

Thameehla (Diamond) Island Marine Turtle Conservation and Management Station, Ayeyawady Region, Myanmar



**Seventh Signatory States Meeting on Memorandum of Conservation and Management of Marine Turtles and their Habitats of the Indian Ocean and South-East Asia
8-11 September 2014
Bonn , Germany**

Background

Thameehla Island is situated between the Bay of Bengal and the Gulf of Mottama (Gulf of Mottaban), at position 15°51.30'N and 94°17.30'E, at the mouth of Patheingyi (Bassein) River.



The total area of the island is 88 ha. The outer circumference of the island is about 4.8 km and the land is a low platform shape.

- The topography is undulating, with low cliffs to the south and west dropping to narrow, sandy beaches.

Much of the island is pock-marked with turtle craters.

With the exception of the north, the island is surrounded by a rocky reef, about 270 m in width, comprising sandstone and shale.

- On that Island:
4 DOF staff
2 FD staff & Police Force

There is no resident local population on the island.



- Since 1963, Department of Fisheries (DOF) has taken up a project to breed and protect sea Turtles on Thameehla island.
- In 1983, there was a temporary military garrison on the island. The Department of Fisheries has taken responsibility and set up a Marine Turtle Conservation and Management Station on the island since 1986.
- In 1986-87, the programme was fully revived and more department hatcheries were established with skilled technicians.
- As at 2003 the largest concentration of nesting in Myanmar occurred on Thameehla Island beach.

- At present, two beaches remain suitable for Turtle nesting and laying eggs on the island. In 2014, surface area of Sutt Thaphu cove nesting beach is 300 meter in length and 24 meter in width and Tham Ban cove nesting beach is 360 meter in length and 40 meter in width.



- The sandy beach on Thameehla Island was reportedly mainly calcareous, which is suitable for the two sea Turtle species present to lay eggs.

- The island was frequented by nesting marine Turtles the whole year round.
- Thameehla island was the native place for two species of Marine Turtles: i) Green Turtles (*Chelonia mydas*) visits the island all the year round; and ii) Olive Ridley Turtle (*Lepidochelys olivacea*) comes to the island between October and February to lay eggs on the beach.
- There is a rich and diverse fauna and foraging grounds for Turtles in the vicinity of the island's prime nesting sites.
- Nearby Island is their foraging area and mating area also. Turtles migrate to Thameehla Island all year round.

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- That Island is critically important area for foraging and their migratory route. A gradual decline of the nesting Turtle population and number of clutches were found to be significant in the conserved areas.
- Nesting numbers of Green Turtles at Thameehla Island had declined from thousands of nesting females per year in the 1880s to a few tens of females per year today.
- This downward trend is continuing.
- Olive Ridley Turtle nesting numbers have declined from many thousands of nesting females per year to a few tens of nesting females per year.
- This downward trend is continuing at all the index beaches.
- Hawksbill Turtles which nested in hundreds about 100 years ago are now approaching extinction as a nesting species in Myanmar.

- Currently, the governance of the Key Fisheries Biodiversity Area is under the management of the Department of Fisheries, Ministry of Livestock, Fisheries and Rural Development .
- Marine Turtle Conservation and Management responsible are taking by DOF at that Island. No systemically evaluation of the effectiveness of the frameworks put in place to protect the site.
- Thameehla Island was classified as a Marine Protected Area in 1970.
- This framework implies species, no settlement or resource harvesting allowed, visitors permitted.
- The surrounding area is about 3 square miles and situated 8 miles from Heingyi Island. The coral reefs around this island extend about 12 miles is a feeding ground for the turtles.
- Thameehla Island is recognised as a key biodiversity area since 2012.

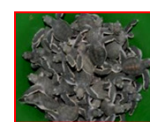
- On Thameehla Island, as at 2009 there were small barracks and temporary fishermen's huts. The large-scale trawl, small scale gill net and trammel net fishing operation kill and harass the Marine Turtle .
- These matters are beyond the local fishery officer's control. DOF, with many difficulties is also (with whatever source available) protecting the decreasing population of marine Turtles because of death and injury caused by the fishing activities.
- One of the main factors which cause decrease in population of marine Turtles is the fishing activities in the sea. We recognise the value of emphasising awareness of the importance of Marine Turtles and to organize the people living in the coastal areas to cooperate in activities for protecting of the marine Turtles.

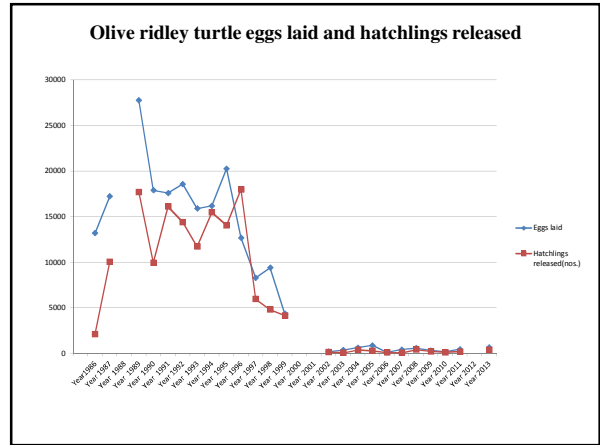
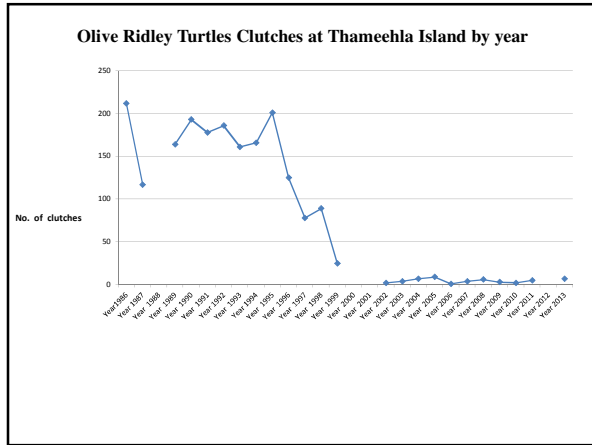
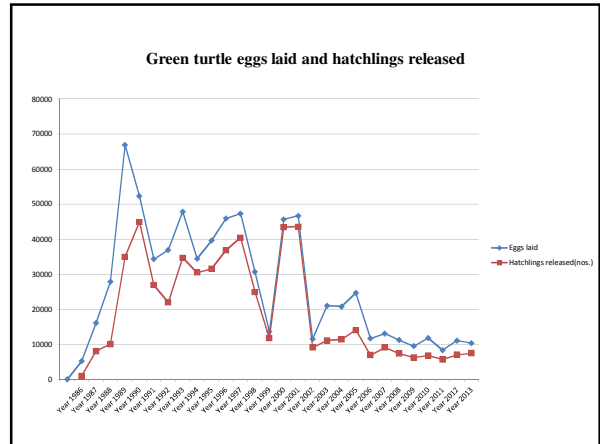
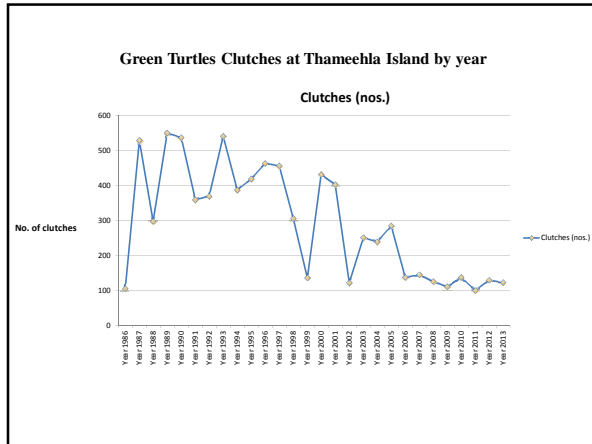
- Several laws, notifications and directives related in Conservation and Management of Marine Turtle and Wildlife under national governance framework are promulgated and issued by DOF and Forest Department (FD).
- On the land these governance are very effectives. But in the water, it is very difficult because of under control and lack of information.
- **Myanmar is signatory to:** ASEAN (MoU) CBD; Ramsar Convention; CITES; UNEP CMS/ IOSEA (MoU); BOBLME (MoU) and IUCN classification: category IV.
- **Conservation and Management activities** were carrying out speedily since 2001.

- DOF staff presently collect the Turtle eggs and transfer them to a temporary hatchery in order to prevent them from being dug up by poachers or other mother Turtles".
- Currently, eggs are transmitting into man-made nests at the hatchery and provide intensive care.



- Releasing hatchlings to the natural.








Tagging Activity

DOF carry out the activity of tagging and recording the tag recovery data to try to identify migratory routes and feeding grounds,

- Inconel flippers were used (from 2001 to June 2014)
- Tag Code: MM-0000
 - ✓ Total tagged turtles: 373
 - ✓ Green turtle: 369 nos.
 - ✓ Olive ridley turtle: 3 nos.
 - ✓ Hawksbill turtle: 1 nos.


Inconel tag recoveries occur and are recorded.

- PIT microchip tagging (from 2003 to 2005)
 - ✓ Green turtles: 25 nos.

- 30 tissue sampling were collected from green turtles and sent these to the SEAFDEC to study the genetic stocks

Result:
Myanmar green turtles are a separate genetic stock



Regular monitoring of nesting, DOF conducted public awareness and education purposes for local fishermen, school children and onsite trainings occasionally. And also distributed posters and brochures.



Capacity Building Training at Thameehla Island



Needs identified at the Thameehla Island are:

- capacity building for DOF staff;
- effective infrastructure and inputs for the research and eggs hatching; regular Monitoring and Management system of Rookeries and Turtle beaches;
- firm Cooperation of relevant Government Agencies, local NGOs and International NGOs who are working for the Biodiversity Conservation and Management;
- inadequate and insufficient information from fishers;
- transportation, communication and reporting systems.
- This Island is most famous Marine Turtles nesting area in Myanmar.
- Thameehla Island is one of the country's protected areas and is the main focal point for the further extension of turtle conservation activities.

- The immediate challenges that need to be addressed in the Country include sub-optimal performance of hatcheries, insufficient capacity to monitor remote sites, incidental capture in fisheries



- According to the data, drew attention to the alarming decline in the number of Green and Olive Ridley Turtles nesting on Thameehla Island.
- The original hatchery shading was destroyed by cyclone Nargis in 2008 and could not be replaced. It is clear that more substantial funding will be needed to develop a more comprehensive national sea turtle conservation programme, and other avenues for external support.



- A lack of systematic infrastructure in the local hatchery was contributing to a strong bias towards production of female hatchlings and, in the worst case, a significant percentage of egg loss.
- Marine Turtles and their Habitats were threatened because of the human and environmental impact. Although DOF is carrying out the Marine Turtle through many difficulties it is also (with whatever source available) is protecting the decreases in population of Marine Turtles because of several activities.

Objectives and plan of marine turtles conservation and management in Myanmar

Objectives

DOF aims to draw support the Support to enhance the Research, Conservation and Management on Marine Turtles and their Habitats and to formulate guidelines and National to draw Strategic plan for Marine Turtle and Management. DOF will aim at :

- i) promoting participatory approach at community levels to improve Marine Turtle , as well as reporting information and protecting for depleting marine Turtles and their habitats;
- ii) promoting capacity building for stake holders that will enhance the conservation and management of marine turtles and their habitats;
- iii) carrying out effective activities on awareness and educational programme for Local Authorities and Local Communities ; enhance collaborate and cooperate with neighboring countries , marine turtle conservation and management concerned organizaions; vi) and to draw National Strategic Plan for Marine Turtle Conservation and Management.

Thank you

