

REPORT OF THE FOURTH MEETING OF THE ANDAMAN SEA SUB-REGION

Bangkok, Thailand

20-21 November 2018



THE SECRETARIAT

SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER

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I. INTRODUCTION

1. The Fourth (4th) Meeting of the Andaman Sea sub-region was held on 20-21 November 2018, in Bangkok, Thailand, under the SEAFDEC-Sweden Project. The Meeting was participated by relevant government officials from Indonesia, Malaysia, Myanmar and Thailand as well as representatives from the Food and Agriculture Organization (FAO), SEAFDEC Secretariat, SEAFDEC/Training Department (TD), and the Regional Fisheries Policy Network (RFPN) members. The list of participants appears as **Annex 1**.

II. OPENING OF THE MEETING

2. The SEAFDEC Deputy Secretary-General, *Mr. Akito Sato*, in his capacity as *Chairperson* of the Meeting, welcomed the participants to the Meeting. He firstly reiterated the sub-regional efforts had been made by the SEAFDEC-Sweden Project and the FAO/Bay of Bengal Large Marine Ecosystem (BOBLME) Project since 2009 to provide the platform for the countries namely: Indonesia, Malaysia, Myanmar and Thailand to discuss on fisheries management with the ultimate goal for sustainable fisheries around the Andaman Sea Sub-region. He emphasized that the key issues were focused on the management and utilization of transboundary stocks, conservation and protection of important habitats, building up resilience and capacity for climate change and reduction of illegal fishing.

3. With the progress had been made since its 3rd Meeting in 2016, the SEAFDEC-Sweden Project continued support the countries to discuss at the Sub-sub-regional of Northern Andaman and Southern Andaman Sea in 2017, especially focused on management and utilization of transboundary stocks, the effort on management of fishing capacity and combat Illegal, Unreported and Unregulated (IUU) fishing in each Sub-regions, including the initiation of sub-regional MCS Networks together with development of port monitoring capacity. This 4th Meeting provided for the countries to update the progress on the country and regional partner's efforts that implemented and sought the opportunity to make a cooperation among countries around the Andaman Sea Sub-region. Before ending the remarks, he encouraged the participants to share information on the progress made in reference to the recommendations made during the previous meetings and come up with valuable recommendations for the benefits of stakeholders in the Sub-region, he then declared the Meeting open. His Opening Remarks appears as **Annex 2**.

III. BACKGROUND, OBJECTIVES AND ADOPTION AGENDA OF THE MEETING

4. The Andaman Sea Sub-region Coordinator for the SEAFDEC-Sweden Project, *Dr. Somchai Bussarawit* presented the background and objectives of the Meeting. After informed the proposed Agenda of the Meeting, without clarification, then the Agenda was adopted. The Prospectus and Agenda appears as **Annex 3**.

IV. REVIEW THE PROGRESS FROM THE PREVIOUS MEETINGS

5. While recalling the Meeting on the recommendations made at the 3rd Meeting of the Andaman Sea sub-region, which was convened in October 2016 in Bangkok, *Dr. Somchai* informed the Meeting on the progress of the activities conducted made by the SEAFDEC-Sweden Project in 2017-2018 such as transboundary fisheries resources management and effective management of fishing capacity and reducing IUU fishing in the Andaman Sea. His presentation appears in **Annex 4**.

V. STRENGTHENING COOPERATION ON TRANSBOUNDARY FISHERIES RESOURCES AND HABITAT MANAGEMENT

5.1 Northern Andaman Sea Sub-region (mackerels, neritic tunas, anchovies)

6. While informing on the background and rationale of the series of Technical Experts Meeting on the Information Compilation of Transboundary Species as Scientific Basis for National Measures for Northern and Southern Andaman Sea, which were convened in 2018, the representative from SEAFDEC/Training Department, *Mr. Sukchai Arnupapboon* presented the maps of spawning ground and season, fishing ground of mackerels, neritic tunas and anchovies, respectively, as outputs of compilation information of Thailand and Myanmar (form as the Northern Andaman Sea sub-region) which could provide as information for the consideration for management measures, controlling on the fishing capacity, the managed area and closed season for fishing, and restriction of fishing gear. His presentation appears as **Annex 5**.

7. The Meeting was informed on the regulations in Myanmar and Thailand to control fishing activities at sea includes *e.g.* Marine Protected Areas, Marine national parks, Local management of marine area (LLMA), closing season for all offshore fishing gear during July-August, and limiting of fishing gear for certain area, restriction of mesh size, push net with engine, pair trawler, purse seine with light luring, and prohibited area for fishing certain species.

8. In addition, the SEAFDEC-Sweden Project Manager, *Ms. Pattaratjit Kaewnuratchadasorn*, informed the Meeting that the compilation of the information were produced as digitized maps based on the data provided by each country. Based on this current information, it is expected that it would be useful information for future endeavours.

1.2 Southern Andaman Sea Sub-region (mackerels, neritic tunas, anchovies)

9. For the Southern Andaman Sea Sub-region, which covers Indonesia, Malaysia, and Thailand, similar study was also conducted by TD. *Mr. Sukchai* informed data of three fish species namely anchovies, mackerels, and neritic tunas, were compiled. In the presentation, it showed the information on migratory route, fishing and spawning grounds, spawning season, MPA zone, related laws and regulation, fishing gear restriction and temporal-spatial restriction, of the three targeted species. His presentation appears as **Annex 5**.

10. After the presentation, the Meeting was provided some modification and correction of the maps, after amended maps, it was agreed that this results will be published accordingly.

VI. OTHER MATTERS

6.1 Status of the new phase of FAO/Bay of Bengal Large Marine Ecosystem (BOBLME) Project

11. The representative from FAO, *Ms. Susana Siar* presented the update on the new phase of the Bay of Bengal Large Marine Ecosystem (BOBLME) Project, which is under the FAO/RAP. She highlighted on the importance of the Bay of Bengal Large Marine Ecosystem have very important critical habitats that provides food, large number of biodiversity, fisheries livelihoods, ecosystem services, the participating countries covers Bangladesh, India, Indonesia, Malaysia, Maldives, Myanmar, Sri Lanka, and Thailand.

12. She added that the overall Strategic Action Programme (SAP) vision of the Project is “A healthy ecosystem and sustainable use of marine living resources for the benefit of the people and countries of the Bay of Bengal Large Marine Ecosystem”. The four Themes are composed of Marine living resources, Critical habitat, Water quality and Social economic consideration. The BOBLME Phase 2 is designed to implement based on the priority areas identified under each SAP Theme. It works through at national and decentralized level, with a regional component that allows flexibility on identification of activities to be undertaken at national/local level. Moreover, she stated that with regards to combating IUU fishing, the Project will building upon the current situation and on the existing activities of each country that would beneficial to the countries and the region. Her presentation appears as **Annex 6**.

VII. PROMOTION OF EFFECTIVE MANAGEMENT OF FISHING CAPACITY AND REDUCTION OF ILLEGAL AND DESTRUCTIVE FISHING IN THE ANDAMAN SEA SUB-REGION

7.1 Country updates on Current Law and Legislation and Efforts on Management of Fishing Capacity and combating IUU fishing (NPOA-Capacity; NPOA-IUU)

➤ Indonesia

13. The representative from Indonesia, *Mr. Rizal Rifai*, presented country updates on the progress of the activities in related to fishing capacity management in Indonesia. According to government effort is a new paradigm, “the strong governance for sustainability mission”. Indonesia strives to control/manage the fishing capacity are: (1) moratorium on issuance of foreign made fishing vessels; (2) ban on transshipment; (3) prohibition of trawl operation; (4) restriction of catch on crab, lobster and swimming crab due to size and gravid female; (5) improvement and transparency in service for licensing.

14. He further informed that current exploitation status of 11 Fisheries Management Area (FMA) in Indonesia where every FMA has legal basis for managing its fisheries resources. As for Andaman Sea is part of FMA 571, with legal bases for its fisheries management according to Ministerial Decree number 75/KEPMEN-KP/2016, regulate the fisheries management authority and mechanism based on area entity. In species, like sardine, flying fish, swimming crab, neritic tuna, the fishing regulation referred to ministerial legal basis. Tuna, neritic tuna, skipjack, based on 107/KEPMEN-KP/2015, regulation on the fisheries management based on species. The regulation have its own mechanism for controlling of catch such as input-output (total effort by licenses-total catch); fishing gear and technique (net mesh, the use of separator); spatial-temporal restriction (spawning season, MPA).

15. He added that to support the implementation of fishing capacity, other governmental effort stipulated (*e.g.* logbook, catch certificates for export purpose; catch documentation scheme (CDS); and harvest strategy in yearly management planning). Currently the estimated allowable stock is about 12.54 million tons; there are about 30,000 vessels with various sizes and fishing gear legally operated in Indonesia waters. This year, Indonesia government certified 1,200 vessels that comply to good fish handling practices integrated with good fishing practices. The presentation appears as **Annex 8**.

➤ Malaysia

16. The representative from Malaysia, *Mr. Abdul Rahman bin Abdul Wahab*, updated the Meeting that the Department of Fisheries Malaysia is in the process of establishing a specific area Fisheries Management (FMA) Plan with data intensive management approach, mainstreaming the Ecosystem-based Approach to Fisheries Management (EAFM), bridging the gap of the managers and the scientists through intensive capacity building.

17. He added that country effort on establishment of National Committee on Fish Stocks had been created to determine the exploitation status of the stock, overexploited or underexploited and so as better respond to the Sustainable Development Goal (SDG) 14, the Vessel modernization to look into standardized fishing vessel for better management, measure the fishing effort is also in their pipeline and development of the fishing gear specification by fishing marking. In addition, he mentioned on the updating the legal framework to follow international instruments since it is important to link to other inter-agencies collaboration. His presentation is shown in **Annex 9**.

➤ Myanmar

18. The representative from Myanmar, *Dr. Kyaw Kyaw* updated on current Law and Legislation and Efforts on management of Fishing capacity and combating IUU fishing in Myanmar. He emphasized on the activities in relation to Management of fishing capacity under the Marine Fisheries Law and the implementation by the related State and Regional level. He mentioned that Myanmar have been worked in progress in good collaboration with inter-agency cooperation between parliamentary members, donors, policy makers in the regional state and Union level. His presentation appears as **Annex 10**.

➤ Thailand

19. The representative from Thailand, *Ms. Doungporn Na Pombejra*, provided the updates information on current law and legislation and efforts on the management of fishing capacity and combating IUU Fishing. She started her talk by informed the Meeting that Thai's fisheries legal framework before 2015 that had no control on fishing effort, ineffective operational systems and no fulfill obligation. Thailand informed the Royal Ordinance on Fisheries 2015, and its amendments, on the Royal Ordinance on Thai Vessels 2018 and country efforts, the fisheries situation in Thailand improved. She also informed that to comply with the international standard, Thailand ratified/acceded in key international agreements such as The United Nations Convention on the Law of the Sea (UNCLOS), UN Fish Stock Agreement (UNFSA) and FAO Port state measure agreement (PSMA) etc. Her presentation appears in **Annex 11**.

7.2 Strengthening Monitoring (M), Control (C) and Surveillance (S) in the Andaman Sea Sub-region

7.2.1 Countries updates on progress of national M, C and S

➤ Indonesia

20. The representative from Indonesia, *Mr. Turman Maha*, gave a presentation on MCS System to Prevent, Deter, and Eliminating IUU Fishing. He emphasized on the importance of integration of multi stakeholders in Monitoring, Control, and Surveillance of marine and fisheries resources, based on Indonesia National Plan of Action with the aims of resources protection, preservation, and rehabilitation. He informed the Meeting in Indonesia at least seven agencies/institutions are involved, *e.g.* 1) Ministry of Marine Affairs and Fisheries-MMAF (Research Agencies, DG of Capture, DG of Surveillance); 2) Ministry of Transportation; 3) Navy; 4) Water Police (POLAIRUD); 5) Maritime Security Board; 6) Supreme Court; and the 7) Attorney General.

21. He further explained that the C-Control, in Indonesia controlled fishing activities through licensing, according to the vessel size and operation area (10-30 GT, >30GT, and high sea operation), while vessels less than 10 GT are categorized as artisanal fishing vessels, do not need license, but has to register. The Vessel Monitoring System (VMS) installation, only obligatory for >30 GT vessels. The country strategy to address issues and type of violations in fishing practices, and to strengthen the MCS by promoting responsible fishing practices by continue collaboration with other relevant bodies. He added that Indonesia has made actions toward good governance in fisheries sectors include: trans-shipment ban, trawler ban, license issuance moratorium, transparency, sinking of apprehended IUU-fishing vessel, joint communiqué in IUU combating with eleven countries and enhanced regional-international cooperation.

22. With regard to the national actions for combating IUU fishing, Indonesia also conducts 1) public awareness; 2) PSMA adoption; 3) capacity building; 4) involvement in international forum (IMCS, AMF, RFMO); 5) implementing NPOA-IUU; 6) intensifying surveillance operation and develop an integrated surveillance; and 7) established and developed fisheries court. As for the S-surveillance activities, Indonesia has implemented set up Surveillance based stations, 58 implementation units, 27 patrol boats, 64 speed boats, 3,500 VMS, and 646 persons of fishery investigator. Due to Indonesia has huge fishery area, the government have support from voluntary groups of community. There are 1,900 voluntary groups of surveillance are scattered in many districts. His presentation appears as **Annex 12**.

➤ Malaysia

23. The representative from Malaysia, *Mr. Osman bin Mahamed*, presented on national MCS in Malaysia. He firstly provided information on legal framework and national policy in relevant to MCS such as the Fisheries Act 1985, National Agro-Food Policy 2011-2020 and other relevant laws. Then, he explained on national actions on each component namely: M-Monitoring, there are two system for monitoring using satellite and Automatic Identification System (AIS) using the Radio Frequency. In monitoring program, Malaysia focused on vessel inspection, license inspection, fishing gear and crew inspection. He added that DOF Malaysia will conduct the procedures under Sec 13 of Fisheries Act 1985 if Malaysia finds fishing vessels operate outside Malaysian waters.

24. C-Control, according to Fisheries Act 1985, Malaysia control fishing activities in the fishing zone. He also shared information that DOF controls some of fishing gears which has prohibited such as pair trawl and drift net with mesh size less than 10 cm

25. S-Surveillance, Malaysia has established the cooperation with enforcement agencies such as Air Force, Royal Malaysian Police, Malaysia Maritime Enforcement Agency and DOF Malaysia to jointly implement the air surveillance and also the sea surveillance.

26. In response to the initiative on MCS for the Gulf of Thailand and Andaman Sea Sub-region, Malaysia has established national committee comprises with 18 agencies and DOF Malaysia is Secretariat. He also informed some national actions to dealing with MCS such as inter-agencies meetings and workshops at operational level to improve and increase monitoring program in Malaysian Fisheries Waters, joint patrolling with neighboring countries. The presentation appears as **Annex 13**.

➤ **Myanmar**

27. The representative from Myanmar, *Dr. Kyaw Kyaw* presented the implementation of National M, C and S in Myanmar. He firstly provided information on the establishment of One Stop Service (OSS) which comprise concerned agencies involved in the implementation of MCS in Myanmar namely: Department of Fisheries (DOF), Navy (only inspection at Sea), Department of Marine Administration (DMA), Custom, Police, Immigration, Port Authority and General Administration Department (GAD) (inspection authority at shore). Myanmar is in process on the consideration to utilize satellite technology of Vessel Monitoring System (VMS).

28. He further informed on Myanmar's responsibilities and duties to perform as the Port State, Flag State and Coastal State in relation to the MCS and explain the procedures at check point and OSS operations. He also lastly added the national actions in support to the implementation of the MCS such as the establishment of Vessel Monitoring System (VMS), consideration to establish the Specific Division, strengthening dialogue with Thailand and Myanmar DOF Staff. He informed the planning under DANIDA Project for Sea Fishery Patrols in Marine Coastal Fisheries in the Tanintharyi and Rakhine by 2018-2019. His presentation appears as **Annex 14**.

➤ Thailand

29. The representative from Thailand, *Ms. Doungporn Na Pombeyra* made reference to the situation before 2015, where there was lack of legal framework on MCS, inter-agencies coordination and weakness of MCS implementation as well as fishing vessel registration and licensing systems- not properly enforced both inside and outside Thai water, therefore insufficient of controlling on fishing vessels. After current Thai Royal Ordinance 2015 was endorsed, several actions were improved in progress such as setting up core MCS agencies and inter-agency cooperation are improved and fishing vessel monitoring system has been improved.

30. She informed the Meeting that the new legal framework defines for the effective function of the M, C and S (Chapter 7) the Control, Surveillance, Traceability and Inspection, and monitoring activities under Marine Fisheries Management Plan (FMP).

31. In addition, she highlighted on the national agencies involved in each M, C and S. and explained the national actions and procedures on the MCS implementation as follows. Her presentation appears as **Annex 15**.

M-monitoring agencies involve are Command Centre for Combat Illegal Fishing (CCCIF); Department of Fisheries (DOF); Marine Department (MD) and Department of Marine and Coastal Resources (DMCR). The monitoring tools used are FMP, VMS, Fishing Info, Thai Flagged, Landing, Logbook, Observer on board, Marking requirements–fishing vessel and transshipment vessel, with a primary data on fishing effort, area of fishing operation, catch, species, composition and discards.

C-Control agencies involve are CCCIF, Department of Fisheries, Marine Department, Department of Marine and Coastal Resources. These agencies have been working on, law and regulation, spatial control MPA, zoning, input controls; license system, fishing days, technical control: gear, mesh size, output control, prohibited species.

S-Surveillance, agencies are CCCIF, DOF, Royal Thai Navy, Custom Department, DMCR, MD, THAI – MECC, and Royal Thai Policies. They have set up surveillance system and use technology - VMS, AIS, ERS, PIPO, Logbook, transshipment control, observer, and inspection at sea.

7.2.2 Report on the Development of a Sub-regional Cooperation on Monitoring, Control and Surveillance in Fisheries in the Northern Andaman Sea

32. *Ms. Pattaratjit* presented on Development of a Sub-regional Cooperation on Monitoring, Control and Surveillance in Fisheries in Andaman Sea Sub-region, which initiated by the SEAFDEC-Sweden Project. She briefed on the background of the MCS network and the progress made during 2017-2018, through the discussion at Sub-regional Meeting on Northern Andaman Sea and Southern Andaman Sea. She informed that in 2018, the SEAFDEC-Sweden Project developed the Roadmap and the nomination of the National Technical Group (5 representatives from each countries) for further get inputs from the countries. She added that the SEAFDEC-Sweden Project already conducted the Meeting on the Development of a Sub-regional Cooperation on Monitoring, Control and Surveillance in Fisheries in the Northern Andaman Sea, which was held on 24-25 July 2018 in Bangkok, Thailand. However, the remaining event that has not been conducted is for Southern Andaman Sea. Her presentation appears in **Annex 16**.

33. After her presentation, the Meeting was noted the progress made by Indonesia and Malaysia and confirmed on the involvement for the upcoming event on MCS in 2019.

7.3 Updates from FAO on the Support on combating IUU fishing

34. The representative from FAO, *Ms. Susana Siar* informed the Meeting on the FAO support to its Member Countries in relation to combating IUU fishing. During 2017-2018, FAO supported countries such as Malaysia, Myanmar and Thailand in focus national strategy and action plan to improve in complying with the Port State Measures Agreement, strengthening fishing regulation, and capacity building to prevent and eliminate IUU fishing. FAO assisted the Countries through the global capacity development programs implemented by FAO. The objective is to improve skill capacity in the implementation of Port State Inspection and MCS operation. She further explained that the global capacity development program includes governance and drafting of strategy and action plans, strengthening national policy and legislative frameworks, strengthening MCS and enforcement institutions and systems, improving flag state performances, addressing coastal state responsibilities in market access measures, and address relevant requirement of regional mechanisms.

VIII. SOCIAL PROFILE AND GENDER ANALYSIS IN KAWTHAUNG TOWNSHIP, MYANMAR

35. *Ms. Jariya Sornkliang*, the representative from SEAFDEC/Training Department, who served as Gender Focal Point of SEAFDEC, presented on the “Social Profile and Gender Analysis in Kawthaung Township, Myanmar”. She provided information on the rationale of the study and objective of the Study, which was to understand the information and knowledge gap that exists on gender aspects in fisheries that includes the typical gender roles existing in households and communities. She informed that the study was carried out by the SEAFDEC/TD gender team and in collaboration with the staff of DOF of Myanmar. There were 80 respondents interviewed in 10% of the whole fishing households and 10 middlemen and women were also interviewed. The number of respondents represents a balance between men and women.

36. As a results of the study, indicating that gender-differentiated roles are based on the characteristics of fishing and there is a strong stereotype of the gender division of labor, like processing the catch such as cleaning, cutting and sun drying fish-the job of women, which regarded as low status and of less economic value. The study also revealed that there is a need to create opportunities for the female fisher through appropriate interventions towards the sustainable promotion of small-scale fisheries. The women have demonstrated the willingness to challenge the gender stereotype and norms prevalent in their community.

37. The study results also was suggested that if climate change puts the spotlight on the future of small-scale fisheries, women’s rights are at the heart of sustainable promotion and development of the future of small-scale fisheries. Inequality in information and social status between owners' wives and labors' wives lead to gender inequality in different-class women in the coastal community (Pu Lone Tone Tone village, Kawthang, Myanmar). In addition, it was suggested to support the establishment of a high school in the area in order to the young generation receive higher education, better job opportunity. Her presentation appears as **Annex 17**.

IX. GROUP DISCUSSION TO DRAFT ON COOPERATION FOR MANAGEMENT ACTIONS FOR THE ANDAMAN SEA SUB-REGION

38. The participants were divided into two groups to discuss issues on Sub-regional Cooperation on transboundary species and Cooperation on management of fishing capacity and to reduce illegal and destructive (combat IUU) fishing. The result of the group discussion appears in **Annex 18**.

X. DISCUSSION ON COOPERATION FOR MANAGEMENT ACTIONS FOR THE ANDAMAN SEA SUB-REGION, DIRECTIONS AND RECOMENDATION/ACTIVITY PLAN FOR YEAR 2019

39. The Meeting noted that the remaining activities of 2018 on the Meeting for the Development of MCS Cooperation for Southern Andaman Sea Sub-region will be postponed to 2019. *Ms. Pattaratjit* requested the Meeting to consider and provide the ideas and topics to be discussed and some recommendations on how to sustain the platform without support from the Project. During the discussion, it was suggested on development of Standard of Procedures (SOP) on sub-regional mechanism on MCS activities, continue supporting capacity building.

XI. WAYS FORWARD AND CONCLUSION

40. The following were identified and agreed in the Meeting as some next ways forward activities in the Andaman Sea Sub-region:

1. Management of Transboundary Resources

- 1) Further strengthening the cooperation for the mutual benefits of each country;
- 2) Utilizing the existing data and information for the precautionary planning and better regional fisheries management;
- 3) Harmonizing/Synchronizing national management actions (*e.g.* closing fishing seasons and closing fishing areas) and update national legal frameworks; and
- 4) Establishing or formulating appropriate communication network and social networking in a website maintained by country focal points on the specific issues (*e.g.* exchange of the knowledge and information among the countries to better understand the status of fisheries

resources due to Climate Change, change of migration pattern, and loss and/or gain by countries).

2. Management of Fisheries Capacity and to reduce illegal and destructive (combat IUU) fishing

- 1) Enhancing capacity building of human resources, particularly legal officers and law enforcement personnel to overcome the gap(s) among the countries;
- 2) Sharing the national policy and legal frameworks on fisheries management with other countries;
- 3) Strengthening technical capacities of the existing body/mechanism and/or inviting the 3rd parties (*e.g.* SEAFDEC, others) for their technical inputs;
- 4) Establishing appropriate patrol coordination for the regional enforcement among the countries;
- 5) Developing a website for updating and sharing data other than a communication tool in cooperation between the countries;
- 6) Strengthening SOP and a regional mechanism for the collaboration/coordination of MCS activities; and
- 7) Harmonizing a mechanism of the central persecution, if possible.

XII. CLOSING OF THE MEETING

41. The Deputy Secretary-General of SEAFDEC, *Mr. Akito Sato*, expressed his thanks to all delegates for the valuable inputs and actively participating in the deliberation and sharing of ideas in the Meeting. Having expressed the importance of Andaman Sea to ensure sustainable management, he then declared the Meeting closed and wished everyone safe travel back home.

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OPENING REMARKS

By Mr. Akito Sato
SEAFDEC Deputy Secretary-General

Distinguished delegates from the countries of the Andaman Sea Sub-region;
Representatives from FAO, My colleagues from SEAFDEC, and Members of the Regional Fisheries Policy Network; Ladies and Gentlemen,

Good morning to all of you!

It is my great pleasure to welcome all of you to the “Fourth Meeting of the Andaman Sea Sub-region” which is organized by the SEAFDEC-Sweden Project. I wish to express my sincerest thanks to everyone to sharing your time to come here for this important event.

Please allow me to recall the process of promoting sustainable fisheries around the Andaman Sea Sub-region with Swedish support under the SEAFDEC-Sweden Project, The Project in n cooperation with the BOBLME Project initiated the forum since 2009 through the First Meeting of the Andaman Sea sub-region which also obtained the participation of India for the Andaman and Nicobar Islands through the BOBLME Project. From that, the SEAFDEC-Sweden Project continued the effort in support the Andaman countries to discuss on the management and utilization of transboundary stocks, conservation and protection of important habitats, and building up resilience and capacity for climate change. The Third Meeting of the Andaman Sea Sub-region was organized in 2016 developed agreement/ arrangement based on ecosystems approach to fisheries through the integration of fisheries and habitat management. The meeting was also looked for action-oriented recommendations towards the development of joint approaches and agreements to address problems/issues common to all four countries in the Andaman Sea, including options for development of a management plan for the whole Andaman Sea.

In line with recommendations from the Andaman countries, the SEAFDEC-Sweden Project recaptured again in 2017, the Sub-regional Consultative Workshop of the Northern Andaman Sea and the Southern Andaman Sea Sub-regional Meeting on Effective Fisheries Management were held on 16-17 November and 21-22 November 2017, respectively. Both Meetings focused on the identify management and utilization of transboundary stocks and the efforts to management of fishing capacity and combat IUU fishing in each sub-regions, including the initiation of sub-regional MCS Networks together with development of port monitoring capacity.

The sequence of Andaman Sea Sub-regional meetings has not been as frequent as that of the Gulf of Thailand but activities had been ongoing within and among the countries of the Andaman Sea. These were mostly linked with the activities of the BOBLME Project such as those for mackerels, MPAs, and EAFM; and also with those of SEAFDEC such the RPOA-Neritic Tunas, RPOA-Fishing Capacity, and promotion of EAFM. Most of these activities had the active involvement of almost all of the Andaman Sea countries.

Ladies and Gentlemen, in order for us to move forward, recommendations during the previous Sub-regional meetings should be considered including the need to tackle challenges ahead in strengthening cooperation around the Andaman Sea while building upon a continuation of a process that has been deemed essential by all involved parties at regional, national and local level.

Lastly, I would wish to thank you once again and welcome you all. I hope that, apart from learning more about our sea and our resources during this Meeting, our successful output from our deliberations

is a must. Without further ado, I now declare the Fourth Meeting of the Andaman Sea Sub-region open. Thank you and have a good day.

PROSPECTUS

1. Introduction

Since 2009, SEAFDEC with support from SEAFDEC-Sweden Project and in collaboration with the Bay of Bengal Large Marine Ecosystem Project (Phase 1) have been strengthening the cooperation of the Andaman Sea Sub-region, especially in improving management of fishing capacity which includes the initiation of sub-regional MCS Networks together with development of port monitoring capacity and coordinated efforts to combat illegal fishing. Since then, numbers of meetings conducted to discuss, shared experiences on good practices as well as to seek cooperation among countries (Myanmar, Thailand, Malaysia and Indonesia, including India) and other relevant institutions.

Priority areas and progress in promoting regional cooperation in and around the Andaman Sea

The SEAFDEC-Sweden Project made in the Andaman Sea Meetings under different parallel initiatives (BOBLME, IUCN/MFF, Japanese Trust Fund, USAID, Denmark, etc.) with the involvement of Andaman Sea Countries in terms of capacity building and improved knowledge on traditional knowledge and in the process to advance sub-regional cooperation on priority species as well with regard to ASEAN region-wide initiatives of relevance to the Andaman Sea.

Ecosystems Approach to Fisheries Management (EAFM): Both SEAFDEC and BOBLME together with FAO, NOAA and others have embraced the ecosystems approach to fisheries management (EAFM) as a tool for planning, monitoring and management. EAFM trainings provided to officers of Myanmar, Malaysia and Thailand as options to use the concept has a planning tool for provincial/cross-border capacity-building, planning and management.

Mackerels (*Rastrelliger spp.*) and mackerel working groups: During the earlier Andaman Sea Meetings, it was shown and recognized that the (eastern) Andaman Sea feature two distinct loops, one from Phuket down into Melaka Straits (Indonesia, Malaysia and Thailand) and the other from Phuket into the waters of Myanmar (Thailand and Myanmar). Recommendations have emphasized the importance of improved monitoring of spawning season, migration patterns of the transboundary and (highly) migratory fish species such as *Rastrelliger spp.*, and related species. The work to promote coordination and increased understanding on mackerels and the movement of mackerels has been supported through the setting up of an Indian Mackerel Working Group (BOBLME) and a genetics working group.

RPOA-Neritic Tuna: The ASEAN/SEAFDEC Scientific Working Group met during 2015 and 2016 and further advanced the process of increasing the knowledge on the status of Neritic tunas in the ASEAN region. Information is now also available on stock status of Kawakawa and Tonggol Tuna including the status in the Andaman Sea.

MPA's, protected areas and fisheries refugia (BOBLME Working Group on MPA's): Through BOBLME an MPA working group was established and trainings provided to select and to build upon the work being done. It would be useful to seek summary updates on the status of work of the (BOBLME) MPA Working Group. Earlier meetings (BOBLME, SEAFDEC, etc.) have discussed options to establish “larger fisheries resources conservation areas” including an aggregate of existing and effective smaller management areas (*i.e.* MPA's, other *refugia*, *etc.*) encompassing critical habitats of important transboundary fish species. To better understand functions of critical habitats. MPA's and fisheries *refugia*, the relevant information on important habitats in the sub-region may also be sourced from relevant international organizations and projects (*e.g.* FAO, IUCN, MFF, Wetlands International, UNEP/GEF South China Sea Project, *etc.*) and from Member countries.

MCS Networks: Limited further steps have been taken to establish MCS networks among Andaman Sea Countries. A step in this direction was done following the recommendations from the 1st Meeting for Andaman Sea Sub-region that suggested that an initial activity to initiate sub-regional cooperation should focus on information sharing, identify key activities related on M, C and S and indicate responsible national institutions on such activities. Importantly the activities to be undertaken should be within the legal framework of Member countries involved. Furthermore, the 1st and 2nd Meetings emphasized that efforts to improve management of fishing capacity were a critical element in combating illegal (IUU) fishing.

RPOA-Fishing Capacity: SEAFDEC Council (April 2016) and ASWGF_i have now recognized the RPOA-Fishing Capacity. The task ahead is to explore the relevance and interest of the Andaman Sea countries in being a target sub-region for the RPOA-Fishing Capacity.

Bi-lateral and tri-lateral dialogue meetings were organized in promotion of the sub-regional cooperation in the Andaman Sea. In promotion of joint management approaches among neighboring countries sub-regional consultative meetings have been conducted in the Northern Andaman Sea (Myanmar and Thailand) with three/four events, 2011 to 2013, and in the Southern Andaman Sea (Indonesia, Malaysia and Thailand) with one event in 2011 through cooperation between SEAFDEC and BOBLME. The meetings brought together officers from different relevant agencies to share and exchange the information with an aim to strengthen dialogue on possible sub-regional cooperative management arrangements. For the Northern Andaman Sea the outline of a “Planning and Management Committee” is available together with a workplan based on priority issues as defined by participants to the dialogue meetings. To activate the Committee and revise/update the workplans the two countries need to reappoint Committee Members (institutional changes in the two countries have included a turnover in available personnel). For the Southern Andaman Sea, the process needs to be reinitiated given the continued/renewed interest to be expressed by the three countries.

The SEAFDEC-Sweden Project tried to maintain momentum of activities to the Andaman countries through the mechanisms provided through BOBLME and ASEAN-SEAFDEC by the organization of **the 3rd Meeting of the Andaman Sea Sub-region** in 2016 (after the phase I of BOBLME ended in 2015). In the process, Andaman countries were also requested to indicate ambitions and priorities for continued bilateral dialogue (Northern Andaman) trilateral dialogue (Southern Andaman) thereby building upon a continuation of a process that has been deemed essential by all involved parties at regional, national and local level.

In line with recommendations from the Andaman countries, the SEAFDEC-Sweden Project recaptured again in 2017, the Sub-regional Consultative Workshop of the Northern Andaman Sea and the Southern Andaman Sea Sub-regional Meeting on Effective Fisheries Management were held on 16-17 November and 21-22 November 2017, respectively. Both Meetings focused on the identify management and utilization of transboundary stocks and the efforts to management of fishing capacity and combat IUU fishing in each sub-regions, including the initiation of sub-regional MCS Networks together with development of port monitoring capacity.

2. Rationale and Objectives of the Fourth Meeting of the Andaman Sea Sub-region

The intention with this the **Fourth Andaman Sea Sub-regional Meeting** is to tackle challenges ahead in strengthening collaboration and cooperation around the Andaman Sea while building upon a continuation of a process that has been deemed essential by all involved parties at regional, national and local level.

The aim is to seek guidance from the four countries with priority action-oriented recommendations for the development of joint approaches and agreements to address problems/issues common to all four countries in the Andaman Sea. The event should build upon common ambitions of Indonesia, Malaysia, Myanmar and Thailand with a focus on looking beyond planning and move into action.

This could involve key elements of both national and regional concern that have been raised as priority areas during national, sub-regional, and regional events.

Objectives:

With the objective to support the development of the Andaman Sea Sub-regional agreements/arrangements based on ecosystem approach to fisheries through the integration of fisheries and habitat management, the meeting should look for action-oriented recommendations for the development of joint approaches and agreements to address problems and issues common to all four countries in the Andaman Sea, including options for management plan for the whole Andaman Sea and related water bodies.

The Meeting Objectives include:

- 1) To review the follow up of agreed activities from the 3rd Meeting of Andaman Sea Sub-region in 2016 and report the progress of activities since the previous meetings of the Andaman Sea Sub-region
- 2) To review the results of the information compilation on migration patterns, spawning and nursery grounds of mackerels, Neritic tunas and anchovies and advise on the steps taken to strengthen cooperation on transboundary fisheries and habitats management
- 3) To update information on efforts of the country and regional organizations to implement activities for management of fishing capacity and combating illegal, unreported and unregulated (IUU) fishing, social development for Andaman Sea Sub-region
- 4) To identify further action plan and solution of for the sustainability of Andaman Sea Sub-region Meeting platform

3. Expected Outputs

- Update progress of the implementation of activities in relevant to transboundary species, effort on combating IUU fishing, social development, experiences shared among the countries, issues and concerns, feedback and suggested steps forward
- Agreed cooperation actions for the Andaman Sea Sub-region and commitment for further strengthen to continue and expand cooperation/coordination/collaboration among various sector and fisheries related national agencies
- Recommendation/solution for sustainability of Andaman Sea Sub-region platform

4. Expected Outcomes

- Awareness raised among participating institutions around the Andaman Sea on benefits of sub-regional cooperation and inter-sectoral cooperation to promote appropriate fisheries and habitat management, management of fishing capacity and social development
- Improvement of structure and involvement in the continued implementation of activities in the Andaman Sea Sub-region
- Strengthen sub-regional cooperation on the fisheries management and initiatives framework such as MCS network in the Andaman Sea Sub-region

TIME TABLE AND AGENDA

Time	Contents
20 November 2018 (Tue)	
08.30-09.00 hr	Registration
09.00-09.15 hr	Agenda 1: Opening of the Meeting
09.15-09.30 hr	Agenda 2: Introduction Session 2.1 Self introduction of participants 2.2 Background, Objectives and Adoption Agenda of the Meeting
09.30-10.00 hr	Agenda 3: Review the progress from the previous meetings
10.00-10.30 hr	<i>Group photograph session and coffee break</i>
10.30-12.00 hr	Agenda 4: Progress of the implementation of the transboundary stocks and habitats and sub-regional cooperation 4.1 Northern Andaman Sea Sub-region (Mackerels, Neritic Tunas, Anchovies) 4.2 Southern Andaman Sea Sub-region (Mackerels, Neritic Tunas, Anchovies) Other matters Updates from FAO on the current status of the new phase of Bay of Bengal Large Marine Ecosystem Project
12.00-13.30 hr	<i>Lunch break</i>
13.30-15.30 hr	Agenda 5: Promotion of Effective Management of Fishing Capacity and reduction of illegal and destructive fishing in the Andaman Sea Sub-region 5.1 Country updates on current Law and Legislation and Efforts on management of Fishing Capacity and combating IUU fishing (NPOA-Capacity; NPOA-IUU) (4 Andaman Sea Countries)
15.30-16.00 hr	<i>Coffee break</i>
16.00-17.30 hr	<i>Continue onto</i> Agenda 5: Promotion of Effective Management of Fishing Capacity and reduction of illegal and destructive fishing in the Andaman Sea Sub-region 5.2 Strengthening Monitoring (M), Control (C), and Surveillance (S) in the Andaman Sea Sub-region 5.2.1 Countries updates on progress of national M, C, and S (4 Andaman Sea Countries) 5.2.2 Report of the Development of a Sub-regional Cooperation on Monitoring, Control, and Surveillance in Fisheries in the Northern Andaman Sea 5.3 Updates from FAO
18.00 hr	<i>Reception dinner hosted by SEAFDEC</i>
21 November 2018 (Wed)	
09.00-09.30 hr	Agenda 6: Report of Social Profile and Gender Analysis in Kawthuang Township, Myanmar

09.30-12.00 hr	<p>Agenda 7:</p> <p>7.1 Group Discussion to draft on cooperation for management actions for the Andaman Sea Sub-region</p> <p>(a) Group 1: Transboundary Resources</p> <p>(b) Group 2: Management of Fishing Capacity and to reduce illegal and destructive (combat IUU) fishing</p> <p>1) What is (a) or (b) cooperation ? 1.1 Give the definition of the terms of cooperation</p> <p>2) Sub-regional Cooperation in Actions 2.1 Why is sub-regional cooperation important? 2.2 What are the CHALLENGES? 2.3 What are the BENEFITS of sub-regional cooperation? 2.4 Which TOOLS can be used to promote sub-regional cooperation? 2.5 ISSUES for sub-regional cooperation?</p> <p>3) Tools and mechanism to promote sub-regional cooperation 3.1 Legal frameworks 3.2 Institutional arrangement 3.3 Sharing information and conducting joint activities 3.4 Incentive for cooperation 3.5 Mediation and dispute resolution mechanism 3.6 Cost and benefit sharing 3.7 Financing</p>
12.00-13.30 hr	<i>Lunch break</i>
	<p><i>Continue onto Agenda 7:</i></p> <p>7.2 Group presentation</p>
13.30-15.00 hr	Agenda 8: Discussion on cooperation for management actions for the Andaman Sea Sub-region, directions and recommendations/activity plan for year 2019
15.00-15.30 hr	<i>Coffee break</i>
15.30-16.00 hr	Agenda 9: Ways forward and Conclusion
16.00 hr	Agenda 10: Closing of the Meeting

REVIEW THE PROGRESS FROM THE PREVIOUS MEETINGS

By Dr. Somchai Bussarawit



Activities 

1. The 3rd Meeting of the Andaman Sea sub-region, 18-20 October 2016, Bangkok, Thailand
2. The 3rd Sub-regional Consultative Workshop on the Northern Andaman Sea/Myek Archipelago, 16-17 November 2017, Bangkok, Thailand
3. The 3rd Sub-regional Consultative Workshop on the Joint Fisheries Management around Southern Andaman Sea, 21-22 November 2017, Bangkok, Thailand
4. The 1st Technical Experts Meeting on Management of Transboundary Species for the Northern Andaman Sea, 13-14 March 2018, Bangkok, Thailand
5. The 1st Technical Experts Meeting on Management of Transboundary Species for Southern Andaman Sea, 4-5 April 2018, Bangkok, Thailand
6. The 2nd Technical Experts Meeting on Management on Information Compilation of Transboundary Species as Scientific Basis for National Measures for Southern Andaman Sea, 10-11 July 2018, Choburi, Thailand
7. The 2nd Technical Experts Meeting on Management of Transboundary Species for the Northern Andaman Sea, 12-13 July 2018, Choburi, Thailand
8. The Meeting on Development of a Sub-regional Cooperation on Monitoring, Control and Surveillance in Fisheries in the Northern Andaman Sea, 24-25 July 2018, Bangkok, Thailand

Activities 

1. The 3rd Meeting of the Andaman Sea sub-region, 18-20 October 2016, Bangkok, Thailand

Objectives:

- facilitating and supporting the development of the Andaman Sea Sub-regional agreements/arrangements based on an ecosystems approach to fisheries through the integration of fisheries and habitat management.
- look for action-oriented recommendations towards the development of joint approaches and agreements to address problems/issues common to all four countries in the Andaman Sea, including options for development of a management plan for the whole Andaman Sea and related water bodies.

Activities 

Group 1. Trans-boundary fisheries resources management

Fisheries/themes

- Indian Mackerel, Short Mackerel, Hilsa shad, Neritic tunas, Sharks and rays

Key Issues

- Information for fisheries management incomplete
- migration patterns unclear
- unknown stock sizes
- Insufficient knowledge on spawning seasons and areas
- limited capacity to develop transboundary management actions
- National management frameworks not harmonized among 4 countries
- No clear joint policy (or policy for joint action - no mandate - no call for joint management
- Standardized statistics framework exist but heterogeneous data collection (human and financial capacities)
- Coastal infrastructure (e.g. port development) impacting fisheries

Activities 

- Management not inclusive of other stakeholders
- Insufficient M&E of management actions and outcomes (social, biological, economic, etc)
- Unclear understanding of climate variability and change on fisheries Mackerel, hilsa, sharks (as applicable) working groups established under BOBLME inactive
- Dependence on projects for activities (working groups, etc)
- Cross-ministerial collaboration (e.g. environment, tourism, natural resources) insufficient
- Management at different scales (from local to national/international) may not always be coherent
- Academic research is not necessarily fisheries management oriented
- Observation - cross-cutting issues, like gender, information management missing

Activities 

Group 2. Management of Fishing Capacity and to Improve/Reduce Unregulated Fishing, to Avoid Unrecorded and Combat Illegal Fishing

Key issues

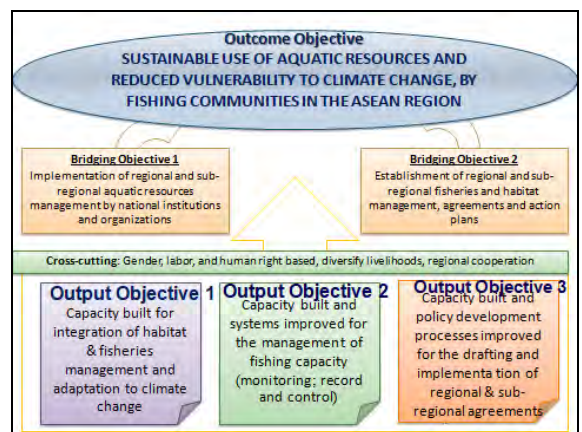
- 1. Assessment of fishing capacity**
 - Limited data/information (Double flag, number of fishing vessels)
 - Unclear stock status
 - Unclear area of spawning
 - Methodology of assessment of active fishing capacity
 - Lack of human resource/Expert
 - Effective Policy and Legal framework (reporting of catch, catch, changing of gear without authorization)


Activities 

- 2. Preparation and Implementation of National Assessment of fishing capacity plans**
 - Lack of knowledge on development of the NPOA (national stakeholders consultation) (Myanmar)
- 3. Required Urgent Measure for Regional Fisheries Management**
 - Require Exchange data and information
 - Require Catch documentation for exportation to other AMS (including Catch Verification System)
- 4. Mechanisms to Promote of the Implementation**
 - Lack of implementation and network for M, C, and S.
 - Lack of public awareness to improve fishing capacity to combat the IUU fishing

Activities 

- 2. Preparation and Implementation of National Assessment of fishing capacity plans**
 - Lack of knowledge on development of the NPOA (national stakeholders consultation) (Myanmar)
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Activities 

Output objective1: Capacity built for integration of habitat & fisheries management and adaptation to climate change -Management of trans-boundary resources/stocks

- the 1st Technical Experts Meetings on Management of Transboundary Species for Northern Andaman Sea (between Myanmar and Thailand), 13-14 March and for Southern Andaman Sea (among Indonesia, Malaysia and Thailand), 4-5 April 2018, in Bangkok, Thailand, respectively.
- identify available data of each of the countries on anchovies, mackerels and Neritic tunas with regards to their spawning grounds, spawning seasons, other biological data, habitats and migration patterns as well as existing fisheries regulations.
- produce maps of important features of the life cycle of the priority species covering the Northern and Southern Andaman Sea.
- These maps would serve as inputs to future coordination of national fisheries measures
- countries agreed on a list of maps and collected and compiled existing data for anchovies, mackerels and Neritic tunas in collaboration and coordination with other agencies, research institutions and universities.

Activities 

The process was followed up and later on in July 2018,

- the 2nd Technical Experts Meeting on Information Compilation of Transboundary Species as Scientific Basis for National Measures for Southern Andaman Sea, held on 10-11 July, and the 2nd Technical Experts Meeting on Management of Transboundary Species for Northern Andaman Sea, held on 12-13 July, 2018 in Chonburi Province, Thailand, respectively.
- The Meetings revealed and analyzed information from the digital maps on spawning grounds, spawning seasons, other biological data, habitats and migration patterns as well as existing fisheries regulations on Anchovy, Mackerel and Neritic Tuna.
- The events were facilitated by SEAFDEC/TD. Based on the maps, the information are not sufficient to make conclusion or agreement.
- After the discussion, it was agreed to continue for the improvement of the data collection in each countries.

Activities



Output Objective 2: Capacity built and systems improved for the management of fishing capacity (monitoring; record and control)

- *Sub-regional Consultative Workshop of the Southern Andaman Sea.* Furthermore, in November 2017 dialogue was facilitated between Thailand and Myanmar as part of the Northern Andaman Sea cooperation with the *Third Sub-regional Consultative Workshop of the Northern Andaman Sea/Myeik Archipelago* in Bangkok, Thailand.
- Countries requested during both events SEAFDEC to develop work plans for the process and consultations for the establishment of MCS coordination among countries for the Northern and Southern Andaman Sea sub-sub-regions by building upon existing national and bilateral cooperation initiatives.
- Effective sub-regional coordination could facilitate trade through improved product traceability, coordinate national measures to secure fish resources as well as to improve scientific assessments and simplify surveillance measures.
- The combined and coordinated initiatives would support national efforts to reduce IUU fishing.
- A condition for such a cooperation to be successful is that all relevant authorities involved in various aspects of fisheries management take part in the cooperation both nationally and bilaterally/regionally.

Activities



- 24-25 July 2018, the SEAFDEC-Sweden Project organized the *MCS Sub-regional Cooperation Meeting in Northern Andaman Sea* which was held in Bangkok, Thailand. The national technical persons from Thailand and Myanmar discussed on common concerns and issues to address on cooperation, including information sharing needed as a basis for establishing an MCS network between the two countries. Both countries agreed to collaborate with different agencies respective of their mandates and responsibility and strengthen the cooperation sub-regional MCS network based on existing cooperation.

Activities



Output Objective 3: Capacity built and policy development processes improved for the drafting and implementation of regional & sub-regional agreements

- **Strengthening the sub-regional cooperation in target sub-regions**
- signed MOU on Fisheries Cooperation between Thailand and Myanmar
- successfully facilitated the discussion between the two countries on several areas of mutual interest including aspects on management of trans-boundary stocks, combating IUU fishing and specifically on the establishment of sub-regional MCS coordination efforts.
- facilitated the dialogues for the countries around Southern Andaman Sea sub-sub-region (Indonesia, Malaysia and Thailand) by the conduct of the Meetings for the compilation of available information to form the basis for digitized maps of spawning grounds, nursery grounds, migration patterns and fishing areas of Anchovies, Mackerels and Neritic Tuna in the Southern Andaman.
- facilitated the consultation on the MCS networking in the Southern Andaman (on-going).
- The 4th Meeting of the Andaman Sea Sub-region, 20-21 November 2018

MAPS OF TRANSBOUNDARY SPECIES (MACKERALS, NERITIC TUNAS, ANCHOVIES) IN THE NORTHERN ANDAMAN SEA SUB-REGION

By Mr. Sukchai Anupapaboon



The 3rd Sub-regional Consultative Workshop of the Northern Andaman Sea/Myeik Archipelago, 16-17 November 2017, Bangkok, Thailand

Recommendations:

- Develop a map of spawning areas (anchovies, mackerels, neritic tunas)
- Map should be presented to higher level meeting
- Develop coordinated management plans
- Develop Road map and submit in Jan. 2018
- Appointment Technical Focal Point and expert group for priority transboundary species
- Appointment of National Technical Group for the coordination of MCS and related activities

The 1st Technical Experts Meeting on Management of Transboundary Species for Northern Andaman Sea, 13-14 March 2018, Bangkok, Thailand

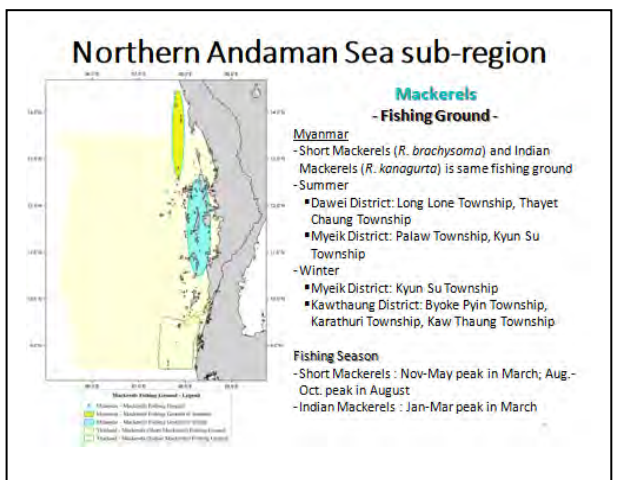
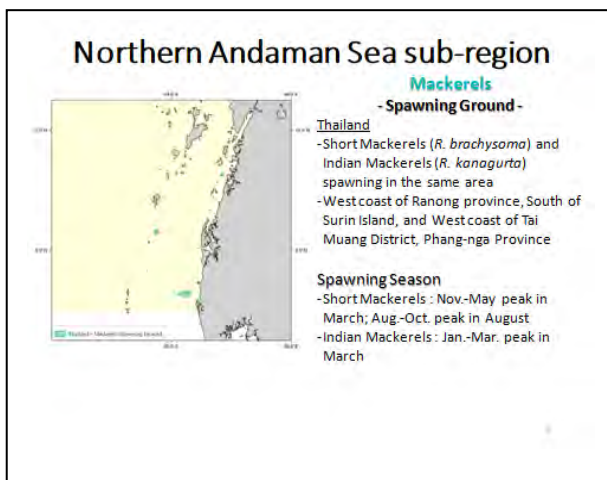
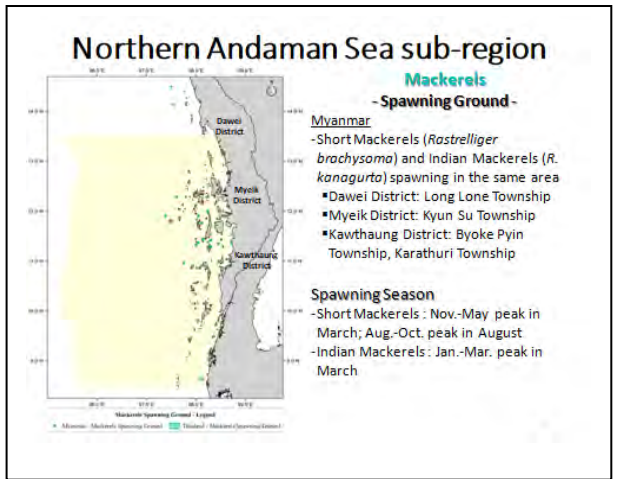
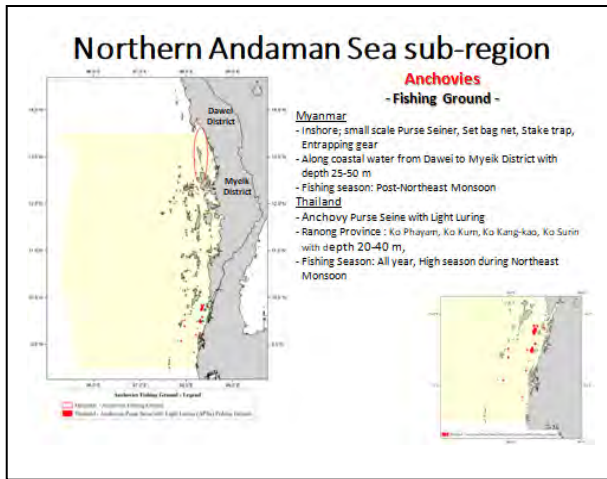
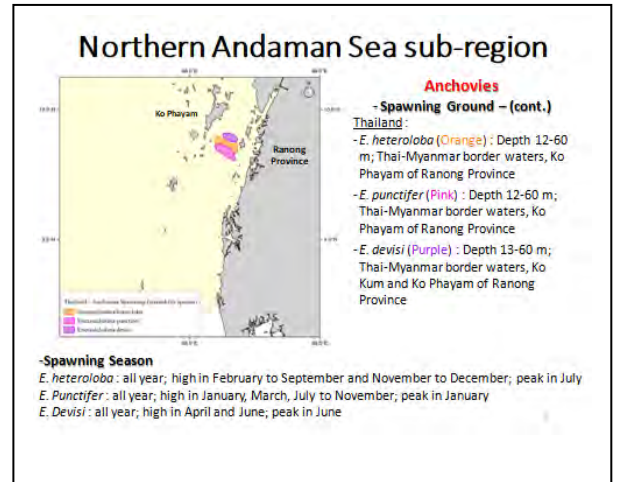
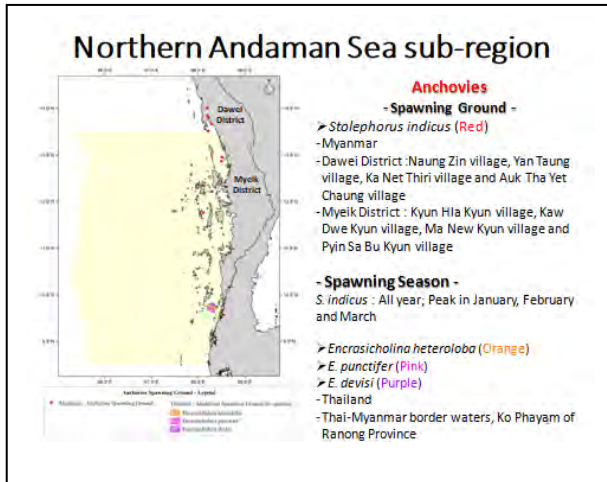
- Target species (anchovies, mackerels, neritic tunas)
- identified existing data available (spawning ground, spawning season etc.)
- identify existing fisheries regulation (management measures)
- agreed on roadmap to produce a digital maps (thematic GIS based map) of biological data and fisheries regulations
- data will be sent to SEAFDEC/TD to produce a set of draft maps (deadline 31 May 2018)
- draft maps (sent out 15 June 2018) will be discussed and needs for revision identified at the 2nd Technical Experts Meeting in July 2018

The 2nd Technical Experts Meeting on Management of Transboundary Species for Northern Andaman Sea, 12-13 July 2018, Choburi, Thailand

- agreed on a draft layer maps to revise additional data for final revision of preliminary maps (list of discussed additional information will be sent (in GIS format using QGIS free software) on 16-20 July 2018)
- updated and revised data will be received to SEAFDEC/TD in shape files (deadline 13 August 2018)
- agreed that border lines of each countries will be excluded
- final maps should be adopted and agreed by the countries

The Meeting will assess and identify the possible future needs for coordination and collaboration of fisheries measures based on the produce maps that could be beneficial to secure a sustainable stock assessment of these transboundary species

Maps on the Target Transboundary Species in Northern Andaman Sea sub-region



Northern Andaman Sea sub-region



Mackerels - Fishing Ground -

Thailand
 -Short Mackerels: West coast of Ranong province (10-40 m)
 -Indian Mackerels: West coast of Ranong province, West coast of Tai Muang District, Phang-nga Province (10-80 m)

Fishing Season
 -Short Mackerels : February-April/May and September-November
 -Indian Mackerels : March-April and October

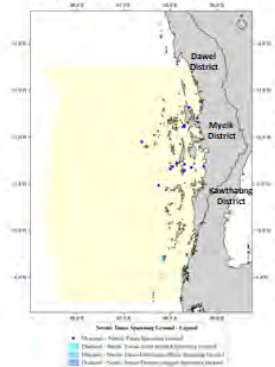
Northern Andaman Sea sub-region



Mackerels -Migratory Route – -BOBP,1987



Northern Andaman Sea sub-region



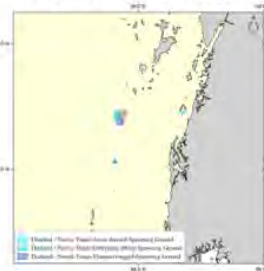
Neritic Tunas -Spawning Ground –

3 target species of Neritic Tunas (*Auxis thazard*, *Euthynnus affinis*, *Thunnus tonggol*)

Myanmar
 -Depth 25-60 m
 ■Myeik District: Kyun Su Township
 ■Kawthaung District: Byoke Pyin Township, Karathuri Township

Spawning Season
 -*A. thazard* : Sep.-Mar., peak in Oct.
 -*E. affinis* : Jan.-Mar., peak in Jan. & Sep.-Dec., peak in Dec.
 -*T. tonggol* : All year, peak in Apr.

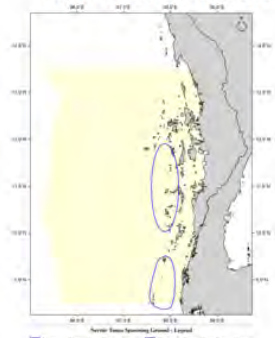
Northern Andaman Sea sub-region



Neritic Tunas - Spawning Ground -

Thailand
A. thazard :
 ■West of Ko Surin and west of Ko Tachai (Phang-nga);
E. affinis :
 ■South of Ko Kum (Ranong);
 ■West and East of Ko Tachai, East off Ko Surin (Phang-nga);
T. tonggol :
 ■South and West of Ko Surin, South of Ko Tachai (Phang-nga);
Spawning Season:
 -*A. thazard* : All year round with 2 peaks: Jan.-Mar. & Aug.-Nov; highest peak in Sept.
 -*E. affinis* : All year round with 2 peaks: Jan.-May & Oct.-Dec.; highest peak in Nov.
 -*T. tonggol* : All year round; peak in April

Northern Andaman Sea sub-region



Neritic Tunas - Fishing Ground -

Myanmar
 - Purse Seine with light luring
 ■Myeik District: Kyun Su Township
 ■Kawthaung District: Byoke Pyin Township, Karathuri Township

Fishing Season : - no information-

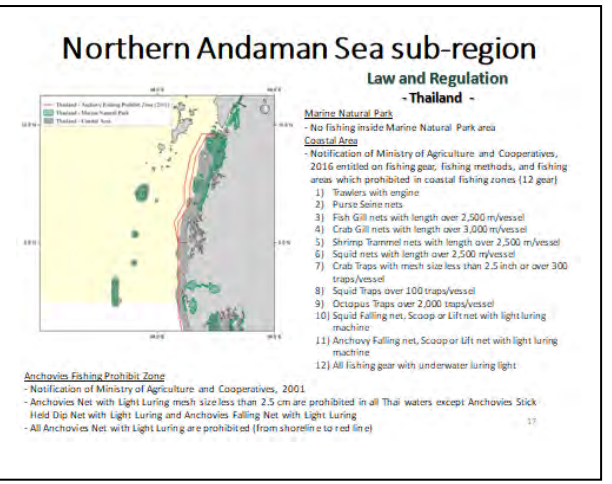
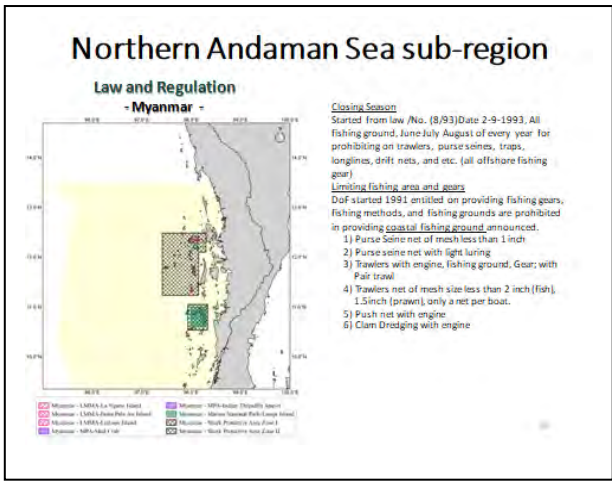
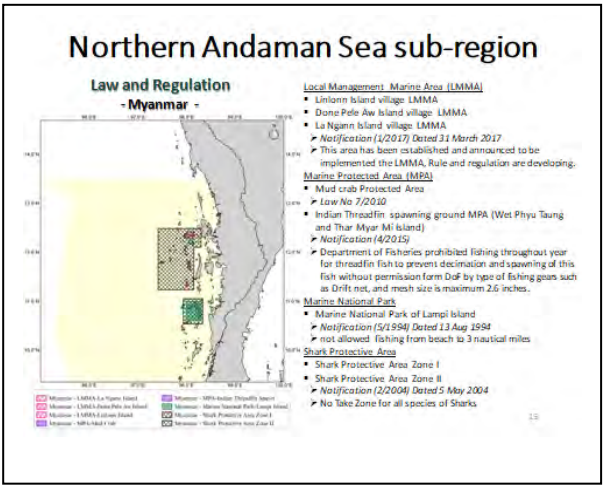
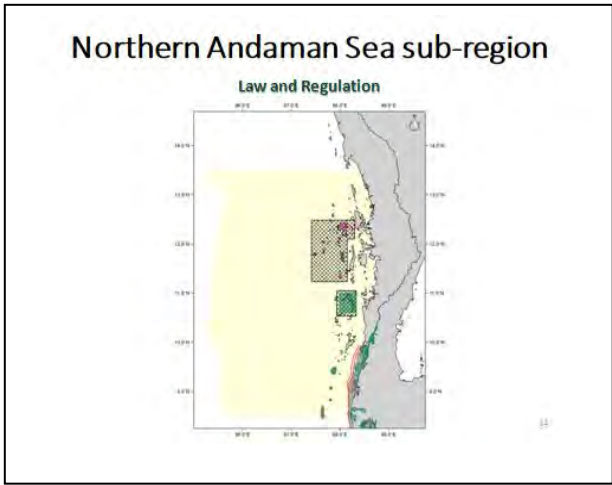
Northern Andaman Sea sub-region



Neritic Tunas - Fishing Ground -

Thailand
 - Fishing ground is along coastal area of Ranong and Phang-nga province
 - Purse seine divided into 4 type of operations;
 ■Purse seine with fish aggregating devices (FADs),
 ■Light luring purse seine (LPS),
 ■Thai purse seine (TPS), and
 ■Tuna purse seine (TUN)

Fishing Season : All year, High in Northeast Monsoon Season (Nov-Apr)



MAPS OF TRANSBOUNDARY SPECIES (MACKERELS, NERITIC TUNAS, ANCHOVIES) IN THE SOUTHERN ANDAMAN SEA SUB-REGION

By Mr. Sukchai Anupapaboon






Agenda 4. Progress of the implementation of the transboundary stock and habitats and sub-regional cooperation

Agenda 4.2: Southern Andaman Sea Sub-region (Mackerels, Neritic Tunas, Anchovies)






The 3rd Sub-regional Consultative Workshop of the Joint Fisheries Management around Southern Andaman Sea, 16-17 November 2017, Bangkok, Thailand

Recommendations:

- Develop a map of spawning areas (anchovies, mackerels, neritic tunas)
- Map should be presented to higher level meeting
- Develop coordinated management plans
- Develop Road map and submit in October 2018
- Appointment Technical Focal Point and expert group for priority transboundary species
- Appointment of National Technical Group for the coordination of MCS and related activities






The 1st Technical Experts Meeting on Management of Transboundary Species for Southern Andaman Sea, 4-5 April 2018, Bangkok, Thailand

Recommendations:

- Target species (anchovies, mackerels, neritic tunas)
- identified existing data available (spawning ground, spawning season etc.)
- identify existing fisheries regulation
- agreed on roadmap to produce a digital maps of biological data and fisheries regulations
- data will be sent to SEAFDEC/TD to produce a set of draft maps (deadline 15 June 2018)
- draft maps will be discussed and needs for revision identified at the 2nd Technical Experts Meeting in July 2018





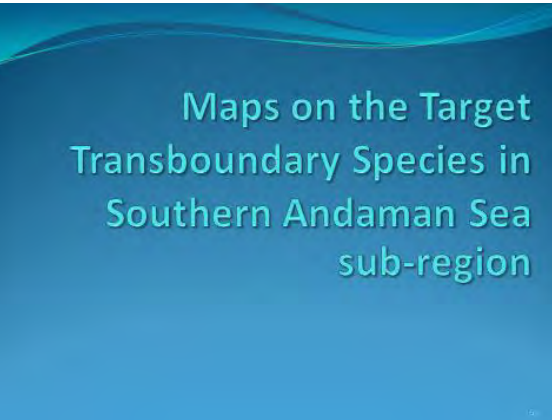

The 2nd Technical Experts Meeting on Information compilation of Transboundary Species as Scientific Basis for national Measures for Southern Andaman Sea, 10-11 July 2018, Chonburi, Thailand


- Agreed on a draft layer maps to revise additional data for final revision of preliminary maps (list of discussed additional information will be sent on 16-20 July 2018)
- updated and revised data will be received in shape files (by deadline on 11 August 2018)
- agreed that border lines of each countries will be excluded
- final maps should be adopted and agreed by the countries



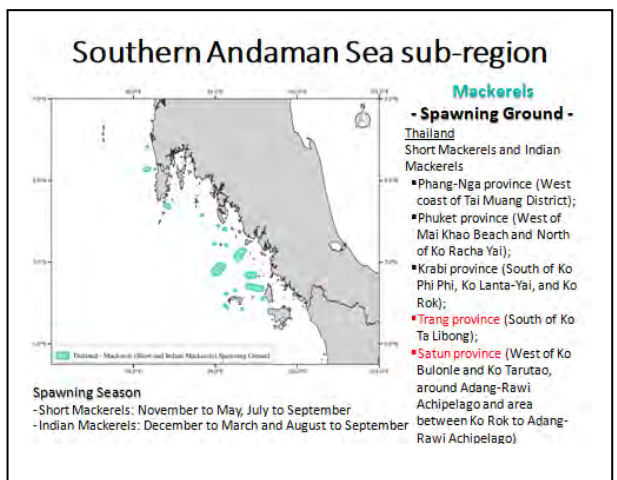
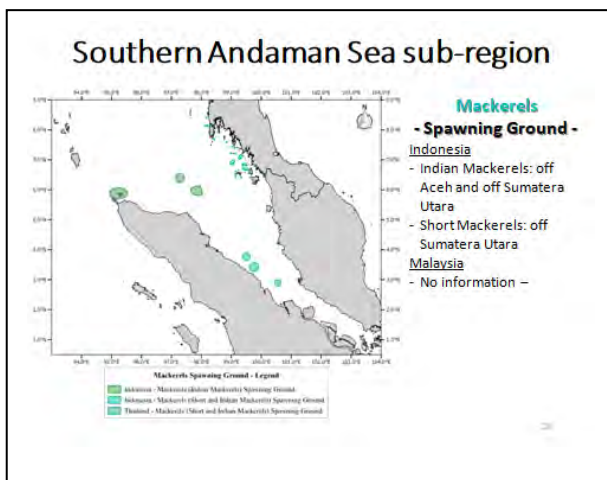
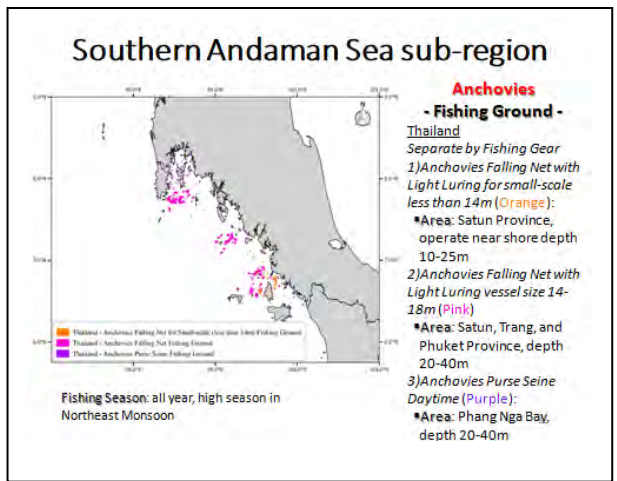
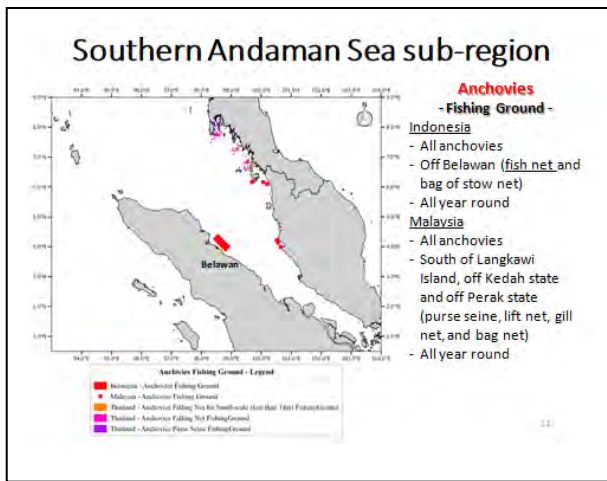
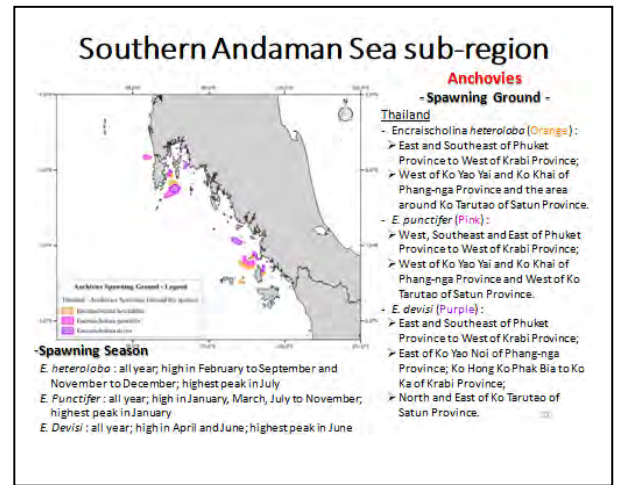
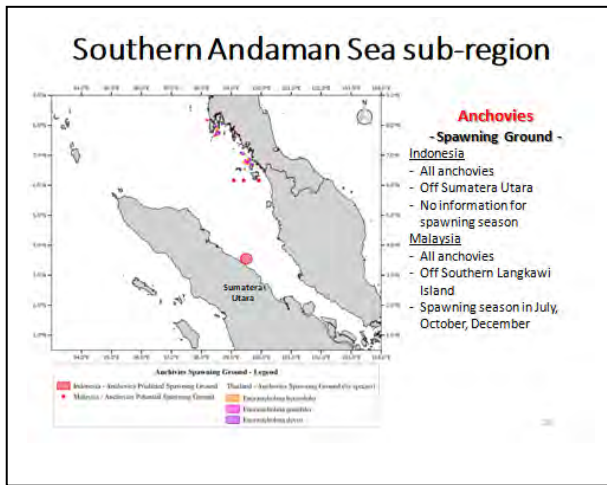



The Meeting will assess and identify the possible future needs for coordination and collaboration of fisheries measures based on the produce maps that could be beneficial to secure a sustainable stock assessment of these transboundary species

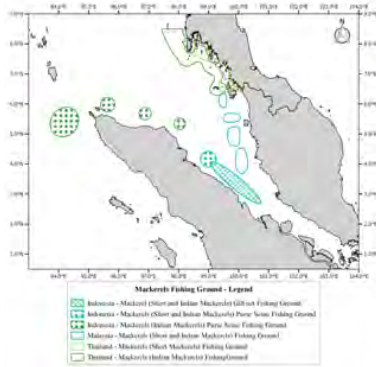


Maps on the Target Transboundary Species in Southern Andaman Sea sub-region

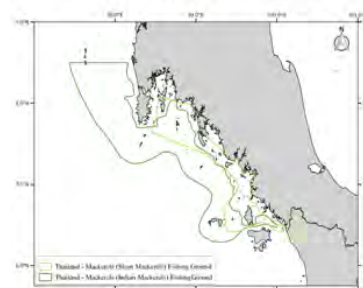


Southern Andaman Sea sub-region



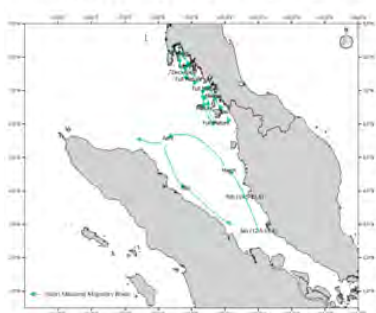
Mackerels
- Fishing Ground -
Indonesia Separate by species and gear
Short Mackerels
 - Gill Net: Off Sumatera Utara and Riau
 - Purse Seine: Off Aceh
Indian Mackerels
 - Gill Net: Off Sumatera Utara and Riau
 - Purse Seine: Off Sumatera Utara and off Aceh
 - No fishing season information
Malaysia
Short and Indian Mackerels
 - West coast of Peninsular Malaysia
 - No fishing season information

Southern Andaman Sea sub-region



Mackerels
- Fishing Ground -
Thailand
 - Short mackerel; Phang-nga bay to Saturn Province, depth 10-40 (light green)
 - Indian mackerel; West coast of Phuket to Satrun province, depth 10-80 m (dark green)
Fishing Season -
 Short Mackerels; Feb.-Apr./May and Sep.-Nov.
 Indian Mackerels; Mar.-Apr. and October.

Southern Andaman Sea sub-region



Short Mackerels
- Migratory Route -
(BOBP, 1987)
 There are two population in southern Andaman, Indonesia-Malaysia population and Malaysia-Thailand population
 Indonesia-Malaysia; young fish in January around west coast of Perak and it moves up northward until April. Then, return southward along east coast of Sumatra, with could found fully mature state of short mackerel in coastal water of Sumatera Utara in May or June.

Southern Andaman Sea sub-region



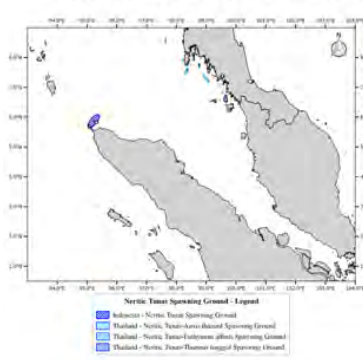
Short Mackerels
- Migratory Route -
Thailand - Malaysia population
 There are two sub-population in South Andaman
 -Northern sub-population; spend their life only in Thai water from Phang-nga bay to Trang provinc.
 -Young fish found at Lanta Yai. It migrates upward along the west coast of Trang and Krabi inside of Phang-nga bay. Then, it moves southward to Spawning ground during Aug.-Nov. Full mature stage could found during Dec.-Apr. Biggest spawning ground is around Yao Yai Island, Phi-phi Island, Lanta Yai Island and also Rok Island.

Southern Andaman Sea sub-region

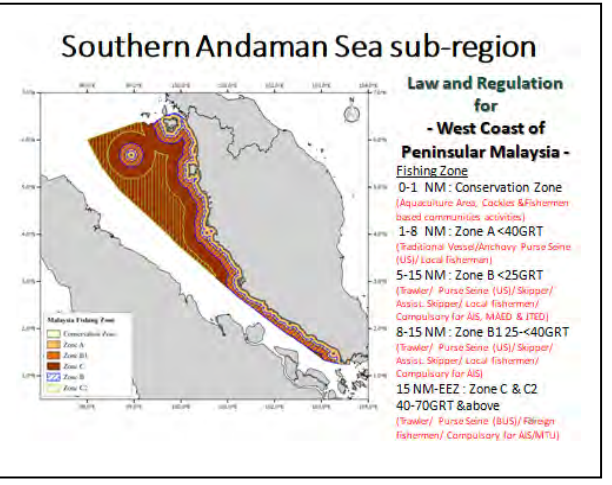
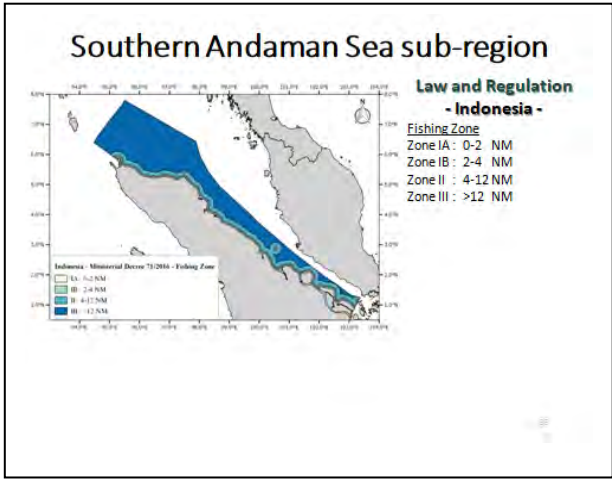
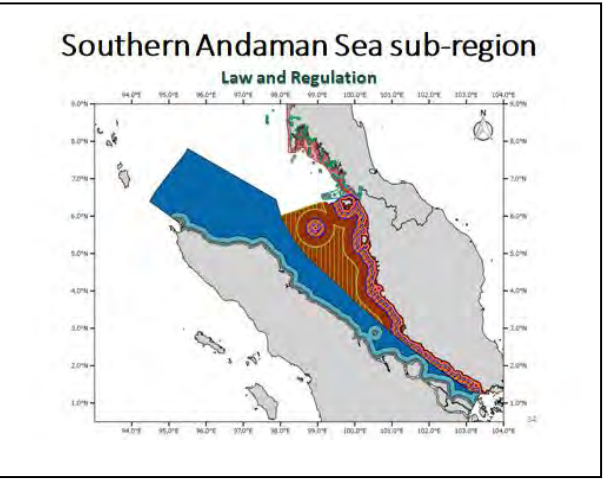
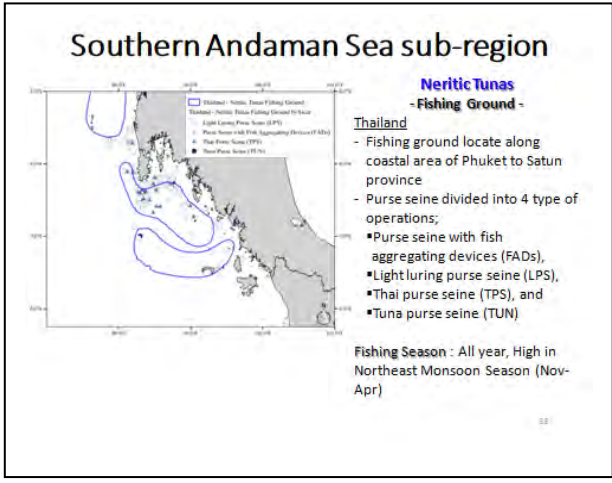
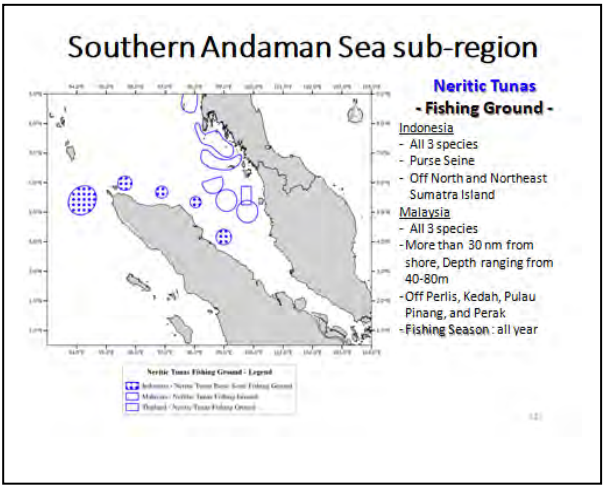
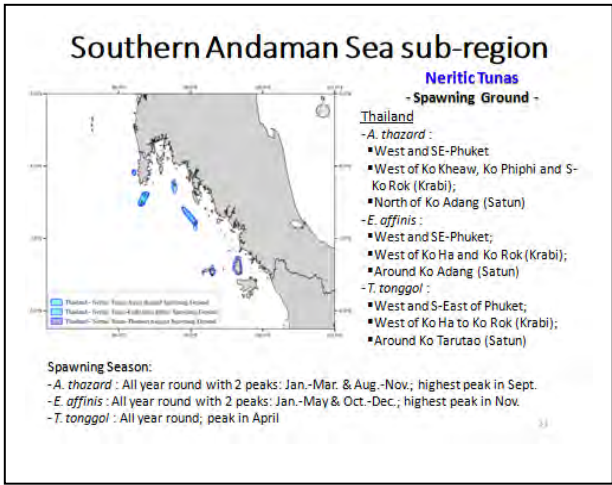


Short Mackerels
- Migratory Route -
Thailand - Malaysia population
 -Southern sub-population (sharing stock between Thailand and Malaysia); Full mature fish could be found around the Langkawi Island. It migrates northward to spawn around Bulon La Island to Adang-rawi archipelago. Larvae mackerel migrate southward during Feb.-Oct. and grow up to full mature stage around Langkawi Island.

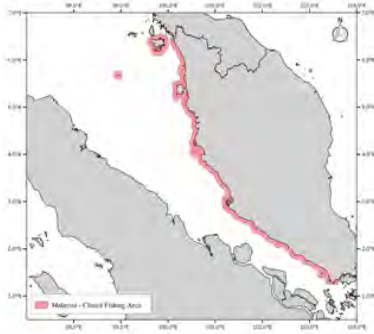
Southern Andaman Sea sub-region



Neritic Tunas
- Spawning Ground -
 -3 target species of Neritic Tunas (*Auxis thazard*, *Euthynnus affinis*, *Thunnus tonggol*)
Indonesia
 - Off Aceh
Malaysia
 - No information -



Southern Andaman Sea sub-region



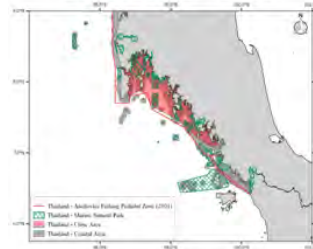
Law and Regulation - Malaysia -

Closed Fishing Area
0-5 NM: Commercial fishing vessels, like trawlers and fish purse seiners, are prohibited from fishing in waters less than 5 nautical miles from the shore.

The waters within 5 nautical miles of the shore are the nursery grounds of juveniles of prawns and fish.

Southern Andaman Sea sub-region

Law and Regulation - Thailand -



Marine Natural Parks

No fishing inside Marine Natural Park area

South Andaman Closed Area

Closed Area in Phuket, Phang-nga, Krabi, and Trang province for spawning period 1 April-30 July

Prohibited fishing gear

- Trawlers with engine
 - All surrounding net
 - Gill net mesh size less than 4.7 cm
- Allowing fishing gear
- Anchovy purse seine operate on day time (from sunrise to sunset)
 - Boat trawl with engine operate on night time (from sunset to sunrise)
 - Bamboo Stake Trap

Coastal Area

Notification of Ministry of Agriculture and Cooperatives, 2016 enlisted an fishing gear, fishing methods, and fishing areas which prohibited in coastal fishing zones (12 gear)

- Trawl net with engine
- Purse Seine net
- Fish Gill net with length over 2,000 m/annual
- Cable Gill net with length over 2,000 m/annual
- Shrimp Trammel net with length over 2,000 m/annual
- Squid net with length over 2,000 m/annual
- Cable Trap with mesh size less than 2.5 inch or over 300 days/annual
- Squid Trap over 100 traps/annual
- Ostracod Trap over 2,000 traps/annual
- Shrimp falling net, scrape or lift net with light luring machine
- Shrimp falling net, scrape or lift net with light luring machine
- Shrimp fishing gear with light luring machine to operate 20 distributor luring light

Anchovy Fishing Prohibit Zone

Notification of Ministry of Agriculture and Cooperatives, 2001

- Anchovies Net with Light Luring mesh size less than 2.5 cm are prohibited in all Thai waters except Anchovies Stick Held Dip Net with Light Luring and Anchovies Falling Net with Light Luring
- All Anchovies Net with Light Luring are prohibited (from shoreline to red line)

UPDATES ON THE CURRENT STATUS OF NEW PHASE OF BOBLME PROJECT


By Ms. Susana Siar



Sustainable management of the Bay of Bengal Large Marine Ecosystem (BOBLME) Programme (Phase 2)

Susana V. Siar
Fishery and Aquaculture Officer
FAO Regional Office for Asia and the Pacific

Bay of Bengal Large Marine Ecosystem



Area

- Total maritime area: 6.2 million km²
- Total area of EEZs: 4.3 million km²
- Combined length of coastline: 14 000 km

Environment

- 8% of the world's mangroves
- 12% of world's coral reefs
- Some of the largest estuaries in the world

Fisheries

- Number of fishers: 3.7 million
- Number of fishing boats: 415 000
- Annual fisheries production: 6 million tonnes
- Value of fisheries production: USD 4 billion

People

- Total population of countries: 2 000 million
- Population of coastal zone: 185 million

The Bay of Bengal Large Marine Ecosystem

- Provides food for nearly 400 million people
- Features important critical habitats: mangroves, coral reefs and seagrass beds
- Features a high degree of biodiversity and a large number of endangered and vulnerable species
- Provides fisheries livelihoods for 5 million people
- Provides ecosystem services worth USD 70 billion per year
- Produces 7% of the value of the world's fish catch
- Includes eight countries with diverse cultures, religions, political and biological systems
- Supports a thriving shipping and maritime industry



https://www.boblme.org/documentRepository/BOBLME-2012-TDA_Executive_summary.pdf

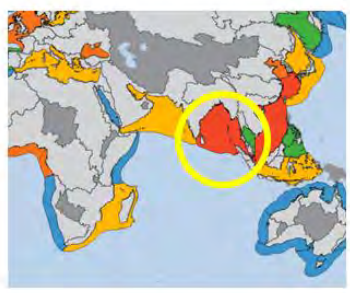


<https://www.boblme.org/documentRepository/BOBLME%20SAP-Final.pdf>

Bay of Bengal Large Marine Ecosystem

Major threats:

- Over-exploitation of fish stocks
- Habitat degradation
- Pollution



Overall SAP Vision: "A healthy ecosystem and sustainable use of marine living resources for the benefit of the people and countries of the Bay of Bengal LME"

1 Theme: Marine living resources	2 Theme: Critical habitats	3 Theme: Water quality	4 Theme: Social and economic considerations
<p>ECOSYSTEM QUALITY OBJECTIVE Protect and enhance marine resources from their natural and enhanced productivity</p> <p>OBJECTIVES</p> <ol style="list-style-type: none"> 1. Restore fishery resources that have declined 2. Restore and enhance species composition 3. Restore the proportion of juvenile fish caught that is retained 4. Restore biodiversity status level of 1980 by 2020 	<p>ECOSYSTEM QUALITY OBJECTIVE Designate, conserve and enhance habitats of national, regional and international importance</p> <p>OBJECTIVES</p> <ol style="list-style-type: none"> 1. Protect, manage and restore mangrove habitats to increase mangrove coverage and improve biodiversity 2. Restore and enhance ecologically sensitive mangrove, coral reef, seagrass, and other coastal and shallow water habitats and associated biodiversity and genetic resources and traditional activities 3. Protect and enhance other coastal and shallow water habitats and associated biodiversity, traditional and tourism values and biodiversity 	<p>ECOSYSTEM QUALITY OBJECTIVE Control and reduce pollution and other inputs and limit them to meet agreed standards for human and ecosystem health</p> <p>OBJECTIVES</p> <ol style="list-style-type: none"> 1. Reduce or prevent the discharge of untreated sewage and other waste into the sea, coastal and estuarine waters 2. Reduce and eliminate solid waste and marine litter 3. Reduce and control nutrients loading into coastal waters 	<p>SOCIO-ECONOMIC QUALITY OBJECTIVE Expand and enhance economic and livelihoods, leading to increased resilience and empowerment of coastal people</p> <p>OBJECTIVES</p> <ol style="list-style-type: none"> 1. Reduce vulnerability to natural hazards, climate variability and climate change, and increase climate resilience 2. Improve the living and working conditions of coastal fishing communities 3. Promote coastal people's participation in and benefit from sustainable development processes


BOBLME Phase 2

The BOBLME Project Framework Document is designed to implement the SAP

- It is based on the priority areas identified under each SAP theme
- Importantly it works at both national and decentralized levels, with a regional component
- It allows flexibility on identification of activities to be undertaken at national/local level
 - Local demonstrations/pilots for action on the ground as a basis for national/local impacts
 - Processes to inform national policy for more effective management coupled to regional cooperation and consensus building

How the Program Framework functions

- A GEF Program Framework is slightly different to a GEF project
- It can be combination of several "Child" projects
- The main umbrella programme and its resourcing is identified in the Programme Framework Document
- Projects are developed within this framework, using the available resourcing
- Additional "child" projects can be incorporated to the Program at a later stage if additional resourcing and co-financing is identified
 - Examples of national projects are:
 - STAR allocation (BD/CC)
 - Bank Loan projects
 - Donor/NGO/philanthropic funded projects
 - Regional (donor) funded projects



The Bay of Bengal Large Marine Ecosystem is defined for the BOBLME Project.

Joint agencies: FAO and ADB

Regional and subregional executing partners include: BOBP-IGO, SEAFDEC, IUCN/MFF, UN Environment (e.g. COBSEA, GPA), UNIDO, APFIC

National execution partners include Ministries of Fisheries and Agriculture, Ministries of Environment, and other national agencies from all 8 participating countries

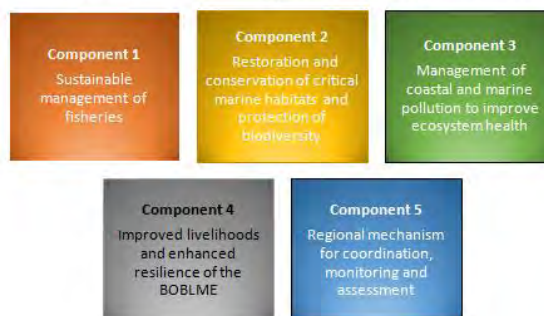
GEF Program Financing: USD 14 266 055

Co-financing: USD 165 000 000

Co-financiers: Bangladesh, India, Indonesia, Malaysia, Maldives, Myanmar, Sri Lanka, Thailand, FAO, ADB, Sweden, Norway, USA (NOAA, USAID), UNE, IUCN, UNIDO, SEAFDEC, BOBP-IGO, Japan Fund for Joint Crediting Mechanism, Bangladesh Forest Department

Program duration: 60 months

BOBLME 2 Program Components



Component 1: Sustainable management of fisheries (SAP theme 1)

- Outcome 1.1: The Ecosystem Approach to Fisheries Management (EAFM) institutionalized at national level for targeted transboundary fish stocks
 - EAFM training
 - Development of EAFM Plans
 - Promotion of Co-Management
- Outcome 1.2: IUU catch in the BOBLME reduced
 - National and Regional Plans of Action-IUU (NPOA/RPOA-IUU)
 - Strengthening of MCS, Port State Measures (PSM)
 - Capacity development to combat IUU

Component 2: Restoration and conservation of critical marine habitats and protection of biodiversity (SAP theme 2)

- Outcome 2.1: Coastal and Marine Managed Areas (MMAs) contribute to conservation of biodiversity and blue carbon
 - MMAs contribute to conservation of Endangered, Threatened or Protected Species (ETPs), Vulnerable ecosystems (VEs), Blue Carbon
- Outcome 2.2: National MMAs established/strengthened through improved management effectiveness at national level
 - Bangladesh STAR CC-M funding will be used for the Sundarbans
 - Only if additional STAR funding becomes available
- Outcome 2.3: Regional consensus and agreements on reduction of threats to marine biodiversity in coastal and open waters
 - RPOA ETP, legislative frameworks

Component 3: Management of coastal and marine pollution to improve ecosystem health (SAP theme 3)

- Outcome 3.1: Pollution from discharge of untreated sewage and wastewater; solid waste and marine litter; and nutrient loading reduced or minimized in selected hotspots in river, coastal and marine waters; promotion of cleaner fishing ports and addressing abandoned fishing gears at 8 hotspots applying ICM approaches
 - Coordination, monitoring, awareness, innovative technology
- Outcome 3.2: Demonstration investments in eco-waste infrastructure solutions: Mandalay City, Myanmar (ADB)
 - Waste and waste water management, reduced debris and litter emerging in main water courses, information sharing, regional protocols

Component 4: Improved livelihoods and enhanced resilience of the BOBLME (SAP theme 4)

- Outcome 4.1: Enhanced resilience of the BOBLME and reduced vulnerability to natural hazards, climate variability and change of selected coastal communities
 - Ecosystem services valuation, resilience plans, empowerment, gender considerations
- Outcome 4.2: Enhanced sustainable livelihoods and diversification for selected coastal communities
 - Value chain analysis, alternative livelihoods, financial services, capacity development

Component 5: Regional mechanism for planning, coordination, and monitoring of the BOBLME (SAP crosscutting theme)

- Outcome 5.1: Strengthened institutional mechanisms at regional and national levels for planning, coordination and monitoring of the BOBLME
 - Consortium for the Conservation and restoration of the BOBLME (CCR-BOBLME), partnership arrangements; inter-sectoral coordination, consultation, base line data
- Outcome 5.2: Program implementation based on adaptive results-based management
 - Regional information sharing, lessons learnt, IW & LME Learn
 - Monitoring and evaluations

Where we are now

- 54th GEF Council meeting in June 2018 in Da Nang approved USD 14, 266, 055 in funding for BOBLME Phase 2 – FAO and Asian Development Bank as joint agencies
 - USD 9, 174, 312 for the regional BOBLME 2
 - USD 4, 587, 156 for the ADB child project in Mandalay, Myanmar
 - USD 504, 587 for the Bangladesh CCM-STAR
- Project Preparation Grant (PPG) has been approved by the GEF Secretariat for the **child projects** after approval of the PFD
 - Will be used to develop **full-fledged projects** in consultation with all BOBLME countries and **partners**
 - **All PPG activities to be completed by 31 October 2019**

Next steps

- Re-establishment of BOBLME governance structure for each participating country
 - National Coordinator
 - Project Steering Committee members
 - One from the Fisheries Ministry
 - One from the Environment Ministry
- Establishment of team of consultants and LoA service provider to develop the full project proposal (for FAO child project)
- Regional inception meeting with participating countries, partners and donors
- Country and subregional consultations
- Consultations with partners and donors

Next steps

- Participation in IW Learn events and upstream GEF coordination
- Drafting of FAO child project (full project document)
- Regional validation workshop
- Letters of co-finance
- Final project document submission to GEF
- Communications and website update

CURRENT LAW AND LEGISLATION AND ENFORCEMENT ON MANAGEMENT OF NPOA-CAPACITY, NPOA-IUU OF INDONESIA

By Mr. Turman Maha

Ministry of Marine Affairs and Fisheries
Directorate General of Capture Fisheries

Management Fishing Capacity in Indonesia

Rizal Rizal
Marine and Fisheries Analyst
Directorate Fisheries Resources Management

Bangkok, 20 November 2018

Indonesian Assets

- FISHERIES**
 - ✓ Potential of Capture Fisheries Marine: 1.25 million ton/year
 - ✓ Inland: 2.03 million ton/year
 - ✓ Aquaculture: 17, 91 million Ha
 - ✓ Marine Biota for medicine: 35000 species
- ENERGY**
 - ✓ Total: 145 in NTB reaches 5 m, potentially as an energy source
 - ✓ Sea Heat: Potential 240,000 MW
 - ✓ Wind: average wind speed 3 m/s can produce 100 KW
- MINING**
 - ✓ Oil and Gas: 223,85
 - ✓ Milliar Barrel
 - ✓ Coal: Rp. 4.136,77
 - ✓ Milliar /year
 - ✓ Mineral: 25 potential island
- TOURISM**
 - ✓ Coral Reef: 8 locations from the 10 best ecosystem locations in the world
 - ✓ Coastline: 95,181 km
 - ✓ Dive Area: Coral Triangle: 235 spot in 11 location
- OTHER MARINE SERVICES**
 - ✓ Shipgrade rank (BMT): 700-900 vna BMT
- MARITIME INDUSTRY**
 - ✓ Shipping Tonnage: to build 134 units of ships / 88000 GT with a capacity value of Rp. 10 trillion
 - ✓ Transportation: large inter-island transportation needs

Three Pillars of Marine and Fisheries Resources Management

Strong governance is the basis to maintain the sustainability of productivity enhancement of marine and fishery resources in Indonesia. Strong fisheries governance is built upon three big pillars of **sovereignty, sustainability and prosperity**.

SOVEREIGNTY MISSION

1. FREE TO DETERMINE one's purpose for the sake of national interest, without foreign intervention
2. NATIONAL SECURITY, which includes the security of its natural resources
3. THE OCEAN'S RESOURCES IS ADEQUATE for more than one generation
4. THE OCEAN BOLSTERS NATION'S DEVELOPMENT
5. FISHERIES RESOURCES TO enhance the quality of the people in one nation

PROSPERITY MISSION

6. TO ACHIEVE THE GOAL OF PUBLIC WELFARE as mandated by the Preamble of the 1945 Constitution of the Republic of Indonesia
7. HUMAN SECURITY, which includes a healthy environment, insured health, decent education and protected human rights

STRONG FISHERIES GOVERNANCE

MINISTRY OF MARINE AFFAIRS AND FISHERIES OF INDONESIA 3

INDONESIA'S STATUS OF FISHERIES RESOURCES EXPLOITATION IN 2016

Legend:

- 0-1%: Sangat Rendah (Very Low)
- 1-2%: Rendah (Low)
- 2-3%: Sedang (Medium)
- 3-4%: Tinggi (High)
- 4-5%: Sangat Tinggi (Very High)

Source: MAF/FP

Establishment of Fisheries Management Institution at 11 Fisheries Management Area (FMA)

National level: Head, Secretariat, 11 Fisheries Management Area (FMA) Offices.

FMA level: Executive Coordinator, Secretariat, National Management Coordinator and WPA, Scientific Panel, Advisory Panel.

Working Groups: Sub-Working Group, National Management and Governance Working Group, Sustainable Compliance Working Group.

Fisheries Management Plan

Regulation for Fishery management plan based on area:

1. FMA 571: Ministerial Decree Number 75/KEPMEK-KP/2016.
2. FMA 572: Ministerial Decree Number 76/KEPMEK-KP/2016.
3. FMA 573: Ministerial Decree Number 77/KEPMEK-KP/2016.
4. FMA 711: Ministerial Decree Number 78/KEPMEK-KP/2016.
5. FMA 712: Ministerial Decree Number 79/KEPMEK-KP/2016.
6. FMA 713: Ministerial Decree Number 80/KEPMEK-KP/2016.
7. FMA 714: Ministerial Decree Number 81/KEPMEK-KP/2016.
8. FMA 715: Ministerial Decree Number 82/KEPMEK-KP/2016.
9. FMA 716: Ministerial Decree Number 83/KEPMEK-KP/2016.
10. FMA 717: Ministerial Decree Number 84/KEPMEK-KP/2016.
11. FMA 718: Ministerial Decree Number 84/KEPMEK-KP/2014.


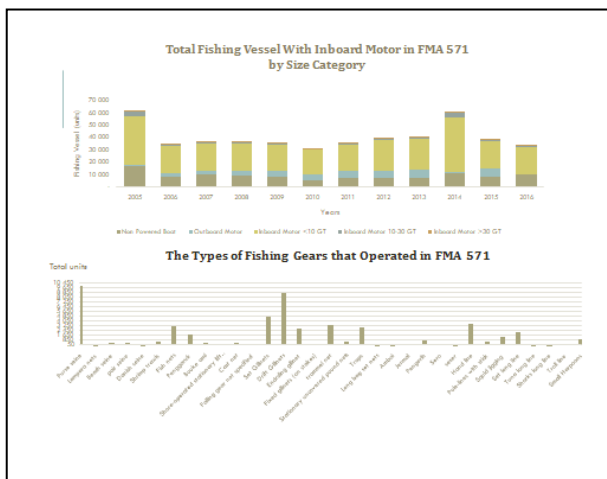
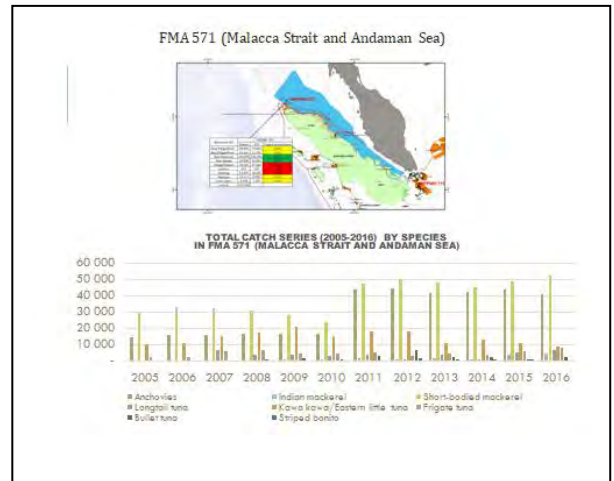
Regulation for Fishery management plan based on species:

1. Blue Swimming Crab: Ministerial Decree Number 70/KEPMEK-KP/2016.
2. Flying fish: Ministerial Decree Number 69/KEPMEK-KP/2016.
3. Bali Strait Sardine: Ministerial Decree Number 68/KEPMEK-KP/2016.
4. Tuna Neritic Tuna, Skipjack: Ministerial Decree Number 107/KEPMEK-KP/2015.

Management Actions

1. Pengaturan masukan (**input control**): arrangements related to inputs to fisheries, such as the number of vessels / number of GT / fishermen making arrests;
2. Pengaturan keluaran (**output control**): arrangements related to output from fisheries, such as the amount / weight of fish caught.
3. Pengaturan teknis (**technical control**): arrangement of fishing gear: net mesh, use of fish separator, etc.
4. Pengaturan area & waktu (**spatial-temporal**): closure of spawning areas, spawning season, etc.

In fisheries management practices input / output controls are often combined with technical controls and / or other spatial-temporal controls

Indonesia's Efforts for Management Fishing Capacity

Fishing Logbook

- Legal basis: Ministerial Decree No. 48/2014 on Fishing Logbook.
- Mandatory to:
 - Fishing vessel greater than 5 GT;
 - Fishing vessel operating in high seas.
- Type of Fishing Logbook
 - Logbook for longline and handline;
 - Logbook for purse-seine, pole and line, trolling;
 - Logbook for other gear types.
- As a landing declaration.
- Has to be submitted to the port authority prior to unloading the catch.
- Verification by the port authority.
- Logbook data will be uploaded into logbook system.

Catch Certificate (SHT)

- Legal basis: Ministerial Decree No. 13/2012 concerning Catch Certificate.
- To prevent, eliminate and combat IUU Fishing Activities.
- Catch certificate consist of:
 - Initial Sheet;
 - Derivative sheet;
 - Derivative Sheet of Simplified Catch Certificate.
- Requirement to export fish product to

Observer on Board

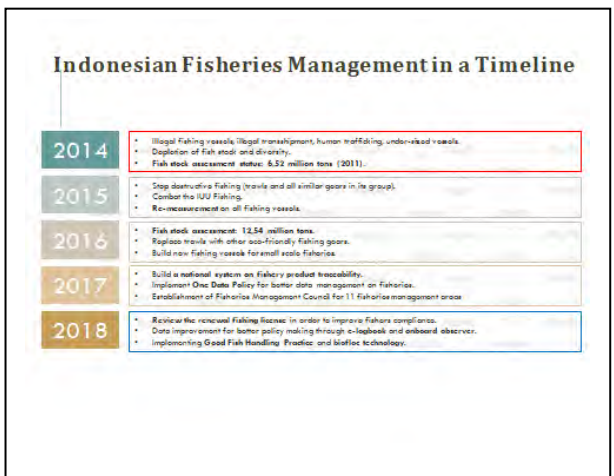
- Legal basis: Ministerial Decree No. 17/MEN-PP/2013 concerning Observer on Board.
- Transshipment Monitoring.
- Verify Logbook data.
- Scientific Data.

SBT-Catch Documentation Scheme (CDS) → CCSBT

- Legal basis:
 - Resolution on the implementation of a Catch Documentation Scheme (CDS) to Record All Catch of Southern Bluefin Tuna, 17 October 2013;
 - Director General Letter No. 08/2014 concerning technical guideline in implementation of SBT Catch Documentation Scheme.
- SBT tag be attached to each whole SBT at the time of kill.
- Objective:
 - To combat IUU Fishing;
 - To timely monitor the catch of each member of CCSBT;
 - To avoid the total catch is exceeding of national quota.
- All vessels fishing for SBT both as target species or by catch has to be included in CCSBT record of vessels authorized to fish for SBT.

Harvest Strategy

- Legal basis: Director General Letter No. 17/2017 concerning technical instructions for development document Harvest strategy.
- Harvest strategy:
 - Important component of a broader Fisheries management framework in the RPP;
 - serve as an operational complement to a RPP
 - become the basis of an adaptive management cycle;
 - provide a formal and consistent approach to management decision-making processes
- Objective:
 - to maintain optimal utilization rates when the status of fish stocks is healthy;
 - encourage recovery when the status of fish stocks is depleted, as well as ensure a low level of risk in conditions of dangerous fish stocks or cannot recover.



Implementation of Electronic Fishing Logbook to Indonesian Fishing Vessels



E-LOG BOOK APPLICATION FOR FISHING

Electronic / digital fishing data reporting application, which is filled independently by the skipper on departure and arrival and during electronic fishing operations sent to the Fishing Log Book Information System (SILOPI) 2018 2019

2018	2019
<ul style="list-style-type: none"> > 30 GT fishing vessels. More than 3,800 Indonesian Fishing Vessels in Indonesian FMA and High Seas (authorized per 23 Oct 2018). IDR 2.6 billion. 	<ul style="list-style-type: none"> > 10 GT fishing vessels. More than 10,000 Indonesian Fishing Vessels in Indonesian FMA. IDR 3.5 billion.

The advantages of E-Log Book



Practical
The collection process is easier and more efficient (gadget based)



Paperless
Does not require paper in the process of recording fishing operations data



Report
Submission of fishing operation data reports without the need to the Fisheries / General Port office



Integrated
Data is directly integrated with the SILOPI Application



Offline Mode
Can be input offline and sent when online



- Impacts:**
1. Improve data quality and quantity as a foundation for strong fishery policy.
 2. Strengthen the traceability system for Indonesian fishery products.
 3. Improve compliance of Indonesian fishers to fisheries regulation.
 4. Prevent IUU fishing in general.

Expanding Deployment Coverage of Observer Onboard Indonesian Fishing Vessels In 2019



100 Observers. 11 Indonesian Fisheries Management Areas & High Seas.
IDR 11.85 billion. 350 vessels, 30,000 observation days.

Impacts:

1. Increase compliance level of Indonesia to RFMOs.
2. Improve data quality and quantity as a foundation for strong fishery policy.
3. Strengthen the traceability system for Indonesian fishery products.
4. Improve compliance of Indonesian fishers to fisheries regulation.
5. Prevent IUU fishing.
6. Mitigate impacts of fisheries to Ecological Related Species, including Endangered, Threatened and Protected species.

Indonesian Fisheries Management

Certifying 1,200 Export-oriented Fishing Vessels with Good Fish Handling Practice (CFIB)

"To ensure implementation of seafood safety and quality assurance systems to Indonesia fisheries products."

2019	2020	2021
<ul style="list-style-type: none"> 400 fishing vessels. USD 85,714 (IDR 1.2 billion). 	<ul style="list-style-type: none"> 400 fishing vessels. USD 85,714 (IDR 1.2 billion). 	<ul style="list-style-type: none"> 400 fishing vessels. USD 85,714 (IDR 1.2 billion).

Implemented at 538 Fishing Ports in Indonesia

Boosting Fisheries Production by Using Biofloc Aquaculture Technology
USD 6,754,000 (2017-2019)

550 packages in Java, Sumatera, Kalimantan, Papua, Bali and Sulawesi.

3.0 tons package/cycle or 1,980 tons in total/cycle

Fish Stock Assessment

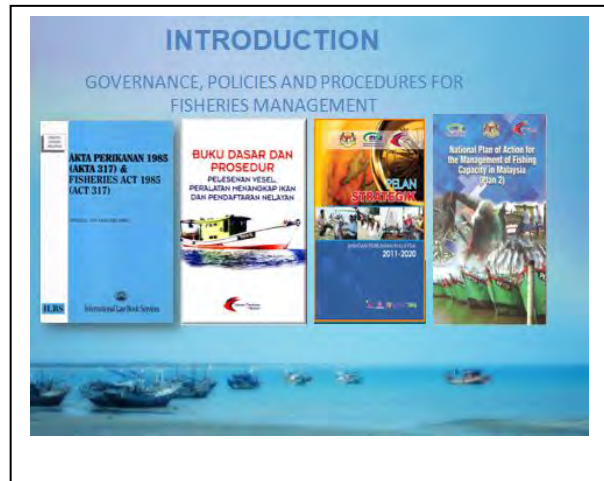
"Stock Assessment is essential to provide scientific basis for fishery manager in determining management actions ensuring the sustainability of the fish stock."

USD 3,000,000 for fish stock assessment

"Considering the complexities of the fishery, connectivity of the oceans and migratory of fishes a collaborative work is required, along with these Indonesia proposes the establishment of ASEAN Ocean assessment to provide scientific advice for sustainability of the fish stocks in this region to relevant fishery managers."

CURRENT LAW AND LEGISLATION AND ENFORCEMENT ON THE MANAGEMENT OF NPOA-CAPACITY, NPOA-IUU OF MALAYSIA

By Mr. Abdul Rahman bin Abdul Wahab



NEW MANAGEMENT DIRECTION

1. Species -Area specific Fisheries Management Plan (FMP)
2. Data-intensive management approach
3. Emphasis on inclusiveness throughout the process -Multi stakeholder through EAFM
4. Intensification of capacity building
5. Bridging the knowledge gap between managers & scientists
6. Formed National Committee on Fish Stocks- so as better respond to SDG 14
7. Vessel modernization to look into standardization of fish vessel -in the pipeline
8. Fishing Gear specification
9. Marking of fishing gear
10. Imposed mandatory use of TED for monsoon trawler starting 1 November 2017.

Species specific

Target Species

1. Anchovy fishery
2. Small Pelagics fishery
3. Neritic Tuna Large Pelagics fishery (Neritic Tuna fishery)
4. Oceanic Tuna Large Pelagics fishery (Oceanic Tuna fishery)
5. Other Large Pelagics fishery (Large Pelagics fishery)
6. Demersal and Cephalopods fishery
7. Prawn fishery
8. Brackishwater fishery
9. Bivalves fishery
10. Sergestid shrimps fishery
11. Lobsters fishery
12. Sea cucumbers fishery
13. Jellyfishes fishery

Area specific :

1. North WCPM waters
2. South WCPM waters
3. North ECPM waters
4. South ECPM waters
5. Sarawak waters
6. West Sabah and Labuan waters
7. East Sabah waters

MANAGEMENT MEASURES

1. Zoning System

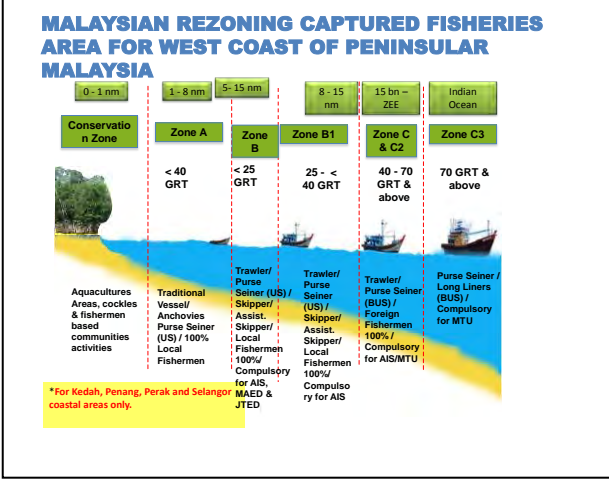
Zone	Distance	GRT	High Seas
A ZONE	0-5 nm	0 - <40 GRT	
B ZONE	5-12 nm	0 - <40 GRT	
C ZONE	12-30 nm	40 - <70GR T	
C2 ZONE	30 nm to EEZ Boundary	70 GRT and above	
C3 ZONE	High Seas	70 GRT and above	

For Traditional Fisherman & Traditional Anchovy Purse Seiner (Owner Operator)

Trawlers & Purse Seiner (Owner Operated & Non Owner Operated)

Tuna Longliners & Tuna Purse Seiner

* There is no restriction for vessels operating at the lower zones to fish at the further up zone. i.e. vessels in Zone A are allowed to fish in Zone B, C and C2.



Working on...

1. Development of generic Catch Certification scheme - SIMP
2. Measure to US Marine Mammal Protection Act

MANAGEMENT MEASURES

4. PENALTY FOR ENCROACHMENT THE AREA OF 5 NM AND BELOW)

No. Of Offence	GRT of Trawler			
	<25 GRT	25 - < 40 GRT	40 - < 70 GRT	> 70 GRT
1 st time	i. Compound RM3,000	i. Compound RM6,000	i. Compound RM12,000	i. Compound RM12,000
2 nd time	+ 1 year license suspension + Fishing gears confiscated	+ 1 year license suspension + Fishing gears confiscated	+ 1 year license suspension + Fishing gears confiscated + Ownership change is not allowed for 5 years	+ 1 year license suspension + Fishing gears confiscated + Ownership change is not allowed for 5 years + Proceeds from the auction of fishes forfeited
3 rd time	iii. Ownership change is not allowed for 5 years + Proceeds from the auction of fishes forfeited	iii. Ownership change is not allowed for 5 years + Proceeds from the auction of fishes forfeited		

Court

NPOA Fishing Capacity (Plan 2)

- Launched 2015
- Operational Period: 2014-manage
- is being reviewed
- to suit the new FMP

Legal Framework

- The Fisheries Act 1985 provide the legislative framework for the conservation, management and development of the capture fisheries in Malaysia. Review is underway to be in consistent with international laws

- Section 15. Fishing, etc., by foreign fishing vessel in Malaysian fisheries waters.

- (1) Subject to subsection (2), no foreign fishing vessel shall do any of the following in Malaysian fisheries waters:

- a) fish or attempt to fish; or
 - b) subject to subsection (1A), conduct any techno-economic research or survey of any fishery

- (2) No foreign fishing vessel shall load or unload any fish, fuel or supplies or tranship any fish in Malaysian fisheries waters without the written approval of the Director-General.

- Section 16. Passage of foreign fishing vessel through Malaysian fisheries waters.

challenges

1. Review processes is lengthy
2. Sanction scheme envisioned by EU is different from the one in practice
3. multi agencies jurisdictions
4. Accession to international treaty - cost and benefit

CURRENT LAW AND LEGISLATION AND ENFORCEMENT ON MANAGEMENT OF NPOA-CAPACITY, NPOA-IUU OF MYANMAR

By Dr. Kyaw Kyaw

4th Meeting of the Andaman Sea Sub-Region

Country update on current law and Legislation and Efforts on management of Fishing capacity and combating IUU fishing (NPOA-Capacity; NPOA-IUU)

Department of Fisheries, Myanmar

20-21 November 2018 Bangkok Lotus Hotel, Thailand

Legal Framework

- Myanmar Marine Fisheries Law (1990)
- The Law relating to the Fishing Rights of Foreign Fishing Vessels(1989)
- Freshwater Fisheries Law (1991)
- Aquaculture Law (1989)




Key Issues related IUU fishing

- DoF requested to Trade Development Programme supported by EU-GIZ for the development of National Plan of Action –NPOA to combat IUU fishing in Myanmar.
- EU Consultant has conducted the mission for NPOA and it includes ;
 - general assessment of fisheries status in Myanmar
 - assessment of IUU fishing in Myanmar
 - proposed key NPOA-IUU measures
 - Structure of the NPOA-IUU

IUU fishing assessment

- offshore illegal fishing
- inshore illegal fishing
- unreported and unregulated fishing



Illegal fishing (offshore)

- fishing without a license (including copy-cat vessels)
- vessels registered and licensed as inshore vessels
- illegal (unlicensed) encroaching on foreign waters
- zone violations – encroaching on inshore waters or protected areas

Illegal fishing (offshore)

- violation of maximum number of sailing days (especially foreign fleet)
- incursions of foreign unlicensed fishing vessels into Myanmar waters (pirate fishing)
- deployment of excessive number of stationary units (traps, stow nets, rafts, etc.)
- deployment of non-conform gear (violation of gear specifications; e.g. mesh size)

Illegal fishing (inshore)

- ▶ fishing with non-conform gears (*e.g.* mesh size)
- ▶ dynamite and cyanide fishing
- ▶ non-registered and non-licensed fishing vessels (*e.g.* baby trawls)
- ▶ fishing without a license
- ▶ fishing outside of allocated fishing ground (incursions)



7

Illegal fishing (inshore)

- ▶ fishing with illegal gears (*e.g.* baby trawls)
- ▶ fishing in closed areas (MPAs)
- ▶ deployment of excessive number of stationary units (traps, etc.)



8

Unreported fishing

- ▶ **illegal at-sea transshipments:** direct illegal exports (affects both inshore and offshore fisheries – especially in the south). Catch and production data/statistics directly affected. State revenue diminished
- ▶ **illegal direct landings in foreign ports:** affects both inshore and offshore fisheries – especially in the south. Catch and production data/statistics directly affected. State revenue diminished. Presumed weak port controls in surrounding jurisdictions – and little bi-lateral MCS cooperation

9

Unregulated fishing

- ▶ few capacity limits in most fisheries – including lacking gear specifications
- ▶ most fisheries lack fisheries-specific management rules altogether
- ▶ generic management rules (*e.g.* closed season in offshore fishery) of mixed usefulness
- ▶ pervasive lack of law enforcement

10

Drivers of IUU fishing

- ▶ DOF transferred the inspection power to NAVY
- ▶ No inspection boat in coastal and deep sea water.
- ▶ Manpower (limited budget for recruitment)
- ▶ Heavy duties (inspection for quality control, aquaculture, inland and marine fisheries)
- ▶ Political commitments



Initiatives to address IUU fishing

- ▶ Consultation with stakeholder
- ▶ Development of VMS
- ▶ Development of Fisheries Co-management
- ▶ Commitment of Parliament
- ▶ Assistance of Development Partners



Gaps that need to be addressed to eliminate IUU fishing

- Legal requirement
- Proper fisheries management plan
- Recommendation of stakeholders
- Strong political commitment
- Effective law enforcement
- Capacity buildings
- Recruitment



Country update for IUU fishing

- Current fisheries law is cover to combat IUU fishing but it is need to compensate specific definition according to International document under by law and procedure
- Now drafting the new marine fisheries law and submitted to Parliament for final approval
- NPOA-IUU drafted by the year 2015 and approved by 2016 and now already implemented according to NPOA-IUU to combat IUU fishing in the country
- For NPOA-Capacity, DoF has planned to draft the Fishery Management Plan by 2019, which will cover to the managing fishing capacity
- Translating English version from Myanmar trade related existing documents

Thank you for your kind attention

**CURRENT LAW AND LEGISLATION AND ENFORCEMENT ON MANAGEMENT OF
NPOA-CAPACITY, NPOA-IUU OF THAILAND**

By Ms. Duangporn Na Pombejra

**The 4 th Meeting
of Andaman sea Sub-region**

20-21 November 2018
Bangkok, Thailand

**Updates on Current Law
and Legislation and Efforts on
management of Fishing Capacity
and combating IUU Fishing
(NPOA- Capacity; NPOA-IUU)**

Department of Fisheries, Thailand

**Agenda 5 – Promote of Effective Management of
Effective Management of Fishing Capacity and to
reduce illegal and destructive (combat IUU) Fishing
in the Andaman Sea Sub-region**



Outline of Presentation

- ▶ **Legal Framework**
 - Situation before 2015
 - New legal Framework on Fisheries management
 - Legal Instruments related to fisheries
- ▶ **Actions Taken**
 - A new legal framework
 - Controlled fishing effort
 - Controlled Fishing gear
 - Controlled fishing vessel registration



Legal Framework

Situation before 2015

Poor Legal framework

No Control on fishing effort

Ineffective operational systems

No fulfill obligation of Int' instruments with respect to CMMs

Poor National Collaboration

Prior to 2015

Insufficiency for effective fisheries management

- The Fisheries Act 1947
- Thai Vessel Act 1938

New Legal Framework on Fisheries Management

- Royal Ordinance on Fisheries 2015
- Royal Ordinance on Fisheries 2015 and the amendments
- Royal Ordinance on Thai Vessels 2018
- National Council for Peace and Order – NCPO Order

Legal Instruments relating to Fisheries

Law of the Sea Convention (UNCLOS)	UN Fish Stock Agreement (UNFSA)	FAO Port State Measures Agreement (PSMA)	IOTC	SIOFA	WCPFC
Party	Party	Party	CP	CP	CNP

Actions taken – a new legal Framework

A limited access system – A fishing license

- The number and type of Fishing gear authorized
- The maximum allowable catch or time period during which fishing operations are permitted
- MSY is used as the reference point for license
- Taken into account the fishing capacity and natural productivity of fish

Actions Taken – Controlled Fishing Effort

Applied catch limitation to fishing license

Based on the 2015 FMP

- Dermal fish: 40% reduction in the Gulf of Thailand and 10% in the Andaman Sea
- Pelagic fish : 30% reduction in the Gulf of Thailand and 20% in the Andaman Sea

To reduced capacity

- Applied TAC to each license
- Limited Fishing days for vessel with high-efficiency gear
- Reduced the number of license available in certain areas through the license combination programme

Actions Taken – Controlled Fishing Gear

To Control the Efficiency of Fishing Gear

- ▶ The issuance of new high efficient gear license is not allowed
- ▶ All artisanal vessel operating high efficiency gear had to apply for a commercial fishing license
- ▶ High efficiency gear type : pair trawl; otter board trawl ; beam trawl ; purse seine; anchovy purse seine; anchovy falling net; anchovy lift net
- ▶ Ban on destructive fishing gear

Actions Taken – Controlled Fishing Gear

- ▶ Limitation of fishing days 30 days –291 days with regard to the size of fishing vessel/2 years duration of fishing license
- ▶ Limitation of number of fishing vessel – Trawl nets ; Surrounding nets; Lift nets or falling nets; Gillnets or set gill nets
- ▶ Mesh size limitation
- ▶ Seasonal area close
- ▶ Zoning 1.5 – 12 NM for Artisanal vessel

Actions Taken – Controlled fishing vessel registration

Increased registration controls

- ▶ Control of vessel registration
- ▶ Control of vessel change of purpose
- ▶ Authority to revoke registrations
- ▶ Authority to identified vessels with Unique Vessel Identification (UVI)

Increased collaboration

- ▶ Integrated MD and DOF processes
- ▶ Collaborated with other countries to verify registration

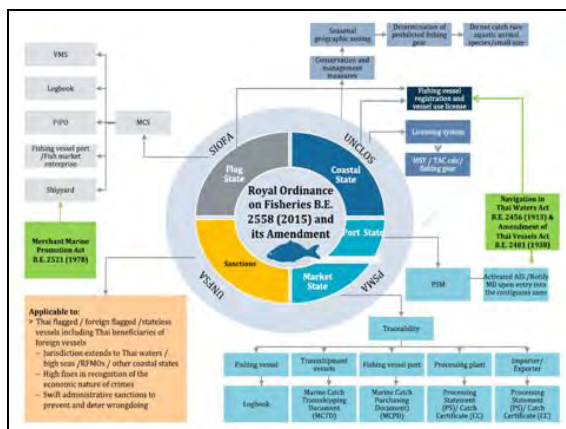
Key Issues – The Royal Ordinance on Fisheries 2015

Fisheries Law Reform

- ▶ Licensing system based on scientific findings and Maximum sustainable yield (MSY)
- ▶ Efficiency measure against vessels undertaking IUU within and outside Thai waters ,regardless of its' nationality of vessel or offenders
- ▶ Traceability system from catch to the consumer as a market state
- ▶ Monitoring, Control and Surveillance (MCS) as a flag state, coastal state and port state
- ▶ Port State measures
- ▶ Administrative sanctions / Deterrent criminal sanctions
- ▶ Safeguard of welfare of seamen to prevent human trafficking, forced labour and illegal practices


Key Issues – The Royal Ordinance on Fisheries and the amendment 2017

- ▶ More effective control measures on fishing activities , in particular on control of transshipment activities
- ▶ Strengthening PSM measures on import of fish and fish product and uploading at port by Foreign flagged vessels etc.



UPDATES ON PROGRESS OF MONITORING, CONTROL, AND SURVEILLANCE OF INDONESIA

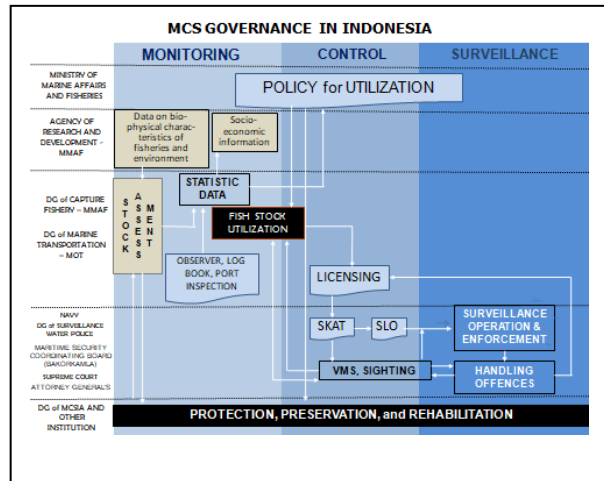
By Mr. Rizal Rifai



**Ministry of Marine Affairs and Fisheries
Republic of Indonesia**

**MCS SYSTEM TO PREVENT, DETER AND ELEMINTATE
ILLEGAL, UNREPORTED AND UNREGULATED (IUU) FISHING**

INDONESIA



- MONITORING Aspects :**
- Observer : Only For Transporter Vessel (Transshipment at sea)
 - Landing Compulsory to the designated port (2 Port have been put in license)
 - Log Book Report (planning to have on-line log-book)
 - Fishing port is limited in the number
 - Artisanal Fishing :
 - < 10 GT, No Need Document, Only Registration
 - No need log book
 - No need report to the port, difficult to record the data

- Controlling Aspects :**
- License : < 30 GT Province Authority, > 30 GT Central Gov.
 - Fishing Vessel have each Fishing Zone to Fish, Fishing outside the zone is subject to violation
 - Fishing in Indonesia jurisdiction VS Fishing in High Seas. It have Different license mechanism. For vessel licensed to fish in high seas are restricted to fish in ZEE.
 - > 30 GT is subject to install VMS
 - SLO (Legal letter from Fisheries inspector)
 - SPB (Sailing Permit from Harbor Master)

- MARINE & FISHERIES STRATEGIC ISSUES**
- 
- Illegal , Unreported and Unregulated Fishing (IUU Fishing)
 - over fishing
 - Fisheries Business Competitiveness
 - Tariff Barrier
 - Marine ecosystem degradation
 - Fuel supply for fisherman and artisanal fisheries
 - Salt Importation
 - climate change
 - Poverty in coastal area



Various Model of Illegal Operation

- Fishing vessels without legal permit
- Fishing using prohibited fishing gears, in unauthorized fishing ground, port of call
- Fake documents, manipulation of prerequisite to conduct fishing activities (DC, Bill of Sale)
- Unreported Transshipment (without reported to the assigned fishing ports)
- Double flagging (not reflag)
- Dummy (Unreal) company address and forgery of documents issued by other institutions.

04/12/2018

STRENGTHENING MCS

- MONITORING

- Continues to collaborate with the relevant agencies body for FSA and agreed on the latest standard assessment
- Establish KOMNASKAN (National Fishery Commission)
- Developing integrated Infrastructure (Center of Integrated Fisheries and Marine)
- Developing E-Log Book

PROMOTING RESPONSIBLE FISHING PRACTICES

GOOD GOVERNANCE

- Transshipment Ban:** Minister Regulation 5/7/2014
- Monitoring of Illegal Fishing Vessel:** Minister Regulation 56/2014
- Subsistence prohibition for an fishing vessel until 31 Oct 2015:** Minister Regulation 10/2015
- Start on Road:** Minister Regulation 71/PERMENA/2016
- Transparency:**
 - Open Vessel License Data dan VMS Data for Public
 - Cooperate with Global Fishing Watch
- Working of Apprehended Fishermen:** 100 Fishermen Released (100 Illegal IV / 842 Foreign IV, 21 Domestic)
- Enhance regional and international cooperation:**
 - Strengthen to Improve Governance of Fisheries Business
- ANVC Compliance Audit of 1,132 as Foreign Fishing Vessel**
- Handling of Human Right Case:** Repatriation (Resolving Issues of Foreign vessel case)
- Fishing Capture Business is only for Domestic and ICCP for the Foreign Vesselmark (Peraturan Dekrete 44/2016)**
- Joint communication on IUU with 11 countries:** India, Norway, Palau, PNG, Solanda Baru, Timor Leste, Australia, Sudan, Rusia, Sri Lanka, Vietnam
- Establishment of Task Force to Prevent and Combat IUU Fishing**
- Strengthening of Law Enforcement:**
 - Enhance among law enforcement institution:
 - Law enforcement on administration for on foreign fishing vessel and the owner
 - Law enforcement on cooperation crime
- Establishment of Task Force on Combating Illegal Fishing (Presidential Decree 119/2015)**

EFFORT ON COMBATING IUU FISHING

Soft Structures

- Public Information Campaign dan Public Awareness for related stakeholders;
- Follow up action on PSMA, implementation of European Commission/EC Regulation;
- Capacity building for fisheries inspector and investigator;
- Member of RFMO (IOTC, CCSBT, and WCPFC);
- Participating country of the Regional Plan of Action (RPOA) to promote responsible fishing practices including combating IUU fishing in Southeast Asia region;
- Actively involve in bilateral, regional and international Forum, such as Indonesia-Australia Fisheries Surveillance Forum (IAFSF), Indonesia-Malaysia Joint Operation (Malindo), International Monitoring, Control, and Surveillance (IMCS) Network, ASEAN Maritime Forum (AMF), Regional Fisheries Management Organization (RFMO);
- National Plan of Action (NPOA) to prevent and to combat illegal, unreported, and unregulated (IUU) fishing 2012-2016.

EFFORT ON COMBATING IUU FISHING

Hard Structures

- MCS implementation:
 - VMS;
 - Observer program;
 - Logbook;
 - Port inspection;
- Intensify surveillance operation:
 - At port: document/license checking, fishing vessel, fishing gear, crew, etc;
 - On Sea: surveillance patrol, inspection on board, interdiction;
- Institution capacity building: Technical implementation unit of surveillance (widespread in Indonesia regions);
- Increasing surveillance infrastrucur: Patrol vessel, Speedboats, and also surveillance facilities and equipments;
- Develop Integrated Surveillance Systems (ISS);
- Facilitate and strengthen surveillance based community;
- Coordinated patrol with other institution (e.g marine police and navy) for law enforcement on the sea;
- Coordinated patrol with neighbouring countries [Australia, Malaysia];
- Establish and develop fisheries court.

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Surveillance Capacity and Capability

INSTITUTION: 5 based, 5 stations, 58 implementing units, 140 surveillance posts

FACILITIES: 27 patrol boats (28-42 m), 64 speed boats, 3,500 VMS, 250 megazines, investigator's equipments and properties

INFRASTRUCTURES: Office, Space, Investigation, evidentplaces, Bunkers, Jetty, Detention Center

CIVIL GOVERNMENT FISHERIES INVESTIGATORS: 646 Civil Government Fisheries Investigators

COMMUNITY BASED SURVEILLANCE GROUPS: 1.900 surveillance voluntary groups scattered in many districts/municipals

04/12/2018

TECHNICAL IMPLEMENTING UNIT OF SURVEILLANCE



**UPDATES ON PROGRESS OF MONITORING, CONTROL,
AND SURVEILLANCE OF MALAYSIA**

By Mr. Osman bin Mohamed

THE FOURTH MEETING OF ANDAMAN SEA SUB-REGION
20 - 21 NOV 2018
BANGKOK THAILAND

**UPDATES ON AVAILABLE MCS SYSTEMS
MCS IN MALAYSIA**

DEPARTMENT OF FISHERIES MALAYSIA
PUTRAJAYA

1

CONTENTS

1. DOMESTIC MEASURES
▪ **POLICY AND LAW**

2. FISHERIES MANAGEMENT
▪ **"MONITORING, CONTROL AND SURVEILLANCE"**

3. ACTION BY DOF

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1. DOMESTIC MEASURES
▪ **POLICY AND LAW**

1.1 POLICY AND LAW

- Fisheries Act 1985
- National Agro-Food Policy 2011-2020
- Strategic Plan of Department of Fisheries Malaysia 2011-2020
- Capture Fisheries Strategic Plan Malaysia 2015-2020



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I. FISHERIES ACT 1985

"An Act relating to fisheries, including the conservation, management and development of maritime and estuarine fishing and fisheries, in Malaysian fisheries waters..."

AKTA PERIKANAN 1985 (AKTA 317) dan PERATURAN-PERATURAN & FISHERIES ACT 1985 (ACT 317) and REGULATIONS

International Law Book Services

5

II. NATIONAL AGRO-FOOD POLICY 2011-2020

"Development of sustainable fisheries catch is essential to ensure conservation of fishery resources and to accommodate future needs. For this purpose, efforts will focus on initiative to..."

- focus on compliance with international instruments in the management of fisheries resources such as *FAO Code of Conduct For Responsible Fisheries (CCRF) 1995, Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IUU Fishing) and EC Regulation 1005/2008.*


(Quoted in pg. 55, the book NATIONAL AGRO-FOOD POLICY 2011-2020)

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III. DEPARTMENT OF FISHERIES MALAYSIA STRATEGIC PLAN 2011-2020

2. Manage and Conserve Fishery Resources
 • Sustainably managed fisheries resources through the implementation of licensing policy, the **MCS** programme, registration of fishing and inland fisheries management to ensure fishery resources are managed in a responsible and consistent with international instruments related.

3. Enforcing the Fisheries Act 1985 and Regulations
 • Plan, implement and coordinate fisheries legislation to ensure that all fishing activities in accordance with the provisions in the act.



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IV. CAPTURE FISHERIES STRATEGIC PLAN MALAYSIA (2015-2020)


STRENGTHEN THE CAPACITY AND CAPABILITIES OF THE MCS PROGRAMME

- protection and rehabilitation of fishery resources through enforcement of legal instruments, awareness campaign dan higher compound rates;
- synergy through strategic cooperation with other enforcement agencies (NBOS).



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OTHER RELEVANT LAWS



- I. FISHERIES ACT 1985
- II. Exclusive Economic Zone Act 1984
- III. Merchant Shipping Ordinance 1952
- IV. Malaysian Maritime Enforcement Act 2004
- V. International Trade In Endangered Species Act 2008
- VI. Malaysian Quarantine & Inspection Services Act 2011

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NATIONAL LEGISLATIVE FRAMEWORKS

LAWS OF MALAYSIA
ACT 317
FISHERIES ACT 1985

Section 15. Fishing, etc., by foreign fishing vessel in Malaysian fisheries waters.

(2) **No foreign fishing vessel** shall load or unload any fish, fuel or supplies or tranship any fish in Malaysian fisheries waters **without the written approval** of the Director General.



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NATIONAL LEGISLATIVE FRAMEWORKS

ACT 317
FISHERIES ACT 1985
PART V. FOREIGN FISHING VESSELS

Section 16. Passage of foreign fishing vessel through Malaysian fisheries waters.

(1) Subject to subsections (2) and (3) a foreign fishing vessel may enter Malaysian fisheries waters, for the purpose of passage through such waters in the course of a voyage to a destination outside such waters.

(2) Such passage, which shall be exercised in accordance with rules of international law of the sea relating to the relevant maritime regime applicable to such Malaysian fisheries waters, includes stopping and anchoring only—

- (a) if the vessel is in distress;
- (b) for the purpose of obtaining emergency medical assistance for a member of its crew; or
- (c) to render assistance to persons, ships or aircraft in danger or distress.

(3) The master of a foreign fishing vessel entering Malaysian fisheries waters for the purpose mentioned in subsection (1) shall notify by radio, tele or facsimile in the English or Malay language an authorized person of the name, the flag, date, location, make and destination of the vessel, the type and amount of fish it is carrying and of the circumstances under which it is entering Malaysian fisheries waters.

(4) Every foreign fishing vessel entering Malaysian fisheries waters for the purpose mentioned in subsection (1) shall—


- (a) without prejudice to this requirement to observe any other law of Malaysia which may be applicable, observe such regulations as may be made under section 61, including regulations regarding the stowage of fishing appliances; and
- (b) return to a position outside such waters as soon as the purpose for which it entered such waters has been fulfilled.

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NATIONAL LEGISLATIVE FRAMEWORKS

Section 20. Bringing into or having in Malaysian fisheries waters fish taken or received from foreign fishing vessel.

Any person who brings into or has in his possession, custody or control in Malaysian fisheries waters fish taken or received from a foreign fishing vessel shall, unless he is authorized in writing so to do by the Director General, be guilty of an offence.



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NATIONAL LEGISLATIVE FRAMEWORKS

NO. 70 of 1952 - ORD. 70/1952
MERCHANT SHIPPING ORDINANCE, 1952
PART XIII - PORTS AND PORT OFFICERS
Arrival and Departure of Vessels

Section 448. Master to report arrival.

The master of every vessel anchoring in any of the ports of the Federation, or going alongside any wharf in any port, shall -

- (a) forthwith give or cause to be given at the Port Office a written report of the arrival of his vessel, which report shall be in such form as shall from time to time be prescribed by the Director of Marine and shall contain such particulars as the Director of Marine may require;
- (b) deposit or cause to be deposited there a list of passengers on board; and
- (c) in the case of British or Malayan vessels and vessels belonging to a nation not having a consular officer at the port, produce to the Port Officer the certificate of registry and shall deposit with him the ship's articles.

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NATIONAL LEGISLATIVE FRAMEWORKS

NO. 70 of 1952 - ORD. 70/1952
MERCHANT SHIPPING ORDINANCE, 1952
PART XIII - CONTROL OF SHIPPING

Section 491B. Notification to the Director of Marine of activity engaged by a ship.

Every ship, vessel, or employer or person to be engaged in any of the following activities -

- (a) dredging;
- (b) mining, including exploration and exploitation;
- (c) cable and pipe laying;
- (d) marine construction, including the construction of jetties and wharves;
- (e) dumping of any material;
- (f) sports, leisure or recreational activity;
- (g) survey;
- (h) cleaning, including cleaning of cargo tanks;
- (i) transportation, discharging or loading of wastes;
- (j) pilotage;
- (k) ship-to-ship activity; or
- (l) any other activity as determined by the Director of Marine.

in Malaysian waters shall be required to notify the Director of Marine, in such form as may be prescribed by him, of such activity.



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LAW OF MALAYSIA

ACT 728
MALAYSIAN QUARANTINE AND INSPECTION SERVICES ACT 2011

Section 11.

- 1) No person shall import any plant, animal, carcass, fish, agricultural produce, soil or microorganism without a permit, licence or certificate issued under this Act.
- 2) No person shall export any plant, animal, carcass, fish, agricultural produce, soil or microorganism without a permit or licence issued under this Act.
- 3) Any person who is involved in the importation and exportation of any plant, animal, carcass, fish, agricultural produce, soil or microorganism who contravenes this section commits an offence and shall, on conviction, be liable to a fine not exceeding one hundred thousand ringgit or to imprisonment for a term not exceeding six years or to both and, for a second or subsequent offence to a fine not exceeding one hundred and fifty thousand ringgit or to imprisonment for a term not exceeding seven years or to both.

2. FISHERIES MANAGEMENT – MONITORING CONTROL AND SURVEILLANCE (MCS)



MONITORING, CONTROL AND SURVEILLANCE PROGRAMME (MCS)

1 (MONITORING)

"the continuous requirement for the measurement of fishing effort characteristics and resource yields through observations, data collection, measurement and analysis of data and fisheries activity information"

1. Monitor fish landing;
2. Vessel Monitoring System;
3. Catch and operations reports;
4. Inspection of fishing vessels;
5. Inspection of fishing gears;
6. Reporting for storage purposes;
7. Analysis on catch and fishing effort & report comparison with VMS, verification on the accuracy of the landing report;
8. Control on landing port/area (landing is only permitted at designated sites);
9. Collection, measurement & analysis of fishing activities but not limited to species composition, fishing effort, by catch & discharge & area of operation.

2 CONTROL

"the regulatory conditions under which the exploitation of the resource may be conducted."

1. Control to fishing effort through licensing;
2. Registration of fishing vessels;
3. Requirement to have permanent markings on fishing vessels;
4. Control and prohibition on fishing gears and methods of fishing;
5. Control on transhipment;
6. Fishermen Registration Programme and issuance of Fishermen Card;
7. Establishment of fishing zones and marine protected areas (MPAs).

3 (SURVEILLANCE)

"the degree and types of observations required to maintain compliance with the regulatory controls imposed on fishing activities"

1. Inspection by Fisheries Officer/Authorised Officer and other enforcement authorities at sea;
2. Air, Sea and Land Surveillance;
3. Law Enforcement.

Reference:
Regional Guidelines of Responsible Fisheries in Southeast Asia (Responsible Fisheries Management, Southeast Asia) Fisheries Development Center, Copyright © Jabatan Perikanan Malaysia, 2008

1 MONITORING

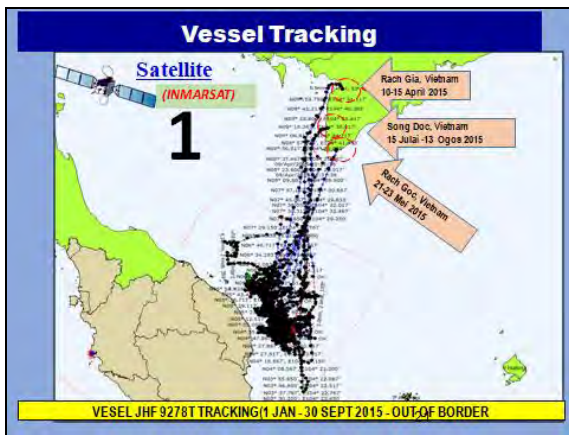
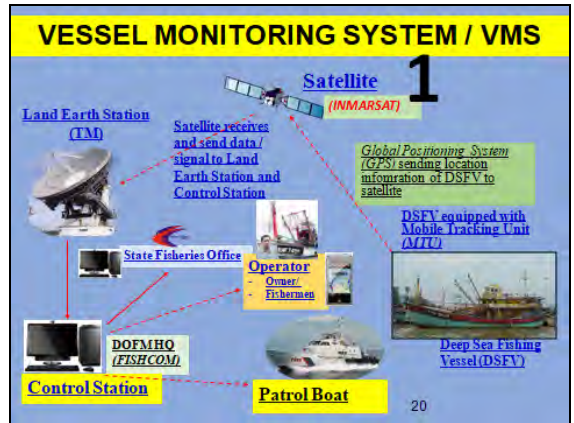
18

(MONITORING)
"the continuous requirement for the measurement of fishing effort characteristics and resource yields through observations, data collection, measurement and analysis of data and fisheries activity information"

1 MONITORING

1. Monitor fish landing;
2. Vessel monitoring system;
3. Catch and operations reports;
4. Inspection of fishing vessels;
5. Reporting for storage purposes;
6. Analysis on catch and fishing effort & report comparison with VMS, verification on the accuracy of the landing report;
8. Control on landing parcels (landing is only permitted at designated sites);
9. Collection, measurement & analysis of fishing activities but not limited to species composition, fishing effort, by catch & discharge & area of operation.

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2 Automatic Identification System (AIS) - Using Radio Frequency

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2 Automatic Identification System (AIS) - Using Radio Frequency

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DOFM in process of installing 2,600 AIS devices to all Zone B Trawlers in Peninsular Malaysia & Sarawak.

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Deterrence

Any Malaysian Fishing Vessel that is found outside Malaysian fisheries waters or below zones permitted:

- Department of Fisheries will:
 - Issue a **show cause letter** to vessel owner – giving reasons/justification.
 - Under Sec. 13 Fisheries Act 1985:
 - *Suspend the renewal of licence,*
 - *Suspend the licence for a period of time,*
 - *Cancel the licence*
- Or other actions as provided for under Fisheries Act 1985.
- Information is circulated to other agencies.

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MONITORING PROGRAMME – at Sea



- Inspection operations on trawlers:
- Vessel inspection;
 - Licence inspection;
 - Fishing gear inspection;
 - Crew inspection.



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2.1.3 MONITORING PROGRAMME IN MALAYSIA FISHERIES WATERS

Vessels size measurement



Inspection of engines



Inspection of fish hold



Inspection of fin plate



MONITORING PROGRAMME – at Landing Facilities

- Inspection of fishing vessels at landing facilities
- To show the presence of the patrol team of DOFM at landing facilities



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MONITORING PROGRAMME – Vessel & Documentation Inspection



- Inspection of fishing vessels at sea.
- To show the presence of the patrol team of DOFM to promote compliance.

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MONITORING PROGRAMME – Vessel & Documentation Inspection



- Inspection of fishing vessels at sea.
- To show the presence of the patrol team of DOFM to promote compliance.

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**NUMBER OF LOCAL FISHING VESSEL INSPECTED BY DOFM
- 2014 TO 2018**

YEAR	NO OF LOCAL VESSELS	LAND	SEA
2014	26759	21864	4895
2015	21355	18009	3346
2016	18423	15351	3072
2017	14558	12498	2060
2018	15321	13034	2287

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2

CONTROL

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2

CONTROL

"The regulatory conditions under which the exploitation of the resource may be conducted."

1. Control to fishing effort through licensing, Registration of fishing vessels;
2. Requirement to have permanent markings on fishing vessels;
3. Control and prohibition on fishing gears and methods of fishing;
4. Control on transshipment;
5. Fishermen Registration Programme and Issuance of Fishermen Card;
6. Establishment of fishing zones and marine protected areas (MPAs);
- 7.

Reference:
Regional Guidelines of Responsible Fisheries in Southeast Asia (Responsible Fisheries Management). Southeast Asian Fisheries Development Center. Copyright © Jabatan Perikanan Malaysia, 2008.

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REVISED FISHING ZONES IN WEST COAST PENINSULAR MALAYSIA (wef 1.6.2014)

0 - 1 bn	1 - 8 bn	9 - 15 nm	16 - 20 nm	21 nm - ZEE	Lautan Hindi
Zon Konservasi	Zon A	Zon B	Zon B1	Zon C	Zon C3
	< 40 GRT	< 25 GRT	25 - < 40 GRT	40 - 70 GRT & keatas	70 GRT & keatas
Aquaculture activities, cockle culture and involvement of fishermen community	Traditional Vessels / Anchovy Purse seine (Owner operator)	Trawlers/ Purse seiners (Owner operator), Apit or assist. master (Ikkong/ Foreign Crew 100%/MTU/ MAAD/ITED)	Trawlers/ Purse seiners (Owner operator), Apit or assist. master (Ikkong/ Foreign Crew 100%/ABS)	Trawlers/ Purse seiners (Non Owner operator), Foreign crews 100%/MTU.	Purse seiners/ Tuna long line (non owner operator) /VMS.

* Kedah, Pulau Pinang, Perak 100%/ABS ONLY.

Catch Certificate Scheme

1985 which in line with EC Regulation letter, prevent and combat IUU Fishing:

1. Fisheries (Quality Control of Fish for Export to the European Union) Regulations 2009
2. Food (Issuance of Health Certificate for Export of Fish and Fish Product to the European Union) Regulations 2009
3. Fisheries (Maritime) (Licensing of Local Fishing Vessel) (Amendment) Regulations 2010

142. (1) For the purposes of regulation 141(1) the declaration to a form or its copy issued by the Director General relating to—
(a) the number of fish being caught or landed;
(b) the species of the fish;
(c) the fishing area of the fish being caught; and
(d) other information as the Director General may require.
(2) If the Director General is satisfied with the declaration under subregulation (1), the Director General shall issue a fish catch certificate or any other documents to verify the information that has been declared.
Made 27 May 2010.
(P.M. No. 1101/10) [P.P.01/10000]
Datin Seri Niew Jay Chuan
Minister of Agriculture and Agro-based Industry

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FISHERIES (PROHIBITION OF METHOD OF FISHING) REGULATIONS 1980

RESTRICTIVE FISHING GEAR AND PRACTICES

"The fishing gear and practices that have a destructive effect on essential fishery resources, namely: trawlers, etc."

ILLEGAL FISHING GEAR AND PRACTICES

"The fishing gear and practices that are prohibited by laws and regulations."
The destructive fishing gear and practices are classified as illegal fishing gear and practices to the extent that it is stated in the regulation.



Push Net

REGIONAL GUIDELINES FOR RESPONSIBLE FISHERIES MANAGEMENT

RESPONSIBLE FISHING OPERATIONS



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FISHERIES (PROHIBITION OF METHOD OF FISHING) REGULATIONS 1980

PAIR TRAWLS

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FISHERIES (PROHIBITION OF METHOD OF FISHING) REGULATIONS 1980

Drift Net with Mesh Size > 10 inches

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Minimum 38MM internal stretched measure at the cod end

FISHERIES ACT 1963
FISHERIES (MARITIME) (AMENDMENT) REGULATIONS 1982
 In exercise of the powers conferred by section 21 of the Fisheries Act 1963, the Minister makes the following regulations:
 1. These regulations may be cited as the **Fisheries (Maritime) (Amendment) Regulations 1982**.

The Fifth Schedule of the principal Regulations is amended—
 (a) by substituting for item 1 the following:
 "1. (1) The minimum mesh size of any trawl net shall be not less than 38 millimetres internal stretched measure at the cod end."

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3 SURVEILLANCE

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3 SURVEILLANCE

"the degree and types of observations required to maintain compliance with the regulatory controls imposed on fishing activities"

1. Inspection by Fisheries Officer/ Authorised Officer and other enforcement authorities at sea;
2. Air, sea and land surveillance;
3. Law Enforcement.

AIR SURVEILLANCE WITH AIR OPERATIONS FORCE, ROYAL MALAYSIAN POLICE

SEA SURVEILLANCE BY DEPARTMENT OF FISHERIES MALAYSIA PATROL BOAT

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ENFORCEMENT – to promote compliance:
 Fishing gear; Engine; Safety Equipment & etc.

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ENFORCEMENT – to promote compliance: Condition on crew use

Employment of foreign crews on board local fishing vessels is permitted with conditions under Section 10(1) (c) of Fisheries Act 1985.



ENFORCEMENT AGENCIES INVOLVED IN MCS PROGRAMME IN MALAYSIA

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ENFORCEMENT AGENCIES INVOLVED IN MCS PROGRAMME IN MALAYSIA			
No.	Department	Functions	
1.	Department of Fisheries Malaysia (DOFM)	<ul style="list-style-type: none"> • Fisheries Act 1985 • International Trade in Endangered Species Act 2008 • Economic Zone (EEZ) Act 1984 <p>DOFM is responsible for the overall management of fisheries related matters. It administers and enforces the Fisheries Act 1985, EEZ Act 1984 and the International Trade in Endangered Species Act 2008. It also undertakes research and provides technical support for the marine, aquaculture and freshwater fisheries industries.</p>	
2.	Department of Fisheries Sabah (DOFS)	<ul style="list-style-type: none"> • Fisheries Act 1986 • Sabah Fisheries Ordinance 1984 • International Trade in Endangered Species Act 2008 <p>DOFS is responsible for the management of fisheries related matters in the state of Sabah only. It also administers and enforces the Fisheries Act 1986 and the International Trade in Endangered Species Act 2008. It also provides technical support for the marine, aquaculture and freshwater fisheries industry.</p>	
3.	Fisheries Development Authority of Malaysia (FAM)	<ul style="list-style-type: none"> • Fisheries Act 1985 • Fisheries Development Authority Act 1977 • Fisheries Association Act 1971 <p>The functions of the UOM are to promote and develop efficient and effective management of fishery enterprises and fish marketing, to promote, facilitate and undertake economic and social development of the Fisheries Association, to register, control and supervise Fisheries Associations and Fisheries Cooperatives and to make provisions for matters related thereto, such to control and coordinate the implementation of the aforesaid activities.</p>	
No.	Department	Law	Functions
A.	Department of Marine Parks, Malaysia	<ul style="list-style-type: none"> • Fisheries Act 1985 	The Department of Marine Parks Malaysia is entrusted with the function to afford special protection to selected flora and fauna, and protect, preserve and to manage the marine breeding grounds and habitat of aquatic life with particular regard to species that are rare or endangered within the Marine Parks.
E.	Malaysia Marine Enforcement Agency (MMEA)	<ul style="list-style-type: none"> • Malaysia Marine Enforcement Agency Act 2004 	MMEA was established to perform enforcement functions for ensuring the safety and security of the Malaysian Maritime Zone with a view to the protection of marine and other natural resources in such zone. The MMEA is entrusted to enforce law and order under any federal law (perform maritime, search and rescue, arrest and apprehend the commission of an offence, and assistance in any criminal matters) as a request by a foreign State as provided under the Mutual Assistance in Criminal Matters Act 2002 and ST/CA entry and exit control authorities, establish and manage maritime facilities for training, search, maritime security and safety as well as maritime search and rescue.
A.	Marine Police	<ul style="list-style-type: none"> • Police Act 1967 	The Marine Police has the responsibility to control, steer and implement operations involving public order. It is also involved in patrolling and coordinating joint maritime search and joint border control with the Malaysian Armed Forces and the Amphibious and Coast Guard of neighboring countries. It is also involved in patrolling, monitoring and coordinating search and rescue operations.

ENFORCEMENT AGENCIES INVOLVED IN MCS PROGRAMME IN MALAYSIA			
No.	Department	Law	Functions
C.	Marine Department	<ul style="list-style-type: none"> • Maritime Shipping Ordinance 1987 • Merchant Shipping Ordinance (Amendment) 1986. 	The Marine Department has the responsibility to regulate fishing vessels under IOTC, IET and register fishing vessels of 15 GRT and above operating in Sub-region.
A.	Royal Malaysian Customs Department	<ul style="list-style-type: none"> • Customs Act 1967 	The Royal Malaysian Customs Department is involved in the collection of duties taxes such as sales tax, petroleum duties, the excise tax, stamp duty, and wealth tax, and other national revenue. It is also involved in trade and industry facilitation as well as compliance and ensuring compliance with regulations.
B.	Malaysia Quarantine and Inspection Service (MAQIS)	<ul style="list-style-type: none"> • Malaysia Quarantine and Inspection Service Act 2011 	MAQIS is involved in the enforcement of all relevant written laws of the entry points, quarantine stations, and quarantine premises to ensure that plants, animals, sea-weeds, fish, agricultural produce, birds, microorganisms, and food which are imported into and exported out of Malaysia comply with the health standard of human, animals, plants and sea and food safety.
10.	Seafood Industry Development and Research Society (SIDRS)	<ul style="list-style-type: none"> • National Parks and Recreation Ordinance 1988 (Amendment) 	These agencies are entrusted with the functions to permit, preserve and manage natural resources (including natural flora and fauna) within protected areas in Sabah including marine or fisheries industry resource or fisheries independent or sea species.
No.	Department	Law	Functions
11.	States Parks and Harbours Authority	<ul style="list-style-type: none"> • Ports and Harbours Enactment 2002 	The States Parks and Harbours Authority is responsible for the licensing of small vessels below 15 GRT in Sabah.
12.	Sabah Wildlife Department	<ul style="list-style-type: none"> • Sabah Wildlife Conservation Ordinance 1983 • International 	The Sabah Wildlife Department is responsible to manage and conserve the flora, fauna and nature of Sabah to ensure the preservation of all species within their natural habitat.
13.	State Parks	<ul style="list-style-type: none"> • State Parks Enactment 1984 • National Park Enactment 1977 	The Sabah Parks is responsible to protect, conserve and preserve natural areas which have been gazetted as a park, research area, which include unique features with high scientific value as a natural heritage.

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RECORD OF FOREIGN FISHING VESSEL DETAINED BY ENFORCEMENT AGENCIES: 2014 - 2018

FOREIGN FISHING VESSEL DETAINED BY ENFORCEMENT AGENCIES				TOTAL
YEARS	MMEA	DOFM	RMP	
2014	74	3	2	79
2015	107	1	0	108
2016	108	3	12	123
2017	148	5	2	155
2018	40	2	0	42
TOTAL				507

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3. ACTION BY DOF

i.) The National MSC Network for Gulf Of Thailand and South Andaman Sea is established under the National IUU Communities. Department Of Fisheries as a secretariat and comprises of 18 agencies including Port Authorities.

ii.) 3 inter-agencies meetings and workshop at operational level to improve and increase monitoring program in Malaysian Fisheries Waters.

iii.) Foiled attempt to land fish caught by 4 vessels listed under IOTC via 46 containers. Critical information was shared by DOF Thailand. Case was closely followed by Thailand and EU.

iv.) Joint operation with Thailand Navy for Gulf Of Thailand areas.

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UPDATES ON PROGRESS OF MONITORING, CONTROL, AND SURVEILLANCE OF MYANMAR

By *Dr. Kyaw Kyaw*

4th Meeting of the Andaman Sea Sub-Region

Myanmar MCS update information
Country update on progress of M, C and S

20-21 November 2018 Bangkok Lotus Hotel,
Thailand

**MONITORING, CONTROL AND
SURVEILLANCE (MCS)**

MCS Component

- Inspection at Sea (Myanmar Navy)
- Inspection Authority at Shore (DoF, DMA, Custom, Police, Immigration, Port Authority, GAD)
- Satellite technology (VMS)





PORT STATE DUTIES

□ **Fishing vessel registration**

- According to the Myanmar Marine fisheries law (1990), all fishing vessel shall have vessel registration and authorization of fish.
- Myanmar fishing vessel is not allowed to fish beyond Myanmar EEZ.
- If fishing vessel violates the rules and regulations two times, it will be confiscated by DoF. Therefore, IUU vessel will not include in fishing vessel list.

PORT STATE DUTIES (CONTD.)

□ **Record of fishing vessel**

- In fishing vessel record of DoF.
 - ❖ Name of Vessel
 - ❖ Name of owner
 - ❖ Identification card no. of owner
 - ❖ Address of owner
 - ❖ Company
 - ❖ Length, Width and GRT of vessel
 - ❖ Engine Brand, Serial no, HP, Registration Number
 - ❖ Issued date of Vessel Registration
 - ❖ Type of hull,
 - ❖ Name of master
 - ❖ Permitted fishing ground and fishing gear
 - ❖ In addition (change of owner, vessel name, engine, fishing gear and vessel measurement)

FLAG STATE DUTIES

- Authorization to fish
- In accordance with the fisheries laws,
- No fishing vessel is not allowed to fish in High sea and other countries EEZ.
- No foreign fishing vessel shall without a permit or a licence, enter the Myanmar fisheries water engaging in the fishery.
- The entrepreneur has right to appoint the agent who is capable of taking charge of the fisheries.
- Fishing gear/method, fishing period, permitted species, size of fish, licence conditions are determined by DoF.
- Vessel marking system are in place. Transshipment at sea is allowed for carrier vessel and these vessel have to fill the transshipment form.

COASTAL STATE DUTIES

When Fishing vessels want to go-out to the fishing ground, have to apply the sailing order to the DOF.

- Fishing Licence
- Fisherman Registration Card
- National Registration Card
- Vessel Registration Certificate by DMA
- Life Saving Appliance (LSA)
- Communication Equipment Licence
- Fishing Gears
- Sailing Order

COASTAL STATE DUTIES (CONTD.)

When Fishing vessels come back from the sea, the check point, as a OSS members inspect again below:

- **Whether the Fishermen those come-back to Check Point.**
- **Check the Fishing log book.**
- **Whether the fishing vessels have operated in the fishing ground over fishing period.**
- **Inspection the species of catching.**
- **After inspection above mentioned, allowed to fishing vessel to proceed their landing site.**

Update for MCS

- **Establishment of Vessel Monitoring System (VMS) (checking cost and benefit)**
- **Specific Division will be formed.**
- **Dialogue with Thai-Myanmar DoF Staffs.**
- **Planned under DANIDA project for Sea Fishery Patrols in Marine Coastal Fisheries in the Tanintharyi and Rakhine by 2018-19 including preparation and implementation.**

UPDATES ON PROGRESS OF MONITORING, CONTROL, AND SURVEILLANCE OF THAILAND

By Ms. Duangporn Na Pombejra

Monitoring, Control and Surveillance in Thailand
 Department of Fisheries
 Ministry of Agriculture and Cooperatives, Thailand

The 4 Meeting of Andaman Sea Sub-region



Situation before 2015

Lack of legal framework on MCS
 Weak MCS capabilities *No legal requirements for VMS

No core MCS agency and no coordination among existing agencies
 *No detailing catch and documentation scheme in place *No accurate on counting the number of vessels

No MCS system, no central database, no procedure
 *Inefficiency on control over Thai flagged vessel *Non-compliance with int' CMMs

Actions Taken

- Establishment of legal framework
- Set up core MCS agency and inter-agency cooperation improvement
- Set up MCS system with the support of new tools and operational procedure improvement

Establishment of FMC Centre



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Establishment of Legal Framework

- The urgent need on legal basis for the effective functioning of the MCS - Chapter 7 : Control , Surveillance, Traceability and Inspection
- Monitoring activities under Marine Fisheries Management Plan (FMP) - by law

Establishment of Legal Framework

Control on Fishing Activities

- Fishing Areas - a management scheme to protect coastal zones , prohibited areas during spawning and nursery seasons, MPAs and fishing zones
- In put and Out put control - control on fishing efforts based on MSY, fishing and landing activities
- Science-based control – Limit control on type of fishing gear, setting limits on the length of grounds round ropes, mesh sizes etc

Establishment of Legal Framework

Legal requirements for Surveillance

- 30 GT. and above to install and operate VMS and transmit a signal at all time, whether at port or at sea
- all commercial fishing vessels to submit logbooks recorded the catch and relevant fishing activities.
- All Thai flagged overseas fishing vessels be equipped with ERS and EM system , complete transshipment declarations, labelling obligations and the observer on aboard

Actions taken – Additional tools

- AIS – tool used to monitoring Thai flagged overseas fishing vessels, transshipment vessels and foreign vessels
- Development of the Maritime Information Sharing Centre (MISC) platform which retrieves and shares data across relevant authorities (MD, DOF, MP, Customs, DMCR, Excise Department) by THAI-MECC and development of a Behaviour Analysis Software – to analyze the historic behaviour of fishing vessels using VMS, AIS and radar data
- Fishing Info System a platform to exchange and share vessel information and is used to control Port In and Port Out activities of all Thai flagged fishing and support vessels
- Fishing logbook to cross check the VMS system to detect any chance of infringement
- Pre-Common Risk Assessment (Pre-cra) to determine the risk profiles of vessels

Monitor



Actions Taken - Agencies

- The Command Centre for Combat Illegal Fishing (CCCIF)
- Department of Fisheries
- Marine Department
- Department of Marine and Coastal Resources

Actions Taken – Monitoring Tools

- FMP
 - VMS
 - Fishing Info, Thai Flagged
 - Landing
 - Logbook
 - Observer on board
 - Marking requirements – fishing vessel and transshipment vessel
- Primary data : fishing effort, area of fishing operation, catch, species, composition and discards

Control



Actions taken - Agencies

The Command Centre to Combat Illegal Fishing

- Department of Fisheries

Marine Department

- Department of Marine and Coastal Resources

Actions Taken

- Law and regulation
- Spatial control MPA, zoning
- Input controls; license system, fishing days
- Technical control: Gear, mesh size
- Output control: Prohibited species

Surveillance

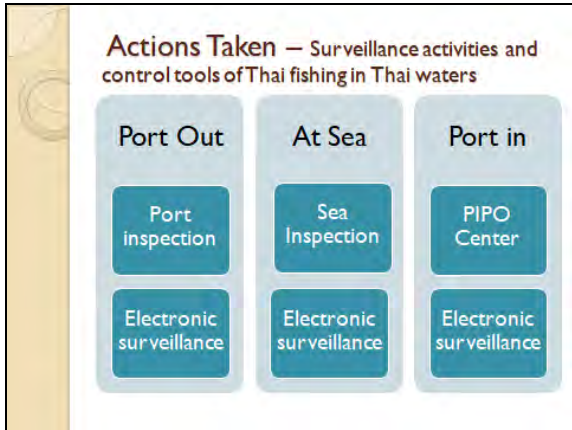


Actions Taken - Agencies

- The Command Centre to Combat Illegal Fishing
- Department of Fisheries
- The Royal Thai Navy
- The Customs Department
- Department of Marine and Coastal Resources
- Marine Department
- THAI – MECC
- Royal Thai Policies

Actions Taken

- Set up surveillance system
- Introduced tool kits and technology - VMS, AIS, ERS, PIPO, Logbook, transshipment control, observer, inspection at sea, Pre-common Risk Assessment, Behavior Analysis Software



Thank you



SCALING UP THE FISHERIES ACT:
Restoring lost protections and incorporating modern safeguards



DEVELOPMENT OF A SUB-REGIONAL COOPERATION ON MONITORING, CONTROL, AND SURVEILLANCE IN FISHERIES IN THE NORTHERN ANDAMAN SEA

By Ms. Pattaratjit Kaewnuratchadasorn, SEAFDEC Secretariat



ASEAN Regional Plan of Action for the Management of Fishing Capacity

Objectives

- 1) Enhance the effective, efficient, and equitable and transparent management of fishing capacity for long-term sustainability
- 2) Ensure that fishery managers should endeavor to initially limit fishing capacity at the present level and progressively reduce the fishing effort applied to affected fisheries
- 3) Avoid growth in fishing capacity that undermines the long-term sustainability objectives
- 4) Enhance sub-regional cooperation in managing fishing capacity, specifically with regards to transboundary species or shared species

Section V

6) States should strengthen sub-regional/regional Monitoring, Control and Surveillance (MCS) networks.

What is MCS?

Monitoring: Collection of data and the measurement and analysis of fisheries related activities such as:
Catches, Foreign crews, Fishing effort, Licensed vessels

Control: Regulatory conditions under which resources can be harvested such as:
Management regulations (quota/effort limitations), product certification rules, Port State Measures

Surveillance: Checking and supervision of fishing related activities (enforcement):
Port control, VMS systems, Air and Sea surveillance

Sub-regional MCS coordination

Some aspects of fisheries are regional such as transboundary/straddling/migratory fish stocks, trade of catches and movement of fishing vessels



Therefore necessary to extend national regulation to a regional perspective through sub-regional coordination

MCS Networks for Andaman Sea Sub-region

Progress 2017-2018

- Two Sub-regional Workshops were organized for the Northern Andaman Sea and the Southern Andaman Sea Sub-region in 2017.

SEAFDEC-Sweden developed a Workplan which there are three steps in process to establish a sub-regional MCS coordination body:

  **Process for developing and establishing Sub-regional MCS Coordination Body/Networks in Andaman Sea Sub-region**

In early 2018, SEAFDEC-Sweden developed a Roadmap, workplan and request the nomination of the National Technical Group on the establishment of sub-regional MCS coordination body/Networks

- **Step One – National consultations.** The first step is to identify the national needs and priorities on cooperation with neighbouring countries through national consultations among agencies involved in existing national Monitoring, Control and Surveillance related coordination groups.
- **Step Two - Sub-regional meetings.** Based on the national priorities identified at the national consultations, appointed participants from key national agencies meet at a sub-regional meeting to compare national priorities and develop a workplan for the establishment of the MCS coordination body.
- **Step Three – Establishment of networks.** Establishment of the sub-regional MCS-coordination body based on the agreed modalities.

  **Process for developing and establishing Sub-regional MCS Coordination Body/Networks in Andaman Sea Sub-region**

- In early 2018, SEAFDEC-Sweden developed a Roadmap, workplan and request the nomination of the National Technical Group on the establishment of sub-regional MCS coordination body/Networks
- Received the Nomination of national Technical group from
 - Thailand
 - Myanmar



- The Meeting on the Development of a Sub-regional Cooperation on Monitoring, Control and Surveillance in Fisheries in the Northern Andaman Sea was organized during 24-25 July 2018 Bangkok, Thailand which was sponsored by SEAFDEC-Sweden Project



- Both countries provided the information such as type of information to be cooperated between Myanmar and Thailand of each component of Monitoring, Control and Surveillance.
- With regard to establishment of the coordination, the Meeting was suggested that the concern on MCS coordination can be discussed under the existing MOU on Fisheries Cooperation between Thailand and Myanmar and mechanism available at borders.

The Meeting wish to ask for your advise how to move forward for the Southern Andaman Sea sub-region


THANK YOU




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SOCIAL PROFILE AND GENDER ANALYSIS IN KAWTHUANG TOWNSHIP OF MYANMAR


By Ms. Jariya Sornkling



Report of Social Profile and Gender Analysis in Kawthaung Township, Myanmar

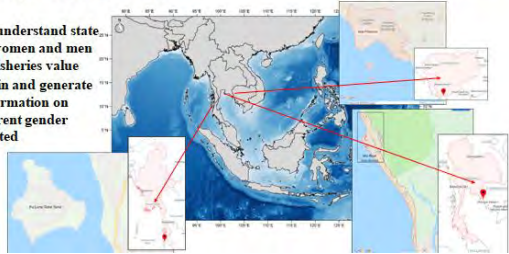


Jariya Sornkling
SEAFDEC Training Department



Background of Study

To understand state of women and men in fisheries value chain and generate information on current gender related






Study site:
Pu Lone Tone Tone Village (Jan to Apr 2018)



- Located in Kawthaung Province, the Southernmost part of Myanmar
- Population: 1,000 households (80%: fishing)



Methodology (1)

Planning Meeting with Fisheries Officers on Data Collection Process and Refinement of the Questionnaires (19-26 January 2018)





Methodology (2)

Data collection (19-26 Jan. 2018)

- Individual Interviews
- Respondents: fishing households (80 persons) & middle-persons (10 persons)



■ Men ■ Women



Methodology (3)

Validation Workshop

- Workshop conducted on 19 April 2018
- 49 stakeholders (27 men & 22 women)



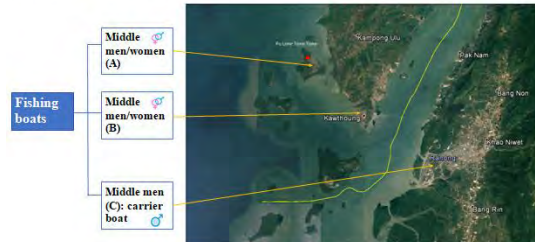
Results

Fishing in Pu Lone Tone Tone

Main fishing gears	%	Fishing season	No. of fishing days at sea/cruise	Fishing hours a day	Labor
1. Drift gillnet	50.0	Jan-Dec	25.8	9.3	Men
2. Surrounding net	20.2	Jan-Dec	20.8	9.5	Men
3. Purse seine	13.1	Jan-Dec	21.2	7.3	Men
4. Squid dip net	11.9	Oct-May	20.8	5.0	Men
5. Squid longline	3.6	Oct-May	5.7	8.0	Men
6. Trap (mud crab)	1.2	Jan-Dec	1.0	6.0	Men

Results

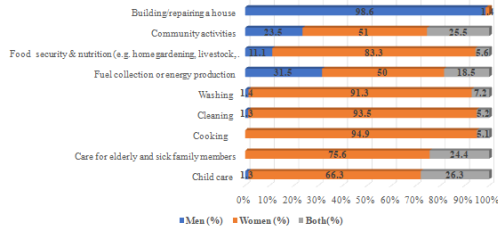
Fish from sea to market in Pu Lone Tone Tone



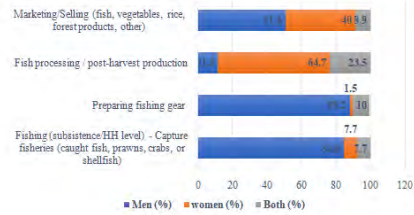
Results

Roles of women and men in household

More than 50% women involved in all non-income generating role except in the hard work



Roles of women and men in fishing activities



Roles of women and men in fishing activities



Fishing gear maintenance



Fish Processing

Roles of women and men in Fishing activities

ACTIVITIES	VALUE CHAIN						
	Pre-fishing		Fishing	Fish processing		Trading	
	Women	Men	Women	Men	Women	Men	
	• Prepare food ingredients	• Prepare fishing gears and boat • Maintain engine	• Catch fish • Cook food	• Sort fish on land • Cut fish • Dry fish • Make shrimp paste	• Sort fish on-board • Unload fish • Transport fish • Dry fish	• Sell fish at local market	• Sell fish at sea • Transport fish from the sea to sell on land • Sell fish in Ranong, Thailand • Buy fish at sea
	• Pray before fishing				• Buy fish at land		

Results and Conclusion



- Gender analysis revealed that gender differentiated roles are based on characteristics of fishing.
- Strong stereotype of gender division of labor delineating tasks – regarded as low status and of less economic value, e.g. processing task (cleaning, cutting & sun drying of fish) for women.
- Men – in intensive physical labor and produce a high economic return.
- Men – usually seen venturing for fishing in Andaman Sea for weeks and marketing the catch in bordering areas in Thailand.
- Women – keen to learn new skills and willing to venture in fishing alongside their male counterparts.

Results and Conclusion



- Cases of some women working as middle-person & retailers.
- Need to create an opportunity for female fisherfolks through appropriate interventions towards sustainable promotion of small-scale fisheries.
- Empower female fisherfolks and make this community resilient to combat the climate change related disasters.
- Women demonstrated willingness to challenge the gender stereotype and norms prevalent in their community.
- More in-depth and diagnostic gender analysis is needed to understand the gender dynamics along the value chain. If climate change puts the spotlight on the future of small-scale fisheries, women's rights is at the heart of sustainable promotion and development of the future of small-scale fisheries.

Recommendations



- Provide understanding on Gender concept to local villager
- Build capacity and awareness people especially women and youth in their area for preserve livelihood and sustainable use of resources
- Job opportunities at Pu Lone Tone Tone, it have Capacity on Local ecotourism area, Fish processing, Tailor and handicraft.



**GROUP DISCUSSION TO DRAFT ON COOPERATION
FOR MANAGEMENT ACTIONS FOR THE ANDAMAN SEA SUB-REGION**

Group 1: Transboundary Resources

<i>Sub-regional cooperation in action</i>	Transboundary Resources
Why is sub-regional cooperation important?	<ul style="list-style-type: none"> • Nature of migration is the need for among countries to implement co-management and effective cooperation • It is important for the scientific-based information • To disseminate technical finding on fisheries resources management, it is needed a venue and mechanism to present the finding based on scientific information to the political decision for consideration and action
What are the Challenges?	<ul style="list-style-type: none"> • It is important for the scientific-based information to transfer for policy support • Knowledge gaps and Awareness level between Fishery biologists/Scientists-Managers-Policy makers for better fisheries resources management • Difference on human resources capacity, experiences and knowledge levels among the countries. • Secure financial resources for the sub-regional cooperation including research and implementation of the activities
What are the BENEFITS of sub-regional cooperation?	<ul style="list-style-type: none"> • Sustainable utilization and management of common fish species of interest for the sub-region (<i>e.g.</i> Neritic tunas, mackerels, anchovies, <i>etc.</i>) • Increasing incomes, better livelihood and well-being of people depending on fishing activities and all supply chain • Understand fisheries status and make pre-cautionary planning
Key issues for sub-regional cooperation?	<ul style="list-style-type: none"> • Limited capacity to develop transboundary management actions • Information for fisheries management incomplete • Migration patterns available (partial) and how to the information can be inputs for consideration for the pre caution planning and further action • Unknown stock sizes and status (catch decreased) • Insufficient knowledge on spawning seasons and areas, closed seasons and closed areas • National management and legal frameworks not harmonized and synchronized among 4 countries • No clear joint policy (or policy for joint action - no mandate - no call for joint management • Standardized statistics framework exist but heterogeneous data collection (human and financial capacities), fisheries profile • Coastal infrastructure (<i>e.g.</i> port development) impacting fisheries
Priorities/opportunities/options	<ul style="list-style-type: none"> • Utilization of the available data and information for precaution planning and fisheries managements • Harmonization/Synchronization of the national management actions (such as closed seasons and closed areas) and updated legal frameworks
Which tools can be used to promote sub-regional cooperation?	<ul style="list-style-type: none"> • Flagship or pilot projects to provide tangible outcomes • Sharing information, lesson learned and exchange experience among the countries (<i>e.g.</i> Fishery Improvement Project for Blue Swimming Crab)

	<ul style="list-style-type: none"> • Communication, Social networking, contact points among the countries for the subjects (<i>e.g.</i> transboundary species) • In-country consultations on the future possible support on the sub-regional Andaman Sea Cooperation • legal frameworks • Institutional arrangement • Sharing information and conducting joint activities • Incentives for cooperation: understand the causes of Climate Change and some countries lost and gain on the changes of the CC, so that cooperation can provide the ideas and how to pre-caution planning and management • Mediation and dispute resolution mechanisms • Cost and benefit sharing • Financing • Improvement on the data collection at the landing sites
Incentives for cooperation	<ul style="list-style-type: none"> • Exchange of the knowledge and information among the countries to understand fisheries resources due to Climate Change, migration patterns changes, Some countries lost and and some countries gain, so that it is important for networking and cooperation can provide the ideas and how to pre-caution planning and management

Group 2: Management of fishing capacity and to reduce illegal and destructive (combat IUU) fishing

<i>Sub-regional cooperation in action</i>	Management of fishing capacity and to reduce illegal and destructive (combat IUU) fishing
Why is sub-regional cooperation important?	<ul style="list-style-type: none"> • Lack of management by one country to impact the others • Need to clear everything (waiting for they find for sharing) • Improve fisheries management • Need to update policy and monitor vessels for IUU fishing
What are the Challenges?	<ul style="list-style-type: none"> • Uncertainty of top management, then need support from third party who is international organization or NGO (such as SEAFDEC and so on) to discuss in high level meeting which came up with “TOR” or “SOP” as standard for the sub-region • Need solid body to face the top management about the important/ critical issue on fisheries management • Unclear of delimitation • Various interest/ different country perspective • Countries have different capacity
Which tools can be used to promote sub-regional cooperation?	<ul style="list-style-type: none"> • Capacity building to law enforcers for all countries (investigation) • Sharing legal policy on fisheries management with other countries (confidential in nature for security reason) • Strengthen the capacity of existing body/mechanism (<i>e.g.</i> ASEAN summit) and/or invited third parties (such as SEAFDEC, NGOs) to provide the technical inputs • Establishment of coordination patrol • Development of website for AMS to update and share the data on information of IUU fishing (monitoring of suspicious vessel on the sea) • Need SOP on MCS activities inception (such as measure fish product on board <i>etc.</i>) • Mechanism of central persecution