

Regional Technical Meeting on Fisheries Resource Enhancement in Southeast Asia

Bangkok, Thailand, 24-26 April 2018





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Fisheries Resource Enhancement Myanmar

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Introduction

India

China

Thailand

Myanmar

- Land area - 676,577 sq.km
- Population - 52 million
- Coastal area - Raknine, Ayeyarwady, & Tanintharyi
- Coast Line - 2832 km long
- Marine water areas - 486,000 sq.km

Policy and Management of Fisheries

Policy

- Ensuring food security, food safety and sustainable development of fisheries sector by conservation of fisheries resources in accordance with the fisheries laws.

Department of Fisheries (DOF) is responsible for the development of fishery sector of the Union of Myanmar and the responsibilities of DOF for development and management in fisheries are as follows;-

- Conservation and rehabilitation of fishery resources;
- Promotion of fisheries researches and surveys;
- Collection and compilation of fishery statistics and information;
- Extension services;
- Supervision of fishery sectors;
- Sustainability of fishery resources;

National Coastal Resources Management Committee (NCRMC)

(Nov 2016)

- * Headed by Vice President as the Chairman,
- * 2 Union Ministers (MONREC, MOALI)
- * 6 Chief Ministers of States and Regions of coastal areas
(Rakhine, Ayeyarwady, Yangon, Pago, Mon, Taninthayi)
- * 7 Permanent Secretaries of Union Ministries,
- * High level representative from Navy
- * Permanent Secretary of MONREC as Secretary of the Committee
- * Departments (Fisheries & Forest) as the Secretariat

TRANSFORMING THE MYANMAR FISHERY SECTOR WHERE TO GO NOW?

Union Level

- ❖ Modified the Vision, Objectives and Plans with current requirements
- ❖ Amended the new fisheries Laws and submitted to the Parliament as final draft.
- ❖ National Coastal Resources Management committee with involving the inline institution and forces.
- ❖ Government of Myanmar announced the commitment to do the Marine Spatial Planning by 2021 include the EEZ at the Our Ocean conference (2017) in Malta

Marine Spatial Planning in Myanmar



The Government of Myanmar announced its commitment to develop a marine spatial plan by 2021; it should cover approximately 485,000 square kilometers of Myanmar's exclusive economic zone.

Threats to Myanmar's Marine Environment

Overfishing



Destructive fishing methods



Clearing of forests leading to sedimentation

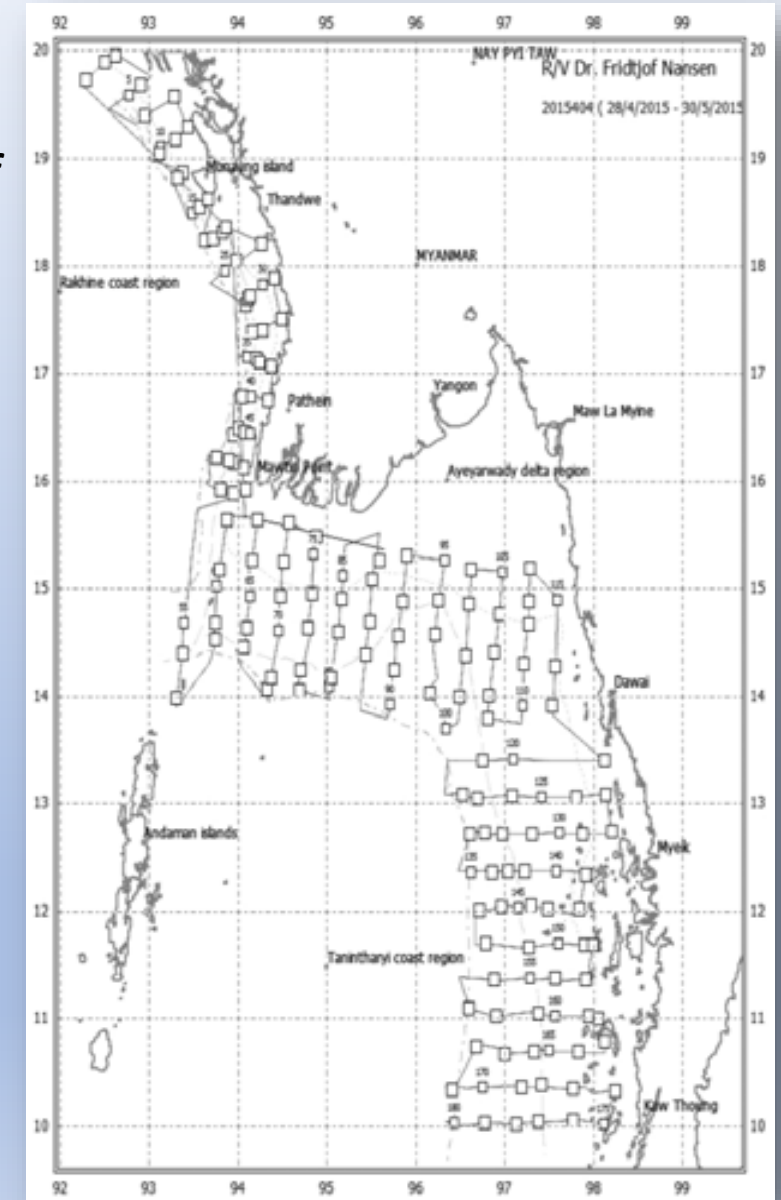


The Marine Fishery Resources of Myanmar

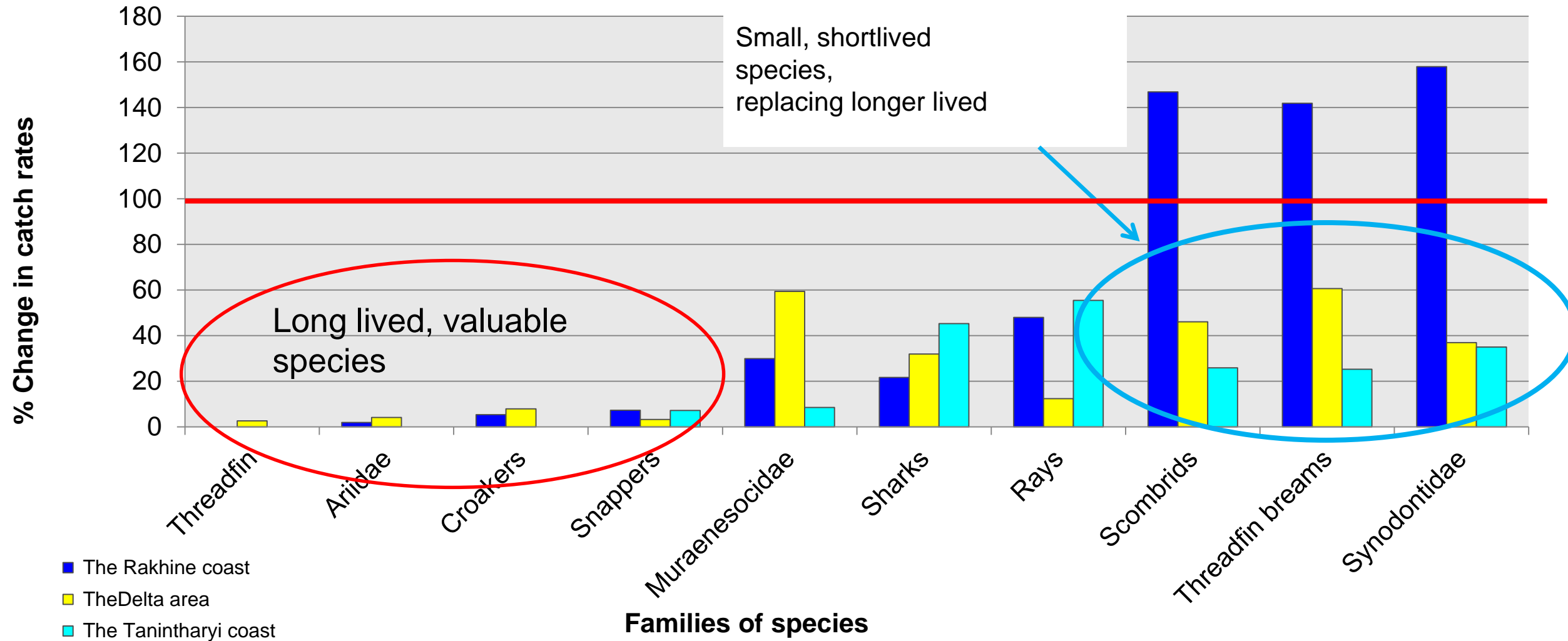
- The first assessment of the state of the fishery resources of Myanmar was conducted through two surveys during 1979-1980, using the RV **Dr. Fridtjof Nansen1**. *The results from those two surveys were used as the basis to estimate a Maximum Sustainable Yield (MSY) for the marine fisheries of the Myanmar EEZ.*
- After more than 30 years, the **RV Dr. Fridtjof Nansen** returned to Myanmar and conducted two more surveys (in 2013 and 2015) to update those earlier assessments.

Compare with the survey results of the 1979-1980 and 2013-2015

Year	Demersal fish Biomass (mt)	Pelagic fish Biomass (mt)
1979-1980	750,000	1,000,000
2013-2015	320,000	190,000
Decrease	50 %	80 %

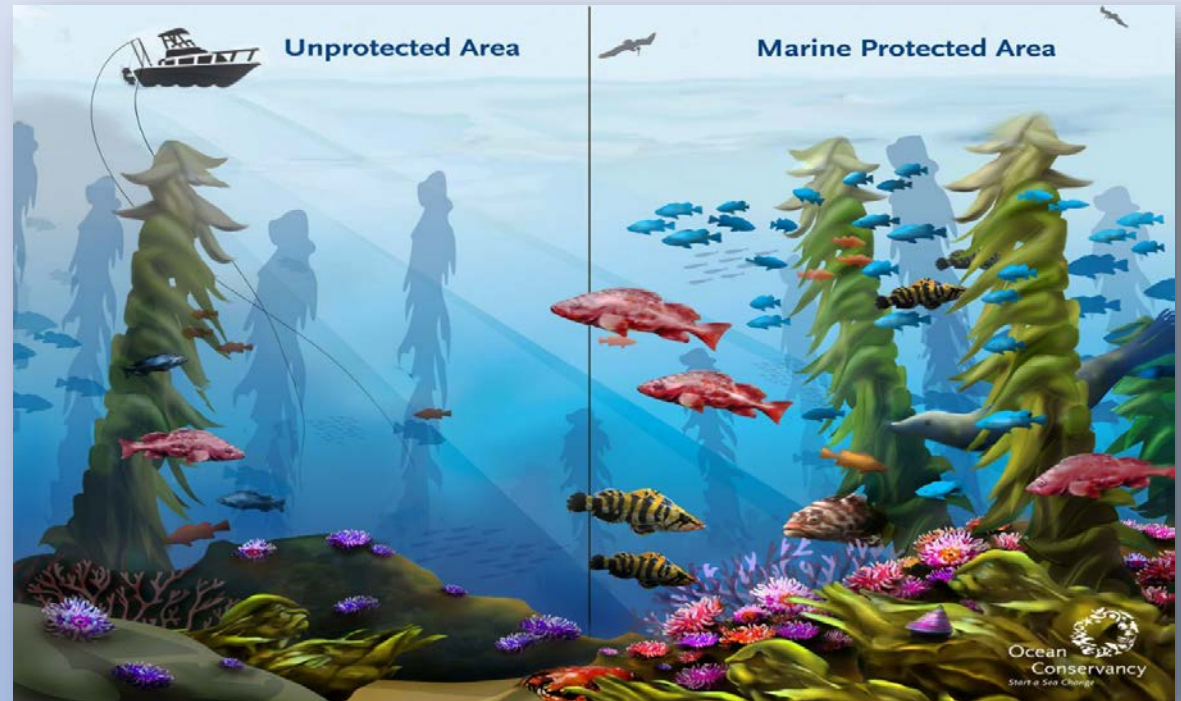


Comparison of catch rates with 1979-1980 Nansen survey, percent change per family



Solutions

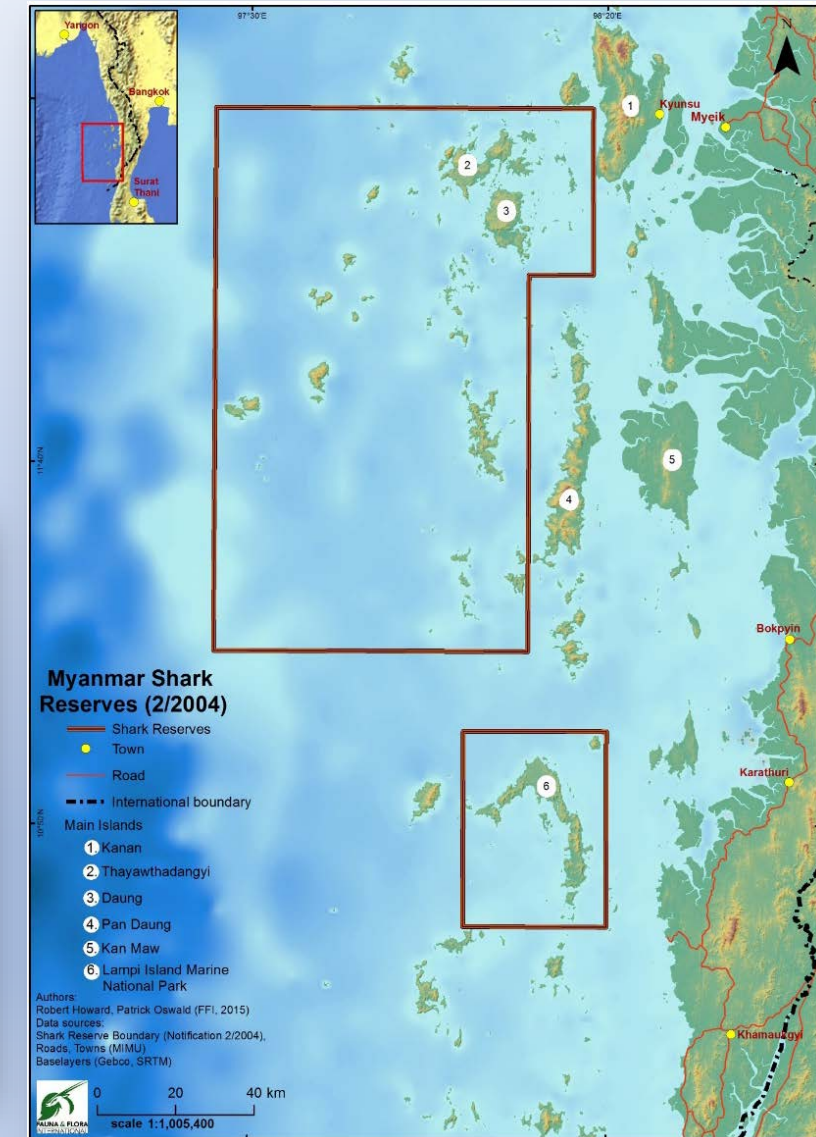
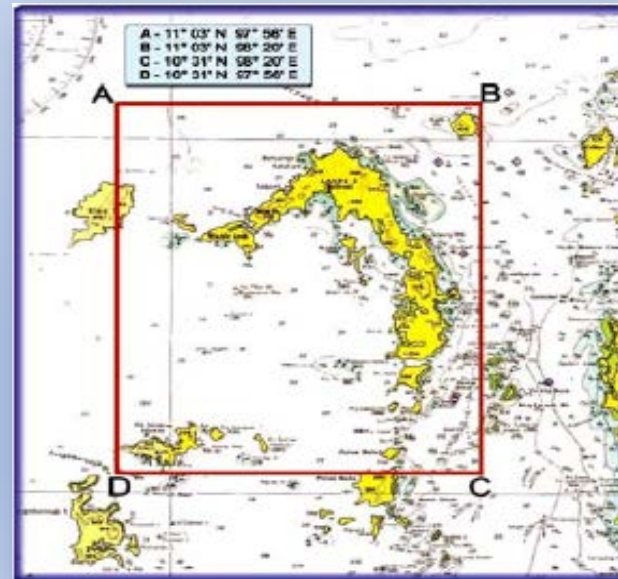
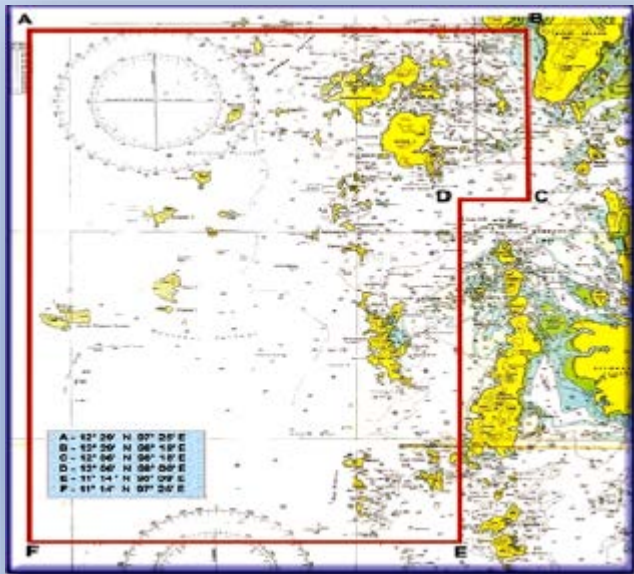
- **Reduce Fishing Capacity/Effort (fish less)**
 - E.g. stopping fishing right of foreign fishing vessels in Myanmar water
- **Provide protection to forests**
 - E.g. National Parks
- **Don't fish everywhere**
 - E.g. Marine Protected Areas (MPAs)



Through the use of Artificial Habitats, Artificial Reefs, Fish Aggregating Devices, Fish Enhancing Devices, large construction in the sea and coral replanting program have not yet been established in Myanmar Coastal zone.

Marine Protected Areas (MPAs) and Marine Park and Marine Reserve

- Conservation of fisheries resources has always been the primary concern of the Department of Fisheries, so Marine Park and Marine Reserves as well as fisheries protected area have been established under the Fisheries Law of Myanmar.
- Lampi island of the Thanninthayi coast has been designated as Maine Park and Marine Reserve in 1996. And then, regarding the shark resources conservation, no-body can conduct shark fishing operation in the protected areas stretching from” Rose” island to “ Lampi” island. so Mergui Archipelago is famous for their shark, ray, coral reefs and other marine creatures

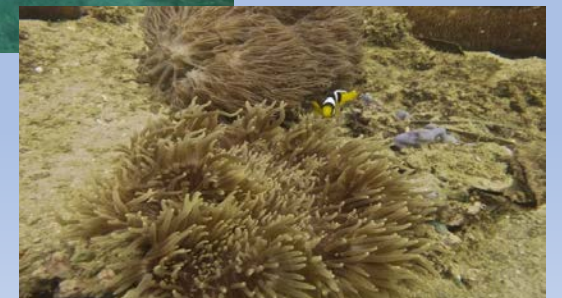


Collaborate with Fauna and Flora International-FFI

- Department of Fisheries (DOF) and FFI-Myanmar Programme have been agreed and signed Letter of Agreement (LoA) on “Collaborative Programme to support the Marine and Freshwater Biodiversity in Kachin and Rakhine States, Ayeyawaddy and Tanintharyi Regions ” on 17 December 2014.
- Activities of Fish biodiversity surveys and establishment of Locally Managed Marine Areas-LMMAs
- Department of Fisheries is undertaking fish biodiversity surveys in the projects in collaboration with the Fauna and Flora International (FFI)

For LMMAs identification:....

- * Reefs with potential to recover
- * Willing fishing communities
- * Reefs close to village
- * Tourism potential



MPA/LMMA

- FFI is also implementing conservation projects in collaboration with the Department of Fisheries and supported by the Tanintharyi Regional Government to establish Locally Managed Marine Areas (LMMAs) in Done Pale Aw village and Lin Lon-Parawah village on the Thayawthadangyi Island and Langann village on Langann Island for the sustainability of the livelihood of the local communities in the Myeik Archipelago.
- Marine Park and Marine Reserves as well as fisheries protected area have been established under the Fisheries Law of Myanmar.



MPA

AIM FOR REPRESENTATIVENESS OF HABITATS

- No trawling
- No shark fishing
- No fishing in green zones
- No netting in yellow zones
- No crabbing in orange zones

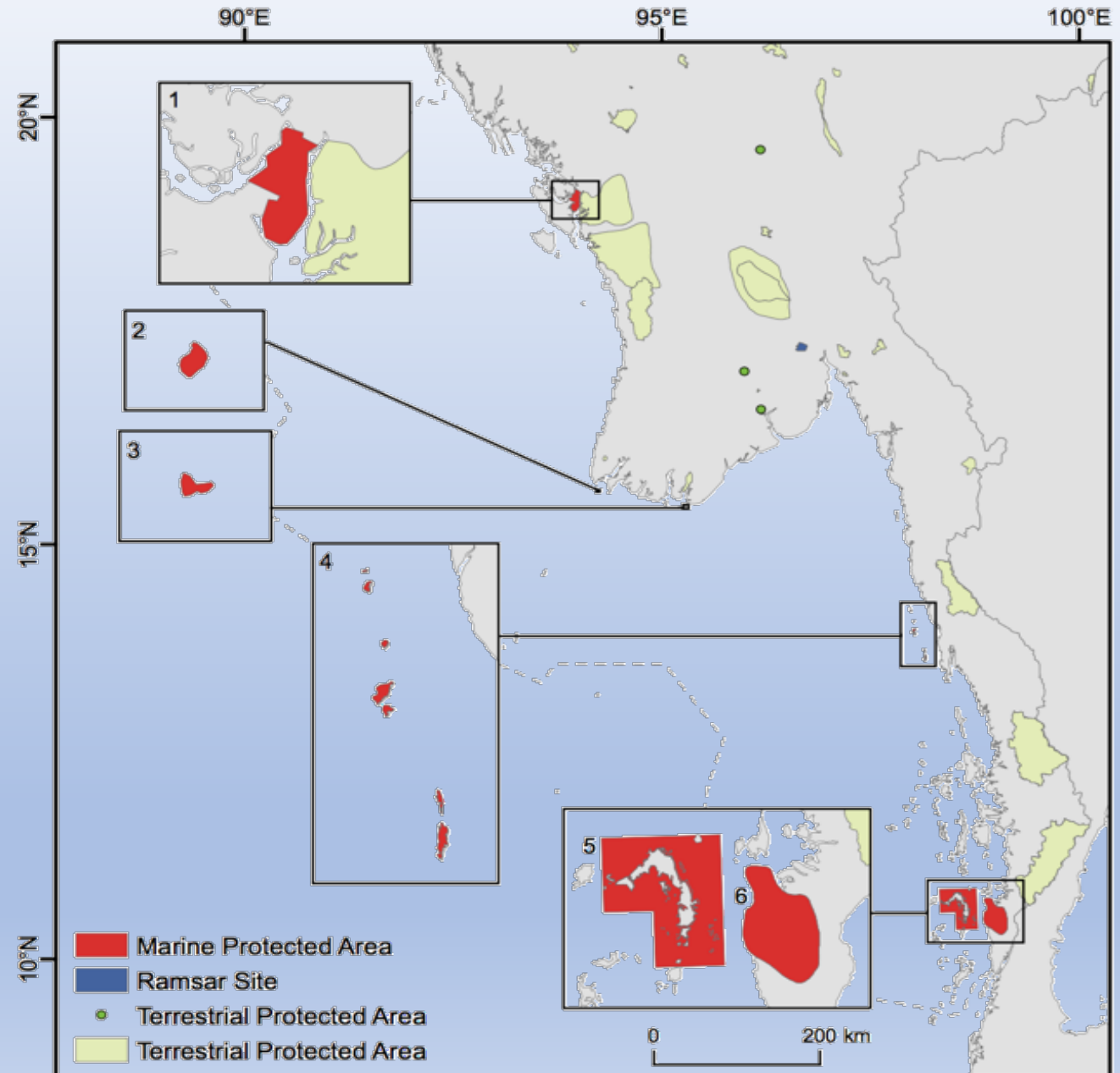


Existing MPAs in Myanmar



< 1% EEZ is currently protected

1. Wunbiak Reserved Mangrove Forest
2. Thamihla Kyun (Diamond Island) Wildlife Sanctuary
3. Kandonlay Kyun Wildlife Sanctuary
4. Moscos Island Wildlife Sanctuary
5. Lampi Marine National Park
6. Pakchan Nature Reserve



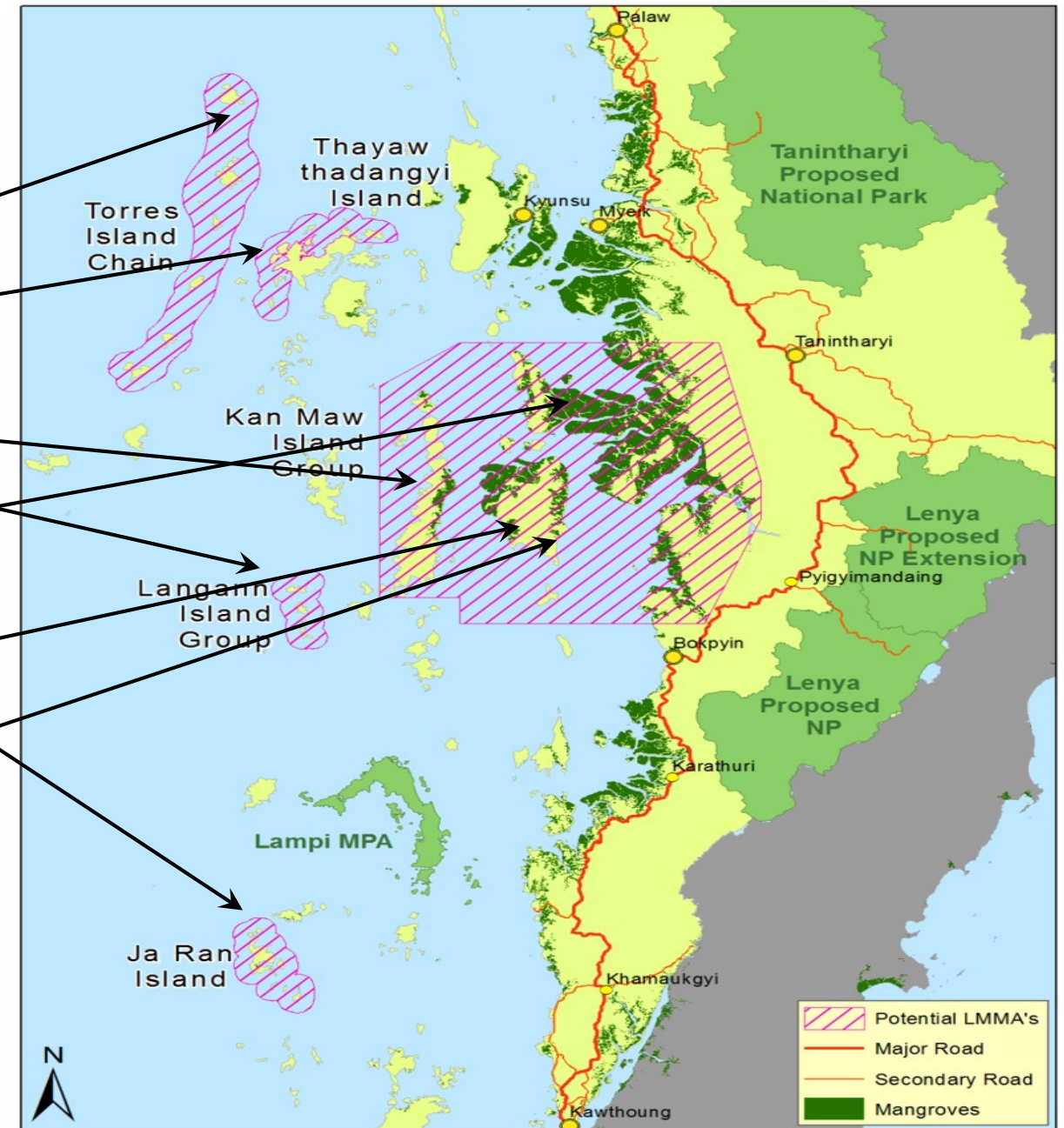
MPA Proposed Sites

Coral reefs

Mangrove forests

Sea grass beds

Mud flats



MPA Development

Preliminary focus on:

- Coral reefs
- Seagrass beds
- Mangrove ecosystems
- Mudflats

Management through zones:

- No-take
- Seasonal no-take
- Gear restrictions
- Multiple Use
- Co-management

Management Groups:

- Gov't (FD, DoF, GAD, MoHT etc.)
- Communities
- Private sector (MFF, Pearl Companies etc.)
- INGOs, NGOs, Universities



Management measure

- Nursery areas are identified and they have been protected and managed as a reserved fishing areas to ensure survival of juveniles of commercially important fish species.
- Strict law enforcement on fishing activities in Myanmar's fishery waters, is carried out by Myanmar Navy address the problem of illegal fishing.
- Trawl net cod-end mesh size not less than 2 inches for fish trawl and 1.5 inch for shrimp trawl net.
- To avoid conflate between the artisanal fishermen and the trawler, ten miles from the shore line in all coastal area the trawler will not allowed to fishing in those areas.
- Around three miles of the all islands area ; (announced as fisheries protected areas) whereby collection of marine fauna and flora is prohibited.

Constrain

Currently we have some problem in fishery sector these are as follows:

- Using distrusted fishing gear and methods and impact on environment. (Poison, explosive)
- Uncover the long coastal areas and difficult to control MCS system for IUU fishing. (Fishing in protected areas and season/without licence)
- Scientific surveys of fish population in large ecosystems are a problem in Myanmar because of the limited budgets, equipment and qualified people. These constraints need to be resolved through internal arrangement.
- Lack of Methodological and analytical expertise.
- Through the use of artificial reefs and coral replanting program have not yet been established in Myanmar Coastal zone.

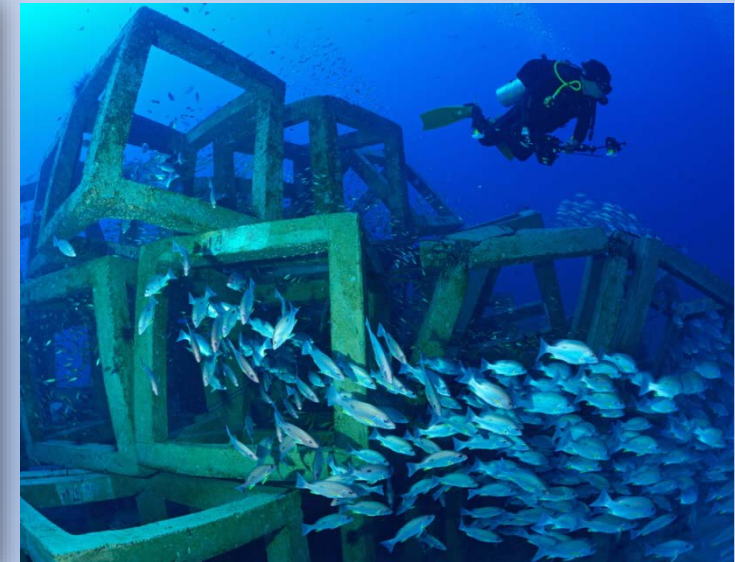
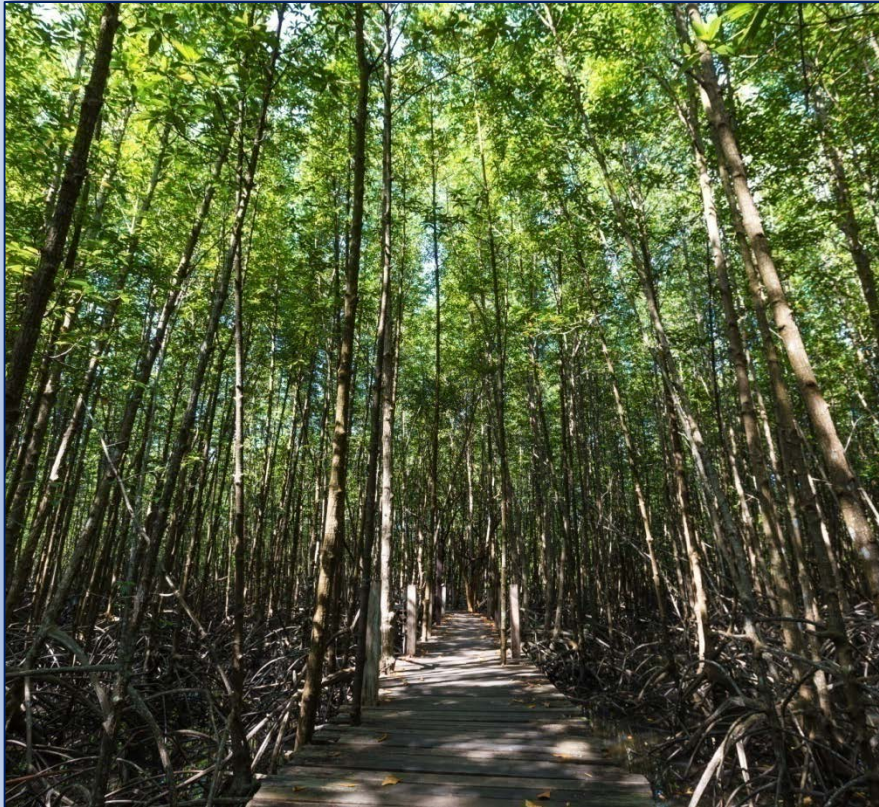


Conclusion

- Sustainable management of these ecosystems are vital for biodiversity, wildlife and the environment.
- There are a number of issues and constraints associated with the management of these ecosystems in Myanmar.
- There is a need for appropriate national policies, legislation, infrastructure and capability to manage, protect and sustainably use the coastal/marine resources.
- Overcoming the sectoral and intergovernmental fragmentation that exists in today's coastal management efforts is a prime goal of ICM.
- NCRMC will play as a national level coordination platform for integrated management and sustainable development of coastal and marine resources in the country.

A high-angle photograph of a tropical coastal scene. In the center, a person is swimming horizontally in crystal-clear turquoise water, holding a long spear. To the right, a traditional wooden boat with a thatched roof and blue tarps is anchored. Two people are on board; one is standing at the stern using a long pole, and another is seated. The water is so clear that dark rocks and coral reefs are visible beneath the surface. On the left, dark, jagged rocks form a shoreline. In the bottom right corner, there are green, leafy plants. The overall atmosphere is serene and suggests a remote, possibly indigenous, location.

Thank you!



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