



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



Bangladesh

GENERAL INFORMATION

Agency or institution primarily responsible for the preparation of this report:

Coastal & Wetland Biodiversity Management Project (CWBMP)
Department of Environment, Ministry of Environment & Forests

Other agencies, institutions, or NGOs that have provided input:

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

1.1 Introduction to marine turtle populations and habitats, challenges and conservation efforts. [INF]

Bangladesh coastline measures 710 kilometres approximately (ICZM 2003). Not all the coastline is suitable for nesting, because sandy beaches are available only in sections along the mainland coast (Islam 2006). Apart from the mainland coast, there are numerous offshore islands whose sandy beaches are ideal for marine turtle nesting (Islam 2006).

Although five species of marine turtles occur in the territorial waters of Bangladesh (Rashid and Islam 2005), only three species have been reported to nest in Bangladesh. Among them, olive ridleys (Ahmed et al 1986, Khan 1987, Rashid 1984, 1986, Rashid and Islam 1999, Islam 2002, Rashid & Islam 2005) and green turtles (Khan 1982, 1987, Rashid 1997, Rashid and Islam 1999) are common, while hawksbills are rare (Rashid 1997, Islam 2002). There was an unconfirmed nesting record of a loggerhead based on a specimen collected by the staff of the Marine Fisheries Research Institute (MFRI) in Cox's Bazaar. Leatherback turtles are seldom encountered (Rashid and Islam 1999) and with no known records of nesting, in Bangladesh; although, one crawl mark recorded in Ceeradia, St. Martin's Island was suspected to be from a leatherback turtle.

Olive ridleys nest on sandy beaches all along the mainland coast and islands stretching from the Sunderban mangrove forests in the southwest, to St. Martin's Island in the southeast. Subsequent comprehensive studies (CARINAM 1996-98) have shown that the estimated numbers of ridleys nesting annually at St. Martin's Island may be less than 200 individuals. A total of 639 ridleys were recorded to nest on St. Martin's Island from October 1996 to February 2003, with the highest numbers recorded during the 2000-01 season. Centre for Nature Resource Studies (CNRS) recorded 650 nesting individuals (GT-129, OL-521) from 2002 to 2007 during a study funded by CAIRNS-Bangladesh. CWBMP

recorded 30 olive ridleys and one green turtle from October 2007 to May 2008.

Green turtles are less widespread than olive ridleys; they nest along the mainland coast as well as on island beaches. They have been reported to nest on south-central island beaches, mainland beaches in the southeast (from Cox's Bazar to Teknaf) and also on some coastal islands (e.g., St. Martin's, Sonadia, Kutubdia, Hatiya and Sandweep islands). Nesting records for this species are either rare or absent for the coastal beaches of the Sunderbans. Green turtles nest year-round but the frequency of nesting increases from October to February, with the peak during November to January. They nest on the same beaches as olive ridley turtles, though there may be differences in nest site selection.

Nesting hawksbill turtles are rare visitors to the beaches of Bangladesh (Rashid & Islam 2005). There are a few unconfirmed reports of nesting on St. Martin's Island, the most recent being in 1992 (Rashid 1997). Reports from the local people of the island indicate that it used to nest here regularly in the 1950s. Little information is available on the loggerhead species in Bangladesh. The nearest sites where nesting of loggerheads has been reported are the islands off Myanmar (Thorbjarnarson et al. 2000), which lie east of St. Martin's Island; a few may nest in Bangladesh.

Leatherback turtles have not been recorded nesting in Bangladesh (Islam 2006). A search of the literature found no historic evidence of leatherback nesting in Bangladesh. However, on 11 April 1997 a dead adult leatherback turtle was washed ashore on St. Martin's Island (Islam 1999, Rashid & Islam 2005). During the 2000-01 breeding season, a crawl mark suspected to be that of a leatherback was observed at the southern tip of the southern-most of the three Ceeradia islands. In 2006 two leatherbacks washed ashore and in 2007 a live young leatherback was brought to the Bakkhali river fish landing, Cox's Bazaar after it got trapped in a fishing net. The turtle later died of exhaustion and heat.

See References in Section 3.1.1

1.2.1 Describe any protocol or approaches practiced in your country, which you consider exemplary, for minimising threats to marine turtle populations and their habitats, which may be suitable for adaptation and adoption elsewhere. [BPR]

Involvement is key for successful conservation and management; Bangladesh has a good level of participation.

1. Participation of the locally elected public representatives, community members and local government agencies/officials through formation of Ecologically Critical Area Management Committees at the Union (smallest administrative unit), Upazila and district levels.
2. In-situ conservation of marine turtle nests by community guarding in St. Martin's Island, Cox's Bazaar - Teknaf sea beach, and Sonadia Island.
3. Ex-situ conservation through establishment of beach hatcheries in St. Martin's Island, Cox's Bazaar - Teknaf sea beach, Sonadia Island and Kutubdia Island.
4. Control lights in nesting areas, particularly in St. Martin's Island and Cox's Bazaar - Teknaf sea beach.
5. Restricting movement of tourists at night on the beaches in St. Martin's Island.

The 'best practice' approach adopted with success is the community based approach by mostly CWBMP-contracted NGOs:

1. By creating alternative income sources (horticulture, fish processing, fishing) through providing conservation grants.
2. Involving community in awareness activities.
3. Community involvement through employment of community members for guarding beaches.

See:

CWBMP (2006a) St Martin's Island ECA Draft Conservation Management Plan Coastal and Wetland Biodiversity Management Project BGD/99/G31

CWBMP (2006b) Sonadia Island ECA Draft Conservation Management Plan Coastal and Wetland Biodiversity Management Project BGD/99/G31

CWBMP (2006c) Teknaf Peninsula ECA Draft Conservation Management Plan Coastal and Wetland Biodiversity Management Project BGD/99/G31

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

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.

See:

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)

1.3.2 Which of these adverse economic incentives are underlying threats to marine turtles in your country? [TSH]

- High prices earned from turtle products relative to other commodities
- Lack of affordable alternatives to turtle products
- Ease of access to the turtle resource (eg. by virtue of proximity or ease of land/water access)
- Low cost of land near nesting beaches**
- Low penalties against illegal harvesting
- Other1: Unregulated expansion of tourism
- Other2: Lack of enforcement of regulations
- Other3:
- None of the above or Not Applicable

Various measures have been proposed to counteract adverse economic incentives, namely:

- 1) Alternative livelihoods for the local community people;
- 2) financial support for creating public awareness;
- 3) incentives for NGOs in turtle conservation activities;
- 4) Protection for in-situ conservation of breeding grounds;
- 5) Logistics support for conservation agency.
- 6) Involvement of stake holders through collaborative management
- 7) Awareness building programmes.

1.3.3 Has your country has taken any measures to try to correct these adverse economic incentives? [BPR]

YES NO NOT APPLICABLE (no adverse economic incentives exist)

The Government of Bangladesh (GoB) has declared three of the coastal beaches and islands as ecologically critical areas (ECA). As a measure to conserve biodiversity and to lessen the burden on the St. Martin's Island's limited resources (e.g., freshwater, undeveloped sewage system), the GoB has put a restriction on the construction of hotels/motels/resorts in St. Martin's Island and Cox's Bazaar-Teknaf sea beach.

Some poachers have been employed by the project authority in St. Martin's Island and now poachers have become protectors.

Forest Department & NGOs are also working in some areas.

It must be realized that "alternative income generating opportunities of the coastal fishing communities are very limited" (BoBLME 2010, p 38).

See:

BOBLME (2010). BOBLME National Inception Workshop- Bangladesh 6-7 January 2010 BRAC Centre Inn, Dhaka, Bangladesh. BOBLME-2010-Project-01.

1.4.1 Indicate, and describe in more detail, the main fisheries occurring in the waters of your country, as well as any high seas fisheries in which flag vessels of your country participate, that could possibly interact with marine turtles. [INF]

a) *Shrimp trawls*: YES NO

In the last twenty years, fishing in the marine sector has expanded rapidly due to initiatives in the 1970's. The expansion has gone on without any real control and management. This has lead to a sharp increase in fishing effort. The ownership of the industry has changed dramatically. With the introduction of more expensive fishing methods most of the boats are no longer owned by fishermen, but by business men who then employ fishers on a catch sharing basis. Even for those fishermen not using boats, they are no longer in control of the fishing resources.

For effective management of marine and coastal fisheries the management regimes are divided into three principal

categories: I) Artisanal Fisheries Management, II) Mechanised Commercial Boat Fisheries Management and III) Industrial Trawl Sector Management (Marine Fisheries Sector Sub-Strategy, Dept. of Fisheries (DOF). 2006) No data are available on the marine turtles from Fishery Statistical Yearbook 2006-07. A total of 127 fishing trawlers (Shrimp trawler - 39; Fish trawler - 88) are involved in the marine fisheries (DOF 2008).

See also BOBLME 2010.

b) Set gill nets: YES NO

Set gill nets, though banned by the government, are still operational. A total of 25,369 (18,992 mechanized and 6,377 non-mechanized) boats with 71,768 and 34,548 gill nets (Total 106,316 net units) are operational, respectively (DOF 2008).

See also BOBLME 2010.

Hussain, M.G. and Hoq, M.E. (eds.). 2010

c) Anchored Fish Aggregating Devices (FADs): YES NO

d) Purse seine (with or without FADs): YES NO

Purse seines contribute around 2,082 units to the total fishing effort; these nets (with or without FADs) are allowed for fishing (DOF 2008).

See also BOBLME 2010.

Hussain, M.G. and Hoq, M.E. (eds.). 2010

e) Longline (shallow or deepset): YES NO

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).

See also BOBLME 2010.

Hussain, M.G. and Hoq, M.E. (eds.). 2010

f) Driftnet: YES NO

Around 1,103 drift nets are in operation (DOF 2008).

See also BOBLME 2010.

Hussain, M.G. and Hoq, M.E. (eds.). 2010

g) Other1:

There are 1,091 seasonal mechanized crafts with 2,007 net units; 4,664 non-mechanized crafts with 18,970 net units and 7,010 all-season non-mechanized crafts with 29,106 nets operating in the Bay (DOF 2008).

See also BOBLME 2010.

Hussain, M.G. and Hoq, M.E. (eds.). 2010

h) Other2:

None of the above

1.4.2 Please indicate the relative level of **fishing effort** and **perceived impact** of each of the above fisheries on marine turtles (e.g. in terms of by-catch). [TSH]

a) Shrimp trawls

Fishing effort:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Perceived Impact:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Source: The total fish catch was 35,391 metric tons for 2006-07: from Shrimp trawl - 5,908 mt and fish trawl - 29,483 mt. (DOF 2008). These trawlers may have an impact on the marine turtle population during their long trawls but this needs further investigation.

b) Set gill nets

Fishing effort:

RELATIVELY HIGH **MODERATE** RELATIVELY LOW NONE UNKNOWN

Perceived Impact:

RELATIVELY HIGH **MODERATE** RELATIVELY LOW NONE UNKNOWN

Source: (DOF 2008).

c) Anchored Fish Aggregating Devices (FADs)

Fishing effort:

RELATIVELY HIGH MODERATE RELATIVELY LOW **NONE** UNKNOWN

Perceived Impact:

RELATIVELY HIGH MODERATE RELATIVELY LOW **NONE** UNKNOWN

Source: (DOF 2008).

d) Purse seine (with or without FADs)

Fishing effort:

RELATIVELY HIGH **MODERATE** RELATIVELY LOW NONE UNKNOWN

Perceived Impact:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE **UNKNOWN**

Source: (DOF 2008).

e) Longline (shallow or deepset)

Fishing effort:

RELATIVELY HIGH **MODERATE** RELATIVELY LOW NONE UNKNOWN

Perceived Impact:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE **UNKNOWN**

Source: (DOF 2008).

f) Driftnet

Fishing effort:

RELATIVELY HIGH **MODERATE** RELATIVELY LOW NONE UNKNOWN

Perceived Impact:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Source: (DOF 2008).

g) Other1 (from 1.4.1): Trammel Nets**Fishing effort:**

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Perceived Impact:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Source: (DOF 2008).

h) Other2 (from 1.4.1):**Fishing effort:**

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Perceived Impact:

RELATIVELY HIGH MODERATE RELATIVELY LOW NONE UNKNOWN

Source:

1.4.3 Describe any illegal fishing that is known to occur in or around the waters of your country that may impact marine turtles. Describe the measures being taken to deal with this problem and any difficulties encountered in this regard. [TSH]

Occasionally, some foreign fishing vessels enter the Bangladesh territorial water and fish illegal. They are also reported to use explosives as a fishing method. The situation needs clarification.

See:

Islam, M. Z. (2001). "Notes on the Trade in Marine Turtle Products in Bangladesh." Marine Turtle Newsletter 94: 10-11.
Rahman, M. M. (2006). Marine Turtle Illegal Trade in the Southwest Coastal part of Bangladesh. Centre for Coastal Environmental Conservation (CCEC), Bangladesh.

1.4.4 Which of the following methods are used by your country to minimise incidental capture/mortality of marine turtles in fishing activities? [IND]

a) **Appropriate handling** of incidentally caught turtles (e.g. resuscitation or release by fishers using equipment such as de-hooking, line cutting tools and scoop nets)

YES NO NOT APPLICABLE

Marine turtles trapped in the nets are usually killed to free the nets. Many of these turtles wash ashore.

b) **Devices that allow the escape of marine turtles** (e.g. turtle excluder devices (TEDs) or other measures that are comparable in effectiveness)

YES NO NOT APPLICABLE

Use of TEDs is limited at present. However, initiatives to enhance their use are being taken by GoB through CWBMP and Department of Fisheries (DOF) and NGOs. The use of TEDs in marine trawls to minimise incidental mortality rate of turtles 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).

c) **Measures to avoid encirclement** of marine turtles in purse seine fisheries

YES NO NOT APPLICABLE

d) **Appropriate combinations** of hook design, type of bait, depth, gear specifications and fishing practices

YES NO NOT APPLICABLE

e) **Monitoring and recovery of fish aggregating devices** (FADs)

YES NO NOT APPLICABLE

f) **Net retention and recycling schemes**

YES NO NOT APPLICABLE

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

YES NO NOT APPLICABLE

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 organisations (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. 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.

h) **Effort management control**

YES NO NOT APPLICABLE

Marine Fisheries Sector Sub-Strategy has been proposed to the GoB by the Department of Fisheries (DOF 2006) but has yet to implemented.

Other (list and explain):

Motivation and Awareness: fishermen are being motivated to release the turtles during fishing.

None of the above

1.4.5 Which of the following programmes has your country developed - in consultation with the fishing industry and fisheries management organisations - to promote implementation of measures to minimise incidental capture and mortality of turtles in national waters and in the high seas? [IND]

Onboard observer programmes

YES NO NOT APPLICABLE

Source: 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.

Vessel monitoring systems

YES NO NOT APPLICABLE

Under the planned strategy, all mechanised 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 decentralised to coastal districts. This management regime will include all mechanised 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 mechanised 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 minimise 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).

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

YES NO NOT APPLICABLE

Not on a regular basis, data also irregular and incomplete. Typically only on commercial vessels.

Training programmes / workshops to educate fishers

YES NO NOT APPLICABLE

Initiatives have been taken to motivate the local government, local administration and local communities to encourage fishermen to release turtles during captures in fishing. CWBMP has contracted some NGOs who are working with the community people to make them aware and provide with some incentives for releasing marine turtle if caught in their nets and report. The incentives are in the form of biodiversity grants to help the communities develop initiatives for additional livelihood options and to improve their living conditions.

Informative videos, brochures, printed guidelines etc.

YES NO NOT APPLICABLE

St. Martin's Project published and distributed several information brochures for the conservation of marine turtles and their nesting habitats. CWBMP and partner NGOs have produced many posters, brochures, videos on the subject. These are distributed free of cost to the coastal people and particularly in the fishing community. In addition many billboards have been hoisted at strategic locations by CWBMP in all three ECAs.

Other (list and explain):

YES NO NOT APPLICABLE

Some NGOs like MarineLife Alliance have produced awareness materials that include posters, post cards, stickers, etc.

None of the above

1.4.6 Are the mitigation measures described in 1.4.4 and 1.4.5, periodically reviewed and evaluated for their efficacy? [SAP]

YES NO UNSURE

CWBMP is collecting information on some of the aspects of monitoring through regular quarterly meetings with community members and contracted NGOs.

1.4.7 In your country, what types of data collection, research and development have been undertaken to support the reduction of marine turtle incidental catch (while taking into consideration the impact of various mitigation measures on other species)? [SAP]

Data on incidental turtle mortality are collected occasionally. The Village Conservation Groups are being sensitized through awareness programs to reduce incidental catch. CWBMP-partner NGOs (Bangladesh Center for Village Development) are organizing some training workshops, to train the fishing community. Some data come from motivated community people and fishermen.

1.4.8 Has your country exchanged information and provided technical assistance (formally or informally) to other Signatory States to promote the activities described in 1.4.4, 1.4.5 and 1.4.7 above? [SAP]

YES NO UNSURE

1.4.9 What legislative and practical measures has your country taken in support of UN General Assembly Resolution 46/215 concerning the moratorium on the use of large-scale driftnets? [SAP]

Driftnets have been prohibited in some restricted areas of Sundarbans. Gill nets (including nets made of monofilament locally called current net) have been prohibited during breeding season of fish in the Sundarbans and in the open sea waters.

Marine turtles have been included in the list of protected animals in the revised Bangladesh Wildlife Preservation Act 2008. It is currently in a draft form, yet to be approved by the Parliament.

1.5.1 Does your country have legislation to prohibit direct harvest and domestic trade in marine turtles, their eggs, parts and products; and to protect important turtle habitats? [IND]

YES NO UNSURE

Amendment of Bangladesh Wildlife Preservation Act - 1974 is under consideration for inclusion of marine turtles in the list of protected animals. However the GoB has given a blanket protection to all wildlife including marine turtles. The Environment Conservation Act 1995 has restricted any killing or capturing of the marine turtles. Marine turtles have been included in the list of protected animals in the revised Bangladesh Wildlife Preservation Act 2008. It is currently in a draft form, yet to be approved by the Parliament.

See:

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.

1.5.2 Which, among the following list, are economic uses and cultural values of marine turtles in your country? Please rate the relative prevalence / importance of each consumptive or non-consumptive use. [INF]

**USES /
VALUES**

Meat consumption

YES NO

**RELATIVE PREVALENCE /
IMPORTANCE**

HIGH MODERATE LOW UNKNOWN

Some fishermen consume meat at Patharghata, Chittagong.

Egg consumption

YES NO

HIGH MODERATE LOW UNKNOWN

Eggs are consumed on a regular basis, mostly by the people from the tribal communities (Islam 2001).

Shell products

YES NO

HIGH MODERATE LOW UNKNOWN

Fat consumption

YES NO

HIGH MODERATE LOW UNKNOWN

Traditional medicine

YES NO

HIGH MODERATE LOW UNKNOWN

Eco-tourism programmes

YES NO

HIGH MODERATE LOW UNKNOWN

Cultural / traditional significance

YES NO

HIGH MODERATE LOW UNKNOWN

Particularly among the followers of Hindu religion and some tribal members.

Other

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

[IND, TSH]

Level of harvest:

RELATIVELY HIGH

MODERATE

RELATIVELY LOW

NONE

UNKNOWN

Impact of harvest:

RELATIVELY HIGH

MODERATE

RELATIVELY LOW

NONE

UNKNOWN

Source of information:

Local information and observation at sites

1.5.4 Have any **domestic** management programmes been established to limit the levels of intentional harvest? [SAP]

YES NO UNKNOWN

Harvesting marine turtles is illegal under the proposed Bangladesh Wildlife Preservation Act 2008, and also under the Environment Conservation Act 1995. As such no harvesting limits are set.

1.5.5 Describe any management agreements negotiated between your country and other States in relation to sustainable levels of traditional harvest, to ensure that such harvest does not undermine conservation efforts. [BPR]

None.

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

MEASURES	RELATIVE EFFECTIVENESS
Monitoring/protection programmes	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	<input type="checkbox"/> EXCELLENT <input checked="" type="checkbox"/> GOOD <input type="checkbox"/> LOW <input type="checkbox"/> UNKNOWN
Previously SMP used to guard and monitor the nesting turtles and undertook ex-situ measures by establishing beach hatcheries to protect the nesting turtles, eggs and hatchlings at St. Martin's Island. Currently CWBMP has reinforced the program by extending it to the three coastal ecologically critical areas, including St. Martin's Island, Cox's Bazaar-Teknaf peninsula beach and Sonadia Island.	
See references in Section 3.1.1	
Education/awareness programmes	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	<input type="checkbox"/> EXCELLENT <input checked="" type="checkbox"/> GOOD <input type="checkbox"/> LOW <input type="checkbox"/> UNKNOWN
Egg relocation/hatcheries	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	<input type="checkbox"/> EXCELLENT <input checked="" type="checkbox"/> GOOD <input type="checkbox"/> LOW <input type="checkbox"/> UNKNOWN
Predator control	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	<input type="checkbox"/> EXCELLENT <input type="checkbox"/> GOOD <input checked="" type="checkbox"/> LOW <input type="checkbox"/> UNKNOWN
Through CWBMP feral dogs were killed to reduce marine turtle mortality from these predators. Feral dogs were involved in the deaths of many nesting female marine turtles. A total of 205 feral dogs were killed between January 23 and 29, 2008 (Sonadia ECA-27; Cox's Bazaar-76; Teknaf-53; & St. Martin's Island-49). The Project needs more financial support to continue this activity on a regular basis. The current statue is unknown.	
See management plans.	
Vehicle / access restrictions	
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	<input type="checkbox"/> EXCELLENT <input checked="" type="checkbox"/> GOOD <input type="checkbox"/> LOW <input type="checkbox"/> UNKNOWN
It is illegal to drive on the beaches of Cox's Bazaar - Teknaf sea beach; however, this has yet to be enforced. In some sections of the long beach, identified as important marine habitats, mooring of fishing boats/trawlers is also restricted.	
See management plans.	
Removal of debris / clean-up	

YES NO N/A

EXCELLENT GOOD LOW UNKNOWN

Annual beach clean-up programs are organized by several NGOs and business firms (MarineLife Alliance, Oceanic Scuba Diving, Nature Adventurers, etc). In addition the Cox's Bazaar District Beach Management Committee also takes up programs to keep some sections that are mostly visited by the tourists clean.

See management plans.

Re-vegetation of frontal dunes

YES NO N/A

EXCELLENT GOOD LOW UNKNOWN

CWBMP has taken up activities through the contracted NGOs to re-vegetate/plant the dunes at the three coastal ECA sites. Naturally occurring vegetation are planted to protect the sand dunes.

See management plans.

Building location/design regulations

YES NO N/A

EXCELLENT GOOD LOW UNKNOWN

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.

Light pollution reduction

YES NO N/A

EXCELLENT GOOD LOW UNKNOWN

Other (list and rate them)

YES NO N/A

1.6.2 Has your country undertaken any evaluation of its nest and beach management programmes?

[\[SAP\]](#)

YES NO NOT APPLICABLE

Sporadic evaluations were done by the Forest Department, Project Authority of St. Martin's Island. CWBMP evaluates its beach management programs on a quarterly basis. In addition the Cox's Bazaar district administration also has a beach management committee that meets once a month and takes initiatives to keep the beaches clean and in good condition. The Forestry Department established Jhau (*Casurina*) plantation along the sea beach to provide a shelter belt.

OBJECTIVE II. PROTECT, CONSERVE AND REHABILITATE MARINE TURTLE HABITATS

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

Critical nesting habitats for the marine turtles have been identified (Rashid 1997, Rashid & Islam 2005) but those areas have yet to be officially declared by the government. Some of the areas identified are within the protected areas while some are outside the protected areas. CNRS is working in Kutubdia Island which is outside the protected area. Nothing significant is being done in other areas except that the legislation gives a blanket cover to protect the marine turtles and habitats critical to their nesting.

2.1.2 Are assessments routinely made of the environmental impact of marine and coastal development on marine turtles and their habitats? [IND, SAP]

YES NO NOT APPLICABLE

The Integrated Coastal Zone Management Project (ICZMP) carried out some impact assessments on the coastal areas due to developmental activities. The report dealing with the important coastal areas (Working Paper 030) may be downloaded from www.iczmpbangladesh.org.

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. [SAP]

YES NO NOT APPLICABLE

Through CWBMP the Department of Environment has identified some sites that correspond with the marine turtle nesting beaches (St. Martin's Island and Sonapara near Inani beach). Data were collected but the results have yet to be released.

See also BoBLME 2011.

2.1.4 Are measures in place to prohibit the use of poisonous chemicals and explosives? [SAP]

YES NO NOT APPLICABLE

Not yet.

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

YES NO NOT APPLICABLE (no degraded coral reefs)

The Ministry of Environment & Forest is actively pursuing actions to conserve and rehabilitate the corals in St. Martin's Island. Previously some actions were undertaken by Conservation of Biodiversity, Marine Park Establishment and Eco-Tourism Development Project and currently CWBMP has taken up the initiative for coral mapping to identify the areas where corals have degraded and to mark areas with good coral and sea grass habitats around the St. Martin's Island.

See management plans.

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

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

Actions were taken to recover degraded mangrove at Sundarbans by the Forest Department and at the Sonadia Island and a small patch in St. Martin's Island by CWBMP.

See management plans.

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

YES NO NOT APPLICABLE (no degraded sea grass habitats)

Few sea grass beds were identified during the survey under the NCSIP-1 during 1996-97. CWBMP is currently engaged in assessing the status and mapping sea grass beds around the St. Martin's Island for protection and rehabilitation.

See management plans.

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

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

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Thorbjarnarson, J. B., Platt, S.G. and Khaing, S.T. (2000). Sea Turtles in Myanmar: Past and Present. Marine Turtle Newsletter 88: 10-11.

3.1.2 Have long-term monitoring programmes (i.e. of at least 10 years duration) been initiated or planned for priority marine turtle populations frequenting the territory of your country? [IND, BPR]

YES NO UNSURE

CARINAM initiated a comprehensive study on the marine turtles nesting in the St. Martin's Island in 1997 through the MTSG/Small Grant Program. Since then the GoB through the St. Martin's Biodiversity Conservation Project 2000-2006 and currently GEF-funded CWBMP 2002 - present data is being collected for the marine turtles in St. Martin's Island. CWBMP has also started collecting data on the marine turtles in Sonadia Island and Cox's Bazaar - Teknaf peninsula beach since 2007. Center for Natural Resources Study (CNRS) an NGO is conducting study on the marine turtles in Kutubdia Island with funding from initially Shell Oil-Bangladesh and later from CAIRNS-Bangladesh.

3.1.3 Has the genetic identity of marine turtle populations in your country been characterised? [INF, PRI]

YES NO UNSURE

3.1.4 Which of the following methods have been or are being used to try to identify migration routes of turtles? Use the text boxes to provide additional details. [INF, PRI]

Tagging YES NO

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).

Satellite tracking YES NO

The first-ever sea turtle tracking project in Bangladesh has been initiated by Marinelife Alliance. An Olive ridley turtle – named "Urmee", which means "wave" in Bangla – was fitted with a Platform Terminal Transmitter (PTT) and released into the Bay of Bengal from Sonadia Island during the evening of 29 March 2010. The signal was lasted for about one year.

See: http://www.seaturtle.org/tracking/?project_id=487

Other

None of the above

3.1.5 Have studies been carried out on marine turtle population dynamics and survival rates (e.g. including studies into the survival rates of incidentally caught and released turtles)? [INF, PRI]

YES NO UNSURE

3.1.6 Has research been conducted on the frequency and pathology of diseases in marine turtles? [INF, PRI]

YES NO UNSURE

3.1.7 Is the use of traditional ecological knowledge in research studies being promoted? [BPR, PRI]

YES NO UNSURE

Information gathered by CARINAM and by the SMP and CWBMP is available to the scientific and local fisher communities. Information is collected from the fishermen on a regular basis through interviews and documented in project reports.

The most common traditional knowledge used is during the turtle walks. The weather conditions (wind, tide) and the intensity of moonlight are some of the clues used by the local fishermen to find nesting turtles.

Traditional knowledge has never been shared with other signatory states.

3.2.1 List any regional or sub-regional action plans in which your country is already participating, which may serve the purpose of identifying priority research and monitoring needs. [INF]

Some activities are initiated in collaboration with SACEP.

3.2.2 On which of the following themes have 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. [INF, PRI]

a) Genetic Identity YES NO NOT APPLICABLE

b) Conservation status YES NO NOT APPLICABLE

c) Migrations YES NO NOT APPLICABLE

d) Other biological and ecological aspects YES NO NOT APPLICABLE

Other

3.3.1 List, in order of priority, the marine turtle populations in your country in need of conservation actions, and indicate their population trends. [PRI]

Hawksbill turtle - Last nesting recorded in 1992 in St. Martin's Island and since then there has been no nesting record. A young hawksbill was, however, caught in a fishing net in 1997.

Green turtle - significant population decline. Khan 1982 mentioned it to be a common nesting turtle and, presently, it is very uncommon (Rashid & Islam 2005). The nesting habitat varies in some physical features from that of the common olive ridleys; for example, sand grain size & composition, slope angle, and distance from shoreline (Rashid & Islam 1999).

Most of the nesting in recent years is by olive ridleys, however, their numbers have declined.

3.3.2 Are research and monitoring activities, such as those described above in Section 3.1 periodically reviewed and evaluated for their efficacy? [SAP]

YES NO UNSURE

3.3.3 Describe how research results are being applied to improve management practices and mitigation of threats (in relation to the priority populations identified in 3.3.1, among others). [SAP]

Under the CWBMP conservation management plans (CMP) have been developed for the coastal ecologically critical areas (ECA) which include the St. Martin's Island, Cox's Bazaar - Teknaf Peninsula beach, and Sonadia Island. Information collected was analysed, discussed with the community and relevant local public representatives and government officials during the monthly meetings of the ECA Coordination Committee (ECACC). Unanimous decisions are conveyed to the community members and implemented accordingly through the contracted-NGOs and Village Conservation Groups. If the situation demands actions not mentioned in the CMP or any threat mitigation measure that needs immediate attention, remedial actions are implemented with approval from the ECACC.

See management plans listed in Section 1.2.1

3.4.1 Has your country undertaken any initiatives (nationally or through collaboration with other Range States) to standardise methods and levels of data collection? [BPR, INF]

YES NO UNSURE

The knowledge gathered by some of the MTSG members on the methods for data collection is transferred during various marine turtle workshops to the younger generation who work on marine turtles. The MTSG book on research techniques is use as the standard reference for filed work.

3.4.2 To what extent does your country exchange scientific and technical information and expertise with other Range States? [SAP, IND]

OFTEN (SYSTEMATICALLY) OCCASIONALLY RARELY NEVER

3.4.3 If your country shares scientific and technical information and expertise with other Range States, what mechanisms have commonly been used for this purpose? Comment on any positive benefits/outcomes achieved through these interactions. [INF]

Sharing through regional workshops and scientific publications

3.4.4 Does your country compile and make available to other countries data on marine turtle populations of a regional interest? [INF]

YES NO UNSURE

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

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

Posters, brochures and stickers have been prepared and disseminated for public education and awareness by CWBMP and partner-NGOs.

Video documentation has been prepared and disseminated to the local community people and stake holders.

MarineLife Alliance organized various activities during the Year of the Turtle 2006, including rallies, drawing competition, exhibition of information materials, picture post cards, posters, etc. They also produced marine turtle identification charts to distribute among the fishermen and to some educational and local government institutions. This material is still available and being used.

CWBMP has plans to produce exclusive video documentaries on the marine turtles. Professional assistance would be highly appreciated.

4.1.2 Which of the following groups have been the targets of these focused education and awareness programmes described in above in Section 4.1.1? [PRI, INF]

- Policy makers**
- Fishing industry
- Local/Fishing communities**
- Indigenous groups
- Tourists**
- Media**
- Teachers**
- Students**
- Military, Navy, Police**
- Scientists**
- Other:**
- None of the above

Information provided to the CWBMP personnel by the fishermen on sightings of marine turtles during their fishing trips, and accidental catches are also reported. Tourists are particularly instructed not take a stroll on the beaches between 10pm and 6am. If anyone accidentally comes across a nesting marine turtle they are instructed not to disturb the animal and inform the nearest patrolling team. Local people have been hired to patrol the beaches during night time in all the three coastal ECAs.

4.1.3 Have any community learning / information centres been established in your country? [BPR, SAP]

- YES** **NO**

One information centre was established at St. Martin's Island but with the termination of the project the centre is closed now. Regular community awareness programmes were conducted by St. Martin's Project. CWBMP, through its contracted NGOs, is carrying out awareness programs. Re-establishing the information centre is under consideration.

4.2 Alternative livelihood opportunities [IND, BPR] Describe initiatives already undertaken or planned to identify and facilitate alternative livelihoods (including income-generating activities) for local communities.

Temporary and project-based alternative income generating activities and livelihood skill development training were undertaken for the local community people at St. Martin's Island by the St. Martin's Project, but unfortunately they did little good for the community. CWBMP, through its biodiversity conservation grant to the locally established Village Conservation Groups, is engaging the community members in horticultural activities and providing fishing gear in all three ECAs. Local people have been hired to guard the plantations, raise nurseries of local plants, guard beaches during night, conduct beach cleaning activities, and are trained as tourist guides. Tourists are recommended to hire trained

guides. Local people are encouraged to make tourist boarding facilities to further help them earn money to meet their living costs.

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

Village Conservation Groups (VCG) have been formed involving members from the local communities by CWBMP. ECA Management Committees have been formed involving representatives from all the stakeholders. VCGs are registered with the cooperative department as such to have a legal basis and also acknowledged through government gazette notification. VCGs are provided with conservation grant money against some conservation activity or alternate livelihood activity. That grant keeps rolling and increasing through deposits with interest. Members of the VCGs offer services for turtle conservation activities.

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

A national committee has been formed headed by Chief Conservator of Forests, Forest Department of Bangladesh to encourage the participation of Government institutions, NGO's, Private Sector and General Community in conservation efforts. NGOs have already been contracted to work for the conservation of marine turtles. Private sector has yet to be attracted to join the marine turtle conservation activities.

OBJECTIVE V. ENHANCE NATIONAL, REGIONAL AND INTERNATIONAL COOPERATION

5.1.1 Has your country undertaken a national review of its compliance with Convention on International Trade in Endangered Species (CITES) obligations in relation to marine turtles? [SAP]

YES NO NOT APPLICABLE

Forest Department is the management authority for CITES. Information not available.

5.1.2 Does your country have, or participate/cooperate in, CITES training programmes for relevant authorities? [SAP]

YES NO NOT APPLICABLE

Forest Department officials regularly attend CITES training programs. Details not available.

5.1.3 Does your country have in place mechanisms to identify international illegal trade routes (for marine turtle products etc.)? Please use the text box to elaborate on how your country is cooperating with other States to prevent/deter/eliminate illegal trade. [SAP]

YES NO NOT APPLICABLE

Bangladesh Coast Guard and Bangladesh Navy are in place to check all boats for illegal trade (in general) throughout the coast line of Bangladesh. The Customs Department is vigilant at all entry/exit points of the country.

5.1.4 Which international compliance and trade issues related to marine turtles has your country raised for discussion (e.g. through the IOSEA MoU Secretariat, at meetings of Signatory States etc.)? [INF]

Sufficient information not available.

5.1.5 Describe measures in place to prevent, deter and eliminate domestic illegal trade in marine turtle products, particularly with a view to enforcing the legislation identified in Section 1.5.1. [INF]

According to the Wildlife Preservation Act 1974 trade in protected animals is prohibited in Bangladesh. Government of Bangladesh has issued a circular in this regard. Initiative has been taken to amend the Wildlife Preservation Act 1974 for incorporating the provisions of illegal trade related to marine turtles. The Bangladesh Forest Department is responsible for enforcement.

5.2.1 Has your country already developed a national **action plan or a set of **key management measures** that could eventually serve as a basis for a more specific action plan at a national level? [IND]**

YES NO

The National Biodiversity Strategy Action Plan (NBSAP) has been drafted and is yet to be approved by the government. NBSAP suggests some action plan for the marine turtles.

The conservation management plans developed by CWBMP also denotes to some sort of action plan whereby activities are undertaken for the conservation of the marine turtles in Bangladesh. Activities undertaken under the CMPs are reviewed on a quarterly basis by the CWBM Project Management Unit (PMU) and ECA Management Cell (ECAMC) of the Department of Environment (DOE).

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

- 1) Protection of known nesting beaches and fishing grounds (2.1)
- 2) Motivation and awareness (4.1)
- 3) Research and monitoring (3.1)
- 4) Capacity building
- 5) Legislation up-dating
- 6) Regulating tourism
- 7) Socio-economic survey
- 8) Enforcement and punitive measures
- 9) Network development and bilateral cooperation with other regional countries
- 10) Priority sites include: St. Martin's Island, Sonadia Island, Cox's Bazaar -Teknaf beach

5.2.3 Please indicate, from your country's standpoint, the extent to which the following **local management issues require **international** cooperation in order to to achieve progress. [PRI]**

Illegal fishing in territorial waters	<input type="checkbox"/> ESSENTIAL <input checked="" type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Incidental capture by foreign fleets	<input type="checkbox"/> ESSENTIAL <input type="checkbox"/> IMPORTANT <input checked="" type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Enforcement/patrolling of territorial waters	<input checked="" type="checkbox"/> ESSENTIAL <input type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Hunting/harvest by neighboring countries	<input type="checkbox"/> ESSENTIAL <input checked="" type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Poaching, illegal trade in turtle projects	<input type="checkbox"/> ESSENTIAL <input type="checkbox"/> IMPORTANT <input checked="" type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Development of gear technology	<input type="checkbox"/> ESSENTIAL <input type="checkbox"/> IMPORTANT <input checked="" type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Oil spills, pollution, marine debris	<input type="checkbox"/> ESSENTIAL <input checked="" type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Training / capacity-building	<input checked="" type="checkbox"/> ESSENTIAL <input type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Alternative livelihood development	<input checked="" type="checkbox"/> ESSENTIAL <input type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Identification of turtle populations	<input type="checkbox"/> ESSENTIAL <input checked="" type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Identification of migration routes	<input type="checkbox"/> ESSENTIAL <input checked="" type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL
Tagging / satellite tracking	<input type="checkbox"/> ESSENTIAL <input checked="" type="checkbox"/> IMPORTANT <input type="checkbox"/> LIMITED <input type="checkbox"/> NOT AT ALL

Habitat studies ESSENTIAL IMPORTANT LIMITED NOT AT ALL

Genetics studies ESSENTIAL IMPORTANT LIMITED NOT AT ALL

5.3.1 Identify existing frameworks/organisations that are, or could be, useful mechanisms for cooperating in marine turtle conservation at the sub-regional level. Please comment on the strengths of these instruments, their capacity to take on a broader coordinating role, and any efforts your country has made to enhance their role in turtle conservation. [INF, BPR]

Bangladesh has signed the CBD, CMS, and CITES treaties, and is promoting synergies with regional and other countries under CBD, CMS and CITES. Recently some progress made with SACEP through CWBMP, DOE.

See:

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.

5.3.2 Has your country developed, or is it participating in, any networks for cooperative management of shared turtle populations? [BPR, INF]

YES NO NOT APPLICABLE

5.3.3 What steps has your country taken to encourage Regional Fishery Bodies (RFBs) to adopt marine turtle conservation measures within Exclusive Economic Zones (EEZs) and on the high seas? [SAP]

Yes (details not available)

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

Marine turtle identification is required as part of all turtle activities. Yet it is a major problem to get the species identification right. This is more of a motivational and/or practice problem rather than a learning or knowledge deficiency. There are few people (may be counted by fingers) who are well trained in marine turtle identification and other conservation activities.

Bangladesh needs training of field workers of Forest Department, Department of Environment, marine Fisheries Department, Marine Academy, NGOs, and relevant tertiary level institutions is a high priority.

5.4.2 Describe any training provided in marine turtle conservation and management techniques (e.g. workshops held, training manuals produced etc.), and indicate your plans for the coming year. [PRI, INF]

Some government officers from the Forest Department and NGO representatives have attended training programmes. However the opportunities are very limited.

5.4.3 Specifically in relation to capacity-building, describe any partnerships developed or planned with universities, research institutions, training bodies and other relevant organisations. [BPR]

These are in the process of being established.

5.5.1 National policies and laws concerning the conservation of marine turtles and their habitats will have been described in Section 1.5.1. Please indicate their effectiveness, in terms of their practical application and enforcement. [SAP, TSH]

Law and legal provisions exist, but enforcement is still limited. Under the Forest Department a separate wild management and nature conservation division has been created which has special laws and legal provisions under the Wildlife Act 1974.

See: <http://www.bforest.gov.bd/>

5.5.2 Has your country conducted a review of policies and laws to address any gaps, inconsistencies or impediments in relation to marine turtle conservation? If not, indicate any obstacles encountered in this regard and when this review is expected to be done. [SAP]

YES NO UNSURE

The review of The Wildlife Act 1974 is under consideration to address the issues of marine turtle conservation. Implementation is slow.

5.5.3 From the standpoint of law enforcement, has your country experienced any difficulties achieving cooperation to ensure compatible application of laws across and between jurisdictions? [TSH]

YES NO UNSURE

None

OBJECTIVE VI. PROMOTE IMPLEMENTATION OF THE MoU INCLUDING THE CONSERVATION AND MANAGEMENT PLAN

6.1.1 What has your country already done, or will it do, to encourage other States to sign the IOSEA MoU? [INF]

The country intends to contribute in the future. IOSEA memorandum has already played an important role in the field of conservation.

6.1.2 Is your country **currently favourable, in principle, to amending the MoU to make it a legally binding instrument? [INF]**

YES NO NO VIEW

6.1.3 Would your country be favourable, over a **longer time horizon, to amending the MoU to make it a legally-binding instrument? [INF]**

YES NO NO VIEW

Subject to final approval of the responsible authority.

6.2 Secretariat and Advisory Committee

6.2.1 What efforts has your country made, or can it make, to secure funding to support the core operations of the IOSEA MoU (Secretariat and Advisory Committee, and related activities)? [IND]

The GoB is contributing in kind through providing information and financing in-country projects to protect marine turtles.

6.3.1 What funding has your country mobilised for domestic implementation of marine turtle conservation activities related to the IOSEA Marine Turtle MoU? Where possible, indicate the specific monetary values attached to these activities/programmes, as well as future plans. [IND]

The GoB invested Tk 14,00,00,000 (=more than US \$2,000,000) from its own revenue budget for the St. Martin's Project (2000-2006), of which a significant amount was allocated for activities related to marine turtle conservation. GoB is also contributing in kind and in cash for the CWBM Project which is protecting marine turtles in the three coastal ECAs.

6.3.2 Has your country tried to solicit funds from, or seek partnerships with, other Governments, major donor organisations, industry, private sector, foundations or NGOs for marine turtle conservation activities? [IND]

YES NO

The 7-year CWBMP (2002-2009) project was a US \$5m project funded by GEF. Different NGOs have been successful to attract some funds for marine turtle work.

6.3.3 Describe any initiatives made to explore the use of economic instruments for the conservation of marine turtles and their habitats. [BPR]

Not yet

6.4.1 Has your country designated a lead agency responsible for coordinating national marine turtle conservation and management policy? If not, when is this information expected to be communicated to the IOSEA MoU Secretariat? [IND]

YES NO

Wildlife and Nature Conservation Circle of Forest Department.

6.4.2 Are the roles and responsibilities of all government agencies related to the conservation and management of marine turtles and their habitats clearly defined? [IND]

YES NO UNSURE

Wildlife and Nature Conservation Circle of Forest Department has been identified and entrusted with the responsibility to conserve the activities of marine turtles.

6.4.3 Has your country ever conducted a review of agency roles and responsibilities? If so, when, and what was the general outcome? If not, is such a review planned and when? [SAP],

YES NO UNSURE

Review of the situation for wildlife and nature conservation with in the Forest Department requires conservation of habitat and special training of personnel for management.

Comments/suggestions to improve the present reporting format:

The format is quite exhaustive and it takes a lot of time to complete. Moreover information provided in this document require information from various government agencies which at times is difficult to get. However there is a provision to correct or update if in any case the information provided is either not satisfactory or incomplete.

In the site threat information sheet the use of the word "harvest" contradicts with "exploitation". Usually "harvest" is for human use/consumption or other commercial use. Whether the killings of turtles on land without any reason/use be also treated "harvest" needs clarification.

Additional information not covered above:

Bangladesh needs support from regional and other IOSEA member countries to develop her capacity in monitoring and application of technological developments in the field of marine turtle studies.

More funding needs to be tapped. The fact is that relevant government agencies have limited technical know-how in conservation of marine turtles particularly related to the use of TEDs. Training opportunities may be created by IOSEA for people from the relevant government departments.

IOSEA may organize workshops on marine turtle related events in collaboration relevant agency in Bangladesh to raise the profile of marine turtles and awareness among the policy makers, NGOs and the general masses.

IOSEA may also facilitate researchers/educational institutions/NGOs for working on marine turtles.

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