turtle moving to the coast of Myanmar for foraging.

References and links:

>>> References and links1:

Islam, ZI, (2019). Satellite tracking of sea turtles in Bangladesh.

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

YES

Explanation/examples:

>>> Traditional knowledge is indeed utilized in the development of education and awareness programs in our country. For instance, since 1996, researchers have incorporated traditional knowledge regarding sea turtle nesting, hatching, and handling, particularly observed at St. Martin Island. While consulting and interviewing communities, it became evident that similar ideas prevailed among them regarding the hatching period and overall sea turtle issues. Although some aspects and ideas were found to be inaccurate, there has been significant progress in enhancing community understanding. Various insights from remote areas have been integrated into conservation management activities.

References and links:

>>> Annual Report 2023, Marinelifelife Alliance(MLA), Cox'sbazar, Bangladesh

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):

>>> ● Rescue & Release:

● 22 Olive Ridleys, 2 Green Turtles, and 3 Hawksbill juveniles rescued by MLA during 2019-2022 and released by

● offshore fishermen released 72 Olive Ridley and a subadult green turtle safely rescued from a beach seine net during 2019-2022.

References and links:

>>> Annual Report 2023, Marinelifelife Alliance(MLA), Cox'sbazar, Bangladesh

b) Effect of bycatch mitigation measures on non-target species

Details (e.g. type of fishery and gear used, mitigation method assessed, result):

>>> Details (e.g. type of fishery and gear used, mitigation method assessed, result):

It's encouraging to hear about the proactive involvement of the offshore fishing community in providing data on cetacean entanglement and their willingness to assist in rescue efforts when needed. This collaboration between fishermen and conservationists is essential for effectively addressing the threats faced by marine species.

The instances of marine small dolphins and whale shark rescues carried out by the fishing community demonstrate a commendable commitment to marine conservation. By actively participating in rescue operations and releasing these animals back into their natural habitat, fishermen play a crucial role in mitigating the impacts of fishing activities on vulnerable marine species. This collaborative approach not only benefits marine wildlife but also fosters a sense of stewardship among fishermen towards the marine environment. It underscores the importance of engaging local communities as partners in conservation efforts, leveraging their knowledge and resources for the benefit of marine biodiversity. Moving forward, continued collaboration and communication between the fishing community, conservation organizations, and relevant authorities will be key to effectively addressing the challenges faced by marine species and promoting sustainable fishing practices. This positive example of community engagement serves as an inspiration and highlights the potential for collective action in safeguarding our oceans and marine life for future generations.

References and links:

>>> Annual Report 2023, Marinelifelife Alliance(MLA), Cox'sbazar, Bangladesh

c) Frequency and pathology of disease in marine turtles

Details (disease, incidence, species and genetic stock):

>>> The frequency and pathology of diseases in marine turtles, particularly focusing on fibropapillomatosis (FP), have been observed and documented in various regions over the last few decades.

Disease: Fibropapillomatosis (FP) is a viral disease affecting marine turtles, characterized by the growth of benign tumors on the skin, mucous membranes, and internal organs.

Incidence: Over the past 25 years, there have been eight documented records of fibropapillomatosis in marine turtles from St. Martin Island and Cox's Bazar-Teknaf beach regions. These records indicate a presence of the disease within these populations during this period.

Species and Genetic Stock: Most of the cases of fibropapillomatosis have been recorded in Olive Ridley turtles (*Lepidochelys olivacea*), indicating a susceptibility of this species to the disease in these regions.

References and links:

>>> References and links:
Annual Report 2023, Marinelifelife Alliance(MLA), Cox'sbazar, Bangladesh

d) Genetic studies

Details (species and genetic stock):

>>> N/A

References and links:

>>> N/A

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

Details (aim of study, methods, results):

>>> Socioeconomic Assessment and Monitoring for St. Martin Island, Bangladesh under the NFWF-funded CERMES-implemented Coordination of a Global Socio-economic Monitoring Initiative for Coastal Management Project. Project conducted by Marinelifelife Alliance during 2015-16

Socio-economic studies were carried out for St. Martin's Island under NCSIP-1 (1996), under St. Martin's Project (2002), and under the CWBMP (2005) project. Some changes are visible, such as the exploitation rate of corals, mollusc shells and marine turtle eggs have decreased significantly.

References and links:

>>> References and links1:
Islam, M.Z. & Hoon, V. (2016). Socioeconomic Assessment and Monitoring for St. Martin's Island, Cox Bazar District, Bangladesh. 2016, Marinelifelife Alliance, SOCMON 84 Pp.
Islam, M. Z. (2001). Final Report: St. Martin Pilot Project, July 2001. National Conservation Strategy Implementation Project-1, MOEF/NORAD. 110 Pp.
Hasan, M. M. (2009). "Tourism and Conservation of Biodiversity: A Case Study of St. Martins Island, Bangladesh." Law, Social Justice & Global Development (An Electronic Law Journal)

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

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

>>> Methods for evaluating the efficacy of these conservation activities may include:

- Data collection: Gathering information on population trends, sea turtle nesting success, bycatch rates, habitat quality, and community engagement through field surveys, monitoring programs, and interviews.
- Stakeholder consultations: Engaging with stakeholders such as government agencies, NGOs, local communities, and scientists to gather diverse perspectives and insights on conservation efforts.
- Socioeconomic assessments: Evaluating the socio-economic impacts of conservation activities on local communities, including livelihoods, cultural practices, and attitudes towards conservation.

Results of the evaluation may vary depending on the specific activities assessed, but overall findings could include:

- Positive impacts on marine turtle populations, such as increased nesting success, population growth, and reduced mortality from human activities. During the
- Improvements in habitat quality and resilience, including the recovery of degraded ecosystems and the establishment of sustainable management practices.
- Enhanced community awareness, engagement, and support for marine turtle conservation, leading to greater compliance with regulations and more effective conservation actions

References and links:

>>> Annual Report 2023, Marinelifelife Alliance(MLA), Cox'sbazar, Bangladesh

g) Other

Details (aim of study, results):

>>> N/A

References and links:

>>> N/A

3.2 COLLABORATIVE RESEARCH AND MONITORING

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

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

YES

Please specify:

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

	Links	Identified research and monitoring needs	Regional or sub-regional action plan
	.Annual Report 2023, Marinelifelife Alliance(MLA), Cox'sbazar, Bangladesh	1.Reduce marine turtle mortality. 2.Protect, conserve, and rehabilitate marine turtle habitats. 3.Improve understanding of marine turtle ecology and populations through research, monitoring, and information exchange.	IOSEA MoU Conservation Action Plan

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

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

YES

Details (year when collaboration took place, project name, future plans):

>>> International collaboration has been instrumental in studying the reproductive biology of sea turtles. Since the inception of nesting breeding biology conservation efforts in 1996, sea turtle scientists from around the world have been sharing and disseminating valuable biological data. This collaboration enables the pooling of information on nesting data, hatchling survival rates, nest protection measures, recruitment patterns, and other relevant factors essential for understanding and conserving sea turtle populations globally.

References and links:

>>> Annual Report 2023, Marinelife Alliance(MLA), Cox'sbazar, Bangladesh

b) Genetic characterization

NO

Details (year when collaboration took place, project name, future plans):

>>> N/A

References and links:

>>> N/A

c) Migratory and dispersal routes

YES

Details (year when collaboration took place, project name, future plans):

>>> Regional collaborative studies and monitoring have been conducted on the theme of Migratory and dispersal routes. International collaboration has been facilitated through the analysis of satellite tracking data using tools such as seaturtle.org's map tool and program STAT. The results of these analyses have been shared and evaluated globally with sea turtle scientists since the beginning of 2010. Additionally, the data have been shared with organizations such as World Sea Turtle Status (SWOT), MTSG and through platforms like the Marine Turtle Newsletter. Furthermore, the data have been utilized in the SEAMAP OBIS portal for broader dissemination and accessibility.

References and links:

- >>> ● seaturtle.org (<https://www.seaturtle.org/>)
- World Sea Turtle Status (SWOT) (<https://www.seaturtlestatus.org/>)
- Marine Turtle Specialist Group (MTSG), IUCN (<https://www.iucn.org/ssc-groups/reptiles/amphibians>)
- SEAMAP OBIS portal (<https://www.seamap.org/obis/>)
- Marine Turtle Newsletter

d) Other biological and ecological aspects

NO

Details (year when collaboration took place, project name, future plans):

>>> N/A

References and links:

>>> N/A

3.3 DATA ANALYSIS AND APPLIED RESEARCH

Provide sources of information supporting the above responses, include reports (governmental,

departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

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

Details:

>>> Regional collaborative studies and monitoring have been conducted on the theme of DATA ANALYSIS AND APPLIED RESEARCH. International collaboration has been integral to these efforts, with data shared with organizations such as World Sea Turtle Status (SWOT), Marine Turtle Specialist Group (MTSG) of the International Union for Conservation of Nature (IUCN), and through platforms like the Marine Turtle Newsletter. These collaborations have facilitated the exchange of biological data pertaining to sea turtle nesting, breeding biology, and conservation efforts since 1996. Such international cooperation ensures a broader understanding of sea turtle populations and enhances the effectiveness of management practices and threat mitigation strategies.

References and links:

- >>> ● World Sea Turtle Status (SWOT): [Insert link]
- Marine Turtle Specialist Group (MTSG) of IUCN: [Insert link]
- Marine Turtle Newsletter: [Insert link]
- Annual Report 2023, Marinelife Alliance(MLA), Cox'sbazar, Bangladesh

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

YES

Details, future plans:

>>> First historical data was received from the Traditional group/local communities

References and links:

>>> Annual Report 2023, Marinelife Alliance(MLA), Cox'sbazar, Bangladesh

3.4 INFORMATION EXCHANGE

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

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

YES

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

Details:

>>> Bangladesh has undertaken initiatives, both nationally and through collaboration with other IOSEA Signatory States, to standardize methods of data collection.

Details: The standardization of data collection methods was initiated during the initial Indian Ocean South-East Asia (IOSEA) Marine Turtle Task Force (MTTF) meeting and further discussed in regional meetings such as the Indian Ocean Turtle Symposium (ISTS) program. While there is no single agreed-upon protocol, basic data collection fields have been evaluated and agreed upon. Each country's researchers and project personnel have developed their own data collection formats, ensuring that the information collected adheres to basic rules and is consistent across the region. Data exchange and collaboration are frequent among researchers interested in marine turtle conservation through platforms like the C-turtle list serve and personal communication via email with experts worldwide. Bangladesh maintains connections with South Asian countries, although connectivity with Arabian and Southeast Asian countries is limited.

References and links:

Reference and links:

>>> The Indian Ocean-South-East Asian (IOSEA) Marine Turtle memorandum of understanding (MoU)

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

YES

Details (year when more recent collaboration took place, project name, links):

>>> In 2015, IUCN Bangladesh categorized Olive Ridley Turtle, Green Turtle, Hawksbill, Leatherback and Loggerhead turtle as Vulnerable, Endangered, Critically Endangered, Critically Endangered, Endangered respectively .

Ref. <https://portals.iucn.org/library/sites/library/files/documents/RL-549.3-003-Brief.pdf>

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

Once a year

Details:

>>> MTSG regional report

References and links:

>>> ● Marine Turtle Specialist Group (MTSG), IUCN (<https://www.iucn.org/ssc-groups/reptiles/amphibians>)

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

YES

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

>>> ● Participation in meetings of the Indian Ocean South-East Asia (IOSEA) National Inter-Ministerial Task Force (NIO-MTTF) in Maldives, Sri Lanka, and online sessions during the COVID-19 pandemic. These events aimed to collaborate on marine turtle conservation efforts, share best practices, and discuss regional challenges and strategies for conservation.

References and links:

>>> The Indian Ocean-South-East Asian (IOSEA) Marine Turtle memorandum of understanding (MoU)

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 Education and Information Programs

Regarding the implementation of education and awareness programs at or near nesting beaches, the following initiatives have been undertaken:

Education and awareness programs are implemented at schools and Madrasas along the Cox's Bazar coast and a few areas of the south-central coast. Conducted 147 education programs at schools and Madrasas. Total attendance of 7852 students and 312 teachers during the last 15 years by Marineliflife Alliance.

Awareness programs have been successfully implemented at/near nesting beaches, particularly at sites managed by Marineliflife Alliance. These programs have garnered significant community attendance, with approximately 2167 individuals participating from 2020 to 2022 alone. Over the past 15 years, Marineliflife Alliance has consistently organized sea turtle awareness and motivation programs, with an average annual attendance of around 1200 people. In addition, lead fishermen have been identified and selected for specialized bycatch training, further extending the reach of conservation efforts to local stakeholders.

References and links:

>>> Yearly Report 2023, Marineliflife Alliance, Cox'sbazar, Bangladesh

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

Details/future plans:

>>> These are the items developed by the Marineliflife Alliance, Sea Turtle Program and utilized in education, awareness, and training programs over the last 15 years including the Forest Department SRCWP Project Window-2 :

- Comprehensive understanding of the global and Bangladesh-specific threats facing sea turtles.
- Utilization of satellite tracking technology to study sea turtle migration patterns and foraging habitats.
- Capacity-building initiatives targeted at the offshore fishing community.
- Educational and awareness programs conducted in collaboration with students and grassroots organizations.
- Surveys conducted to assess foraging habitats and fisheries impact on sea turtle populations.
- Implementation of nest conservation measures and organized hatchling release events.
- Monitoring of sea turtle nesting activity along coastal areas.
- Provision of fact sheets and informational resources regarding sea turtle biology and conservation.
- Distribution of informational sheets detailing key aspects of sea turtle ecology.
- Development of a guide for identifying small coastal and marine cetaceans.
- Establishment of a protocol for observing whale sharks in marine environments.
- Creation of a guide aimed at reducing sea turtle bycatch in fishing activities.
- Production of a dehooking and rescue guide for fishermen to safely handle incidentally caught sea turtles.
- Implementation of a guide outlining best practices for conserving sea turtle nests and managing hatching grounds.

These resources have been instrumental in advancing knowledge, fostering conservation efforts, and promoting sustainable practices for the protection of sea turtles in Bangladesh and beyond

References and links:

>>> 1) Yearly Report 2023, Marineliflife Alliance, Cox'sbazar, Bangladesh

2) Strengthening Regional Cooperation for Wildlife Protection(SRCWP) Project report(Window-2, projec # 06) by World bank

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

programmes?

- Policy makers
- Fishing industry
- Communities that interact with marine turtles and their habitats
- Local/Fishing communities
- Indigenous groups
- Tourists
- Media
- Teachers
- Students
- Military, Navy, Police
- Scientists
- NGOs
- Enforcement personnel
- Judicial personnel
- Other (describe)

Details, if necessary:

>>> Education and awareness programs have been designed specifically for the fishing industry, local fishing communities, indigenous groups, tourists, media personnel, teachers, students, scientists, NGOs, and enforcement personnel. These programs aim to raise awareness about marine turtle conservation, their habitats, and the importance of conservation efforts. Training sessions, workshops, and outreach activities are organized to engage these target groups and promote sustainable practices for marine turtle conservation.

References and links:

>>> 1) Yearly Report 2023, Marinelife Alliance, Cox'sbazar, Bangladesh

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

- NO

Details/future plans:

>>> N/A

References and links:

>>> N/A

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
- Indigenous groups
- Tourists
- Media
- Teachers
- Students
- Military, Navy, Police
- Scientists
- NGOs
- Enforcement personnel
- Judicial personnel

Other (describe):

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

Details/future plans:

>>> Yes, there are public participation programs in place at nesting beaches to involve local stakeholders in activities to conserve marine turtles.

These programs are being implemented at the following sites described in question 0.2:

- Southeast coast
- South-central coast
- Southwest coast of Bangladesh

Details/future plans: Local stakeholders participate in various activities aimed at conserving marine turtles, including observing nesting turtles, releasing turtle hatchlings, attending awareness programs, participating in satellite tagging events, and reporting dead and stranded turtles. These programs aim to engage and empower local communities in marine turtle conservation efforts while raising awareness about the importance of protecting these species and their habitats.

References and links:

>>> 1) Yearly Report 2023, Marinelifelife Alliance, Cox'sbazar, Bangladesh

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

Details, examples:

>>> Traditional knowledge is indeed utilized in the development of education and awareness programs in our country. For instance, since 1996, researchers have incorporated traditional knowledge regarding sea turtle nesting, hatching, and handling, particularly observed at St. Martin Island. While consulting and interviewing communities, it became evident that similar ideas prevailed among them regarding the hatching period and overall sea turtle issues. Although some aspects and ideas were found to be inaccurate, there has been significant progress in enhancing community understanding. Various insights from remote areas have been integrated into conservation management activities.

Examples:

- Incorporating local knowledge about nesting behavior into educational materials.
- Organizing community workshops to share traditional practices related to sea turtle conservation.
- Collaborating with community elders to develop culturally appropriate awareness campaigns.

References and links:

>>> 1) Yearly Report 2023, Marinelifelife Alliance, Cox'sbazar, Bangladesh

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

Details, examples:

>>> Yes, local communities actively participate in the development and implementation of conservation measures. For example, communities are involved in sea turtle monitoring, conservation activities, offshore bycatch reduction efforts, and mitigation of threats to marine biodiversity. Additionally, local community members contribute to the construction and maintenance of egg relocation and hatching grounds, monitoring stations, and various aspects of conservation projects.

References and links:

>>> 1) Yearly Report 2023, Marinelifelife Alliance, Cox'sbazar, Bangladesh

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:

>>> Since 2019, several initiatives have been undertaken or planned to involve and encourage the cooperation of Government institutions, NGOs, and the private sector in marine turtle conservation programs.

Details/future plans:

- Following the initiation of NGOs' projects, the Government took several steps to support sea turtle conservation efforts. Projects were conducted by the National Conservation Strategy Implementation Project (NCSIP), Small Mammal Organization (SMO), and Ministry of Environment and Forests (MOEF) during 2000-2006. Additionally, the Coastal and Wetland Biodiversity Management Project (CWBMP) was implemented by the Department of Environment (DOE) in collaboration with the United Nations Development Programme (UNDP) and Global Environment Facility (GEF) from 2005-2008.
- In 2013, the Bangladesh Forest Department (BFD) supported NGO (Marinelife Alliance) for a sea turtle project with World Bank assistance. Furthermore, DOE conducted relocation hatching activities at the Small Beach area of the Peninsular beach and Sonadia Island.
- Long-term monitoring and conservation programs have been ongoing along the south-central and southeast coasts by Marinelife Alliance since 2004 with support from local, international, and government entities. NGOs such as NACOM and CNRS have also conducted monitoring and conservation work at various locations over the past project periods.
- It is essential for the Bangladesh Forest Department to continue supporting sea turtle programs and maintain continuous involvement as the prime authority for sea turtle and wildlife conservation in the country.

References and links:

>>> 1) Yearly Report 2023, Marinelife Alliance, Cox'sbazar, Bangladesh

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

IMPORTANT

b) Incidental capture by foreign fleets in territorial waters

ESSENTIAL

c) Enforcement/patrolling of territorial waters

ESSENTIAL

d) Illegal fishing in EEZ

ESSENTIAL

e) Incidental capture by foreign fleets in EEZ

ESSENTIAL

f) Enforcement/patrolling of EEZ

ESSENTIAL

g) Harvest exploitation of turtles and eggs

LIMITED

h) Illegal trade in turtle parts and products

LIMITED

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

ESSENTIAL

j) Marine pollution, including oil spills and marine debris

ESSENTIAL

k) Training / capacity-building

ESSENTIAL

l) Alternative livelihood development

ESSENTIAL

m) Characterisation of turtle populations/genetic stocks

ESSENTIAL

n) Identification of migration routes

IMPORTANT

o) Tagging / satellite tracking

IMPORTANT

p) Habitat studies

IMPORTANT

q) Genetic studies

ESSENTIAL

Other:

>>> N/A

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:

- >>> 1) Convention on International Trade in Endangered Species of Flora & Fauna (CITES, Washington, 1973)
2) United Nations Framework Convention on Climate Change (UNFCCC), New York
3) Convention on the Conservation of Migratory Species of Wild Animals (CMS, Bonn 1979)
4) Indian Ocean South East Asian Memorandum of Understanding (MoU) on Marine turtles
5) Convention on Biological Diversity (CBD, Rio 1992)
6) United Nations Convention on the Law of the Sea (UNCLOS, Montego Bay 1972)

References and links:

>>> ● Marine Turtle Specialist Group (MTSG), IUCN (<https://www.iucn.org/ssc-groups/reptiles/amphibians>)

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

Details:

>>> Bangladesh has undertaken several additional efforts to enhance sub-regional turtle conservation. These efforts include:

1. Participation in regional workshops and conferences focused on marine turtle conservation, where best practices and scientific knowledge are shared among neighbouring countries.
2. Collaboration with neighbouring countries on joint research projects to assess marine turtle populations, nesting sites, and migration patterns in shared marine ecosystems.
3. Establishment of bilateral agreements and partnerships with neighboring countries to coordinate conservation efforts, share data, and implement conservation measures across borders.
4. Engagement in regional initiatives, such as the Indian Ocean South-East Asia (IOSEA) Marine Turtle Memorandum of Understanding (MoU), to promote cooperation and collaboration on marine turtle conservation at the sub-regional level.

These efforts contribute to a collective approach to marine turtle conservation in the sub-region, facilitating the sharing of resources, expertise, and experiences among neighboring countries.

Sea Turtle Program-Bangladesh, Marinelife Alliance maintains regular research collaboration between regional and international non-governmental organization r

Turtle Conservation Project-Sri Lanka

Bio Conservation Society (BCSL), Kandy - Sri Lanka.

Tree Foundation-India

Dakhshin Foundation-India

WIDECAS-USA

SWOT-The Status of the World's Sea Turtle

ISTS-International Sea Turtle Society

MTSG-Marine Turtle Specialist Group/IUCN/SSC

References and links1:

References and links:

>>> Yearly Report 2023. Marinelife Alliance, Cox'sbazar, Dhaka

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 secretariat at iosea@un.org

	Threats addressed by the plan	Objectives	Geographic coverage	Species covered	Name of the regional/sub-regional action plan (include web links to plan if available)
	<ul style="list-style-type: none"> ● Egg poaching ● Predation of nest and turtle ● Bycatch ● Human activity (tourism, beach activities) ● Lighting disturbances ● Pollution, Plastics, Ghost net. ● Nesting Habitat degradation. 	<ol style="list-style-type: none"> 1. Reduce marine turtle mortality. 2. Protect, conserve, and rehabilitate marine turtle habitats. 3. Improve understanding of marine turtle ecology and populations through research, monitoring, and information exchange. 4. Increase public awareness of threats to marine turtles and their habitats, and enhance public participation in conservation activities. 5. Enhance national, regional, and international cooperation. 	Bangladesh Coast And Marine Water	Olive Ridley Green Turtle Hawksbill Turtle	IOSEA MoU Conservation Action Plan

5.2.2 Has your country encouraged Regional Fishery Management Organizations (RFMOs) in the Indian Ocean to adopt marine turtle conservation measures within Exclusive Economic Zones (EEZs) and on the high seas? Please describe the interventions made by your country in this regard in the last 5 years, referring to specific RFMOs.

Details/future plans:
 >>> As of now, Bangladesh has not actively encouraged Regional Fishery Management Organizations (RFMOs) in the Indian Ocean to adopt marine turtle conservation measures within Exclusive Economic Zones (EEZs) and on the high seas. However, Bangladesh recognizes the importance of promoting marine turtle conservation measures through international cooperation and may consider engaging with RFMOs in the future to address this issue.

References and links:
 >>> <https://faolex.fao.org/docs/pdf/bgd214075.pdf>

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

Details/future plans:
 >>> No

References and links:
 >>> N/A

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:
 >>> No

References and links:

>>> No

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:

>>> More than 2500 offshore fishermen have been trained by Marinelife Alliance alone, Sea Turtle Program during the last 16 years, to reduce bycatch, rescue and release live turtles at sea. Other organization trained another 2500 fishermen.

In the last five years, Bangladesh has undertaken several training initiatives in marine turtle conservation and management:

- **Workshops:** Bangladesh organized workshops on various aspects of marine turtle conservation, including nesting site monitoring, hatchery management, and community engagement. These workshops aimed to build the capacity of conservation practitioners, government officials, and local communities involved in turtle conservation efforts.

- **Training Manuals:** Training manuals were developed to provide guidelines and best practices for marine turtle conservation activities. These manuals cover topics such as sea turtle biology, nest monitoring protocols, handling and rescue techniques, and community-based conservation approaches. They serve as valuable resources for training programs and field implementation.

- **Field Training:** Practical field training sessions were conducted to provide hands-on experience in marine turtle conservation activities. Participants learned about nest excavation, tagging and tracking methods, data collection, and beach management practices. These sessions were instrumental in equipping individuals with the necessary skills for effective conservation action.

Plans for the Coming Year: In the coming year, Bangladesh intends to continue its efforts in marine turtle conservation training through the following activities:

- **Expansion of Workshops:** Bangladesh plans to expand the reach of workshops to include more coastal communities and stakeholders. Special focus will be given to remote areas with high nesting densities to ensure comprehensive coverage of conservation efforts.

- **Updates to Training Manuals:** Efforts will be made to update existing training manuals to incorporate new research findings, best practices, and emerging conservation challenges. These updated manuals will serve as valuable resources for ongoing and future training programs.

- **Advanced Training Programs:** Bangladesh aims to introduce advanced training programs for experienced conservation practitioners and researchers. These programs will focus on specialized topics such as satellite telemetry, genetic analysis, and policy development for marine turtle conservation.

The plan for next 3 years (Marinelife Alliance Sea Turtle Project)

- **Training of Community Conservation Assistant (CA) :** 120 persons

- **Training of Offshore Fishermen to reduce bycatch :** 1200 Fishermen Captain (from 1200 fishing boat)

- **Meeting: Fisheries Officials to discuss gear management, TED issues :** 60 persons

- **Meeting with Forest Officials at various coastal locations and HQ:** 300 persons

- **School Education/ Quiz & Drawing:** 30 program.

- **Awareness Campaign & Festival:** 12 Programs with community including fishermen

Overall, Bangladesh remains committed to building the capacity of individuals and organizations involved in marine turtle conservation and management, with the goal of achieving long-term sustainability and protection of these iconic species.

References and links1:

References and links:

>>> Yearly Report 2023. Marinelife Alliance, Cox'sbazar, Dhaka

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:

>>> Conservation Program conduct training for Forest Department staff, community conservation Assistant, offshore fishing community, local coastal school/Madrasha students on the sea turtle and marine megafauna conservation.

- **Collaboration with universities and research institutions to provide specialized training programs on marine turtle conservation.**

- **Partnerships with training bodies to develop and implement capacity-building workshops and seminars for relevant stakeholders.**

- **Engagement with national, regional, and international organizations to exchange knowledge and best practices in marine turtle conservation.**

- **Integration of community-based conservation assistants into training programs to enhance local capacity for conservation efforts.**

- Involvement of the offshore fishing community in training sessions to promote sustainable fishing practices and reduce turtle bycatch.
- Implementation of educational programs in local coastal schools and Madrasas to raise awareness among students about marine turtle conservation.

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?

YES

Details:

title of the document, year, link:

>>> ● The development of the National Action Plan is currently underway, spearheaded by Marinelife Alliance in collaboration with stakeholders and experts in the field. The plan is being meticulously crafted to address the pressing conservation needs of marine turtles and their habitats within the coastal regions of Bangladesh. It aims to provide a comprehensive framework for guiding conservation efforts, identifying key conservation priorities, and implementing targeted strategies to mitigate threats to marine turtle populations.

● Upon completion, the National Action Plan will be officially adopted by the Bangladesh Forest Department in the coming months. This collaborative effort reflects the commitment of the government and conservation organizations to safeguard the rich biodiversity of marine turtles and ensure their long-term survival in Bangladesh's coastal waters. The plan will serve as a vital tool for coordinating conservation actions, mobilizing resources, and promoting stakeholder engagement to achieve tangible conservation outcomes for marine turtles and their habitats.

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

Details:

Title of the documents, year, link:

>>> No

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

Details/future plans:

>>> As of now, there are no specific genetic stocks or marine turtle populations identified as priorities in the national action plan or other action plans for biodiversity conservation in Bangladesh. The conservation efforts for marine turtles in Bangladesh primarily focus on broader population conservation measures rather than targeting specific genetic stocks. However, ongoing research and monitoring efforts may lead to the identification of priority genetic stocks or populations in the future, which could then be incorporated into national action plans for marine turtle conservation.

Reference: No specific reference provided.

References and links:

>>> A/A

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

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

>>> Major Threats :

1. Bycatch in Offshore Fishing Activity
2. Eggs poaching and Predation
3. Nesting beach alteration
4. Tourism/lighting disturbances

Activities ongoing to address the above threats :

1. Bycatch in Offshore Fishing Activity

(IOSEA CMP/Obj-1, Prog-1.4).

- Seasonal Closure on fishing marine fishing activity for 22 days and 63 days. Particularly imposed for Hilsa fish breeding enhancement for spawning and nursing of the juvenile fish. That helps sea turtles and other marine megafauna bycatch reduction during that period.
- TED use mandatory -For every shrimp Trawler with net/nets during trawling; under the Marine Fisheries Ordinance, 1983 (Ordinance # XXXV of 1983/Section 55/under Rules 14 /subrules 14A/SRO# 330ACT/2006; Dated: 27Dec 2006). No implementation in the field (Marinelife Alliance observation 2014-21).
- Offshore artisanal fishing communities have been trained (ongoing program) for bycatch reduction, rescue from entanglement, and data collection (NGO Marinelife Alliance).

(IOSEA CMP/Obj-3, Prog-3.1).

- Conduct baseline studies or gather secondary information on marine turtle populations and their habitats

- Initiate and/or continue long-term monitoring of priority marine turtle populations in order to assess conservation status.

- Characterise genetic identity of marine turtle populations.

- Identify migratory routes through the use of tagging, genetic studies and/or satellite tracking.

2. Eggs poaching and Predation

Activity:

- Collate and organise existing data on threats to marine turtle populations. (IOSEA CMP/Obj-1, Prog-1.1/Act-a).

- Establish baseline data collection and monitoring programmes to gather information on the nature and magnitude of threats. (IOSEA CMP/Obj-1, Prog-1.1/Act-b).

- Enact, where not already in place, legislation to prohibit direct harvest and domestic trade. (IOSEA CMP/Obj-1, Prog-1.5/Act-a).

- Evaluate the effectiveness of nest and beach management programmes. (IOSEA CMP/Obj-1, Prog-1.6/Act-a).

- Reduce the mortality of eggs and hatchlings to maximise hatchling recruitment and survival, preferably using conservation techniques that emphasize natural processes wherever possible. (IOSEA CMP/Obj-1, Prog-1.6/Act-b).

- Minimise the mortality of eggs, hatchlings and nesting female turtles caused by feral and domestic animals. (IOSEA CMP/Obj-1, Prog-1.6/Act-c).

(IOSEA CMP/Obj-1, Prog-1.6/Act-c).

3. Nesting beach and habitat alteration

(IOSEA CMP/Obj-2, Prog-2.2/all actions).

- Re-vegetate, where appropriate, frontal dunes at nesting beaches, with indigenous flora as far as possible, in order to provide visual barriers to coastal development and to restore appropriate beach temperature regimes

- Remove debris that impedes turtle nesting and hatchling production

- Enhance recovery of degraded coral reefs.

- Enhance recovery of degraded mangrove and seagrass habitats

(IOSEA CMP/Obj-3, Prog-3.3/all actions).

- Prioritise populations for conservation actions

- Identify population trends

- Use research results to improve management, mitigate threats and assess the efficacy of conservation activities (e.g. hatchery management practices, habitat loss, etc.)

4. Tourism/lighting disturbances

- Tourism threats in terms of human activities on the beach is high during nesting season at St. Martin Island.

It is minimized by activities of sea turtle conservation but beach closure couldn't be implemented.

References and links:

>>> Yearly Report 2023. Marinelife Alliance, Cox'sbazar, Dhaka

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

NO

Details, future plans:

>>> As of now, Bangladesh has not conducted a review of policies and laws specifically aimed at addressing inconsistencies related to the conservation of marine turtles and their habitats. However, efforts are underway to identify and address any gaps or inconsistencies in existing policies and laws to strengthen marine turtle conservation measures. This ongoing process involves collaboration among relevant government agencies, conservation organizations, and stakeholders to assess the effectiveness of current regulations and develop strategies for enhancing protection for marine turtles and their habitats. By conducting a thorough review, Bangladesh aims to ensure that its policies and laws align with international conservation standards and

effectively safeguard marine turtle populations for future generations.

References and links:

>>> N/A

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

Details:

>>> In Bangladesh, there are several threats to marine turtles that are not adequately addressed by existing policies or laws. One significant challenge is the lack of regulation and oversight regarding conservation projects, particularly those focused on sea turtle nesting sites. Some organizations conduct hatching programs without adhering to basic conservation guidelines or scientific principles. These projects may prioritize short-term gains or public relations efforts over the long-term viability of marine turtle populations. For instance, sea turtle nests left on beaches for in situ conservation may be vulnerable to theft or disturbance by other organizations seeking to relocate the eggs to unsuitable sites for hatching. Additionally, the practice of keeping hatchlings for extended periods to facilitate media coverage poses risks to the turtles' health and survival. This highlights the need for stronger regulatory frameworks and enforcement mechanisms to ensure that conservation efforts prioritize the well-being of marine turtles and adhere to established scientific principles.

References and links:

>>> Yearly Report 2023. Marinelife Alliance, Cox'sbazar, Dhaka

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

YES

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

Details:

>>> As of the current state, Bangladesh does have legislation that explicitly requires marine and coastal development projects, as well as natural resource extraction projects, to be accompanied by an Environmental Impact Assessment (EIA) concerning marine turtles and their habitats.

The Environmental Conservation Act of 1995 (ECA) serves as the primary legal framework governing environmental protection and management in Bangladesh. Under this act, the Environmental Impact Assessment (EIA) process is mandated for all development projects, including those occurring in marine and coastal areas.

Additionally, the Environmental Conservation Rules of 1997 provide detailed guidelines and procedures for conducting EIAs. These rules outline the requirements for assessing potential impacts on biodiversity, including marine turtles and their habitats, as part of the overall environmental assessment process.

The adoption dates for the Environmental Conservation Act and the Environmental Conservation Rules are as follows:

- Environmental Conservation Act: Adopted in 1995
- Environmental Conservation Rules: Adopted in 1997

These legislative measures ensure that marine and coastal development projects, as well as natural resource extraction projects, undergo comprehensive environmental assessments to evaluate potential impacts on marine turtles and their habitats.

References and links:

>>> Environmental Conservation Act: Adopted in 1995
● Environmental Conservation Rules: Adopted in 1997

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

References and links:

>>> As of now, Bangladesh does not have legislation that explicitly requires marine and coastal development projects and natural resource extraction projects to be accompanied by an Environmental Impact Assessment (EIA) specifically in relation to marine turtles and their habitats. However, there are broader environmental laws and regulations in place that may encompass aspects related to marine turtle conservation within EIAs. To ensure compliance with existing environmental regulations, including those pertaining to EIAs, various measures are implemented. These may include:

1. Regulatory oversight: Government agencies responsible for environmental protection and natural resource management oversee the implementation of EIAs and ensure compliance with relevant regulations.

2. Enforcement mechanisms: Legal frameworks may include penalties and enforcement mechanisms for non-compliance with EIA requirements, deterring violations and promoting adherence to environmental standards.
3. Public participation: Stakeholder engagement and public consultation processes may be incorporated into EIA procedures, allowing for input from local communities, NGOs, and other relevant parties to ensure thorough assessment and consideration of potential impacts on marine turtles and their habitats.
4. Monitoring and reporting: Monitoring programs may be established to assess the effectiveness of mitigation measures proposed in EIAs and to monitor the impacts of development projects on marine turtles and their habitats. Regular reporting and evaluation help track compliance and identify areas for improvement.
5. Capacity building: Training and capacity-building initiatives may be conducted for government officials, project developers, and other stakeholders involved in the EIA process to enhance understanding of marine turtle conservation issues and ensure effective implementation of EIA requirements.

While specific measures addressing marine turtles within EIAs may currently be lacking, the existing regulatory framework and associated measures aim to promote sustainable development practices and protect the environment, including marine ecosystems and species. Continued efforts to strengthen environmental legislation and enforcement mechanisms can further support marine turtle conservation efforts in Bangladesh.

References and links¹:

Reference: Environmental Conservation Act, 1995 (amended in 2010), Government of Bangladesh.
Environmental Impact Assessment Guidelines for Bangladesh, Department of Environment, Government of Bangladesh.

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:

>>> In the past 5 years, Bangladesh has not actively encouraged other states to sign the Indian Ocean-Southeast Asia (IOSEA) Memorandum of Understanding (MoU) so far due to the absence of an active focal point for the IOSEA MoU within the country. However, with the establishment of an active focal point now, Bangladesh is poised to play a more proactive role in advocating for and promoting the IOSEA MoU among other countries within its range. This may include diplomatic outreach, participation in regional meetings and conferences, and collaboration with international partners to raise awareness about the importance of marine biodiversity conservation and the benefits of joining the IOSEA MoU. By taking on this active role, Bangladesh aims to foster greater regional cooperation and commitment to the conservation of marine species and their habitats in the Indian Ocean-Southeast Asia region.

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

NO

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

>>> NA

6.2 RESOURCES TO SUPPORT IMPLEMENTATION OF THE MOU

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

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

Please refer to the IOSEA CMP and IOSEA Work Programme.

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

>>> Sea Turtle Conservation Program

Bangladesh Forest Department Project SRCWP(World Bank).

Sea Turtle Project-Bangladesh, Marinelifelife Alliance

Nature & Life, CODEC

Sea Turtle Conservation Project, NACOM/USAID

Turtle Conservation Project, IUCN

References and links1:

References and links:

>>> Focal Point

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)

>>> USAID, USFWS, ExPlorewild

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

NO

6.3 COORDINATION AMONG GOVERNMENT AGENCIES

Provide sources of information supporting the above responses, include reports (governmental,

departmental, university, NGO, etc.) as well as published articles (scientific or online articles); also include appropriate links to these information sources and/or attach documents to this report.

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

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

	Role in the conservation of marine turtles and their habitats	Name of the agency
	Providing Wildlife (Conservation and Security) Act,2012 in favour of Marine turtle	Bangladesh Forest Department
	Enforcement and applying legal actions against exploiters and smugglers	Law enforcement Agencies
	No contribution yet : • Implement a ban on the use of J-hooks to mitigate turtle bycatch. • Mandate the use of Turtle Excluder Devices (TEDs) in trawl nets to prevent turtle entanglement. • Consider reducing or banning the use of Marine Set Bag nets, which are a significant contributor to turtle bycatch and detrimentally impact fisheries resources.	Fisheries Department
	Prevent illegal trafficking, smuggling	Law enforcement Agencies

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

Details:

>>> Enforcing laws related to marine turtles and their habitats in Bangladesh faces significant challenges due to several factors. These include the remote nature of some habitats, making monitoring and enforcement difficult. Moreover, the large human population, coupled with high poverty rates, often leads to increased pressure on marine resources, including turtle habitats. Additionally, limited conservation funding from the government further hampers enforcement efforts, as adequate resources are necessary for effective monitoring, patrols, and law enforcement actions. Addressing these limitations requires concerted efforts to improve governance, increase conservation funding, and involve local communities in conservation initiatives.

References and links:

>>> Focal Point

OTHER REMARKS

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

>>> Column arrangement is not suitable for data input

Feel free to include additional information not covered above:

>>> NA