Ocean Sustainability in ASEAN

The current status and common outlook of blue economy :Myanmar

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ABU DHABI HALL
AT CLUB 2020
10 DECEMBER 2021 - 2.30PM

ASEAN Secretariat

James Michel Foundation

Seychelles Envoy for ASEAN

The blue economy in 2030 Agenda (UN/ ASEAN) : The Ocean

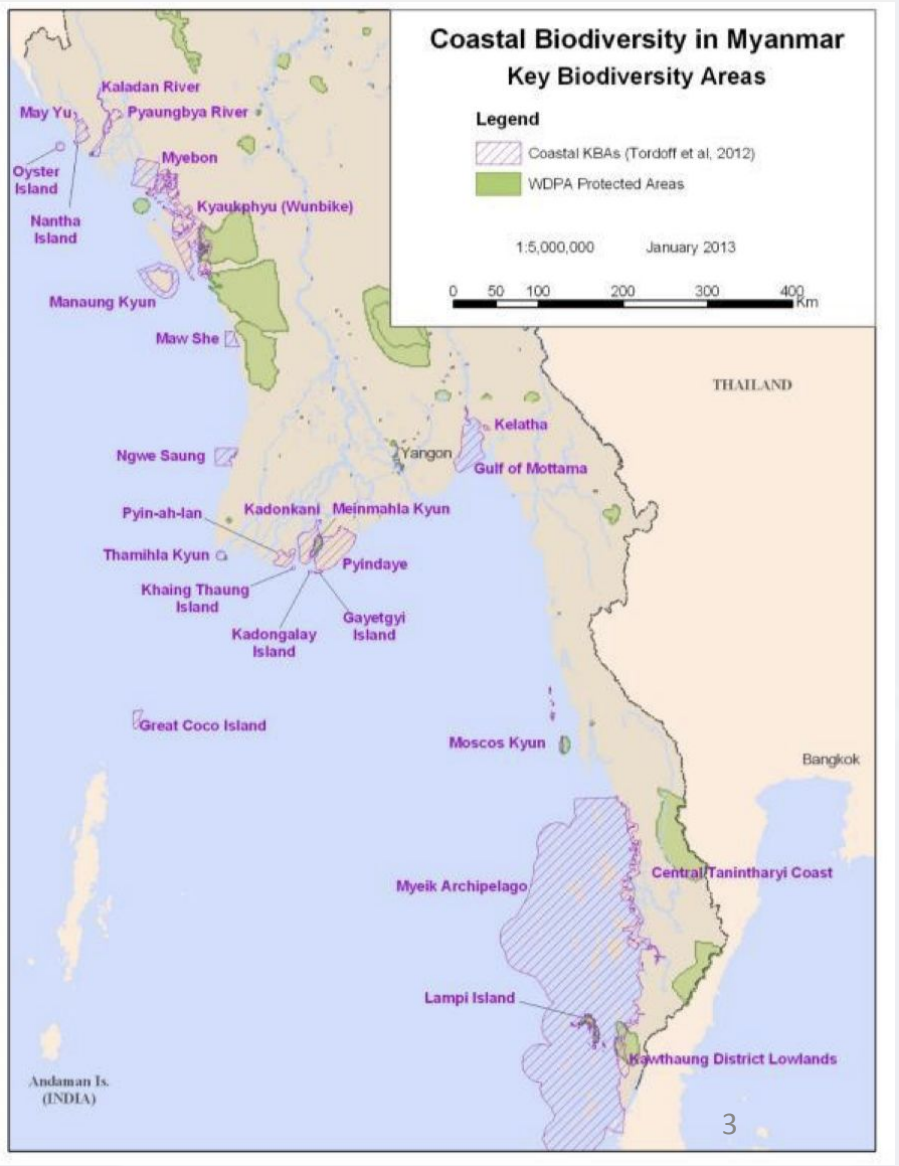
- ✔ **SDG 14: Conserve and sustainably use the oceans, seas and marine resources**
- ✔ **ASEAN leader's declared to be implemented the blue economy on the occasion of 38th ASEAN submit on 26 October 2021.**

Plans for the sustainable coastal fisheries/ocean: Myanmar

a. Cooperation with regional/ international bodies in accordance with the policies.
b. Processing of fisheries statistical data to meet the requirements of the standard indicators
c. Implementation of fisheries co-management and ecosystem approach to fisheries management.
d. Improved the legal framework with international standards, best practice and provisions.
e. Implementation of National Plan of Action Combating Illegal, Unreported and Unregulated (IUU) Fishing.
f. Promotion of conservation areas for marine and freshwater resources in critically important habitats.
g. Adoption of climate-smart fish species and their related breeding and culture techniques.
h. Develop the marine eco-tourism.

List of national policy and legal instruments support to Ecosystem approach to fisheries/ blue economy : Myanmar

Fisheries Policies
2018-2030 Myanmar Sustainable Development Plan
2018-2023 Agriculture Development Strategy and Investment Plan
2016 National Framework for Community Disaster Resilience
2015-2020 National Biodiversity Strategy and Action Plan
Fisheries Primary Legislation
1991 Law No. 1 on Freshwater Fisheries
1990 Law No. 9 on Marine Fisheries, as amended in 1993
1989 Law No. 11 on Fishing Rights of Foreign Vessels, as amended in 1993
1989 Law No. 24 on Aquaculture
Fisheries Secondary Legislation
1998 Directive (on Myanmar Department of Fisheries System of Inspection) No. 9
Other Sector's Primary Legislation
2018 Law No. 12 on Conservation of Biodiversity and Protected Areas
2012 Law No. 9 on Environmental Conservation
2006 Law No. 8 on Conservation of Water Resources and Rivers
Other Sector's Secondary Legislation
2014 Notification No. 50 on the Environment Conservation Rules

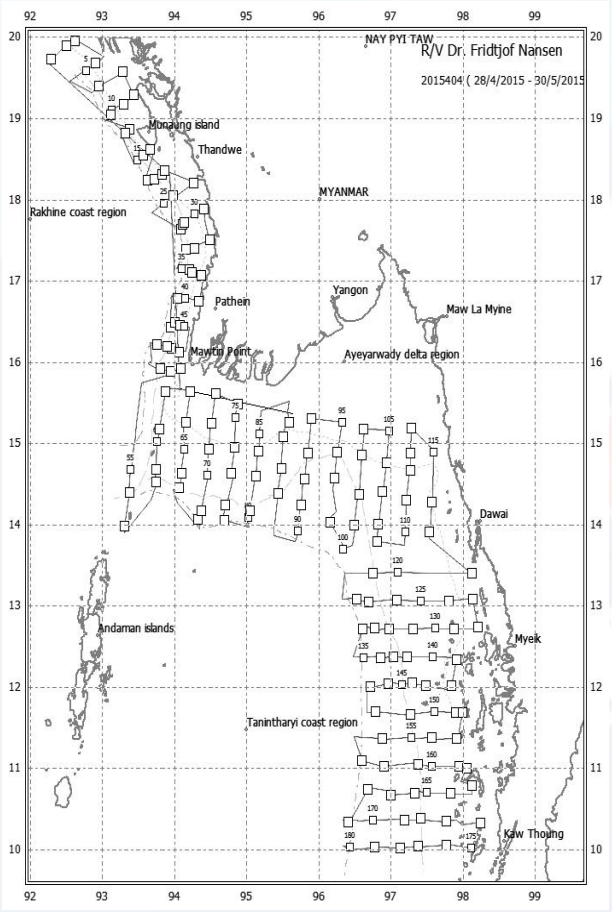


Multilateral partnerships for ocean sustainability: Myanmar

- FAO (Climate change adaptation, Fish adaptation, Fisheries co-managemenmt)
- NORAD (Research, marine aquaculture, capacity development)
- DANIDA (Suatainable Coastal Fisheries)
- GIZ (Inland Fisheries and aquaculture)
- ACIAR/ WORLD FISH (Fisheries development/Inland)
- SEAFDEC (regional bodies for fisheries development)
- JICA (Small scale aquaculture)
- TICA (Hacteries, data collection)

Survey of the fisheries resources and marine ecosystem by Research Vessel Dr. Fridtjof Nansen(Norway): Myanmar

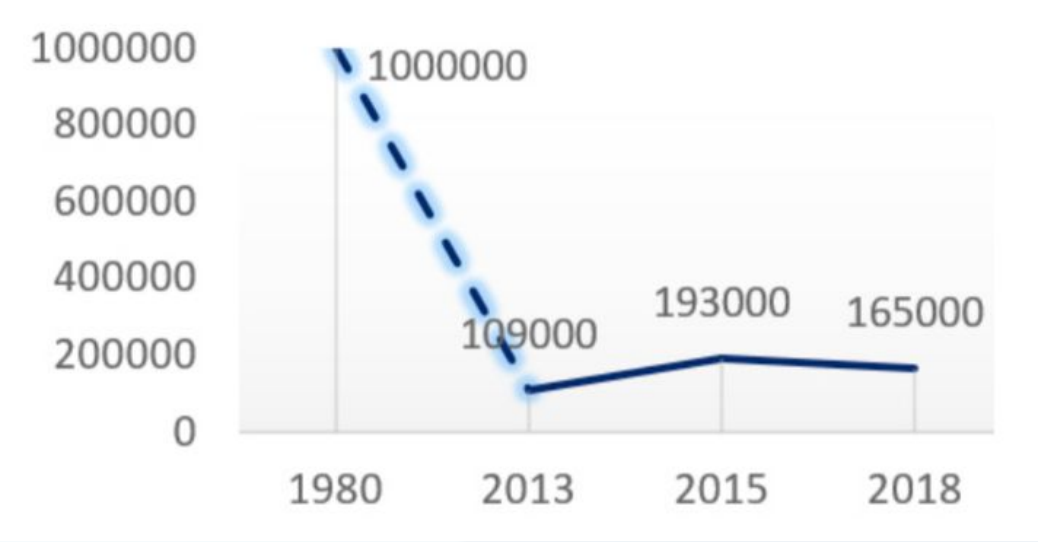
Year	Survey title	Period and season
1979	Marine Fisheries Resources Survey and Exploratory Fishing	Sep-Nov (Post Monsoon)
1980	Marine Fisheries Resources Survey and Exploratory Fishing	Mar-Apr (Pre Monsoon)
2013	Myanmar Fishery Resources - Ecosystem Survey	Nov-Dec (Post Monsoon)
2015	Myanmar Ecosystem Survey (verification)	Apr-Jun (Pre Monsoon)
2015	Habitat Mapping on the Myeik Archipelago	June (Pre Monsoon)
2018	Survey of Fishery Resources and Ecosystems	Aug-Sep (Monsoon)

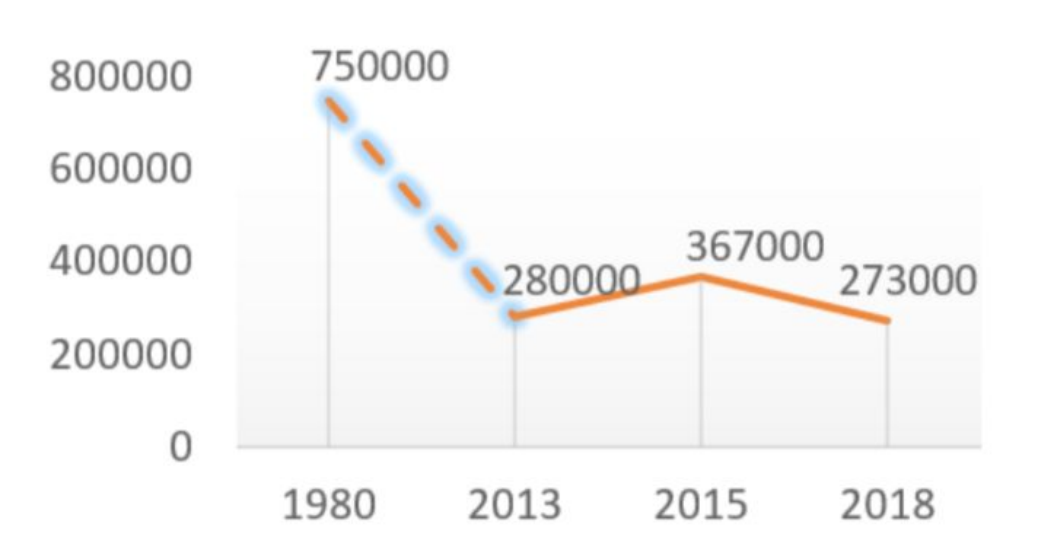


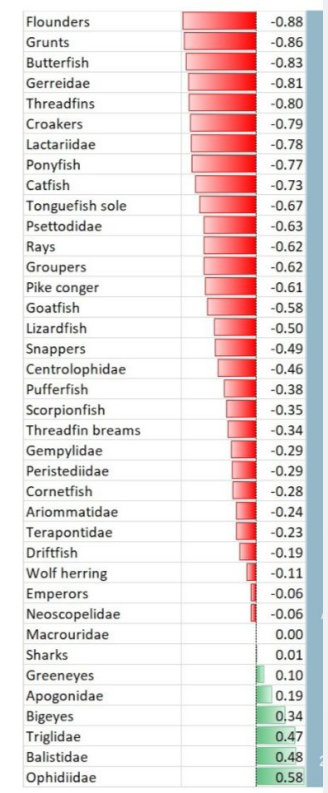
- Surveys carried out by the R/V *Dr Fridtjof Nansen* are an integral part of the EAF-Nansen Programme which, through different phases and objectives, has been running since the mid- 1970's, and returned to Myanmar water in 2013, 2015, 2018.
- Funded by the Norwegian Agency for development cooperation (Norad), and led by FAO in close collaboration with the Norwegian Institute of Marine Research (IMR).
- The Bay of Bengal Large Marine Ecosystem Project (BOBLME) has also been a key partner.

COMPARISONS OF FISH BIOMASS ESTIMATES

1979-80 vs 2013-18







Pelagic fish biomass

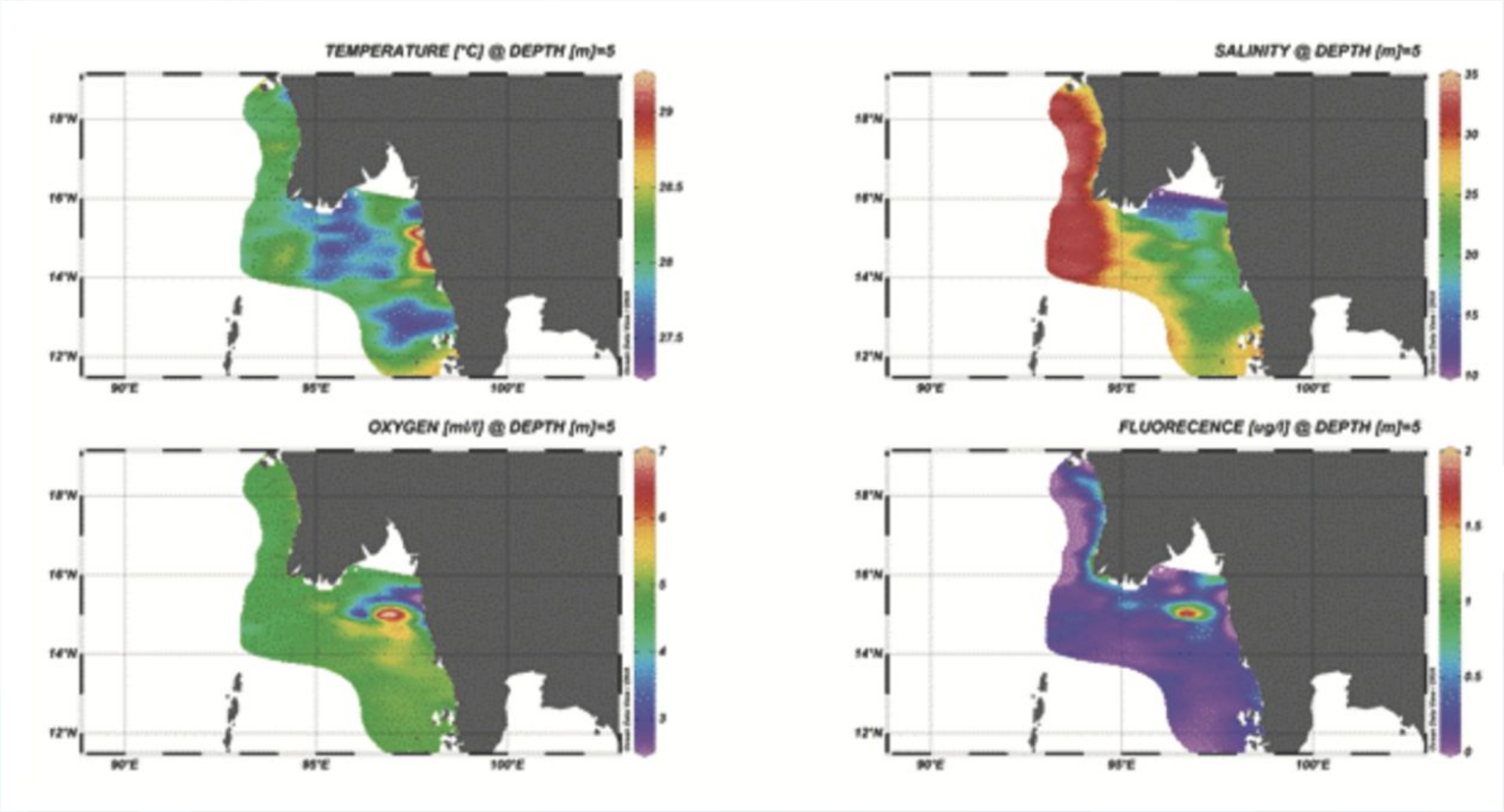
The average pelagic biomass in the 1979–1980 surveys was estimated at about **1 million tonnes.** In the 2013–2015 and 2018 surveys, the average was estimated only **160 000 tonnes**, which rep- resents an **80% decrease** from the 1970–1980 surveys.

Demersal fish abundance

The average demersal biomass in the 1970– 1980 surveys was estimated at about **750 000 tonnes**. In the 2013–2015 and 2018 surveys, the average was estimated at 310 000 tonnes, which represents a **60% decrease** from the 1970–1980.

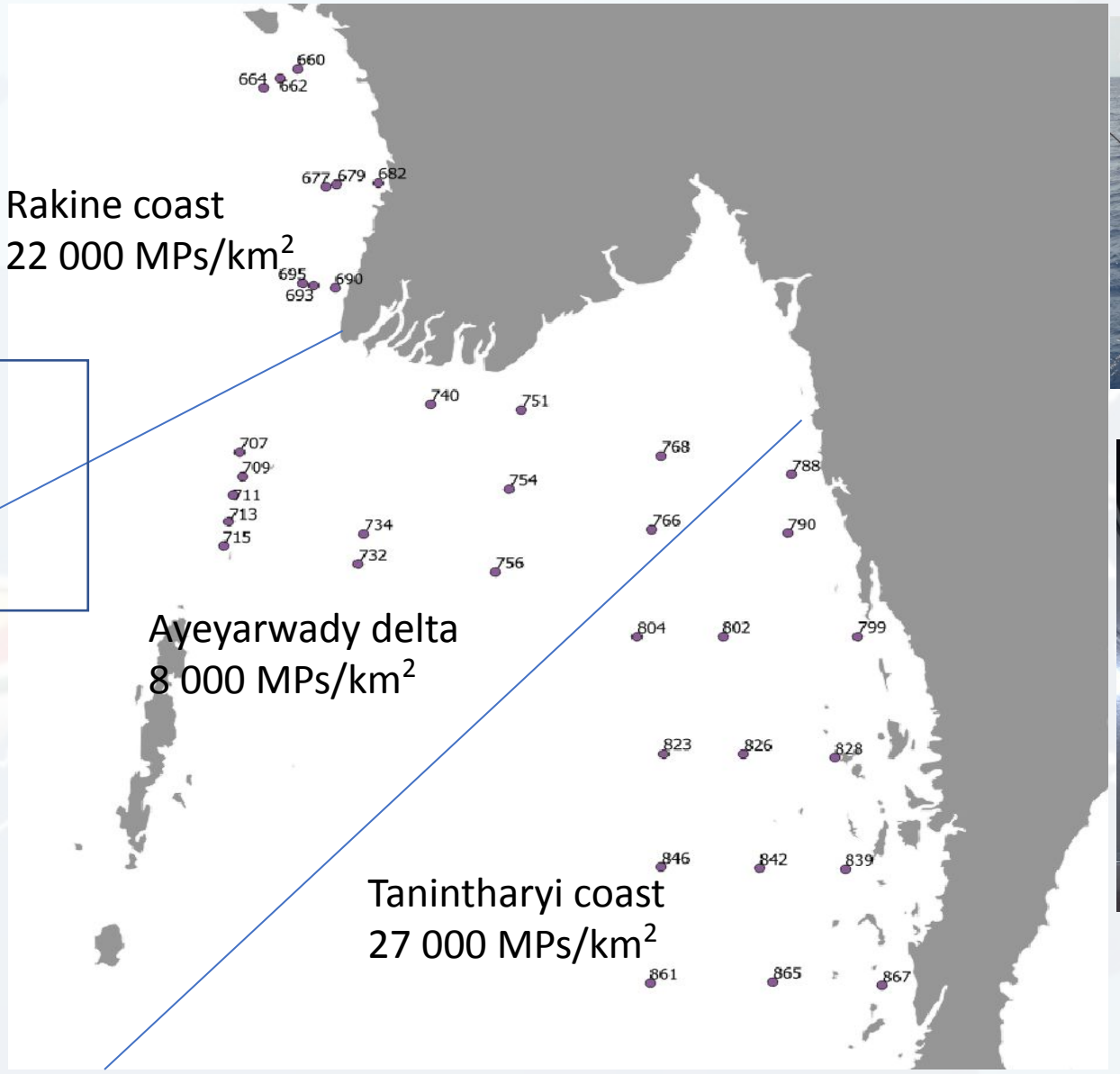
significant reduction of most species, including those of commercial importance.

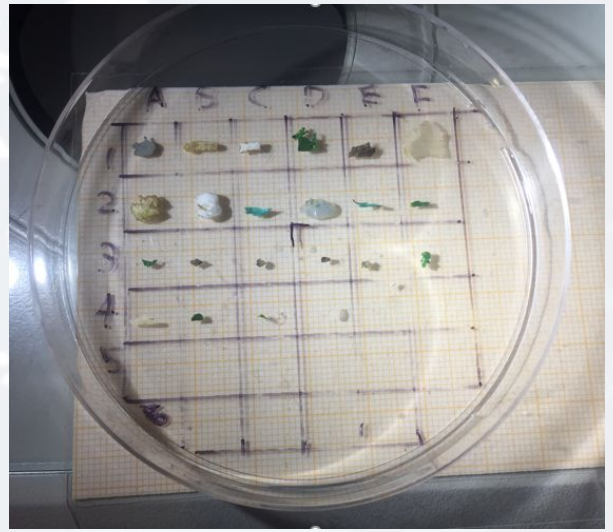
Marine Environment: Distribution of temperature, Salinity, Oxygen, Fluorescence for the whole coastal area: Myanmar



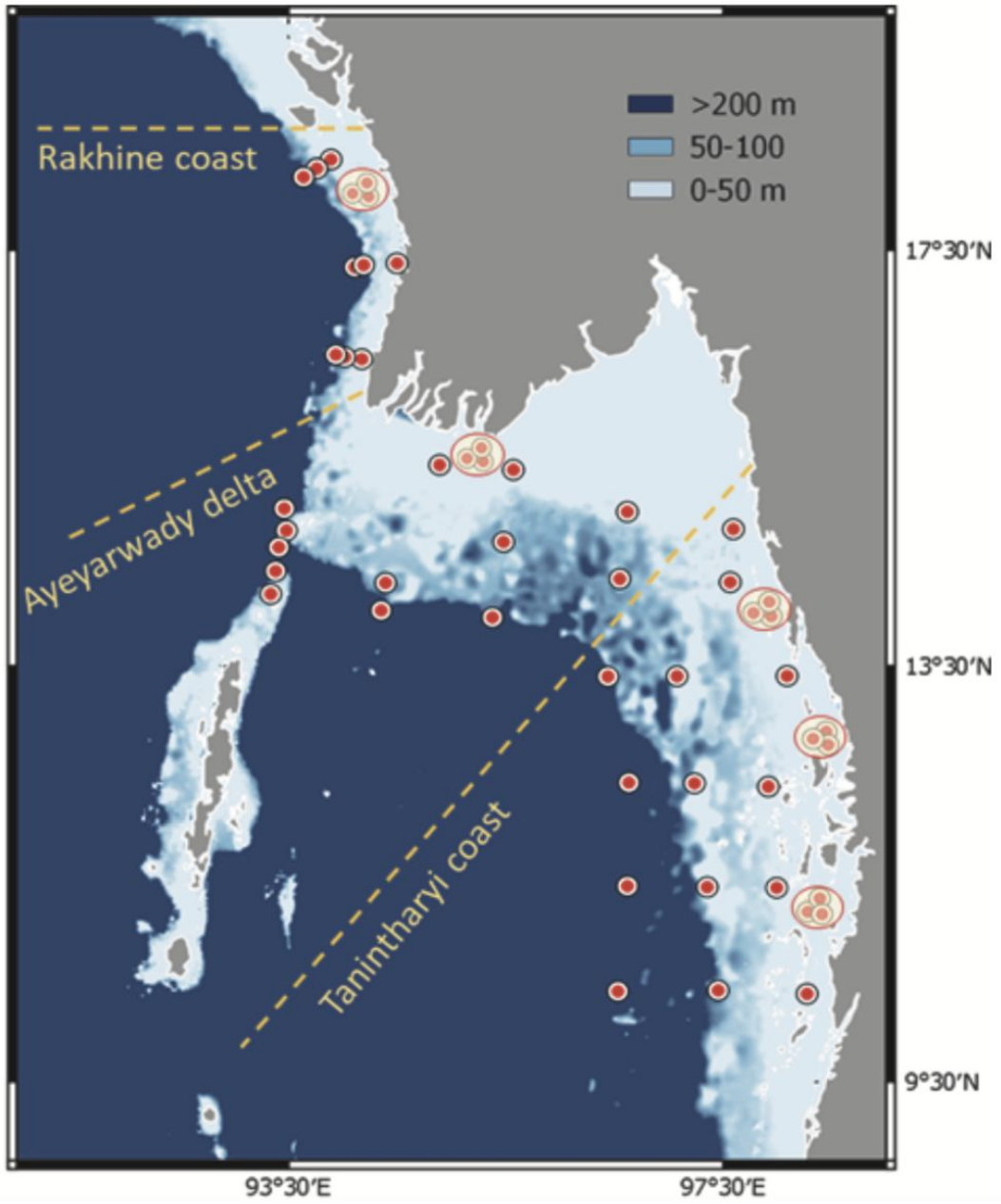
Mean density of microplastics in surface water in Myanmar

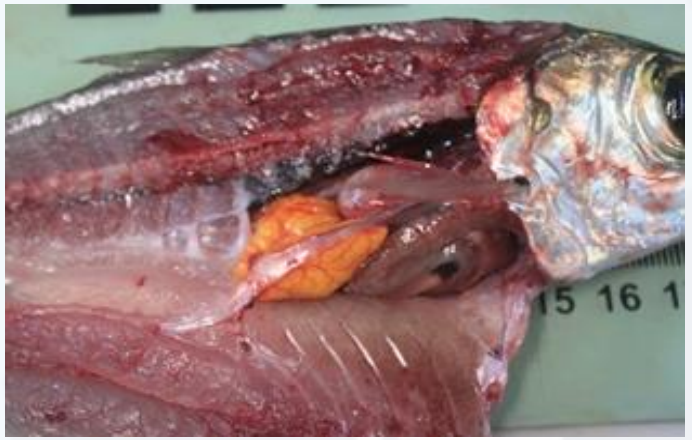
- ≤ 5 000 particles/km^2
- 5000-10 000 particles/km^2
- 10 000-20 000 particles/km^2
- 20 000-100 000 particles/km^2
- ≥ 100 000 particles/km^2





Egg and Larvae Survey: Myanmar





Food and Agriculture Organization of the United Nations

FAO SPECIES IDENTIFICATION GUIDE FOR FISHERY PURPOSES

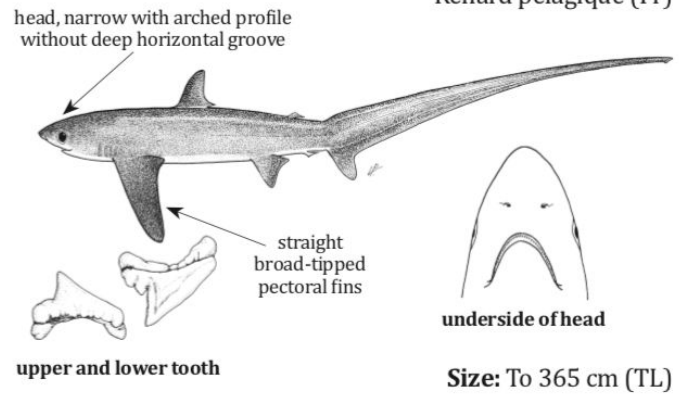
ISSN 1020-6868

FIELD IDENTIFICATION GUIDE TO THE LIVING MARINE RESOURCES OF MYANMAR

Alopias pelagicus Nakamura, 1935

FAO names: Pelagic thresher (En)
Renard pélagique (Fr)

Local name(s): Hmee She Ye Paw Nga Mann.
Habitat: Oceanic, epipelagic, caught near shore where shelf is narrow. Maximum depth 150 m.
Fisheries: Longlines, driftnets.
Distinctive Characters: Long upper caudal lobe nearly as long as rest of shark; eyes small with orbits not expanded onto dorsal surface of head; labial furrows absent; 1st dorsal fin base somewhat closer to pectoral fin bases than pelvic fin bases.
Colour: Deep blue or grey above, white below; white colour of abdomen not extending over pectoral fin bases.



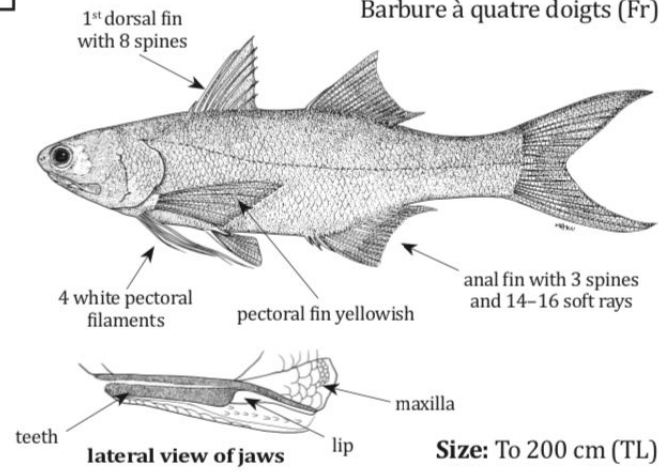
Size: To 365 cm (TL)

POLYNEMIDAE
Threadfins

Eleutheronema tetradactylum (Shaw, 1804)

FAO names: Fourfinger threadfin (En)
Barbure à quatre doigts (Fr)

Local name(s): Nga Za Yaw.
Habitat: Along coasts and in estuaries.
Fisheries: Gillnets, handlines, bottom trawls.
Distinctive Characters: Pectoral fin insertion well below midline of body; anterior part of lower jaw with small teeth extending onto lateral surface of lower jaw; 71–80 pored lateral line scales; 9–12 scale rows above lateral line; 13–15 scale rows below lateral line; 2nd dorsal fin with 1 spine and 14 (rarely 13 or 15) soft rays; 6–18 gillrakers on 1st gill arch; swimbladder absent.
Colour: Head and trunk with slight darkish silver tinge, becoming lighter on lower sides; anterior margins of 1st and 2nd dorsal fins blackish.



Size: To 200 cm (TL)

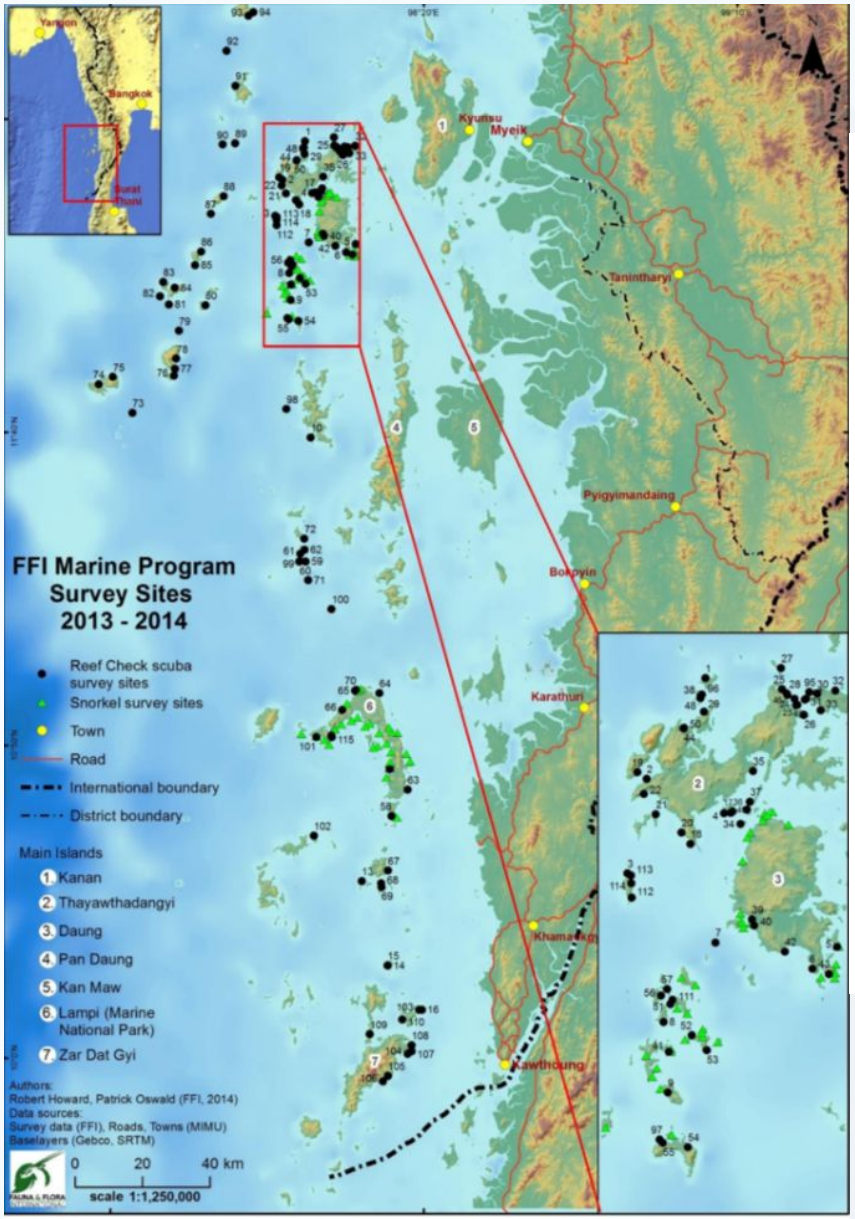
http://dof-myanmar-fic.org

Fisheries Information Center in Myanmar

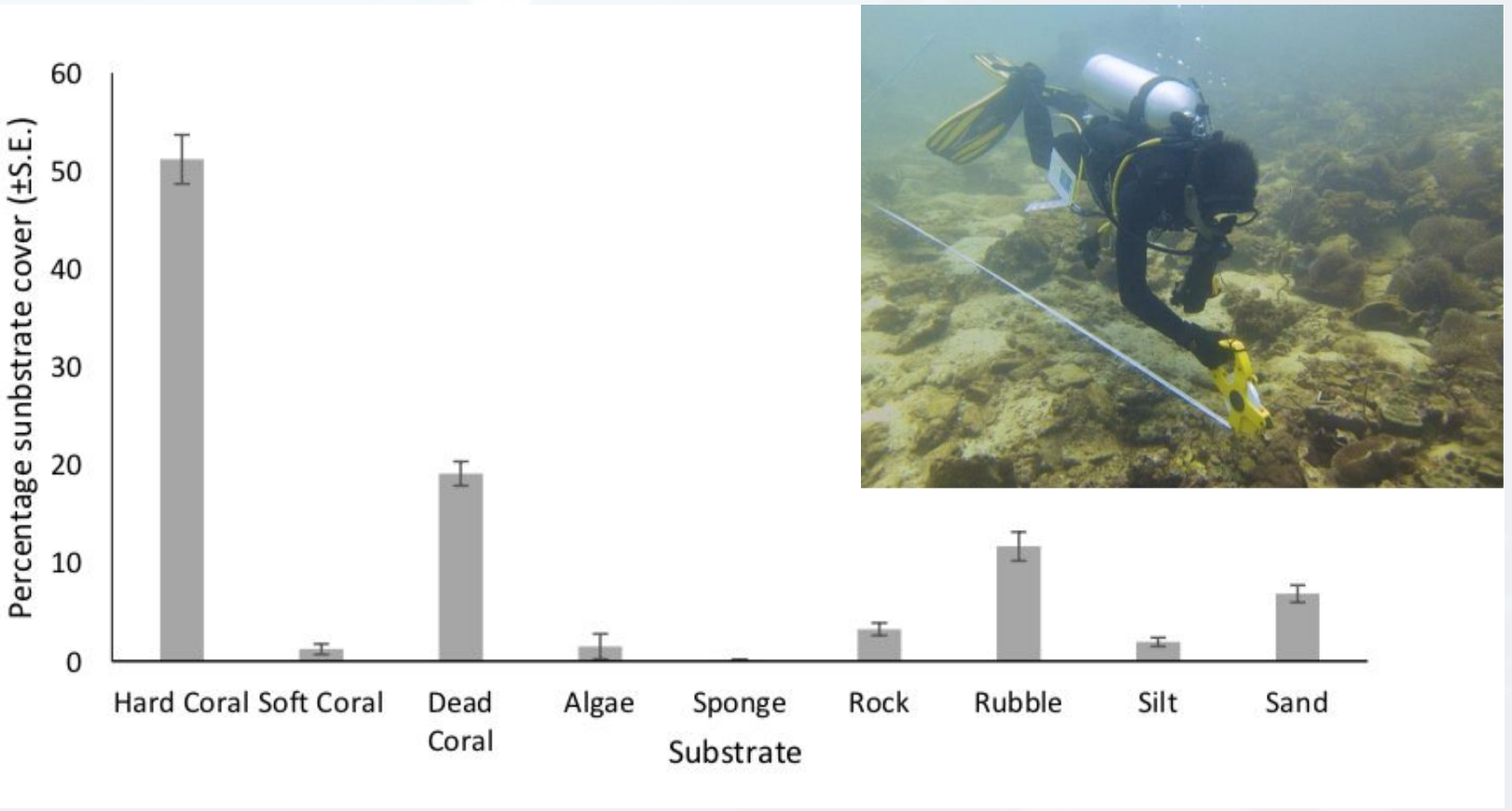
Planning the Next Marine Ecosystem Survey: Myanmar

- ✔ SHI YAN-6 , Marine Science Survey, Chinese Acadamy of the scinece, South China Sea, Institution of Oceanology.
- ✔ The Marine Research Program with Russia – Study of the Deep Geological Structure, Tectonics and Geodynamics of the Earth's Crust Within Sedimentary Basins of the Andaman Sea.
- ✔ SEAFDEC-2, Fisheries survey in the shallow water in Myanmar.

Coral Assessment Survey: Myanmar (Southern part)



Coral reefs play a critical role in the health of marine ecosystems

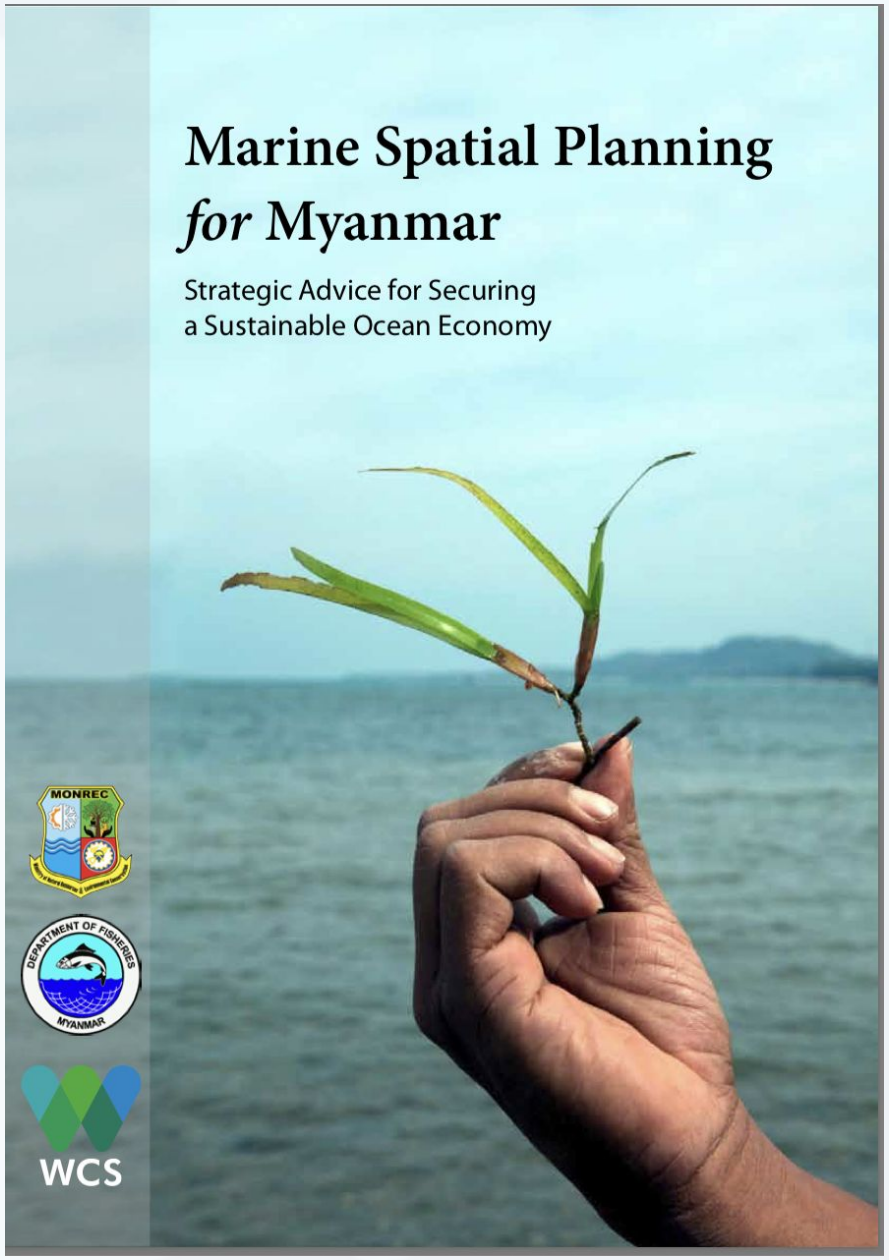


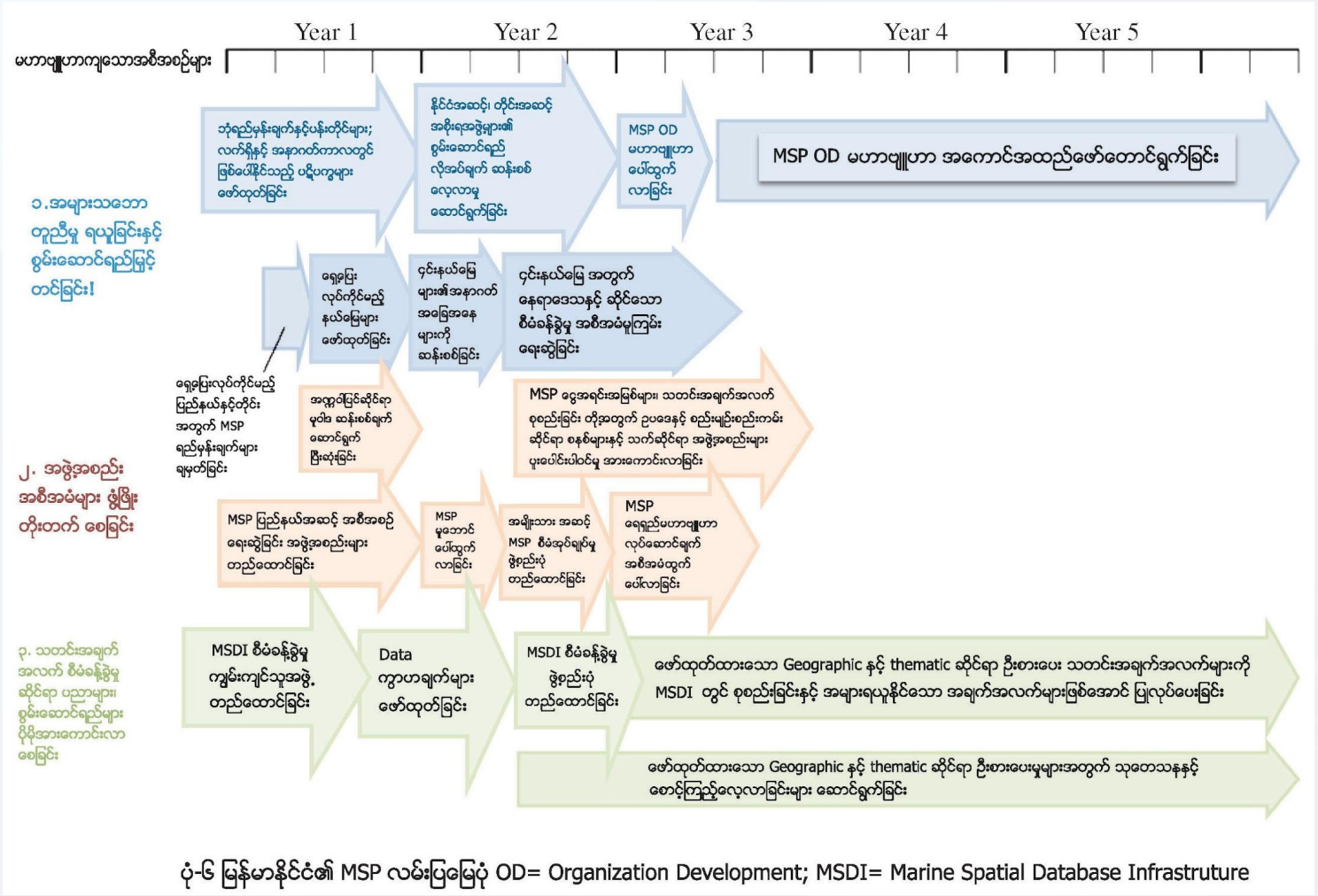
More than 500 species of corals has been recorded from the Myeik Archipelago. Like many other countries, coral reefs in Myanmar are facing the problem of degradation, especially by fishing and trading.

International Commitments (Our Ocean Conferences, 2017, 2019) : Myanmar

- To develop ***a marine spatial plan*** .The plan foresees developing further the Myanmar's marine protected area network, providing support to sustainable fisheries, as well as ensuring the development of a sustainable blue economy for all marine stakeholders.
- to engage more coastal communities in the process of ***inshore fisheries co-management planning and implementation***
- To expansion of ***offshore Fisheries conservation zones.***

Progress on the commitments: Myanmar





ပုံ-၆ မြန်မာနိုင်ငံ၏ MSP လမ်းပြမြေပုံ OD= Organization Development; MSDI= Marine Spatial Database Infrastruture

Behind Schedule

Strategies for the inshore fisheries co-management: Myanmar

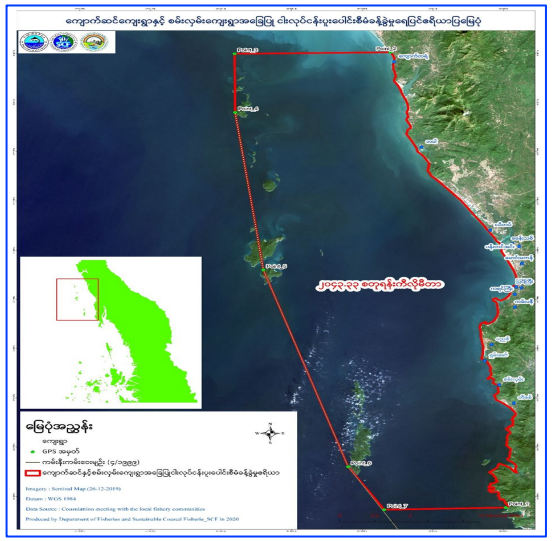
- ✔ New Marine Fisheries Law
- ✔ Regulatory Framework to be developed
- ✔ Establishment of MCS Division and Fisheries Co-Management Unit
- ✔ DoF operational capacities across different levels

- ✔ Institutional by-laws internal rules & regulations
- ✔ Inclusiveness: "***Internalizing Externalities***"
- ✔ Management areas & co-management plans
- ✔ Delegation of rights brings new responsibilities for improved management of fishing grounds & fisheries
- ✔ Enhancement of Monitoring capacity

- ✔ Stronger leverage in value creation of fish products
- ✔ Complementary livelihoods promotion

Implementation of National Plan of Action Combating Illegal, Unreported and Unregulated (IUU) Fishing
VMS system and SOP of patrolling between fisheries and maritime police

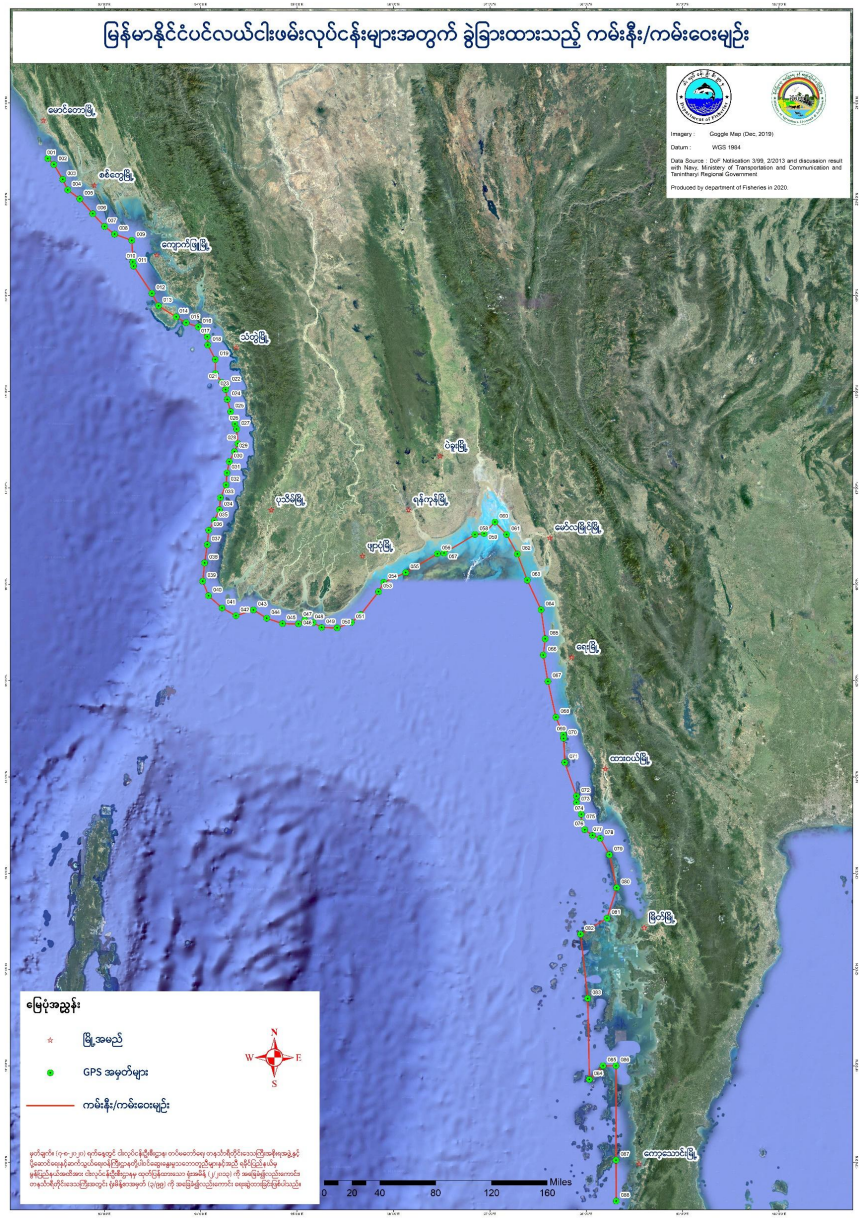
Developing the fisheries co-management area with communities

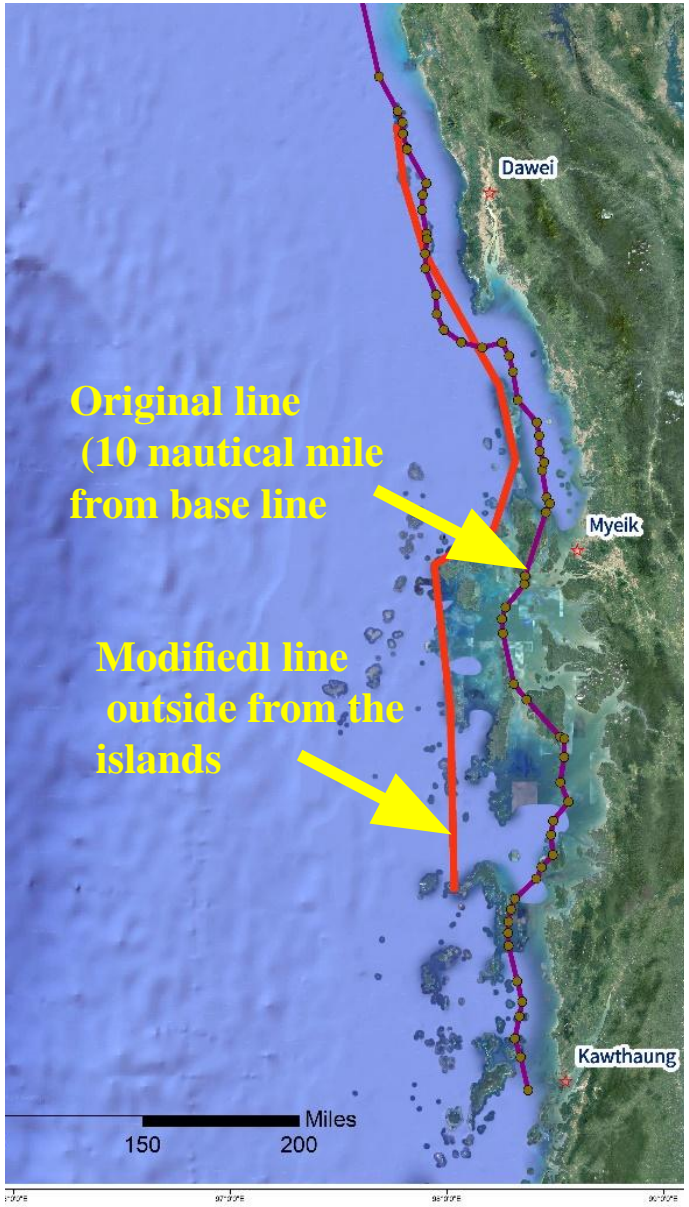


Standard Operating Procedures (SOP)[1] for joint Inshore Fisheries Inspections (IFI) operated by the Department of Fisheries and the Police Force of the

Standard Operating Procedures (SOP)[1] for joint Inshore Fisheries Inspections (IFI) operated by the Department of Fisheries and the Police Force of the Republic of the Union of Myanmar

Boundaries between offshore and inshore water in Myanmar (Modified)

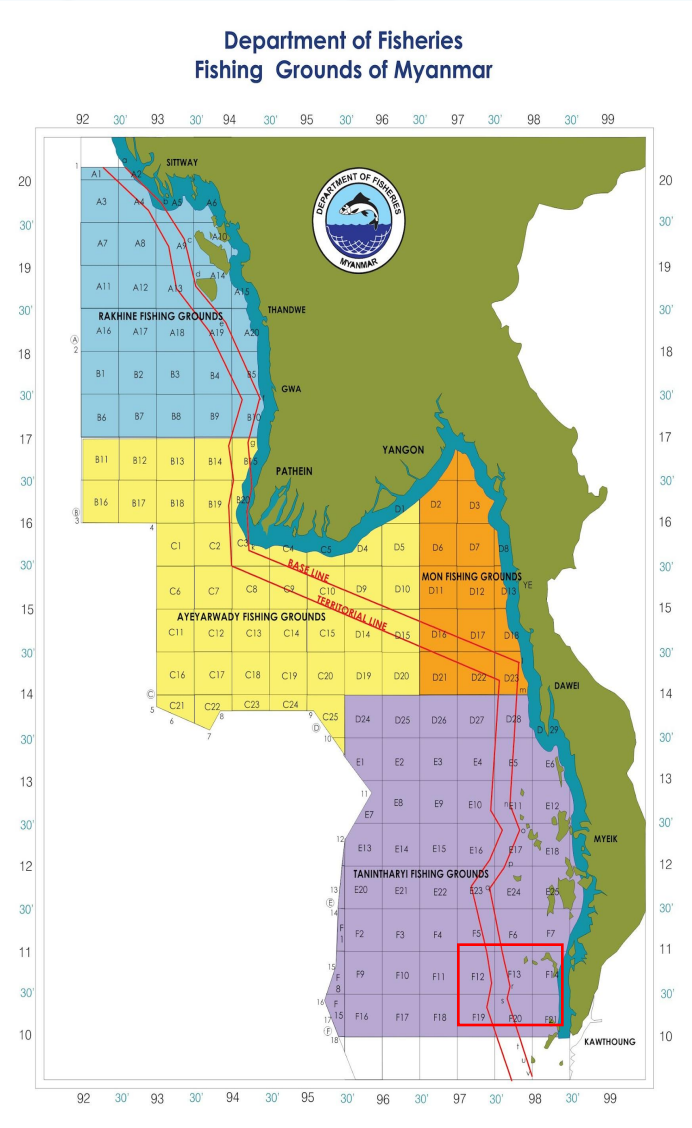




Support protect the habitats;

- ✔ Sparwning ground
- ✔ Nursery grounds)
- ✔ Coral

Progress on the commitments: Myanmar (Offshore Fisheries Conservation Zone, Co management area,)



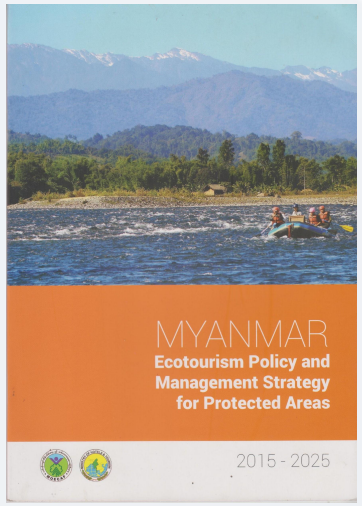
- There are six fishing grounds namely F13, F14, F18, F19, F20, F21 are prohibited as offshore fisheries conservation zone (180 Square mile)
- Co-mangement area in Thandwe, Rakhine coast
- LMMA, Locally Management Marine Area in Thinintharyi coast.

Responsible Marine Eco-tourism: Myanmar

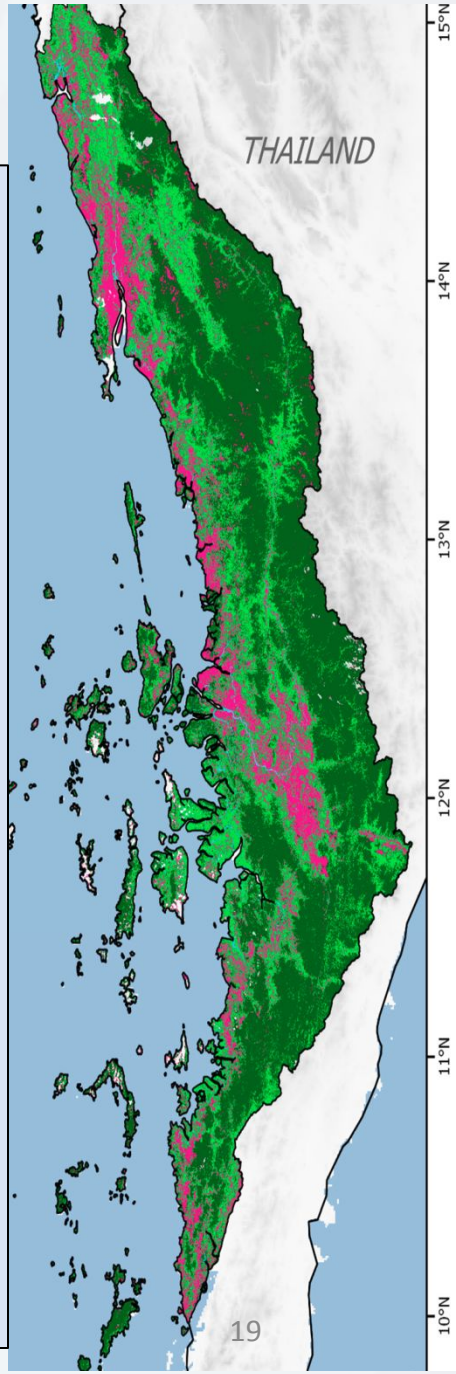
ID	Site name	National Designation	Status	Establish end Year	Area (km2)
1.	Lampi Island	Marine National Park	Designated	1998	204.84
2.	Moscos Island	Wildlife Sanctuary	Designated	1927	49.19
3.	Tanintharyi	National Park	Proposed	2002	2071.81
4.	Tanintharyi	Nature Reserve	Designated	2005	1699.99
5.	Lenya	National Park	Proposed	2002	1761.19
6.	Lenya (Extension)	National Park	Proposed	2004	1398.59

Types of Marine based tourism;

- Cruise Ships
- Scuba diving charters
- Day trip charter
- Adventure liveaboards
- Privately owned crewed yachts
- Privately owned professionally crewed yachts

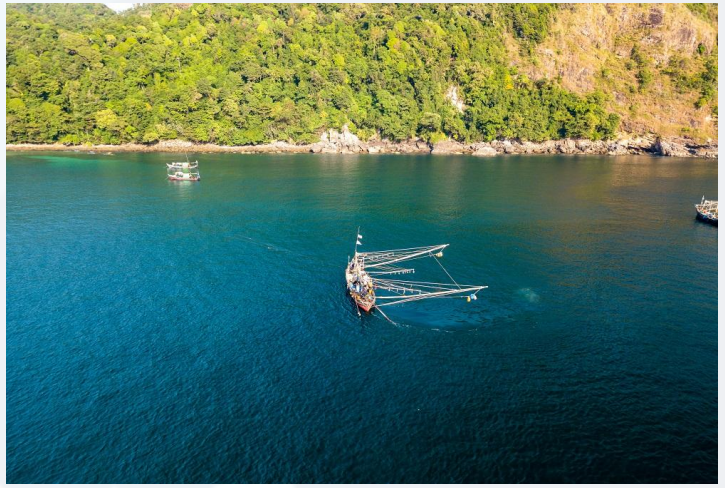


- **523 kinds of Coral Reef**
- **Unique Flora & Fauna**
- **Many Snorkeling sites**
- **Virgin Scuba Diving Sites**
- **Marine Species include Rays, Whale Sharks, Dolphins, Hammerhead Sharks, Bull Sharks, Killer Whales, Dugongs, Many Kinds of Coral Fishes**

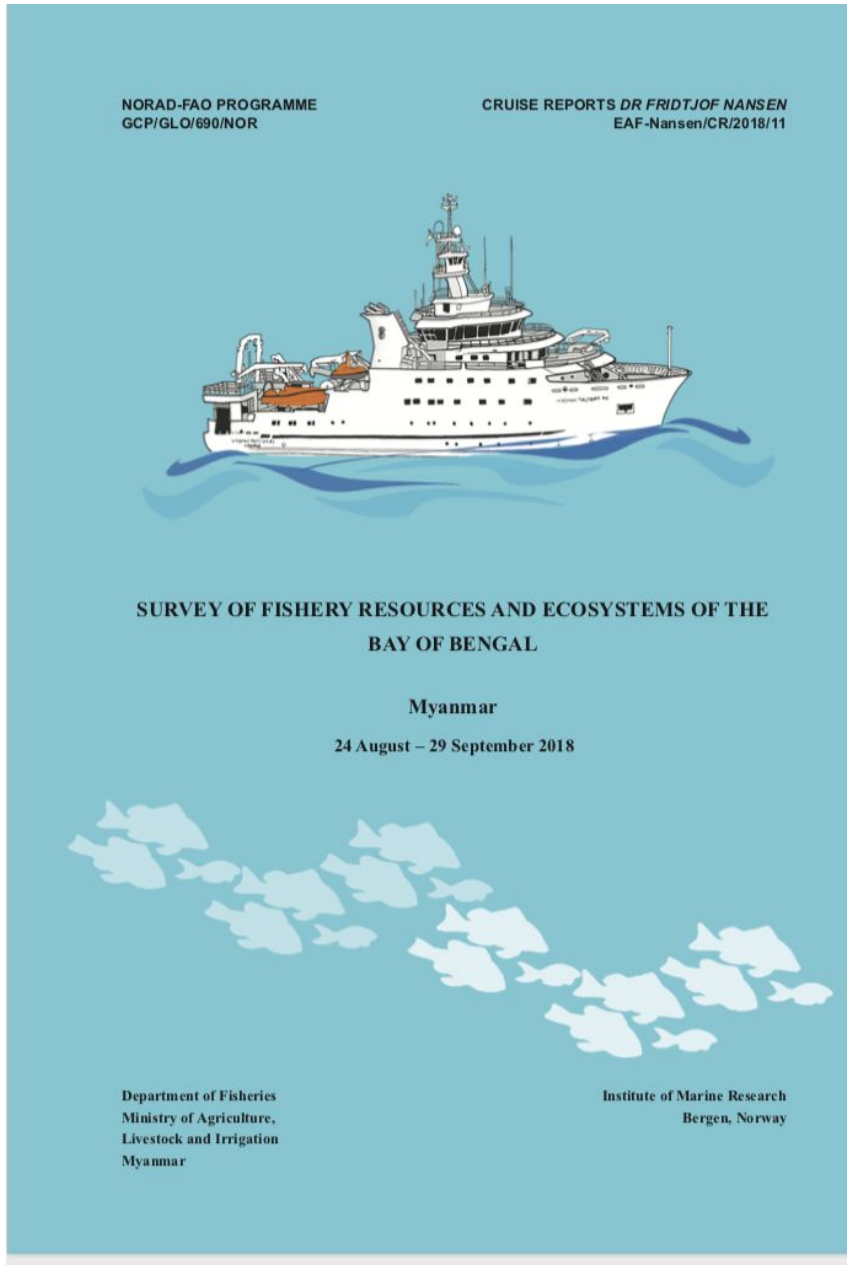


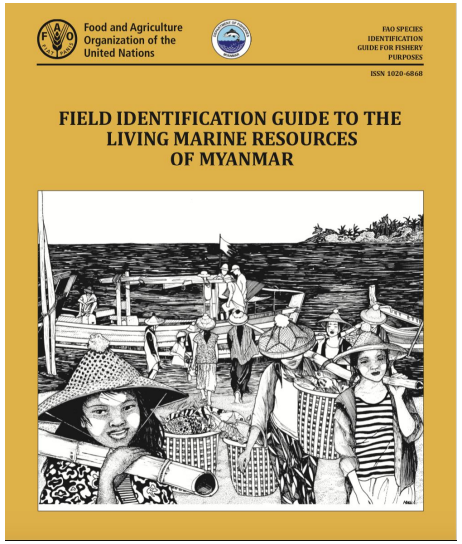
Recommendation Marine Eco-tourism: Myanmar

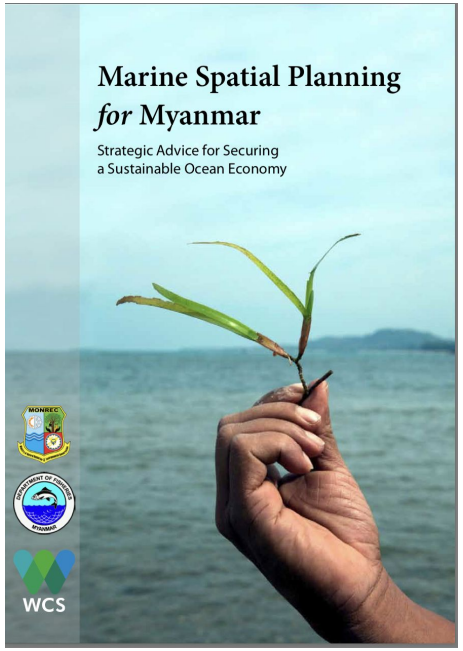
- Effectively utilize big potential for marine tourism in Southeast Asian Countries
- Environmental protection
- Sustainability
- Inclusiveness
- Accelerated Technological Change and Marine Tourism
- Artificial Intelligence And Its Impact On Marine Tourism

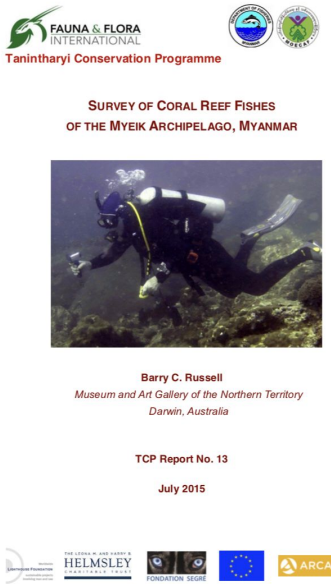



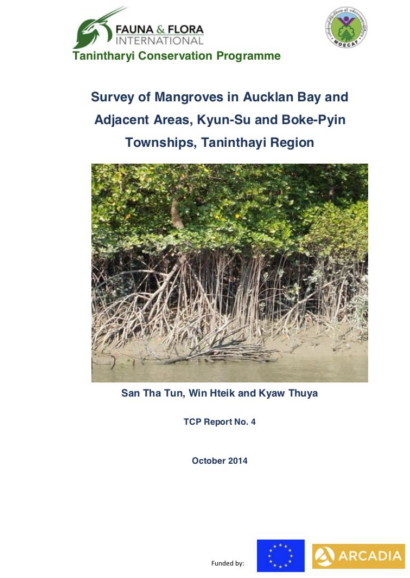
Publications

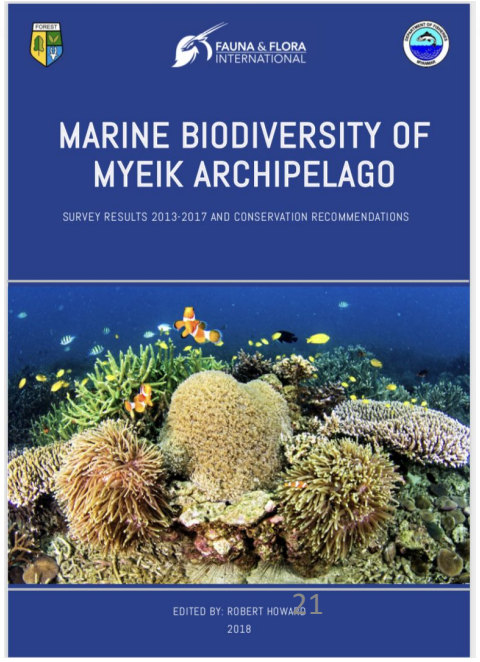












Keys coopearation areas on the oceans: Myanmar

- **Data and stastistics** (*Ocean data*)
- **Maritime shipping** (*While essential for sustainable growth, maritime shipping adversely affects the marine ecosystem*)
- **Fisheries** (*The main threats to marine fisheries are overfishing, environmental degradation and irregular, unregulated and unreported (IUU) fishing*)
- **Marine Pollution** (*Regional cooperation activities for effective ocean governance, including exchange of information and best practices, sub-regional and cross-border initiatives around river basins and collaboration around data and statistics*)
- **Ecotourism** (*Improved livelihoods to ensure long- term marine eco-tourism industry)*

Thank you for your attention

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