REPORT OF THE MEETING ON THE DEVELOPMENT OF MONITORING, CONTROL AND SURVEILLANCE NETWORK FOR SOUTHERN ANDAMAN SEA

Bangkok, Thailand
20-21 August 2019

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CONTENT

List of Annexes

REPORT OF THE MEETING ON THE DEVELOPMENT OF MONITORING, CONTROL AND SURVEILLANCE NETWORK FOR SOUTHERN ANDAMAN SEA

20-21 August 2019, Bangkok, Thailand

I. Introduction

1. The Meeting on the Development of Monitoring, Control and Surveillance Network for Southern Andaman Sea Sub-region was organized by the SEAFDEC-Sweden Project on 20-21 August 2019, in Bangkok, Thailand. The Meeting was attended by National Technical Group (NTG)/representatives, which comprised officers from different authorities (*e.g*. fisheries, marine enforcement, navy) from Indonesia, Malaysia and Thailand, as well as representatives from the Food and Agriculture Organization of the United Nations/Regional Office for Asia and the Pacific (FAO/RAP), officials from SEAFDEC Secretariat, Training Department (TD), Marine Fishery Resources Development and Management Department (MFRDMD), and members of the Regional Fisheries Policy Network (RFPN). The List of participants appears as **Annex 1**.

2. The Meeting was convened as a follow up activities of the "Third Sub-regional Consultative Workshop of the Joint Fisheries Management around Southern Andaman Sea", which was held in Bangkok in November 2017. During that 2017 Workshop, it was agreed to further strengthen the sub-regional cooperation on Monitoring, Control and Surveillance (MCS) network for Southern Andaman Sea Sub-region and identified steps to take for the establishment of the MCS network. Subsequently, in 2018 the SEAFDEC-Sweden Project developed the workplan and roadmap of establishment of the MCS network for Southern Andaman Sea sub-region (Indonesia, Malaysia and Thailand). In following up, therefore, this 2019 Meeting was intended to identify shared national priority areas for data sharing and coordination in fisheries for Southern Andaman Sea sub-region; discuss on ways forward on strengthening MCS network for Southern Andaman Sea sub-region; and discuss a possible mechanism for future cooperation for Southern Andaman Sea sub-region.

II. Opening of the Meeting

3. The Secretary-General of SEAFDEC, *Dr. Kom Silapajarn*, in the capacity as Chairperson of the Meeting firstly welcomed the participants to the Meeting. While emphasizing the importance of the sub-regional cooperation on fisheries management that had been strengthened for the Southern Andaman Sea Sub-region, he referred to the recommendation made at the Third Sub-Regional Consultative Workshop of the Joint Fisheries Management around Southern Andaman Sea, which was convened by the SEAFDEC-Sweden Project in November 2017 on the strengthening MCS cooperation in this Sub-region. Based on the recommendation, the SEAFDEC-Sweden Project hence conducted this Meeting to discuss on the development and strengthening of coordination for the Monitoring, Control and Surveillance (MCS) in the Southern Andaman Sea Sub-region. He encouraged the participants for the contribution and wished for the fruitful discussion during the Meeting. He then declared the Meeting open. His Opening Remarks appears as **Annex 2**.

III. Background, Objectives and Adoption of the Agenda

4. *Dr. Somchai Bussarawit*, Andaman Sea Sub-region Coordinator of the SEAFDEC-Sweden Project gave a brief presentation on the background, objectives and agenda of the meeting. Without modification of the Agenda, then Meeting adopted the Agenda. The Prospectus and Agenda appears as **Annex 3** and **Annex 4.**

5. In addition, the representative from Indonesia informed the Meeting on another regional initiative on the development of the establishment of ASEAN IUU taskforce, which was discussed during the 27th Meeting of ASEAN Sectoral Working Group on Fisheries (27-29 June 2019) in Da Nang, Viet Nam. This ASEAN IUU taskforce would be another platform for strengthen the regional cooperation to combat IUU fishing that would support the effective exchange of information, to create a network for better communication between the law enforcement authorities and governmental competent authorities taking responsibilities for combating IUU fishing.

IV. Reviews results relevant to MCS from the previous Meetings

4.1 The 3rd Sub-regional Consultation Workshop of the Joint Fisheries Management around Southern Andaman Sea on 21-22 November 2017

6. *Dr. Somchai* reviewed the results of the 3rd Sub-regional Consultative Workshop of the Joint Fisheries Management around Southern Andaman Sea on 21-22 November 2017. During that 2017 workshop, countries discussed on the possibility to develop coordinated efforts to implement the ASEAN Regional Plan of Action on Management of Fishing Capacity (RPOA-Capacity),where it states that countries to strengthen the implementation of MCS networks. With regards to the efforts for management of fishing capacity and reduce Illegal, Unreported and Unregulated (IUU) fishing, it was also emphasized on the strengthening of inter-agencies cooperation such as joint control transshipment at sea, using of the technology and tools to monitor fishing activities and sharing information on the database of fishing gear and vessel marking system, catch and landing, analysis of information for fishing effort and stock status with neighboring countries in Southern Andaman Sea.

7. In his presentation, he also referred that the follow-up actions after the 2017 Workshop, the SEAFDEC-Sweden Project proposed the roadmap for the establishment of MCS network for Southern Andaman Sea Sub-region, Northern Andaman Sea Sub-region and the Gulf of Thailand Sub-region and requested the nomination of the National Technical Group (NTG) to be assigned for the development of the MCS networks. The presentation appears as **Annex 5**.

4.2 The 4th Andaman Sea Sub-region Meeting on 20-21 November 2018

8. Highlighted in the 4th Meeting of Andaman Sea Sub-region on 21-22 November 2018, as presented by *Dr. Somchai*, the effort of the countries to implement actions on management of fisheries capacity and to reduce illegal and destructive fishing and the MCS cooperation. Some suggested actions included were:1) enhancing capacity building of human resources, particularly legal officers and law enforcement personnel to overcome the

gap 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; 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. The presentation appears as **Annex 5**.

9. *Dr. Kom* expressed the appreciation to the SEAFDEC-Sweden Project for the support to the Member Countries for strengthening the cooperation on MCS by providing the platforms for the discussion and encouraging sharing of information among the Member Countries through these sub-regional approaches.

10. *Ms. Pattaratjit Kaewnuratchadasorn*, the SEAFDEC-Sweden Project Manager informed the Meeting that since 2017, for the Andaman Sea Sub-region side, aside from MCS initiatives, several activities under the SEAFDEC-Sweden Project were implemented for Andaman Sea Sub-region such as managing transboundary species like anchovies, neritic tunas and mackerels, gender analysis among others. The outputs and background of the projects can be found in the reports and published in the official website.

V. Principle and Framework of MCS Network

11. *Mr. Simon Nicol*, Senior Fisheries Officer from FAO/RAP presented on the "Principles and Framework of MCS Network". He emphasized that MCS and fisheries management stems from the same foundation which is the FAO Code of Conduct for Responsible Fishing (CCRF). He mentioned that the MCS network is necessary to have a shared vision of fisheries which promotes joint combating or joint enforcement of illegal activities at sea. He also reiterated that to implement MCS networks effectively, information sharing and understanding of fishing regulations in the region are needed. He added that information to be shared formally or informally among countries maybe classified into 3 types: fishing vessels registers, vessels tracking and catch information, and IUU register. Moreover, he stated that since the regional countries have already well-developed fisheries management and the MCS networks implementation in region may no longer be a challenge. His presentation appears as **Annex 6**.

12. After the presentation, *Ms. Pattaratjit* inquired on the function of component M-Monitoring and rationale of the Maximum Sustainable Yield (MSY) as reference point for fisheries resources assessment to MCS system. In response, *Mr. Simon* informed that the MCS refers that not only knowing the fisheries resources status but also knowing if the vessels authorized for fishing are compliant in providing catch data during port samplings through verification of observers and VMS. These components then would help in determination of the level of allowable catch. While noting that in term of the sub-regional cooperation on MCS, in relation to rules, it needs to be consistency but not need to be the same regulation, countries needs just to understand other countries regulations, it is maybe need to have comparative law and regulations to understand where there is difference of law and regulation.

13. *Mr. Sutee Rajruchithong*, Technical Expert of TD inquired on how to incorporate information data gathered by responsible fishers at sea as a part of surveillance operations.

Mr. Simon suggested determining ways first on how to verify data from these fishers before incorporating data into the information base.

VI. Updated Results from the National Consultation on MCS Network for Southern Andaman Sea or Activities which relevant to M, C, and S

14. Based on the roadmap on the establishment of MCS networks in Southeast Asia waters, the countries were requested to identify the national needs and priorities on cooperation with neighbouring countries through national consultations among agencies involved in existing national M, C and S related coordination groups. Therefore, this Agenda was discussed on results from the national consultation MCS network for Southern Andaman Sea or activities relevant to monitoring, control and surveillance.

6.1 Countries updates

Indonesia

15. *Mr. Rizal Rifai*, the representative from Indonesia presented the MCS activities in Indonesia. He reported that the MCS in Indonesia is divided three components: Monitoring (data management), Control (licensing) and Surveillance (VMS and enforcement action). Some of Indonesia measures in managing the seas are issuance of moratorium on some permits for foreign made vessel, ban on transshipment at sea and prohibition of trawl fishing gear.

16. He also added that Indonesia has already started the MCS governance in 2014 by collecting the data related to illegal fishing, illegal transshipment at sea, depletion of fish stock and diversity. From 2015 to 2017, replacement of destructive gear and building of fishing vessel for small scale fisheries projects were already implemented. In 2018 and 2019, there are on-going activities on quota for fish catch and license and review on the renewal fishing license. The presentation appears as **Annex 7**.

17. The representative from Malaysia inquired on type of VMS system uses in Indonesia, *Mr. Rizal* verified it is a satellite based system (SINKADA) backed by regulations in compliance. He also added that vessels are categorized by Gross Tonnage (GT) and governed by different entities (30GT above is governed by MMAF and for 30 GT below by the Local Government).

18. *Mr. Simon*, the representative from FAO sought the clarification on the transshipment regulations in Indonesia, if so how the category for the fishing vessels size. In response, the representative from Indonesia clarified that transshipment regulations are not based on the GT of vessels and that transshipment at sea is actually not allowed in Indonesia.

Malaysia

19. *Mr. Mohd Faizrus Anwar bin Roslan*, the representative from Malaysia presented on the MCS implementation for fisheries management under the role of department's strategy

plan. He mentioned that monitoring and managing the fishing activities are through the Vessel Monitoring System (VMS-AIS and MTU), joint operations with other maritime enforcement agencies and control of alien species and enforcement. He also added that the Department of Fisheries and Marine Department are sharing information data in the system. The presentation appears as **Annex 8**.

20. The representative from Indonesia inquired about the details of the management system. *Mr. Faizrus* explained that the VMS is comprised two tasks that functions differently, the AIS and MTU system. The AIS system is installed for purse seine and trawlers fishing vessels while MTU system is installed for all fishing vessels. AIS system, is a transporter, power breaker, powered by solar system and 24 hours fully charged.

21. *Mr. Sutee* asked the effect of bad weather on the system. *Mr. Faizrus* clarified that if the vessel faced with bad weather the system's signal may be affected, however, this condition can be notified through AIS transmission.

Thailand

22. The representative from Thailand, *Dr. Pavarot Noranarttragoon*, provided the updated information on Implementation of Monitoring, Control and Surveillance (MCS) in Thailand. In his presentation, he started with the definition of M, C and S. With regard to Control, he added that Thailand has undertaken a reform of the fishing license regime and issuance of new fishing license shall be consistent with the MSY as stipulated in the Fishery Management Plan. The limit of number of fishing days with a maximum 30 days per trip and limited number of fishing days per year by type of fishing gear (*i.e.* trawl 270 days/year, purse seine 255days/year, anchovy purse seine 225 days/year and lift net or falling net 225 days/year).

23. He further elaborated the Surveillance part, Thailand has four separated components: before fishing, while fishing, during landing and post landing, where using the technology for to monitor fishing vessels operation at different steps. The Meeting took note of the set up of Port-in and Port-out (PIPO), as part of the MCS activities, has been in operation, where Thai fishing vessels are required to report to PIPO for inspection every time they port-out and port-in. He updated that currently Thailand has set up the 30 Port-In Port-Out Controlling Center (PIPO) and 21 Frontal Inspection Port (FIP). Moreover, he added that Thailand has six designated port for outside water territory (over sea), which are Samutprakarn, Ranong, Trat, Samutsakorn, Phuket and Songkla. In addition, he informed that fishing patrol center/unit have one (1) zone in Andaman Sea, and zone 3 Krabi Center (3 patrol units). He highlighted the remaining challenges that required the attention such as understand of transboundary species, maintain surveillance standard, continue improving MCS. The presentation appears as **Annex 9**.

6.2 Harmonization of Matrix of M, C and S for Southern Andaman Sea sub-region

24. Based on the national MCS system in Indonesia, Malaysia and Thailand, the task was given for the participants to harmonize the type of information to be shared and coordinated at the Southern Andaman Sea Sub-region level. The participants were divided into three groups namely: the Monitoring (M), Control (C), and Surveillance (S). Each group was assigned to discuss issues that are of priority in the MCS aspects of the Southern Andaman Sea.

25. Based on the result of discussions, the Monitoring (M) group agreed that the issues in transboundary species are in need to be shared among the countries in order to achieve better management. The information to be shared are catch efforts, vessels utilized, stock status and stock assessment results. Meanwhile, the Control (C) group focused on the regulations and related policies and best practices in preventing IUU. However, the Surveillance (S) group discussed on how to create networking strategy among countries for better sharing of information like tracking, position and vessel details. The (S) group also discussed the possibility of having community-based surveillance as an added intelligence operation. The matrix for the harmonization of the priority areas for data sharing and coordination in fisheries for Southern Andaman Sea sub-region appears as **Annex 10** and Group Discussion results appears as **Annex 11**.

VII. Discussion on the Establishment of the Southern Andaman Sea Sub-regional Cooperation on MCS in Fisheries

7.1 The Proposed Establishment of Southern Andaman Sea Sub-regional Cooperation on MCS in Fisheries (ref: concept paper)

26. *Ms. Pattaratjit* presented the Concept Paper of Establishment of sub-regional cooperation on Monitoring, Control and Surveillance in fisheries in the Southeast Asian Region, which was developed by the SEAFDEC-Sweden Project (as of 25 April 2018), as shown in **Annex 12**. While emphasizing the international instruments/conventions in related to fisheries resources are required the strengthened Monitoring, Control and Surveillance, she highlighted the rationale and benefit of the MCS coordination through sub-regional approach. In the Concept Paper, the SEAFDEC-Sweden Project also proposed the ideas on the possible working mechanism of Southern Andaman Sea Sub-regional Cooperation on MCS in Fisheries, as defined in *Appendix 2* of the Concept Paper.

7.2 Discussion/Group Work on Working Mechanism and Ambition for Future MCS Coordination Group based on the Countries Norm

27. After the presentation on the Concept Paper for the Establishment of MCS Network in Agenda 6.1, the participants were divided into group discussion (by country) and were requested to discuss on the proposed working mechanism and ambition for future MCS coordination group based on the countries norm as defined in *Appendix 2* of the Concept Paper.

28. Based on the discussion, the Meeting noted the following suggestion:

- The network would focus for enhancing of regional cooperation in combating IUU Fishing and comprised agencies who are involved MCS activities in the sub-region.
- Avoid the duplication with existing mechanism and the networks should intend to support RPAO-IUU and ASEAN Network IUU.
- The proposed mechanism should not be legally binding to prevent complication during the operation.
- Seek the possibility if the conduct of the meetings for MCS network for Southern Andaman Sea could be conducted simultaneously with other regional meetings such as ASEAN meetings.

29. After the comments from the countries, the Draft Working Mechanism was presented, as shown in **Annex 13.** *(Appendix 2* of the Concept Paper revised as of 21 August 2019).

VIII. Discussion on Ways forward on strengthening Coordinating bodies for MCS Network in the Southern Andaman Sea Sub-region

30. Under this Agenda, countries were tasked to discuss on ways forward or suggestions on strengthening coordinating bodies for MCS Network in the Southern Andaman Sea.

31. After the country discussed internally, each country presented the feedback and suggestions as follows:

- Thailand urged that Member Countries should have common understanding on MCS principles, while noting that fisheries resources status (MSY or alternative reference point) is needed as reference point for the network activities. Moreover, Thailand agreed to host annual MCS sub-regional meeting, however, Member Countries may need to prepare their own budget for the other expenses (transportation allowance etc.). They also added that in order to prevent challenges in funding support for the future MCS meetings, an aide from a third party source maybe needed.
- Malaysia and Indonesia commended the initiative of Thailand in becoming host for the next annual MCS meeting and recommended that internal meeting regarding budget or funding support should be done as soon as possible.
- Malaysia mentioned that there is already a National Technical Group (NTG) involving the enforcement agencies and fisheries that covers the Gulf of Thailand and Andaman Sea. They suggested that command center must be established in the sub-region in order to have a better network. Malaysia also proposed to prepare a SOP-based understanding on how to work together under this sub-region network and this SOP need not be legally binding. In addition, they also wanted the ASEAN member countries to be involved and recognize the MCS sub-regional initiatives.
- Indonesia suggested having a focal point and alternate focal point for Southern Andaman Sea. These assigned focal points will be responsible in attending meeting for sub-regional MCS network. They also requested to consider the network as part of RPOA-IUU or ASEAN Combating IUU and asked SEAFDEC to facilitate in appointing the focal point.

32. With regard on the request for the focal point for the coordination, *Ms. Pattaratjit* sought the clarification on the preference of the country to use the National Technical Group (NTG) to serve as focal point or new nomination of the focal point. The Meeting was informed that Thailand and Malaysia has already nominated the National Technical Group and it is recognized at national level. For Indonesia, even though, the National Technical Group has not nominated, SEAFDEC is requested to send a letter of request with regards to nomination of focal point to Indonesia.

33. The **Meeting agreed** on the proposal and considered the discussion as the result of the way forward for MCS Network in Southern Andaman Sea Sub-region.

IX. Discussion on Communication Mechanism

34. The Meeting took note of the existing regional/sub-regional/bilateral platforms that addressing combat IUU fishing and MCS (e.g. RPOA-IUU Coordination Committee (annually

organize in November),FAO/APFIC, COBSEA, SEAFDEC, ASEAN), which can be a possible fora for countries to report, discuss and collaborate to each other, in particular on MCS. However, *Ms. Pattaratjit* raised the concerned that even though the MCS body or coordination would not be easily establish within short time and no external fund to be secure for organizing the Southern Andaman meetings conducts since the SEAFDEC-Sweden Project will end in 2019, she suggested that countries could communicate via an email group among NTGs or focal points as it could be a mean for MCS communication.

X. Updates from FAO on BOBLME Phase 2

35. *Mr. David Brown*, FAO Consultant from FAO/RAP presented on the Bay of Bengal Large Marine Ecosystem Programme Phase 2, which covers eight countries of Bay of Bengal and Andaman Sea, that includes Indonesia, Malaysia, Myanmar and Thailand. He firstly introduced two major outputs which was the Transboundary Diagnostic Analysis (TDA) and the Strategic Action Programme (SAP). He mentioned about achievement of BOBLME phase 1 such as stock assessment, draft NPOA for sharks and rays, draft RPOA for shark, review of impacts of Illegal, Unregulated and Unreported (IUU) fishing, capacity development on Ecosystem Approach to Fisheries Management (EAFM) etc.

36. *Mr. David* also mentioned that there are five components of BOBLME phase 2 including 1) Sustainable management of fisheries 2) Restoration and conservation of critical marine habitats and protection of biodiversity 3) Management of coastal and marine pollution to improve ecosystem health 4) Improved livelihoods and enhanced resilience of the BOBLME 5) Regional mechanism for planning, coordination, and monitoring of the BOBLME. The BOBLME Project Phase 2 is in the process on national consultations and finalization of the Activities which will be started in the mid of 2020. In addition, he emphasized that the Southern Andaman Sea MCS network initiative align with match to the BOBLME Outcome 1.2 (IUU catch in the BOBLME reduced), based on the deliberation of this Meeting, it would provide ideas for further developed detailed outputs and activities. The presentation appears as **Annex 14**.

XI. Conclusion, Way forward

37. Based on the 2-days discussion, the Meeting took note on the summary of the deliverable as follows:

- With regards to Matrix harmonization, the **Meeting is in agreement** to focus on transboundary species issues by sharing information on catch efforts, vessels utilized, stock status and assessment results. The regulations and related policies and best practices in preventing IUU should also be given importance. Forming of networking strategies should also be priority in order to better communicate among countries and to address easily challenges in formulating an MCS network.
- Meanwhile, for the working mechanism and ambition for future MCS coordination group based on the countries norm. The Meeting agreed to concentrate on enhancing the regional cooperation in combating IUU fishing, prevention of network duplication with the existing mechanism and that the networks should intend to support RPAO-IUU and ASEAN Network IUU. Moreover, it was suggested that the proposed mechanism should not be legally binding to prevent complication during the operation and in order to save funding support, the meetings of MCS Southern

Andaman Sea network should be conducted simultaneously with other regional meetings.

- In order to strengthen coordinating bodies for MCS Network in the Southern Andaman Sea. The **Meeting agreed** to have common understanding on MCS principles. In addition, Thailand agreed to host the future MCS meeting through their national budget however other additional cost should be shouldered by respective countries. The term NTG instead of focal point is also agreed upon for consistency. It was also advised that Indonesia send a letter of request to SEAFDEC with regards to nomination of their NTG.

XII. Closing of the Meeting

38. In his Closing Remarks, the Secretary-General of SEAFDEC, *Dr. Kom Silapajarn*, expressed his gratitude to all participants for their great contribution. He also acknowledged for the Secretariat of the Meeting for the support and arrangements of the Meeting. After commending the value inputs of the participants to come up with the significant recommendations towards the establishment of the MCS network for Southern Andaman Sea Sub-region. He wished the participants a safe journey back home and declared the Meeting close. The Closing Remarks appear as **Annex 15**.

Annex 1

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Annex 2

OPENING REMARKS

By Dr. Kom Silapajarn,
SEAFDEC Secretary-General

Distinguished National Technical Group for MCS from Indonesia, Malaysia and Thailand, representative from FAO, colleague from SEAFDEC, ladies and gentlemen,

Good morning to all of you!

Firstly, I would like to express my warm welcome to all of you for participating in the Meeting on the Development of Monitoring, Control and Surveillance Network for Southern Andaman Sea.

As you aware that the SEAFDEC-Sweden Project has made the effort to provide platforms for Andaman Sea countries namely: Indonesia, Malaysia, Myanmar and Thailand, to discuss on issues of management of fishing capacity and reduce Illegal, Unreported and Unregulated (IUU) fishing. Based on geographical areas, The Project divided the platforms of Andaman Sea Sub-region into Northern (Myanmar and Thailand), while for Southern Andaman Sea covers Indonesia, Malaysia and Thailand, in order to facilitate the discussion and strengthen the cooperation on fisheries resources and management of fishing capacity and reduce IUU fishing.

This Meeting builds upon the outcomes from the discussion during the Third Sub-regional Consultative Workshop of the Joint Fisheries Management around Southern Andaman Sea in November 2017; the Workshop was discussed in particular to the Monitoring, Control and Surveillance (MCS) network. Therefore, the SEAFDEC-Sweden Project developed a roadmap for initiating MCS cooperation in the Southern Andaman Sea and this meeting is following up on this request.

The MCS cooperation would be benefit for the countries through improved scientific-based information, improved product traceability and enhanced the trade across the countries, and reduced costs for surveillance, through national efforts to reduce IUU fishing. An important condition for such a cooperation to be successful is that all relevant authorities involved in fisheries management take part in the cooperation both nationally and sub-regionally.

To develop MCS cooperation, we expect that the common priority areas for cooperation in all areas of fisheries management would be identified and how such cooperation can be developed. We expected the outcomes from the Meeting would be the formal MCS coordination and strengthen coordinating body for MCS Network in the Southern Andaman Sea Sub-region.

Finally, I would like to express my sincere thank to all of distinguished participants for coming here. I wish your contribution and constructive inputs for this two days meeting. Last but not least, I would also like to thank to Sweden for funding support this effort.

I wish you a successful Meeting and look forward to interesting and constructive discussions. I now declare the Meeting open.

Thank you.

Annex 3

PROSPECTUS

I. Introduction

Today investments are being made to develop fishing boats, fishing gear, to increase catching capability and, thus the exploitation rate of the resources. As long as the harvesting level has not been exceeding the maximum sustainable yield, the increasing of fishing effort has been in proportion to the amounts of existing resources (fish). However, when the maximum sustainable yield is exceeded, the profits of fishing decrease as overall landing of fish per hour declines. Thus, open access to fish resources lead to unlimited fishing effort and a high risk of over fishing and reduced catches and profits. The development of a well-regulated fishery is the solution to this and has to be based on a regulated use of national resources. The regional characteristics of the fishery such as transboundary stocks, trade and movement of fishing vessels make it necessary to extend national regulation to a regional perspective through sub-regional coordination.

Several instruments addressed on management of fisheries resources such as 1982 United Nation Convention on the Law of the Sea (UNCLOS), the most important rules of international law relating to Monitoring, Control and Surveillance (MCS), with the purpose to conserve the marine resources and environment. FAO (1981) defined the term of M, C and S:

Monitoring: the continuous requirement for the measurement of fishing effort characteristics and resource yields.

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

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

Thus, Monitoring is the collection of data, Control covers the legal management system including management of resources and Surveillance is the enforcement. This also means that the authorities and ministries that need to be involved in the MCS cooperation should include those responsible for all of the above activities. Those could include for example Port Authorities, Department of Fisheries, Customs and Trade, Enforcement Authorities, Immigration and Labour.

The Southern Andaman Sea sub-region, under the SEAFDEC-Sweden Project covers Indonesia (North Sumatra), Malaysia and Thailand. This discussion had been strengthening since 2009 until present to strengthen tri-lateral cooperation to improve management of fishing capacity, including the initiation of sub-regional MCS Networks together with development of port monitoring capacity and coordinated efforts to combat IUU fishing. Along this line, the Regional Plan of Action on Management of Fishing Capacity (RPOA-Capacity) also highlighted on the need to strengthen the sub-regional cooperation on MCS. An effective sub-regional coordination could facilitate trade through improved product traceability, coordinate national measures to secure fish resources as well as improve scientific assessments and simplify surveillance. The condition for such a cooperation to be successful is that all relevant authorities involved in aspects of the fisheries management take part in the cooperation both nationally and internationally/regionally.

Therefore, in 2017, the SEAFDEC-Sweden Project facilitated the discussion among Southern Andaman Sea on the support of strengthening MCS cooperation and requested SEAFDEC to develop a workplan for establishing a coordinating MCS body between Indonesia, Malaysia and Thailand in connection to existing cooperation initiatives. It is noted MCS operations can be expedited with reduced costs and in an effective manner through co-operation with neighbouring countries on bilateral, sub-regional or regional initiatives.

II. Objectives of the Meeting

1. To identify shared national priority areas for data sharing and coordination in fisheries in the sub-region;
2. To discuss on ways forward on strengthening MCS network for Southern Andaman Sea; and
3. To discuss a possible mechanism for future cooperation in the Southern Andaman Sea sub-region.

III. Expected Outputs

1. List of shared national priority areas for data sharing and coordination in fisheries in the sub-region
2. Key elements for move forward for establishing a MCS network in the Southern Andaman Sea sub-region
3. Suggested working mechanism to coordinate on MCS network in the Southern Andaman Sea sub-region
4. Suggested communication mechanism for exchanging information

IV. Expected Outcomes

1. Establishment of MCS systems/networks in the Southern Andaman Sea sub-region
2. Effective and efficient collaboration and Coordination across the relevant agencies on MCS

V. Target Participants and Resource Person

1. Five National Technical Group persons (NTG) from each three countries who should be representing different national authorities involved in different aspect on fisheries (such as port Authorities, Department of Fisheries, Customs an Trade, Enforcement Authorities, Immigration and Labor) (15 persons)
2. Resource persons and representatives from regional organization and partners such as FAO/RAP, RPOA-IUU Sec. (2-3 persons)
3. Representatives from SEAFDEC Secretariat, TD and MFRDMD (10 persons)
4. Regional Fisheries Policy Network members (7 persons)

Annex 4

PROVISIONAL TIME TABLE AND AGENDA

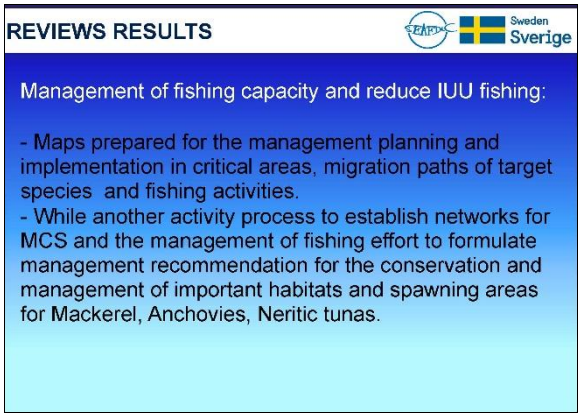
Time	Contents
19 August 2019 (Monday)	
	Arrival of all participants
20 August 2019 (Tuesday)	
08.30-09.00	Registration
09.00-09.15	Agenda 1: Opening of the Meeting
09.15-09.30	Agenda 2: Background, Objectives and Adoption of the Agenda
09.30-09.45	Agenda 3: Reviews results relevant to MCS from the previous Meetings 3.1 The 3rd Sub-regional Consultation Workshop of the Joint Fisheries Management Around Southern Andaman Sea on 21-22 November 2017 3.2 The 4th Andaman Sea Sub-region Meeting on 20-21 November 2018 *By Dr. Somchai Bussarawit, SEAFDEC-Sweden project*
09.45-10.15	*Group photo and refreshment*
10.15-12.00	Agenda 4: Updates Results from National Consultation on MCS Network or the Implementation which relevant to M,C, and S 4.1 Countries updates • Indonesia • Malaysia • Thailand (*Time will be allocated for 20 minutes/presentation and 10 minutes for Q&A)*
12.00-13.30	*Lunch*
13.30-15.00	4.2 Harmonization of Matrix of M, C and S for Southern Andaman Sea sub-region *By Ms. Pattaratjit Kaewnuratchadasorn, SEAFDEC-Sweden project*
15.00-15.30	Agenda 5: Principle and Framework of MCS Network *The Meeting will be provided on the principle and Framework on MCS Network on Fisheries Management, Benefits and Challenges* *By Simon Nicol, FAO/RAP*
15.15-15.30	*Refreshment*
15.30-17.00	Agenda 6: Discussion on the Establishment of Southern Andaman Sea Sub-regional Cooperation on MCS in Fisheries 6.1 Presentation on the proposed Establishment of Southern Andaman Sea Sub-regional Cooperation on MCS in Fisheries *(ref: concept paper)*

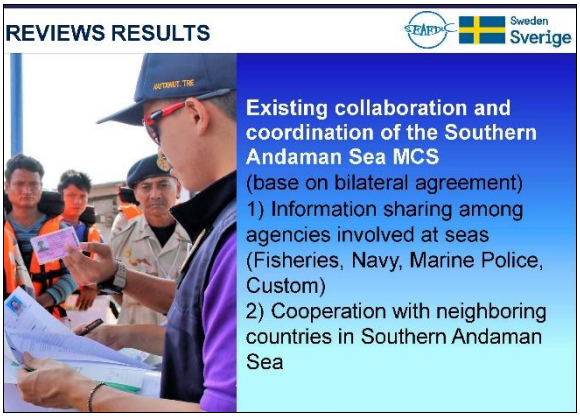
	By Ms. Pattaratjit Kaewnuratchadasorn, SEAFDEC-Sweden project 6.2 Discussion/Group Work on Working Mechanism and Ambition for Future MCS Coordination Group based on the Countries Norm
18.30-20.00	*Reception dinner hosted by SEAFDEC*
21 August 2019 (Wednesday)	
9.00-9.15	Presentation results from Day 1
9.15-10.30	Agenda 7: Discussion on Ways forward on strengthening Coordinating bodies for MCS Network in the Southern Andaman Sea Sub-region
10.30-11.00	*Refreshment*
11.00-12.00	Presentation of Agenda 7 and Plenary Discussion
12.00-13.30	*Lunch*
13.30-14.30	Agenda 8: Discussion on Communication Mechanism
14.30-15.00	*Refreshment*
15.00-15.30	Agenda 9: Updates from FAO on BOBLME Phase 2 Initiative *ByDavid Brown, FAO*
15.30-15.45	Agenda 10: Conclusion, Way forward
15.45-16.00	Agenda 11: Closing the Meeting

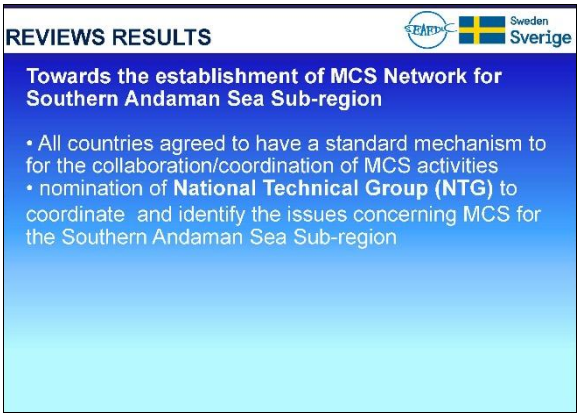
Annex 5

REVIEWS RESULTS RELEVANT TO MCS FROM THE PREVIOUS MEETINGS

By *Dr. Somchai Bussarawit*







REVIEWS RESULTS

Sweden Sverige

Roadmap for Establishment of MCS Network for Southern Andaman Sea Sub-region

NTG in Countries → NTG Meeting → Pre-High Level Meeting → Sub-regional Meeting (in countries) → High Level Meeting

REVIEWS RESULTS

Sweden Sverige

3.2 The 4th Meeting of the Andaman Sea Sub-Region in Bangkok, Thailand, 20-21 November 2018

REVIEWS RESULTS

Sweden Sverige

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

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

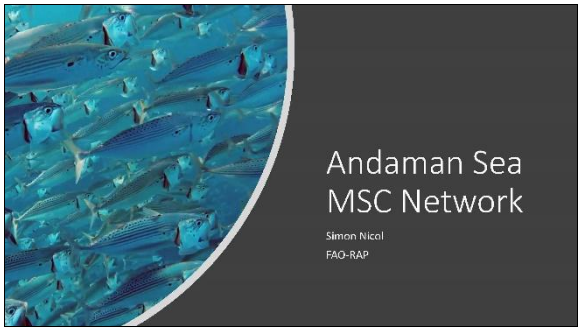
Harmonizing a mechanism of the central persecution, if possible.

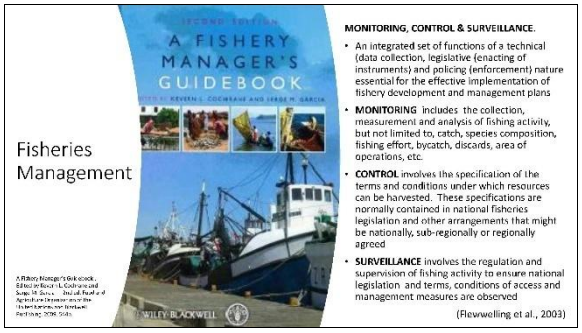
https://www.facebook.com/SEAFDECSwedenProject

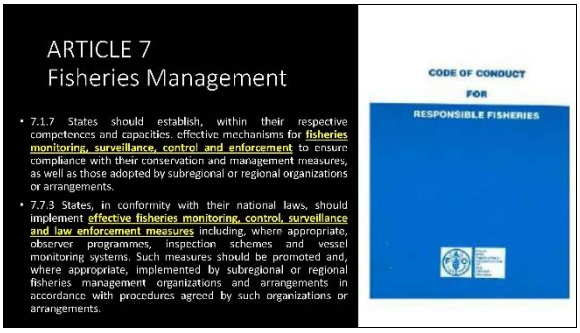
Annex 6

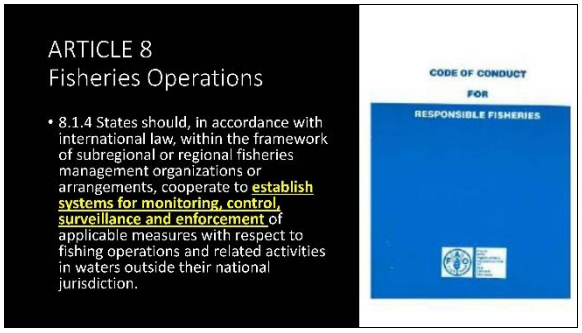
PRINCIPLE AND FRAMEWORK OF MCS NETWORK

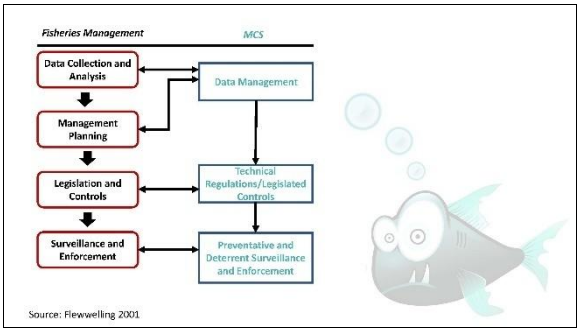
By *Mr. Simon Nicol*

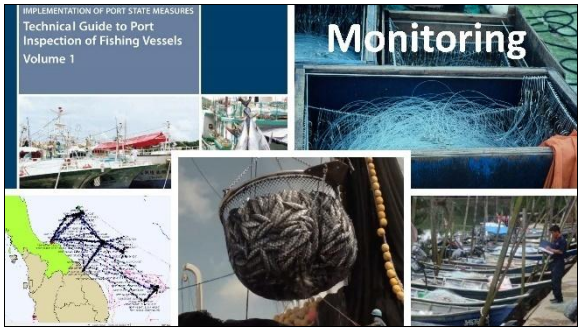


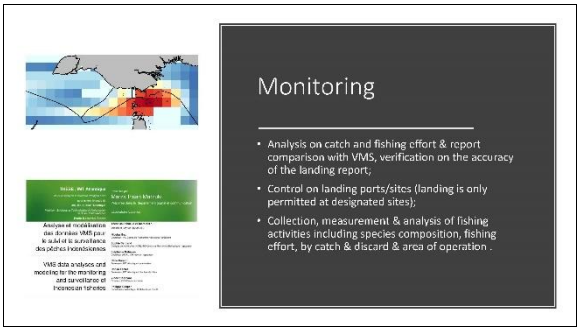












Control

- Fishing effort through licensing;
- Registration of fishing vessels;
- Requirement to have permanent markings on fishing vessels;
- Prohibition on fishing gears and methods of fishing;
- Transshipment;
- Fishing zones.

Surveillance

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

MCS Networks

Why

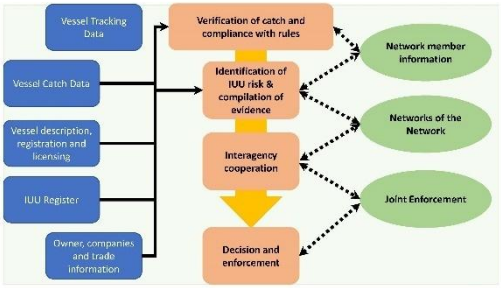
- Proactive and re-active responses
- Wide and Shared vision of fisheries
- Early access to information on persons and vessels of interest
- Cooperative initiatives
- Shared training and capacity building

How

- Information sharing protocols
- Transferable, Transparent and Harmonized rules

What defines an MCS Network?

- A collaborative effort of two or more agencies that provide resources, expertise and information to the network to detect, prevent, investigate, and respond to fishing activity that contravenes national and international rules and procedures.
- Serve as primary focal points for the receipt, analysis, gathering, and sharing of relevant information among partners
- Coordination of joint actions and training



Fishing vessels registers	Vessel Tracking and Catch Information	IUU Registers
• Flag and License details • Identifying features and photos of vessels • Vessel owners and fishing master	• VMS • AIS analyses • Transshipment information • Port Information • Landings and trade data	• Reports and details of suspected IUU fishing incidents and vessels • INTERPOL notices • Customs information • Police and port authority reports • Regional and local news reports

Information to Share?

01 Build insight into known or possible illegal incidents

02 Improve tracking efforts and identification of fishing activity

03 Profile of suspicious operators

Collaborative approaches to strengthen evidence against illegal fishing perpetrators

Harmonize for Transferability and Transparency

Joint Actions

- Inspection of suspicious vessels
- Enforcement action
- Training
- Placements
- Policy and Strategy

Mechanics

Bilateral or multilateral arrangements

- Formal Information Exchanges
- Informal sharing exchanges

Share responsibilities

- Infrastructure
- Virtual operations
- Physical centres
- Focal points

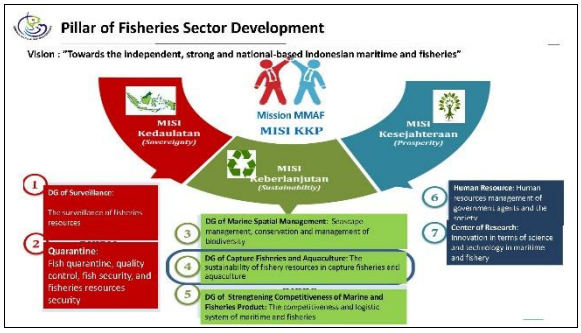
Summary

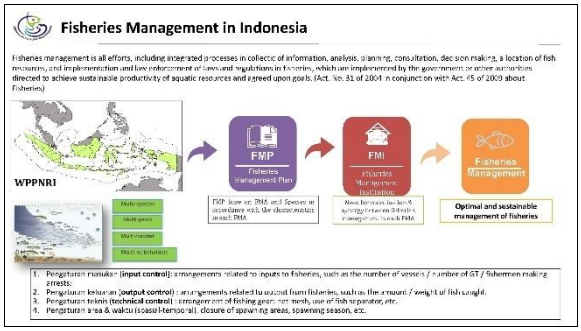
- Andaman Sea Coastal States have much information to share
- Similar levels of capacity
- Compare legal frameworks
  - Formal or informal information sharing
- Undertake IUU risk assessments
- Joint Enforcement

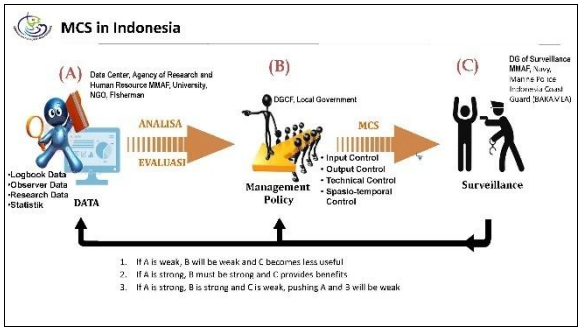
Annex 7

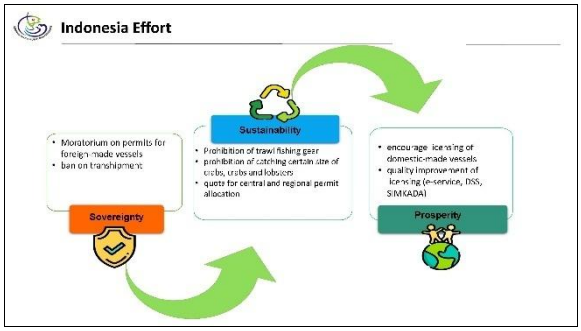
UPDATED RESULTS FROM THE NATIONAL CONSULTATION ON MCS NETWORK FOR SOUTHERN ANDAMAN SEA OR ACTIVITIES WHICH RELEVANT TO M,C, AND S (INDONESIA)

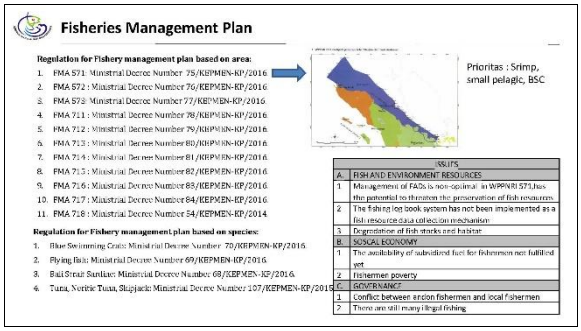
By *Mr. Rizal Rifai*

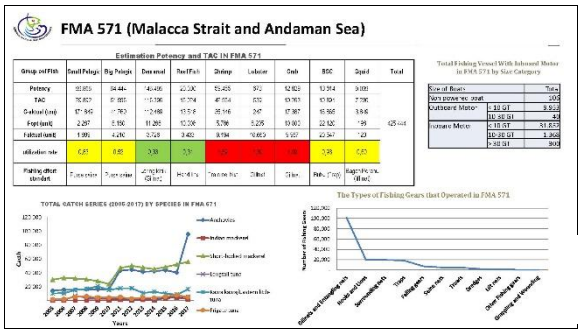


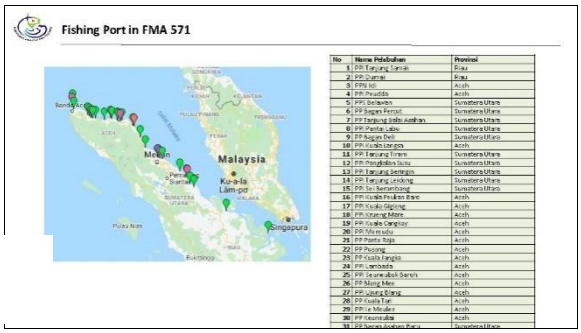




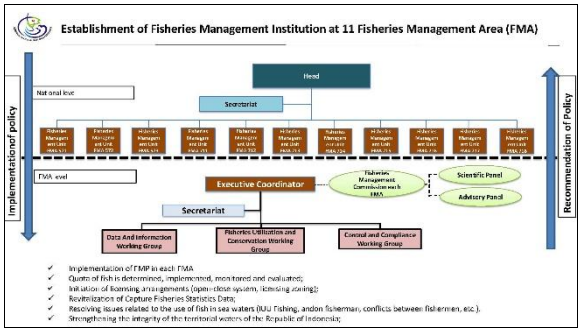






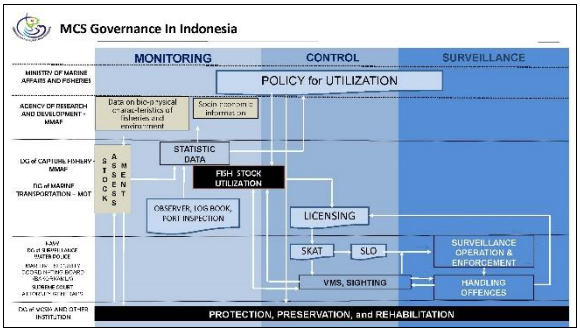


Establishment of Fisheries Management Institution at 11 Fisheries Management Area (FMA)



- Implementation of FMP in each FMA
- Quota of fish is determined, implemented, monitored and evaluated;
- Initiation of licensing arrangements (open-close system, licensing zoning);
- Revitalization of Capture Fisheries Statistics Data;
- Resolving issues related to the use of fish in sea waters (IUU Fishing, andon fisherman, conflicts between fishermen, etc.).
- Strengthening the integrity of the territorial waters of the Republic of Indonesia;

MCS Governance In Indonesia

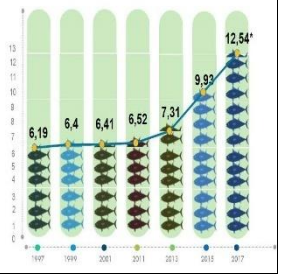


MCS Governance in a Timeline

2014	• Illegal fishing vessels, illegal transshipment, human trafficking, under-sized vessels. • Depletion of fish stock and diversity. • **Fish stock assessment status: 6,52 million tons (2011).**
2015	• Stop destructive fishing (trawls and all similar gears in its group). • Combat the IUU Fishing. • **Re-measurement** on all fishing vessels.
2016	• **Fish stock assessment: 12,54 million tons.** • Replace trawls with other eco-friendly fishing gears. • Build new fishing vessels for small scale fisheries.
2017	• **Fish stock assessment: 12,54 million tons.** • Replace trawls with other eco-friendly fishing gears. • Build new fishing vessels for small scale fisheries.
2018	• **Review the renewal fishing license** in order to improve fishers compliance. • Data improvement: for better policy making through **e-logbook** and **onboard observer.** • Implementing **Good Fish Handling Practice** and **biofloc technology.**
2019	• Implementing **quota of fish and license** • Compile document: Harvest strategy for several priority species (Tuna, BSC, Snapper, Grouper, and small pelagic)

Strengthening MCS : Monitoring Aspects

- Establish KOMNASKAN (National Fishery Commission)
- Developing integrated Infrastructure (Center of Integrated Fisheries and Marine)
- Log Book Report (Developing E-Log Book)
- Observer : Only for Transporter Vessel (Transshipment at sea)
- Implement **One Data Policy**
- Landing Compulsory to the designated port (2 Port have been put in license)
- Port Sampling Program → E-BRPL (Scientific data Dash Board)
- Ban on Trawl fishing gear and transhipment at sea
- Moratorium on Permit Foreign Vessel;



Strengthening MCS : Controlling Aspects

- ✓ License : < 30 GT Province Authority, > 30 GT MMAF
- ✓ Quota allocation fish utilization (by; Tons and GT)
- ✓ Compile Document Harvest Strategy for several priority species (Tuna, BSC, Snapper, Grouper, and small pelagic)
- ✓ Closing Season
- ✓ Min size for Crab, BSC and Lobster
- ✓ Fishing Vessel have each Fishing Zone to Fish,
  - Zone 1A = 0-2 nm
  - Zone 1 B= 2-4 nm
  - Zone 2 = 4-12 nm
  - Zone 3 = < 12 mm
- ✓ Inspection on arrival and depart of fishing vessel on Port
- ✓ Product certification to prevent, eliminate and combat IUU Fishing Activities
- ✓ Indonesia is currently conducting an internal process to ratify the PSM Agreement

Strengthening MCS : Surveillance Aspects

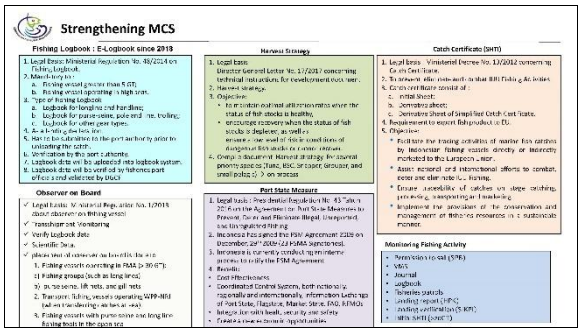
Soft Structures

1. Public Information Campaign dan Public Awareness for related stakeholders;
2. Follow up action on PSMA, implementation of European Commission/EC Regulation;
3. Capacity building for fisheries inspector and investigator;
4. Member of RFMO (IOTC, CCSBT, and WCPFC);
5. Participating country of the Regional Plan of Action (RPOA) to promote responsible fishing pratices including combating IUU fishing in Southeast Asia region
6. 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).
7. National Plan of Action (NPOA) to prevent and to combat illegal, unreported, and unregulated (IUU) fishing 2012-2016.

Hard Structures

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

Strengthening MCS



Quata of Fish and Fishing License

Estimation of Fish and Total Allowable Catch : 9 group of fish in each WPP

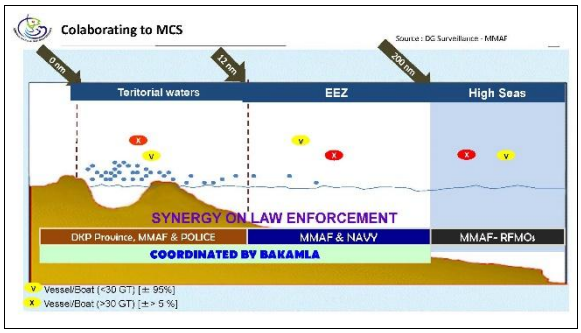
Quota of fish 9 group of fish in each WPP : MMAF and Local Government (ton)

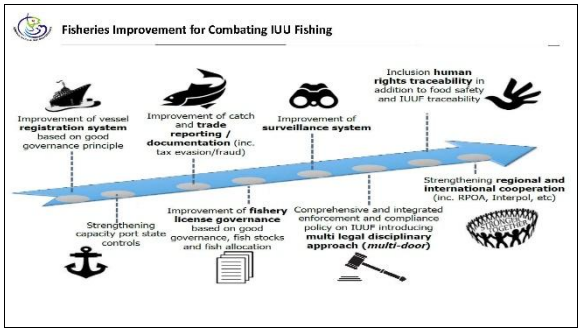
$$A_{i,p} = T\_rata_i \times (W1 + W2)\,(CF1 + CF2)$$

A_{ip}	: Quota of fish
T_rata	: Catch average in 5 years
W1	: number of fishermen
W2	: the length of the coastline
CF1	: Validation of Logbook and observer
CF2	: Conservation activity

Alocation for fishing license : MMAF (>30 GT) and Local Government (<30 GT)

Note : Quota of fish for (>30 GT) has been establish and implementation and establishmen process quota of fish in each Local Government (<30 GT)


Colaborating to MCS
Source : DG Surveillance - MMAF
0 nm
12 nm
200 nm
Teritorial waters
EEZ
High Seas
SYNERGY ON LAW ENFORCEMENT
DKP Province, MMAF & POLICE
MMAF & NAVY
MMAF- RFMOs
COORDINATED BY BAKAMLA
Vessel/Boat (<30 GT) [± 95%]
Vessel/Boat (>30 GT) [± > 5 %]

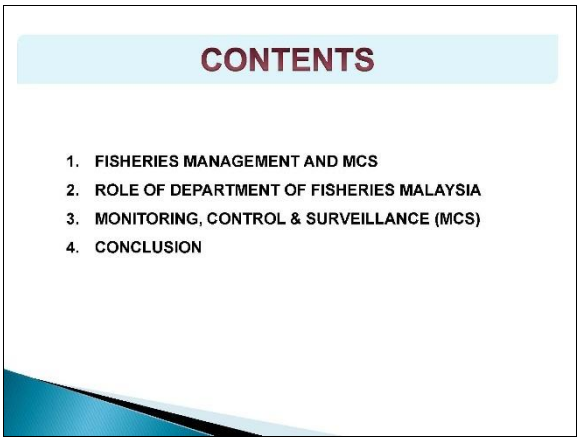

Fisheries Improvement for Combating IUU Fishing
Improvement of vessel registration system based on good governance principle
Improvement of catch and trade reporting / documentation (inc. tax evasion/fraud)
Improvement of surveillance system
Inclusion human rights traceability in addition to food safety and IUUF traceability
Strengthening regional and international cooperation (inc. RPOA, Interpol, etc)
Strengthening capacity port state controls
Improvement of fishery license governance based on good governance, fish stocks and fish allocation
Comprehensive and integrated enforcement and compliance policy on IUUF introducing multi legal disciplinary approach (multi-door)

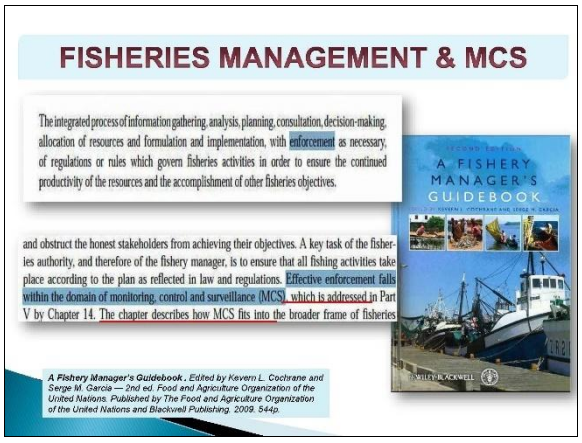

TERIMA KASIH
Thank You

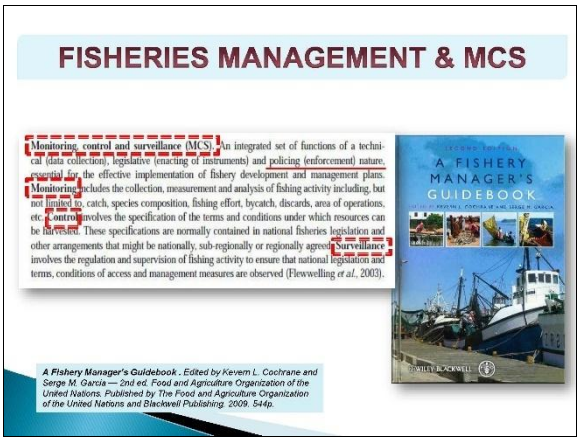
Annex 8

UPDATED RESULTS FROM THE NATIONAL CONSULTATION ON MCS NETWORK FOR SOUTHERN ANDAMAN SEA OR ACTIVITIES WHICH RELEVANT TO M,C, AND S (MALAYSIA)

By *Mr. Mohd Faizrus Anwar bin Roslan*







FISHERIES MANAGEMENT & MCS

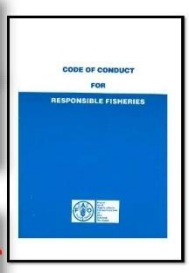
ARTICLE 7 – FISHERIES MANAGEMENT

7.1.7 States should establish, within their respective competences and capacities, effective mechanisms for fisheries monitoring, surveillance, control and enforcement to ensure compliance with their conservation and management measures, as well as those adopted by subregional or regional organizations or arrangements.

7.7.3 States, in conformity with their national laws, should implement effective fisheries monitoring, control, surveillance and law enforcement measures, including, where appropriate, observer programmes, inspection schemes and vessel monitoring systems. Such measures should be promoted and, where appropriate, implemented by subregional or regional fisheries management organizations and arrangements in accordance with procedures agreed by such organizations or arrangements.

ARTICLE 8 – FISHING OPERATIONS

8.1.4 States should, in accordance with international law, within the framework of subregional or regional fisheries management organizations or arrangements, cooperate to establish systems for monitoring, control, surveillance and enforcement of applicable measures with respect to fishing operations and related activities in waters outside their national jurisdiction.



5

1.4 Enforcement in Fisheries management

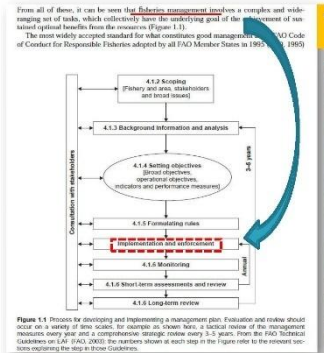
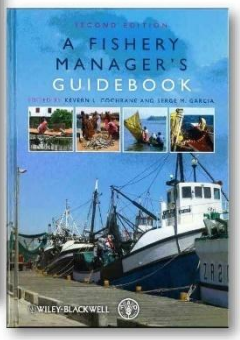


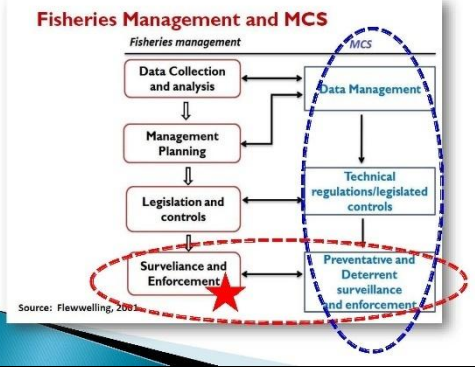
Figure 1.1 Process for developing and implementing a management plan. Evaluation and review should occur on a variety of time scales, for example as shown here, a tactical review of the management measures every year and a comprehensive strategic review every 3–5 years. From the FAO Technical Guidelines on LAF (FAO, 2003): the numbers shown at each step in the Figure refer to the relevant sections explaining the step in those Guidelines.

A Fishery Manager's Guidebook . Edited by Kevern L. Cochrane and Serge M. Garcia — 2nd ed. Food and Agriculture Organization of the United Nations. Published by The Food and Agriculture Organization of the United Nations and Blackwell Publishing. 2009. 544p.



1.5 Enforcement in Fisheries management

Fisheries Management and MCS



Source: Flewwelling, 2001

ROLE OF THE DEPARTMENT

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.

*"Commitment to **combat IUU** fishing through sound capture fisheries management"* – page 22 and 36

Role Of Resource Protection Division

1) Enforcement of the Fisheries Act 1985 and all its Regulations through MCS programme
2) Plan and execute operations at sea and on land.
3) Plan and execute air surveillance programmes.
4) Monitor the safety of the local fishermen.
5) Analyse all available information to aid enforcement.
6) Assist in "search and rescue" activities.

Role Of Resource Protection Division

7) Monitoring and managing the fishing activities through the Vessel Management System (VMS)
8) Plan and execute joint operations with other maritime enforcement agencies.
9) Control of the alien species.
10) Enforcement of the turtles enactment and inland fisheries rules.

Legislation Related to Fisheries Management

1. Fisheries Act 1985
2. Exclusive Economic Zone Act 1984
3. Merchant Shipping Ordinance 1952
4. International Trade In Endangered Species Act 2008
5. Malaysian Quarantine and Inspection Services Act 2011
6. Environment Quality Act 1974 (Act 127)
7. Animal Food Act 2009 (Act 698)

Legislation Related to Fisheries Management

NO.	FISHERIES REGULATIONS
1.	Fisheries Maritime Regulations 1967
2.	Fisheries (Maritime) (Sarawak) Regulations 1976
3.	Fisheries (Prohibition Of Method Of Fishing) Regulations 1980
4.	Fisheries (Maritime) (Licensing Of Local Fishing Vessel) Regulations 1985
5.	Fisheries (Marine Culture System) Regulations 1990
6.	Fisheries (Prohibition Of Import, Etc., Of Fish) Regulations 1990
7.	Fisheries (Prohibited Areas) (Rantau Abang) Regulations 1991
8.	Establishment Of Marine Parks Malaysia Order 1994
9.	Fisheries (Prohibited Areas) Regulations 1991
10.	Fisheries (Closed Season To Catch Kerapu Fry) Regulations 1996
11.	Fisheries (Prohibition Of Method Of Fishing For Kerapu Fry) Regulations 1996
12.	Fisheries (Control Of Endangered Species Of Fish) Regulations 1999
13.	Fisheries (Cockles Conservation And Culture) Regulations 1999
14.	Fisheries (Quality Control Of Fish For Export To The European Union) Regulations 2009
15.	Fisheries (Quality Control of Fish for Export to the European Union) (Amendment) Regulations 2010
16.	Fisheries (Maritime) (Licensing of Local Fishing Vessel) (Amendment) Regulations 2010
17.	Fisheries (Protected Area for Sea-Cucumber) Regulations 2010
18.	Fisheries (Prohibition of Import, etc., of Fish) (Amendment) 2011
19.	Fisheries (Fish Disease Control Compliance For Exports and Imports) Regulations 2012

Legislation Related to Fisheries Management

FISHERIES (RIVERINE) RULES IN MALAYSIA

1. Kedah Fisheries (riverine) Rules 1990 (20 Ogos 1991)
2. Perlis Fisheries (riverine) Rules 1990 (26 Okt.1993)
3. Perak Fisheries (riverine) Rules Perak 1992 (21 Mei 1992)
4. Negeri Sembilan Fisheries (riverine) Rules 1976 (24 Nov. 1977)
5. Johor Fisheries (riverine) Rules 1984 (1 Jan. 1984)
6. Pahang Fisheries (riverine) Rules 1991 (4 Jul.1991)
7. Terengganu Fisheries (riverine) Rules Terengganu (Amendment)1993
8. Kelantan Fisheries (riverine) Rules 1997 (11 sept.1997)
9. Pulau Pinang Fisheries (riverine) Rules 1999 (21 Jan.1999)
10. Sarawak State Fisheries Ordinance ,2003
11. Sabah Enactment Inland Fisheries and aquaculture 2003

FISHERIES RULES FOR TURTLES AND TURTLES'S EGGS IN MALAYSIA

1) Sabah-The National Park Enactment 1977(The Turtle National Parks regulations)
2) Sarawak-Rhe turtles Ordinance (The Turtles Prevention of Disturbance)Rules 1962
3) Terengganu –Turtle Enactment 1951 and Turtle Enactment (Amendment) 1987
4) Pulau Pinang-Fisheries Rules(Turtle and Eggs) 1999
5) Melaka-Fisheries Rules(Turtle and Eggs) 1989
6) Johor-Pinang-Fisheries Rules(Turtle and Eggs) 1999
7) Kedah-Turtle Enactment 1972

MONITORING, CONTROL AND SURVEILLANCE (MCS)

MONITORING

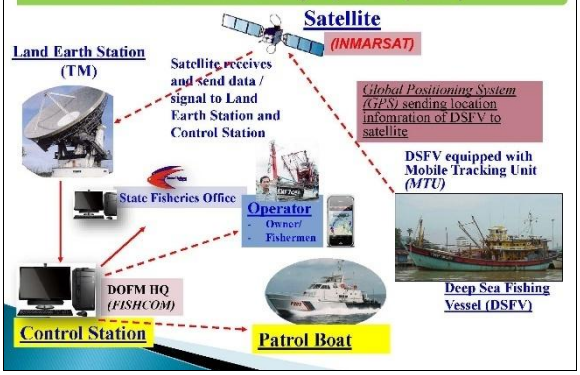
"the continuous requirement for the measurement of fishing effort characteristics and resource yields through observations, data collection, measurement and analysis of data and fisheries activity information"

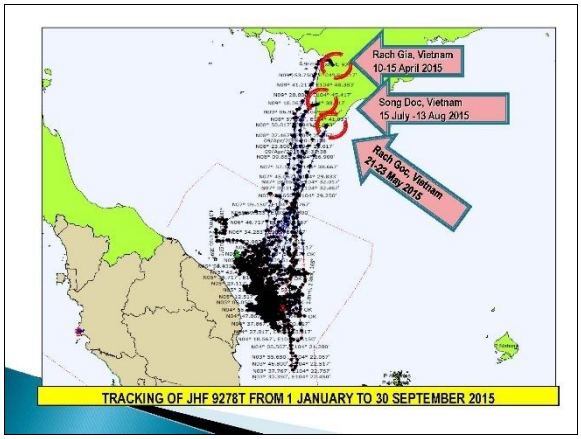
1. Monitor fish landing;
2. ***Vessel Monitoring System;***
3. Catch and operations reports;
4. **Inspection of fishing vessels;**
5. **Inspection of fishing gears;**
6. Reporting for storage purposes ;
7. Analysis on catch and fishing effort & report comparison with VMS, verification on the accuracy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

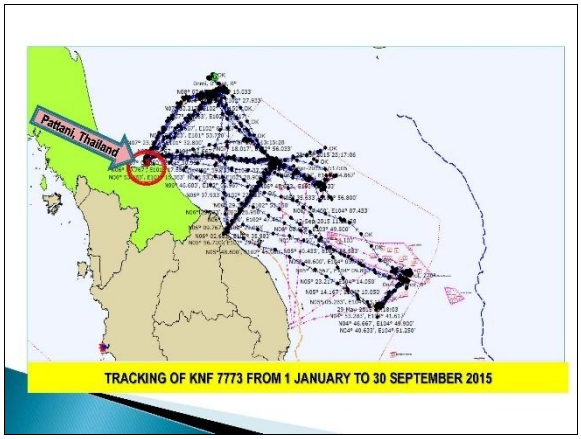
Vessel Monitoring System (VMS)

- a mechanism to monitor the activities of fishing vessels using SATELLITE and RADIO FREQUENCIES.
- a useful tool in the monitoring of vessels.
- a TOOL to help carry out management more efficiently and effectively.

Vessel Monitoring System (VMS)



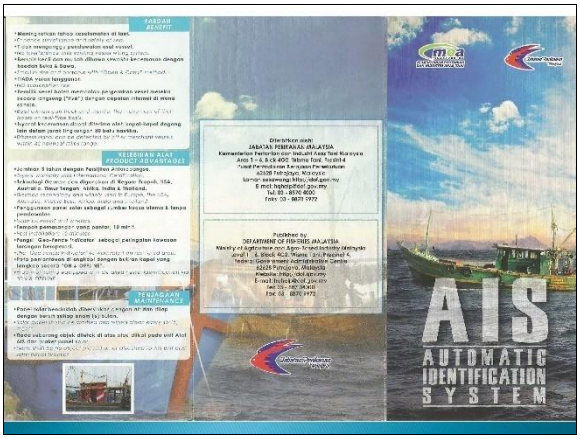


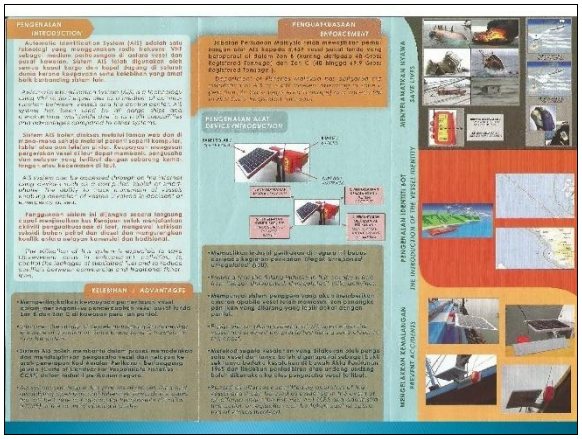


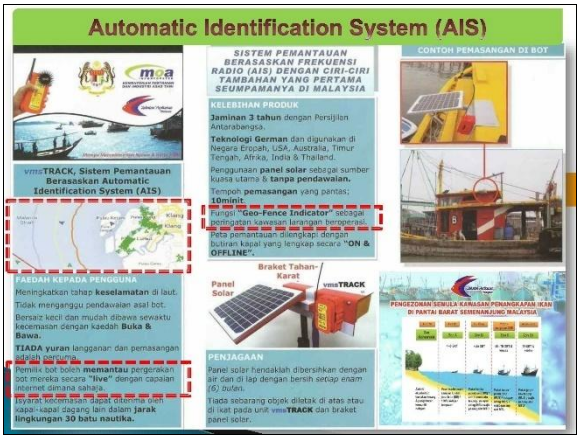
Deterrence

Any Malaysian Fishing Vessel that is found outside Malaysian fisheries waters:

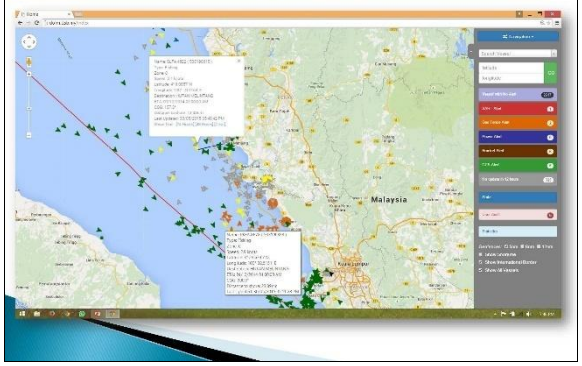
- Department of Fisheries will:
  - Issue a **show cause letter** to vessel owner – giving reasons/justification.
  - Under Sec. 13 Fisheries Act 1985:
    - ***Suspend the renewal of licence,***
    - ***Suspend the license for a period of time,***
    - ***Terminate the license***
- Or other actions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

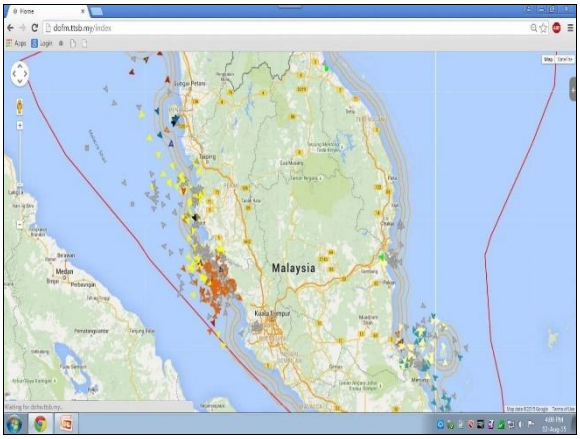


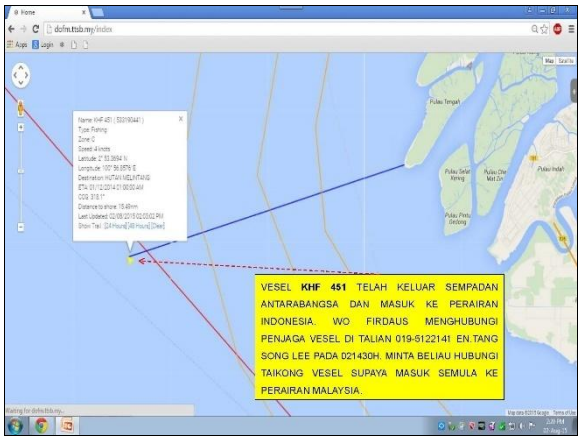


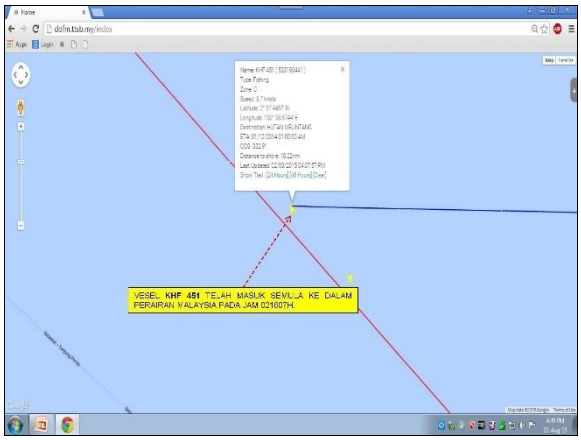


Tracking from AIS









With the presence of VMS….
We know the position of the vessel
We know their speed and course.
Apart from that ……

If the vessel:
- Leave the fishing port'
- Enter a fishing port;
- Fish in "keep-out" zone;
- Cross to other country

Also alerted if
- Tampering occurs to the system
- Power supply cut from system
- Connectivity to antenna is cut.

Monitoring Programme - Malaysia Fisheries Waters

Monitoring Programme – Vessel & Document Inspection

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

Monitoring Programme – Vessel & Document Inspection

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

Monitoring Programme - Landing Facilities

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

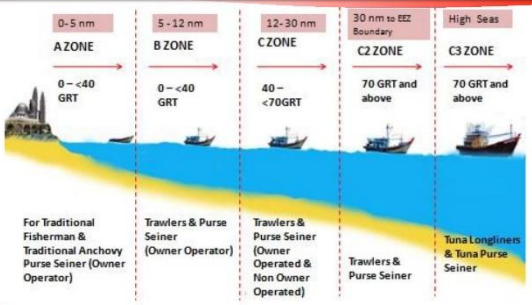
MONITORING, CONTROL AND SURVEILLANCE (MCS)

CONTROL

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

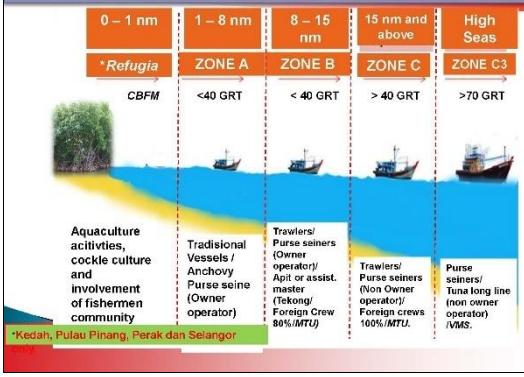
1. Control of fishing effort through licensing;
2. Registration of fishing vessels;
3. Requirement to have permanent markings on fishing vessels;
4. Control and prohibition on fishing gears and methods of fishing;
5. Control on transhipment;
6. Fishermen Registration Programme and Issuance of Fishermen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

FISHING ZONES IN MALAYSIA



*There is no restriction for vessel operating in the inner zones to fish in the zones further up e.g vessel in Zone A are allowed to fish in Zone B,C and C2

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



*Kedah, Pulau Pinang, Perak dan Selangor only

The Fishing Zone in Malaysia

FISHERIES (PROHIBITION OF METHOD OF FISHING) REGULATIONS 1980

JADUAL

1. Pukat Tunda dua bot atau apa jua pukat yang dikenali dengan apa jua nama yang disesuaikan supaya dapat ditunda di sepanjang dasar laut dengan mengguna dua bot berjentera. — **Pair trawl**

2. Apa jua pukat atau beg yang diperbuat daripada apa-apa bahan, yang dipasangkan kepada rangka yang teguh, sama ada dengan atau tanpa kasut berbentuk papan peluncur, supaya dapat ditunda, ditarik, ditolak atau ditunjah di sepanjang dasar laut dengan mengguna bot berjentera. — **Push net**

3. Apa jua cara menangkap ikan yang mengguna kuasa elektrik, dijanakan dengan apa jua cara, untuk menarik, melengarkan atau membunuh ikan. — **Electrocuted**

4. Apa jua pukat hanyut, pukat insang atau apa-apa pukat yang hampir menyerupai apa-apa pukat hanyut atau pukat insang yang mempunyai saiz mata pukat yang melebihi 25.4 sentimeter (10 inci) yang beroperasi di mana-mana sahaja daripada permukaan air hingga ke dasar laut dengan cara berhanyut atau bersauh. *(Mas. PU(A) 32/90)* — **Drift net >10" mesh size**

Diperbuat pada 10hb September 1980.

* *Diterbitkan sebagai PU(A) 314/80.*
[1] *PU(A) 187/71.*

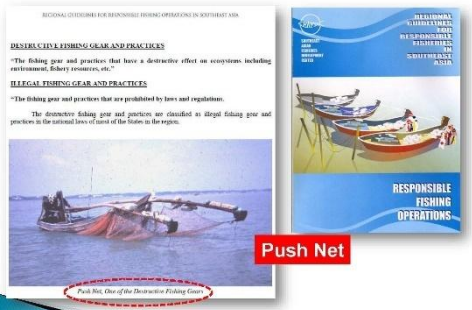
FISHERIES (PROHIBITION OF METHOD OF FISHING) REGULATIONS 1980

Pair Trawl

FISHERIES (PROHIBITION OF METHOD OF FISHING) REGULATIONS 1980

Push Net

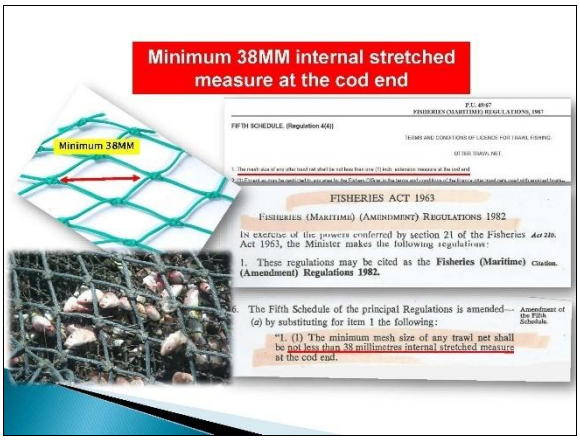
FISHERIES (PROHIBITION OF METHOD OF FISHING) REGULATIONS 1980



FISHERIES (PROHIBITION OF METHOD OF FISHING) REGULATIONS 1980

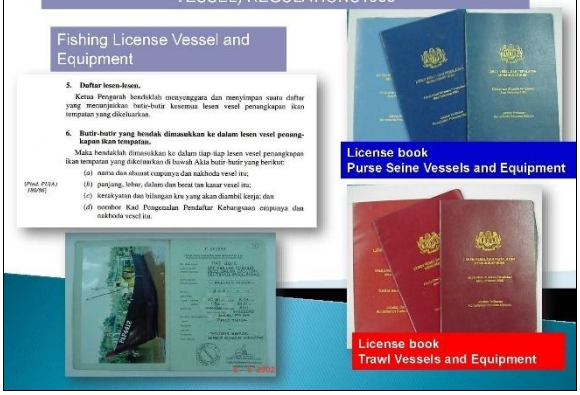
Drift Net with Mesh Size > 10 inches

Minimum 38MM internal stretched measure at the cod end



FISHERIES (MARITIME) (LICENSING OF LOCAL FISHING VESSEL) REGULATIONS1985

Fishing License Vessel and Equipment

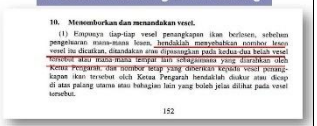


License book
Purse Seine Vessels and Equipment

License book
Trawl Vessels and Equipment

FISHERIES (MARITIME) (LICENSING OF LOCAL FISHING VESSEL) REGULATIONS1985

Vessel numbering and marking



10. Menomborkan dan menandakan vesel.

(1) Empunya tiap-tiap vesel penangkapan ikan berlesen, sebelum pengeluaran mana-mana lesen, hendaklah menyebabkan nombor lesen vesel itu dicatkan, ditandakan atau dipasangkan pada kedua-dua belah vesel tersebut atau mana-mana tempat lain sebagaimana yang ditetapkan oleh Ketua Pengarah, dan nombor lesen yang diberikan kepada vesel penangkapan ikan tersebut oleh Ketua Pengarah hendaklah diukur atau dicap di atas palang utama atau bahagian lain yang boleh jelas dilihat pada vesel tersebut.

152

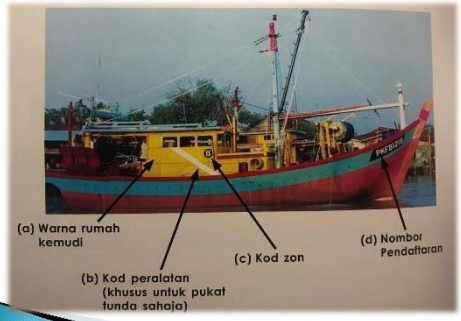
Wheel House Colour

Negeri	Warna Rumah Kemudi	Negeri	Warna Rumah Kemudi
Perlis	Dark blue	Pahang	Light yellow
Kedah	Dark red	Terengganu	Light green
Pulau Pinang	Light blue	Kelantan	Dark ed
Perak	Dark yellow	Wilayah 1 (Kuching)	Green
Selangor	Light red/orange	Wilayah 2 (Sibu)	Blue
Negeri Sembilan	Dark green	Wilayah 3 (Miri)	Yellow
Melaka	Purple	WP Labuan	Red
Johor Barat	Dark blue		
Johor Timur	Light blue	Kenka 2 Bot (Perak)	Yellow & red

Wheel House Marking

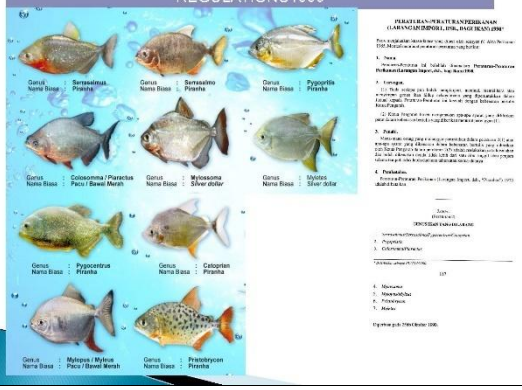
VESSEL	MARKING
Trawler	Diagonal white strike (30 cm width) Vessel number & Zoning code – paint on top of wheel house (Zone C & C2).
Purse seine	Vessel number & Zoning code – paint on top of wheel house(Zone C & C2).
PTMT	White outline (8 cm width)
MPPI	Pink 'P'
SRS	White 'S' with pink background.

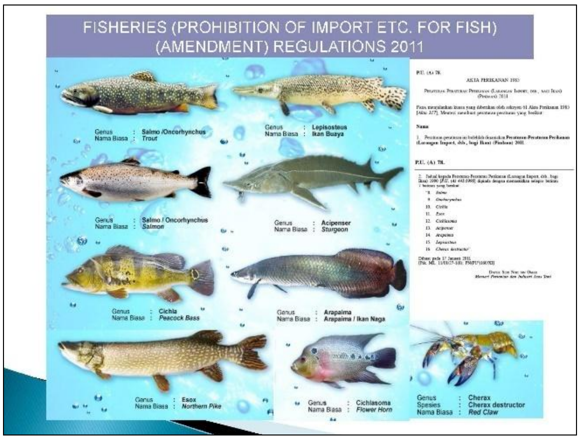
GENERAL SPECIFICATION OF MALAYSIAN FISHING VESSEL

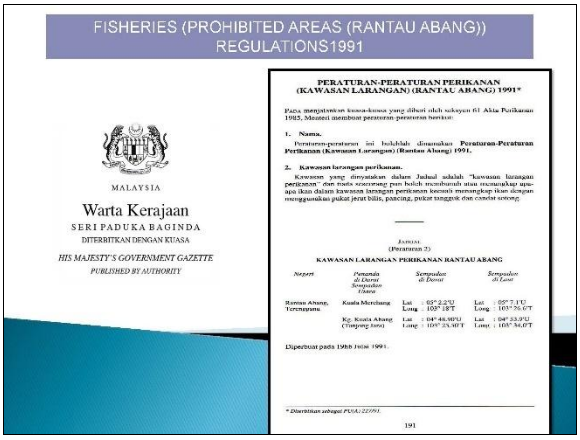


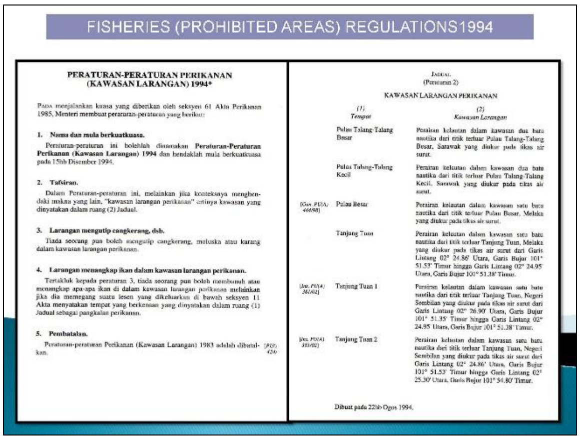
FISHERIES (CONTROL OF MARINE ENDANGERED SPECIES OF FISH) REGULATIONS1999

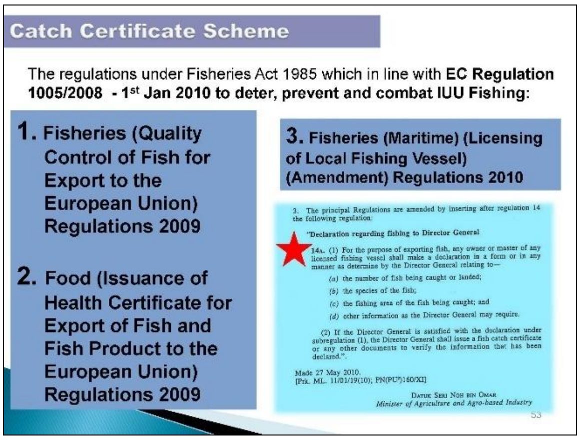
FISHERIES(PROHIBITION OF IMPORT ETC. FOR FISH) REGULATIONS1990




FISHERIES (PROHIBITION OF IMPORT ETC. FOR FISH) (AMENDMENT) REGULATIONS 2011
Genus : Salmo /Oncorhynchus
Nama Biasa : Trout
Genus : Lepisosteus
Nama Biasa : Ikan Buaya
Genus : Salmo / Oncorhynchus
Nama Biasa : Salmon
Genus : Acipenser
Nama Biasa : Sturgeon
Genus : Cichla
Nama Biasa : Peacock Bass
Genus : Arapaima
Nama Biasa : Arapaima / Ikan Naga
Genus : Esox
Nama Biasa : Northern Pike
Genus : Cichlasoma
Nama Biasa : Flower Horn
Genus : Cherax
Spesies : Cherax destructor
Nama Biasa : Red Claw


FISHERIES (PROHIBITED AREAS (RANTAU ABANG)) REGULATIONS1991
MALAYSIA
Warta Kerajaan
SERI PADUKA BAGINDA
DITERBITKAN DENGAN KUASA
HIS MAJESTY'S GOVERNMENT GAZETTE
PUBLISHED BY AUTHORITY
PERATURAN-PERATURAN PERIKANAN (KAWASAN LARANGAN) (RANTAU ABANG) 1991*
PADA menjalankan kuasa-kuasa yang diberi oleh seksyen 61 Akta Perikanan 1985, Menteri membuat peraturan-peraturan berikut:
1. Nama.
Peraturan-peraturan ini bolehlah dinamakan Peraturan-Peraturan Perikanan (Kawasan Larangan) (Rantau Abang) 1991.
2. Kawasan larangan perikanan.
Kawasan yang dinyatakan dalam Jadual adalah "kawasan larangan perikanan" dan tiada seseorang pun boleh membunuh atau menangkap apa-apa ikan dalam kawasan larangan perikanan kecuali menangkap ikan dengan menggunakan pukat jerut bilis, pancing, pukat tangguk dan candat sotong.
JADUAL
(Peraturan 2)
KAWASAN LARANGAN PERIKANAN RANTAU ABANG
Diperbuat pada 19hb Julai 1991.
191


FISHERIES (PROHIBITED AREAS) REGULATIONS1994
PERATURAN-PERATURAN PERIKANAN (KAWASAN LARANGAN) 1994*
JADUAL
(Peraturan 2)
KAWASAN LARANGAN PERIKANAN


Catch Certificate Scheme
The regulations under Fisheries Act 1985 which in line with EC Regulation 1005/2008 - 1st Jan 2010 to deter, 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
3. The principal Regulations are amended by inserting after regulation 14 the following regulation:
"Declaration regarding fishing to Director General
14A. (1) For the purpose of exporting fish, any owner or master of any licensed fishing vessel shall make a declaration in a form or in any manner as determine 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.
[Prk. ML. 11/01/19(10); PN(PU²)160/XI]
DATUK SERI NOH BIN OMAR
Minister of Agriculture and Agro-based Industry
53


MALAYSIA
Standard Operating Procedure
For
Catch Certificate Documentation


MONITORING, CONTROL AND SURVEILLANCE (MCS)
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.

ENFORCEMENT – to promote compliance:

Fishing gear; Engine; Safety Equipment & etc.

ENFORCEMENT – to promote compliance:

Condition on crew use

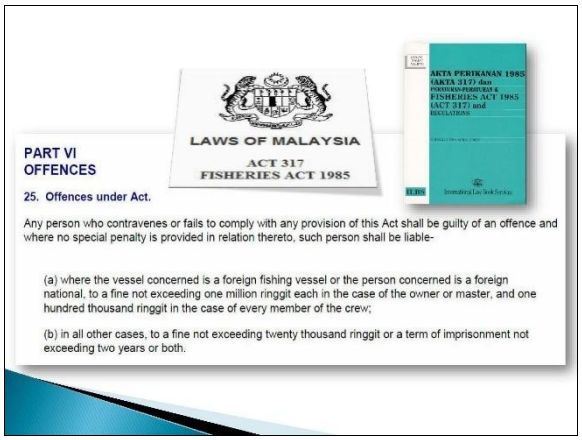
Employment of foreign crews on board local fishing vessels is permitted with conditions under Section 10(1) (c) of Fisheries Act 1985.

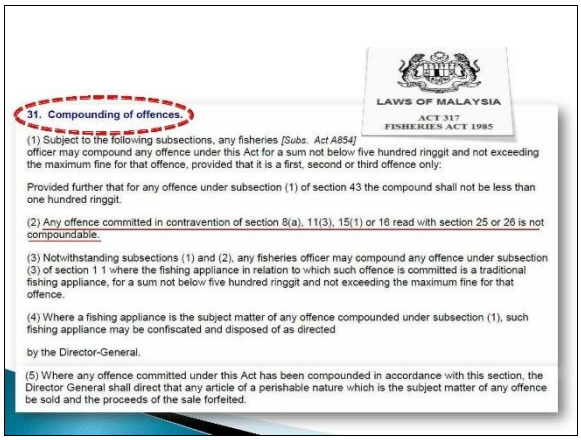
INSPECTION

ARREST

ESCORT

SAFE CUSTODY AND PROSECUTION





CONCLUSION

"MCS and Fisheries Management"

"MCS is vital and crucial component of fisheries management, where the need for MCS could be easily recognized by accessing by status of fisheries development and management in a country."

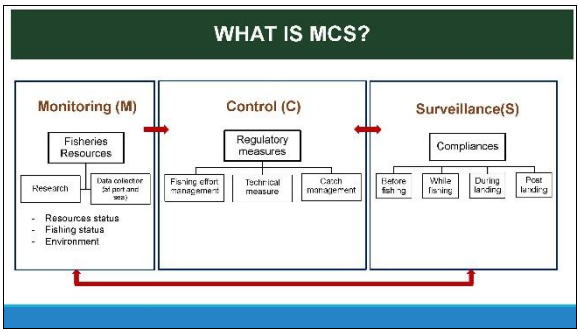
Department of Fisheries Malaysia committed to conduct Monitoring, Control and Surveillance (MCS) Programme as part of sustainable fisheries management and good governance to secure the supply of fish as a source of food for the country and the world.

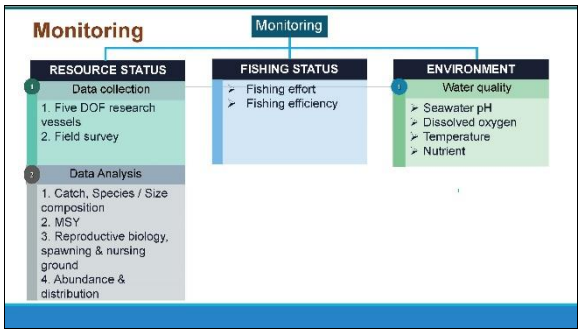
THANK YOU

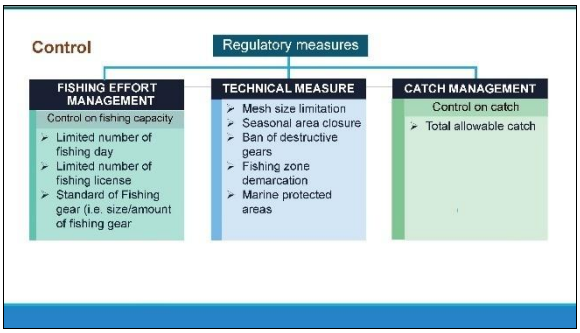
Annex 9

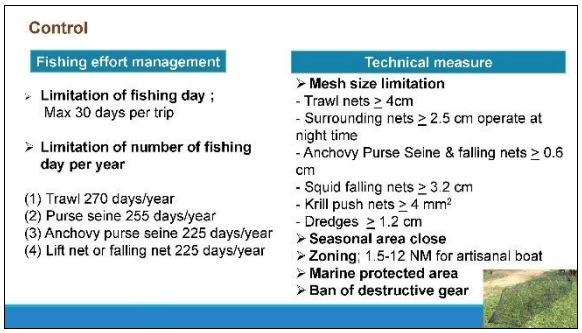
UPDATED RESULTS FROM THE NATIONAL CONSULTATION ON MCS NETWORK FOR SOUTHERN ANDAMAN SEA OR ACTIVITIES WHICH RELEVANT TO M, C, AND S (THAILAND)

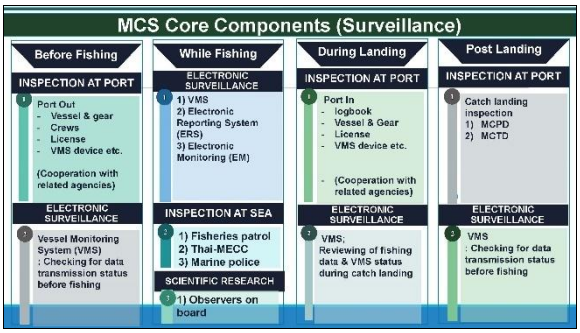
By *Dr. Pavarot Noranarttragoon*











Port In-Port Out Control Center (PIPO)

PIPO Center : The Port-in and Port-out (PIPO) Declaration, as part of the MCS activities, has been in operation since 2015. The goal of the PIPO operation is to more effectively inspect fishing vessels on the basis of risk assessment.

1. PIPO Center for inside Thai water
   - 30 PIPO Center
   - 21 FIP
2. Designated Ports for outside Thai water (Over sea)
   - Samut Prakan
   - Samut Sakhon
   - Ranong
   - Phuket
   - Trat
   - Songkhla

PO in bordering Coastal States (Myanmar & Cambodia): 3 hrs. in advance.
PO in other Coastal States or high sea: 24 hrs. in advance

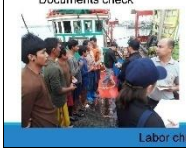
BEFORE FISHING

Port Out Checking


Documents check


Fishing gear


Physical vessel check


Labor checking


Seafarer safety

Port In-Port Out Control Center (PIPO)

Port In Checking


Landing inspection of fishing products


Labor checking


Fishing gear check

While fishing

- Fisheries Monitoring Center (FMC)
  - Tracking Thai flag vessels
    - ✓ Thai waters
    - ✓ Neighboring/ international water

- Fishery patrol
- Thai-MECC
- Marine Police
  - ✓ Inspect fishing vessels at sea


Thai-MECC

Vessel Monitoring System Center

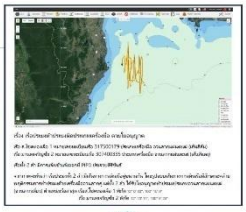
Thai waters

- All fishing vessels size over than 30 GT must equip VMS

Neighboring/ international water

- Oversea & Carrier vessels require for installing VMS, Electronic Reporting System (ERS) or EM (CCTV) depending on vessel size

VMS CAPACITIES



VMS sends signal every hour for all fishing vessels, except anchovy purse seine (15 mins)

- Report location
- Report fishing vessel behavior

Fishing Patrol Center/Unit

Zone 1 Rayong Center (8 patrol units)
No of Officers: 188
No. of Patrol vessels: 66
- 60-70 feet Vessels: 11
- 19-38 feet Vessels: 30
- less than 19 feet Vessels: 25

Zone 3 Krabi Center (3 patrol units)
No of Officers: 76
No. of Patrol vessels: 23
-60-70 feet Vessels: 6
-19-38 feet Vessels: 8
-less than 19 feet Vessels: 9

Zone 2 Songkhla (4 patrol units)
No of Officers: 76
No. of Patrol vessels: 28
- 60-70 feet Vessels: 4
- 19-38 feet Vessels: 13
- less than 19 feet Vessels: 11

Challenges

- Transboundary species
- Maintain surveillance standard
- Continue improving MCS

Annex 10

HARMONIZATION OF MATRIX OF M, C AND S FOR SOUTHERN ANDAMAN SEA SUB-REGION

Agenda 5.2

Harmonization of Matrix of M, C and S for Southern Andaman Sea sub-region

Type of Information that would beneficial to obtain from the Southern Andaman Sea Sub-region countries

Monitoring	Control	Surveillance
1. Catch by species (e.g. transboundary species: short mackerel, neritic tunas, anchovy, and blue swimming crab) Disaggregated data and catch and effort data, changing in abundance and index of abundance. Cpue	1. Regulation on the issuance of fishing license for foreign vessels and domestic vessels (IN, TH) - Type of license produce by border country agencies (MY)	1. Technologies, application of various tools to monitor fishing activities (VMS, AIS, etc, ERS/EM, UAV)
2. Fish biology of transboundary species (TH) : results of biological parameters estimated data.	2. Mechanism of fishing vessel registration (quota / limitation efforts) both foreign vessels and domestic vessels	2. Data and information arrested fishing vessels from other Southern Andaman Sea countries (IN)
3. Fishing ground of each fishing gear	3. Vessel inspection process at the sea and ports	3. Air and sea patrol
4. Number of fishing vessels by gear (TH, IN)	4. Number of ports for fishing vessels	4. Record of vessel / person that involved in crime / security breach / IUU
5. Market state information (TH)	5. Law and policy about MCS	5. Vessel inspection process at the sea and ports (IN)
6. Record of vessels/person that not have a license to operate (MY)	6. Infringement information	6. Data of illegal fishing flying its flag state in high seas (IN)
Disaggregated data and catch and effort data Cpue	7. Report progress with ratification or implementation, as appropriate, of international and regional instruments concerning responsible fishing practices and	

Type of Information to be shared with the Southern Andaman Sea Sub-region

Monitoring	Control	Surveillance
1. Statistical catch by species and fishing gears (IN,TH) Data collection program, share the methodology on the data collection of important species (TH, IN)	1. Regulation of fishing license's issuance (IN,TH)	1. Number of illegal foreign fishing vessel crews apprehended in Indonesia (IN)
2. Fish biology (TH)	2. Fishing vessel registration process (IN,TH)	2. Experience of implementation of PSM (IN) - Foreign fishing vessel and carrier vessel inspection (TH) - Sharing experience on implementation of PSM (Procedures to inspect foreign vessels both countries) (TH)
3. Number of fishing vessels (by gear)	3. Mechanism of fishing vessel inspection (IN,TH)	3. Intelligence info on IUU (MY)
4. Vessel Traffic Management System (VTMS) Information (MY)	4. MSY, TAC (IN)	4. Export Import method between two countries (TH)
	5. Law and policy about MCS (IN,TH)	5. Species and volume of catch (flag) (TH)
	6. Number of ports and fishing vessels (IN) Number of ports for domestic and foreign vessels (TH)	6. Port Inspection Report (PIR) (TH)
	7. Type of prohibition species (MY)	7. Lesson Learned : Management measures to regulate transshipment at sea, moratorium of foreign fishing vessel and Banning trawl (IN)
	7. Type of prohibition species (MY)	

Type of Information to be discussed and coordinated with other the Southern Andaman Sea Sub-region countries

Monitoring	Control	Surveillance
1. Share stock population of neritic Tuna (IN), Migratory patterns, biology, stock assessment of transboundary species (TH)	1. Information of reflagging/deflagging fishing vessels (IN, TH)	1. Effective action against IUU vessels entering ports (such as through the imposition of sanctions and the seizure of catch). (IN)
2. Blue Ocean Strategy on preventing IUU (MY)	2. Latest regulations/ legislation on preventing IUU (MY)	2. Border control (MY)
4. Fishery Improvement Project for longtail tuna (TH)	3. The implementation of international and regional standards concerning working conditions on their fishing vessels (including human rights) with a view to addressing these gaps in the future (IN)	3. Mechanism on monitoring of fishing vessel movement and activities, including suspected IUU fishing in the jurisdiction waters and beyond (IN)

What are the issues/areas of cooperation among countries

Monitoring	Control	Surveillance
1. Exchange of latest information on IUU (MY)	1. Best practices on preventing IUU	1. Border Control (MY)
2. Improvement of data and information on transboundary species (TH)	2. Ability to control vessels operating in areas beyond national jurisdiction with a view to addressing these gaps in the future (IN)	2. Export-Import control by using Catch Certificate and relevant documents. (TH)
3. Implementation of Traceability Scheme (IN)		3. Coordinated Patrol Vessel (IN)
		4. Exchange VMS data on fishing vessel flying their flag operated beyond their jurisdiction and in the high seas (IN)
		5. Data sharing and monitoring of fishing vessel movement and activities, including suspected IUU fishing in their waters and beyond (IN)
		6. Establishment of the focal point for the exchange of information on IUU fishing and MCS (IN)

Group Discussion

- The participants will be divided into
  Group 1: Monitoring
  Group 2: Control
  Group 3: Surveillance
- Each group discussion on the information in the Matrix and agreed on the common among 3 three countries
- Time will be allocated for 1 hour
- One representative present the results

Annex 11

RESULTS OF GROUP DISCUSSION ON MONITORING, CONTROL AND SURVEILLANCE FOR SOUTHERN ANDAMAN SEA SUB-REGION

Monitoring			**Control**	**Surveillance**
	Now	Future		
Catch	Yes – Aggregation No – Disaggregation		**I** 1. Regulation on issuance of fishing for domestic vessel 2. Mechanism of fishing vessel registration (quota/limitation, area management, domestic vessels) 3. Vessel inspection process at the sea and ports 4. Numbers of ports for fishing vessels 5. Law and policy about MCS 6. Suspicious information (illegal activities) **II** 1. Regulation of fishing licenses issuance 2. Fishing vessel registration process 3. Cross check mechanism of fishing vessel inspection 4. MSY, TAC 5. Law and policy about MCS 6. Number of ports and fishing vessel (domestic and foreigner) 7. Domestic of prohibition species **III** 1. Information of reflagging/de-flagging fishing vessels 2. Latest regulations/legislation on preventing IUU 3. Sharing list of IUU foreign fishing vessel (including cargo) **IV** 1. Best practising on preventing IUU	- Technologies (VMS/AIS) - Coordinated patrol: • Air • Sea - Information sharing • Tools • Protocol • Type of info: tracking, position, details of vessel - Networking communication • Focal point • Time/com check - Intelligent operation • Spy boat (Community based surveillance) - Capacity building
Biology	Yes	Spatial		
Effort	Yes – Aggregation			
Vessel Register No license details	Yes			
Traceability		Case by case		
VMS	Case by case			
IUU	Yes			
Stock status	Yes			

Monitoring (M) group agreed that the issue in transboundary species are in need to be shared among the countries in order to achieve better management. The information to be shared are catch efforts, vessels utilized, stock status and stock assessment results.

The Control (C) group focused on the regulations and related policies and best practices in preventing IUU.

The Surveillance (S) group discussed on how to create networking strategy among countries for better sharing of information like tracking, position and vessel details. The (S) group also discussed the possibility of having community-based surveillance as an added intelligence operation.

Annex 12

CONCEPT PAPER ON SUB-REGIONAL COOPERATION ON MONITORING, CONTROL AND SURVEILLANCE IN FISHERIES IN THE SOUTHEAST ASIAN REGION (AS 25 APRIL 2018)

Concept paper

Establishment of sub-regional cooperation on monitoring, control and surveillance in fisheries in the Southeast Asian Region

This document describes the rationale and benefits for establishing sub-regional networks for cooperation on monitoring, control and surveillance (MCS), as requested by countries around the Gulf of Thailand, Northern Andaman Sea and Southern Andaman Sea. The document also describes steps needed to establish these networks, in the three sub-regional seas.

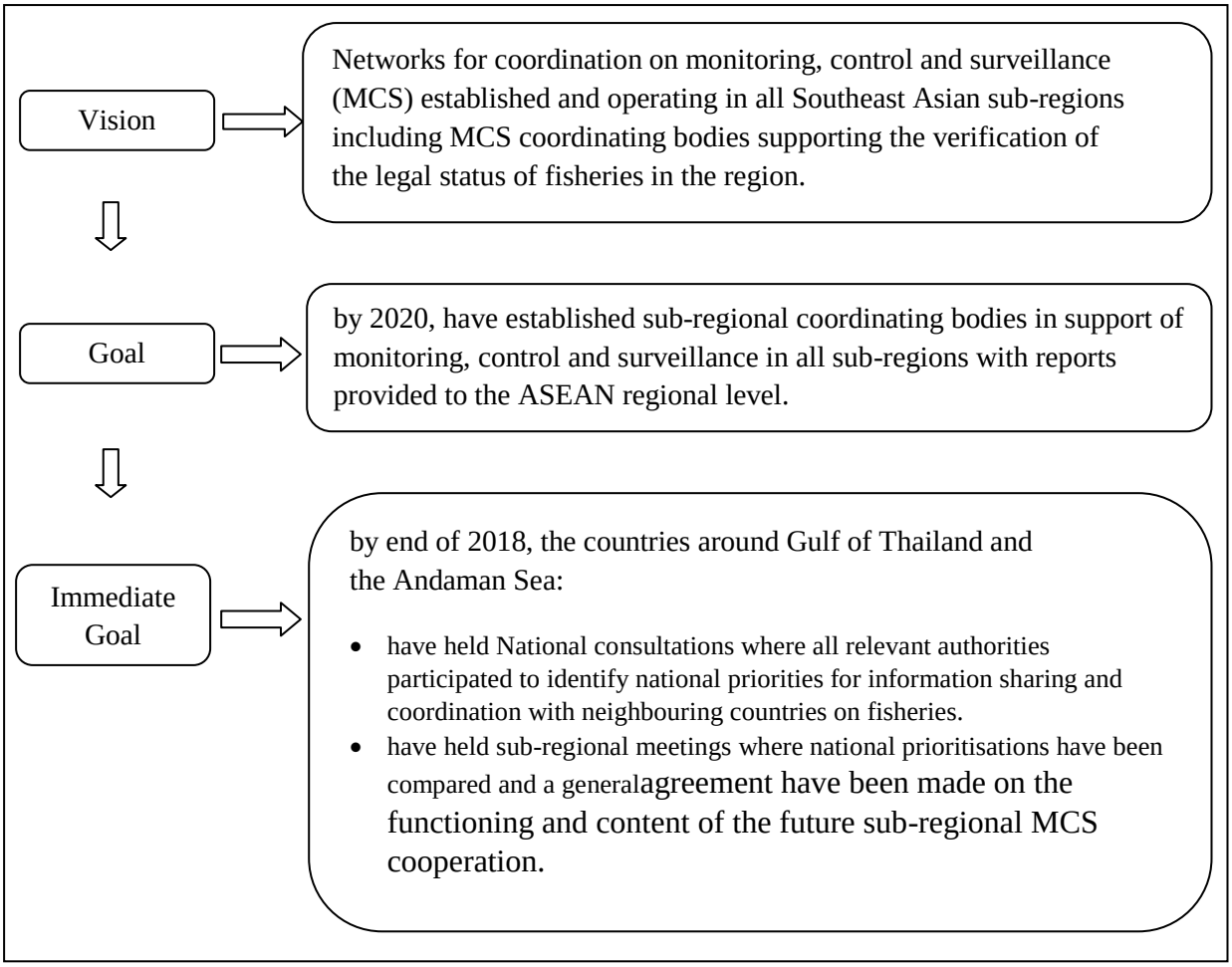
Rationale and background

There is a growing understanding that there is a need to monitor and control fishing activities in order to certify and verify the legal status of fisheries in Southeast Asia. Sub-regional coordination is a necessary component to achieve this. An effective sub-regional coordination can facilitate trade through improved product traceability, coordinate national measures as well as improve scientific assessments and simplify surveillance. All these can support national efforts to reduce IUU. Sub-regional coordination also show ambitions by Gulf of Thailand and Andaman Sea countries to respond to criticism from importing countries in Europe and North America and certify the legal status of traded fisheries products. Countries around the Gulf of Thailand and Andaman Sea have therefore requested that SEAFDEC facilitate the establishment of sub-regional bodies for monitoring, control and surveillance with a main emphasis on information sharing on monitoring and control. The basis for such cooperation is always the national rules and mandates of agencies involved.

To develop an efficient cooperation on monitoring and control (M and C) several authorities need to be involved such as departments of fisheries, environmental agencies, port authorities, customs, trade promotion, immigration, transport and labour as well as the maritime enforcement authorities (navy, coastguard, marine police or similar). There is already existing national coordination groups established for inter-agency coordination in all of the South East Asian countries and the sub-regional MCS network should build on these and facilitate cooperation between them. Several of the recently developed bilateral MOUs on fisheries and related activities are supportive of bilateral and sub-regional cooperation as is existing examples on ongoing cooperation on maritime security and traffic separation schemes (between Maritime Enforcement Authorities).

By closely linking the new coordination body for Monitoring and Control to existing cooperation on Surveillance, an integrated MCS coordination can be initiated that can be a platform to handle cross border issues related to fisheries.

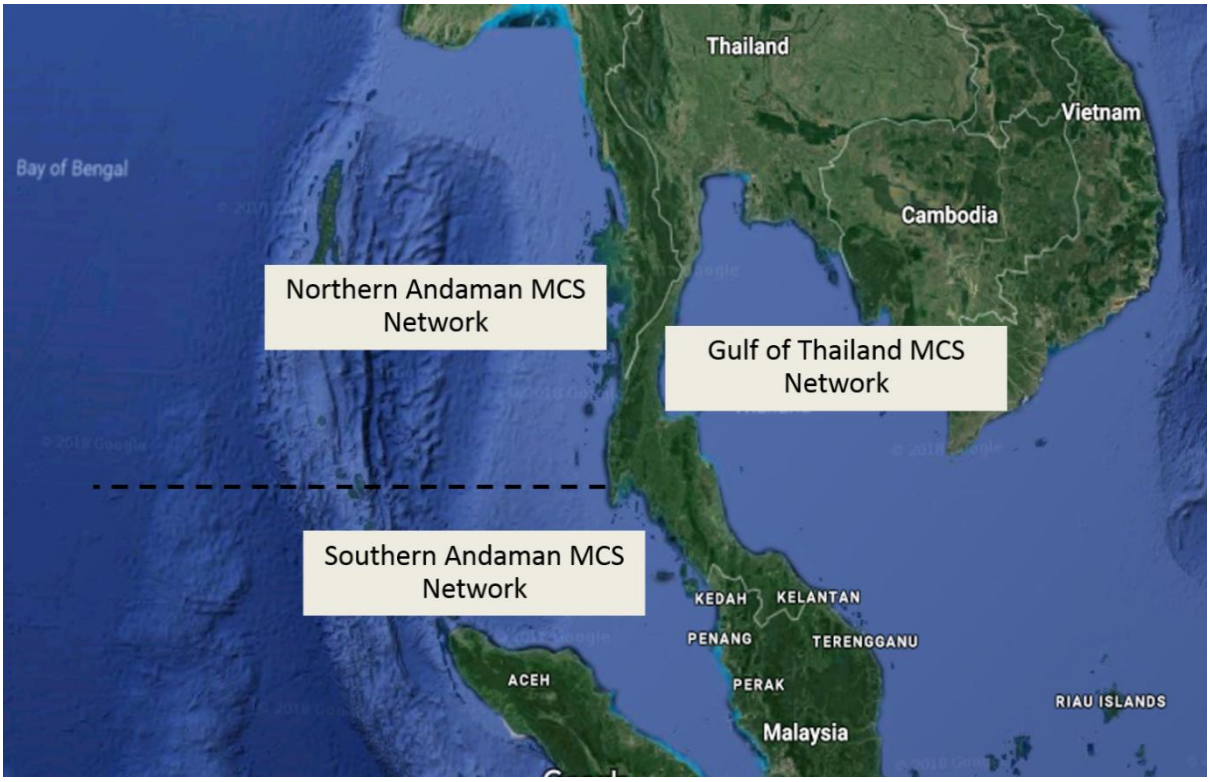
Vision, Goal and Objective



Benefits

Sub-regional cooperation on M, C and S benefits the coastal countries in many ways. An improved cooperation can develop fast and efficient mechanisms to solve cross border issues in many areas related to Fisheries. Immediate benefits include the facilitation of trade by coordinating product certification and catch data, data sharing on crews and immigration, scientific data needs and coordination of measures to monitor and control fisheries. In addition requirements by international certifications, trade regulations and warnings (yellow and red cards) are being issued on countries trading in fisheries products. Requirements to respond to this have a regional and trans-boundary dimension. Concerted efforts to cooperate on regional fisheries aspects would show ambitions by Gulf of Thailand and Andaman Sea countries to move towards sustainability and to respond to criticism received by importing countries thereby facilitate trade and improve revenues and tax incomes. As mentioned above, ***the key for such a cooperation to be successful is that relevant authorities from already existing national multi-agency units take part in the cooperation both nationally and internationally/regionally*.**

An efficient sub-regional cooperation facilitates monitoring and control efforts, improves revenues and tax collection and improves efficiency of national authorities through improved cross-border communication. For more specific examples of benefits of sub-regional coordination on monitoring, control and surveillance see Appendix 1.



Map of Sub-regional MCS cooperation areas

Steps to establish sub-regional fisheries cooperation on MCS

The starting point for a sub-regional MCS cooperation should be based on a common understanding among designated national agencies on the national needs for cooperation with neighbouring countries. This can be identified and verified through national consultation meetings. The second step would be sub-regional meetings where national priorities are discussed and the scope for the cooperation is agreed. The third step would involve the establishment of the MCS networks. These three steps to formalize cooperation are described in detail below:

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 m, c and s related coordination groups. All countries around the Gulf of Thailand and Andaman Sea have today established inter-agency coordination groups (see also under "Geographical areas" below). These consultations could be held as separate half day workshops or be held in connection with regular meetings with national MCS-units. An example of an agenda for a National workshop is included in Appendix 3.

The purpose of the consultation would be to identify all relevant authorities needs for cooperation with neighbouring countries to facilitate and solve issues such as "yellow and red cards", cross-border coordination mechanisms on all aspects of fisheries, what kind of information they would like to
have from other countries – and what kind of information they are legally mandated to share with other countries (see also Appendix 1).

Several authorities need to be involved such as those responsible for fisheries, port authority, environment, customs, trade, immigration, labour, transport as well as maritime enforcement authorities (Navy, Coastguard, Marine police or similar) as specified in the rules and regulations of each country.

The expected output from the National consultation would be a short document. It would identify what information from the neighbouring countries that would be useful on M, C and S within the different competence areas of the involved authorities. The document should also outline cross border issues that need to be discussed and what types of national fisheries information that could be shared with neighbour countries. The document would provide the basis for further discussions at sub-regional and bilateral level on the scope of future MCS cooperation. The national consultation could be facilitated and supported by SEAFDEC as/if needed.

Step two - sub-regional meetings

Based on the national priorities identified at the national consultations, appointed participants from key national agencies meet at sub-regional meetings in the three proposed sub-regions. The objective is to work out the scope and functioning for a future MCS coordination group. The key element for the sub-regional cooperation is to facilitate information sharing and coordination. Some ideas for the functioning of an MCS coordination group are listed in Appendix 2. As highlighted during the Gulf of Thailand and Andaman Sea MCS meetings in 2017 the participants should also discuss norms for information sharing.

Countries should at this meeting bring representatives from key authorities related to fisheries activities such as department of fisheries, port authority, environment, customs, trade, immigration, labour, transport as well as maritime enforcement authorities. SEAFDEC secretary general has sent a letter around 22 January, 2018 to SEAFDEC Council directors asking for nominations of a National Technical Group (NTG) to represent the country at the sub-regional meeting. SEAFDEC can finance a maximum of 5 participants from each country, each representing a separate key authority. SEAFDEC can facilitate and support the sub-regional consultation as/if needed.

The expected output from the sub-regional meeting is a draft agreement on the scope and function of a future MCS cooperation – one draft per sub-region. The draft can be further fine-tuned and endorsed nationally before step three.

Step three – Establishment of networks

Establishment of the sub-regional MCS-coordination body based on the agreed modalities. The inauguration of the MCS sub-regional coordination body could be facilitated by SEAFDEC. The scope of these cooperation platforms should then be adapted as appropriate, through regular consultations, as new issues and needs are emerging and highlighted by countries.

The expected output is documents with agreed scope/rules of procedure for permanent MCS coordination groups in the three sub-regions.

Time plan

Sub-regional meetings are planned to be held in June/July and therefore national consultations should be finished before June.

Geographical areas

The aim is to initiate three MCS coordination bodies. Existing national inter-agency cooperation units for fisheries are noted in brackets.

- *Gulf of Thailand:* Cambodia (*National Committee for Maritime Security (NCMS)*), Malaysia (*JBOM Committee (maritime task force Malaysia)*), Thailand (*Thai – Maritime Enforcement Coordination Committee (Thai-MECC)*), Viet Nam (*Working Group 689*)
- *Northern Andaman Sea:* Myanmar (*One Stop Service*), Thailand (*Thai – Maritime Enforcement Coordination Committee (Thai-MECC)*)
- *Southern Andaman Sea:* Indonesia (*Special Task Force 115)*, Malaysia (*JBOM Committee (maritime task force Malaysia)*), Thailand (*Thai – Maritime Enforcement Coordination Committee (Thai-MECC)*)

Outline for working mechanisms of MCS coordination bodies

In Appendix 2 some ideas on what the working mechanisms for a future MCS coordination could include are provided. The fact that many different competence areas would be included in such a cooperation means that external organisation such as SEAFDEC, FAO, IMO, ILO or similar have no obvious over-arching mandate to lead on such a group. Therefore the chairing of the work is suggested to be held by the countries while SEAFDEC, and others within their mandates, are prepared to support and facilitate the chairing country as appropriate and conditioned on availability of financial resources. Please note that these are proposals to help clarify the intentions and they are all open for discussions as participating countries see necessary.

Appendix 1. Specific benefits of sub-regional cooperation in the areas of Monitoring, Control and Surveillance

*"**Monitoring (M)** – include the collection, measurement and analysis of fishing and related activities including – but not limited to – catch, species composition, landings, fishing effort, by-catch, discard, areas of operations etc. in which this information is primary data to use for decision making"**

Regional cooperation would be able to support the coordination of catch and landing data collection and to coordinate processes for certification and verification of catch data including catch data exchange in order to improve traceability of fisheries products, enhance trade and revenues. Coordinated data collection is also the basis for flexible trade regulations and tax revenues to countries. Sub-regional MCS coordination could also build mechanisms for exchange of information on nationals working as crews on foreign vessels. The coordination of national measures for conservation of trans-boundary fish-stocks could increase production of fish as well as profits for fishermen and the countries in the region.

- Authorities that are involved in these issues could include Port Authorities, Department of Fisheries, Customs and Trade, Enforcement Authorities, Immigration and Labour.

***"Control (C)** – involves the specific of the terms and condition under which resources can be harvested. These specifications are normally contained in national fisheries legislation and other arrangements that might be nationally, sub-regionally, or regionally agreed. The legislation provides the basisfor which fisheries arrangements, via MCS, are implemented"**

The national laws need to be formulated so that they are implementable and controllable but in areas such as trade, immigration, maritime enforcement and national measures referring to trans-boundary species there are many potential benefits to coordinate with neighbour countries. Some of these refer to the sharing of data (on for example crew lists to fight trafficking and crew mistreatment, vessel licenses to fight double flagging, VMS data, suspect vessels, catches of trans-boundary stocks etc.).An efficient cooperation facilitates all these areas, improving revenues and improves efficiency of national authorities cross border work.

- Authorities that are involved in these issues could include Port Authorities, Department of Fisheries, Customs and Trade, Enforcement Authorities, Immigration and Labour.

*"**Surveillance (S)** – involves the checking and supervision of fishing and related activities to ensure that national legislation and terms, conditions of access, and management measures are observed"**

As mentioned above there is already some cooperation between some of the countries in the region, usually on a bilateral basis which is a good starting point for a broader regional cooperation. The existing regional cooperation on surveillance often have a focus on enforcement authorities, but in line with recent bilateral MOUs on fisheries, cooperation on surveillance could also benefit from a broader representation of authorities to increase understanding of areas that are not at the core of enforcement such a registered vessels, licenses to fish, gear restrictions, species and catch compositions, crew rights etc.

- Authorities that are involved in these issues could include Port Authorities, Department of Fisheries, Customs and Trade, Enforcement Authorities, Immigration and Labour.

**The definitions stated as defined by FAO and the RPOA IUU MCS Meeting in Bali 2008.*

Appendix 2. Proposed working mechanisms and ambitions for future MCS coordination groups

Scope

The main aim of the sub-regional MCS group for fisheries is to facilitate and coordinate the sub-regional and bilateral sharing of information on cross-boundary aspects. The cooperation should be based on national laws and be guided by existing international and regional agreements and focus on action-oriented coordination of ongoing fisheries monitoring, control and surveillance.

Participating country representatives and observers

a. The following countries are members: XXX, YYY, ZZZ
   - Representatives should be from agencies involved in national MCS coordinating units and/or task forces
b. External organizations or countries can apply to be observers to the committee.
c. The chair or participating country representatives can invite external experts and resource persons to meetings as appropriate.

Chair

a. The meetings, and intersessional coordination, shall be chaired on an annual basis by participating country representatives in alphabetical order. The chairing country representative is responsible for organizing meeting(s) including practical arrangements and development of draft agenda in cooperation with the other participating country representatives as appropriate.
b. Cost for meeting venue and organization will normally be covered by the chairing country while travel expenses and accommodation for meeting participants will be covered by the participants. If support is provided by an external organization or similar this should be applied on a case by case basis in coordination with the chairing country representatives.

MCS Coordinating committee meetings and working groups

a. The coordination committee shall meet once per year unless otherwise agreed by the committee.
b. If deemed necessary closed sessions can be scheduled that would exclude observers and external experts.
c. The coordinating committee can agree to set up working groups that report to the committee as appropriate. Each working group must have an appointed country representative or organization to lead the work.

Area of competence

The tasks that the coordinating committee could be involved in could for example include, but not be restricted to, the areas listed below. Other tasks could be suggested by the committee and agreed by participating countries, as appropriate:

a. <u>Monitoring</u>

- coordinate information sharing among participating agencies from catch data collection, landing data and results from landing inspections,
- coordinate information sharing among participating agencies on crew lists, contract arrangements, including nationalities of crew members

- facilitate that information received through the network is disseminated among domestic relevant authorities in support of national monitoring and management efforts (and to improve traceability and verification of nationally made catch certifications)
- support coordination to have collected catch data provided to scientific working groups to improve quality of stock assessments of trans-boundary species
- coordinate the monitoring of the implementation of adopted joint/coordinated plans for the conservation and management of trans-boundary species with information, as needed, provided to national authorities

b. Control

- Coordinate/facilitate the understanding among participating countries on the scope, purpose and requirements of national laws and regulations, including institutional responsibility to facilitate sub-regional coordination on control measures (including safety at sea, labour and working conditions);
- coordinate and facilitate data exchange between member countries on appropriate features such as vessel registries, fishing licenses and cross border landings
- facilitate reviews/checks of vessel registration, fishing licenses, crew lists of domestic and foreign crews to provide an update on people engaged in fisheries and to fight trafficking and mistreatment of crews.
- facilitate that information received through the network is disseminated among domestic relevant authorities in support of national *control efforts*
- facilitate implementation of control measures in follow-up to agreed measures (nationally/ sub-regionally) on limits to fishing effort, closed seasons, protected areas in support of sustainable fisheries in target sub-regions

c. Surveillance

- facilitate communication between control/surveillance authorities in participating countries – facilitate/strengthen links with existing sub-regional cooperation on maritime security and enforcement
- facilitate coordination of surveillance procedures, where appropriate, including inspections at sea to ensure that fishing activities are conducted in accordance with applicable laws and regulations (and to combat illegal fishing and to prevent forced labor and human trafficking in the fisheries sector
- facilitate/ensure that any irregularities discovered are reported (domestically and, as applicable, to the flag state and country of origin of crew members)
- increase knowledge of regulations in neighbouring countries among fishermen and surveillance related agencies

Appendix 3. Tentative Agenda for national consultation workshop in preparation for Sub-regional initiation meeting of an MCS coordination network/body. *(total time 3.5 hours)*

Purpose: The expected output from the National consultation would be a short document. It would identify what fisheries related information from the neighbouring countries that would be useful on M, C and S within the different competence areas of the involved authorities. The document should also outline issues that need to be discussed with neighbouring countries and what types of information that could be shared with neighbour countries. The document would provide the basis for further discussions at sub-regional and bilateral level on the scope of future MCS cooperation.

If countries so wishes SEAFDEC Secretariat offer to support countries by participating in and if requested leading a national consultation workshop. The workshop is held in preparation of the upcoming sub-regional meeting to initiate a fisheries related coordination body/network focused on "Monitoring" and "Control" but closely linked to existing sub-regional cooperation on maritime security (Surveillance) and recently developed bilateral MOUs on fisheries and related aspects.

Participants: Representatives of all relevant national authorities in regards to fisheries activities. These are authorities presently involved in inter-agency coordination, working group or task forces with a focus on M, C and S. These authorities typically include: Department of Fisheries, Port authorities, Customs, Department of Trade, Department of Transport, Department of Immigration, Department of Labor, Marine police, Coastguard, Navy etc. as relevant for each country depending on institutional mandates.

Agenda item 1. Overall outline (45 min)

a. Election of Chairperson
b. Background, Rationale, Objective of the National Consultation

Agenda item 2. Present National situation (30 min)

a. Mandate, responsibilities and objectives of existing national (M, C and S) inter-agency coordination units *(task forces, working groups, national committees, enforcement committees, "one-stop-services", etc.)*
b. Objectives of existing bilateral or sub-regional coordination units involving national agencies. (*Bilateral MOUs on fisheries, cross-border movement of goods and peoples, maritime security and environmental protection)*

Agenda item 3. Identification of National cross border coordination priorities (1.5 hour)

a. Monitoring (see Appendix 1)
b. Control (see Appendix 1)
c. Surveillance (see Appendix 1)

Agenda item 4. Conclusion (30 min)

a. National coordination of priorities (responsibility for finalisation of document on National priorities)
b. Representation at sub-regional meeting (which authorities should be represented at the sub-regional meeting)

Annex 13

DRAFT WORKING MECHANISM AND AMBITION FOR FUTURE MCS COORDINATION GROUP BASED ON COUNTRIES NORM (AS 21 AUGUST 2019)

Concept paper
(as of 21 August 2019)

Establishment of sub-regional cooperation on monitoring, control and surveillance in fisheries in the Southern Andaman Sea

This document describes the rationale and benefits for establishing sub-regional networks for cooperationon monitoring, control and surveillance (MCS), as requested by countries around Southern Andaman Sea.

Rationale and background

There is a growing understanding that there is a need to monitor and control fishing activities in order to certify and verify the legal status of fisheries in Southeast Asia. Sub-regional coordination is a necessary component to achieve this. An effective sub-regional coordination can facilitate trade through improved product traceability, coordinate national measures as well as improve scientific assessments and simplify surveillance. All these can support national efforts to reduce IUU. Sub-regional coordination also show ambitions by Gulf of Thailand and Andaman Sea countries to respond to criticism from importing countries in Europe and North America and certify the legal status of traded fisheries products. Countries around the Gulf of Thailand and Andaman Sea have therefore requested that SEAFDEC facilitate the establishment of sub-regional bodies for monitoring, control and surveillance with a main emphasis on information sharing on monitoring and control. The basis for such cooperation is always the national rules and mandates of agencies involved.

To develop an efficient cooperation on monitoring and control (M and C) several authorities need to be involved such as departments of fisheries, environmental agencies, port authorities, customs, trade promotion, immigration, transport and labour as well as the maritime enforcement authorities (navy, coastguard, marine police or similar). There is already existing national coordination groups established for inter-agency coordination in all of the South East Asian countries and the sub-regional MCS network should build on these and facilitate cooperation between them. Several of the recently developed bilateral MOUs on fisheries and related activities are supportive of bilateral and sub-regional cooperation as is existing examples on ongoing cooperation on maritime security and traffic separation schemes (between Maritime Enforcement Authorities).

By closely linking the new coordination body for Monitoring and Control to existing cooperation on Surveillance, an integrated MCS coordination can be initiated that can be a platform to handle cross border issues related to fisheries.

Objectives

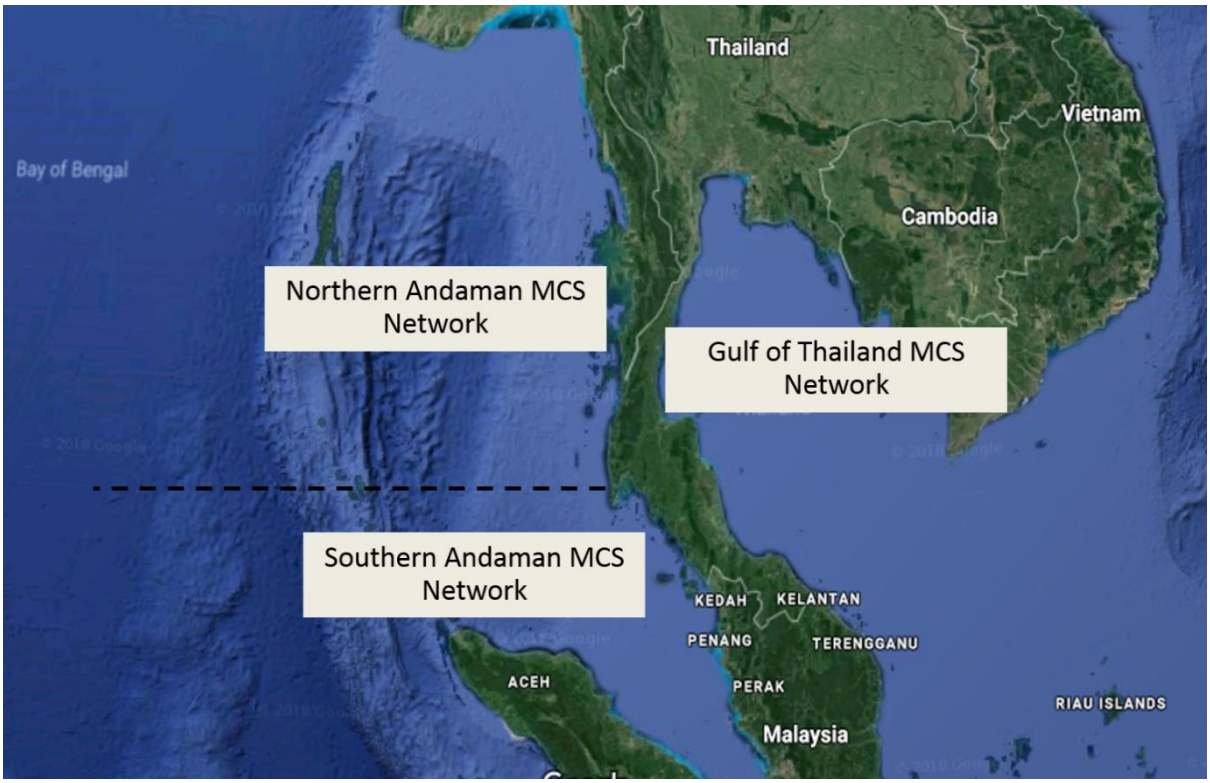
- To manage and utilize of fisheries resources in sustainable manner
- To enhance regional cooperation on combatting IUU Fishing
- To enhance AMS' capacity and capabilities on the Monitoring, Control and Surveillance (MCS) and fight against IUU fishing through dissemination of the best practices, especially on maritime domain surveillance and investigation activities and experiences of the Network

Benefits

Sub-regional cooperation on M, C and S benefits the coastal countries in many ways. An improved cooperation can develop fast and efficient mechanisms to solve cross border issues in many areas related to Fisheries. Immediate benefits include the facilitation of trade by coordinating product certification and catch data, data sharing on crews and immigration, scientific data needs and coordination of measures to monitor and control fisheries. In addition requirements by international certifications, trade regulations and warnings (yellow and red cards) are being issued on countries trading in fisheries products. Requirements to respond to this have a regional and trans-boundary dimension. Concerted efforts to cooperate on regional fisheries aspects would show ambitions by Gulf of Thailand and Andaman Sea countries to move towards sustainability and to respond to criticism received by importing countries thereby facilitate trade and improve revenues and tax incomes.

As mentioned above, ***the key for such a cooperation to be successful is that relevant authorities from already existing national multi-agency units take part in the cooperation both nationally and internationally/regionally.***

An efficient sub-regional cooperation facilitates monitoring and control efforts, improves revenues and tax collection and improves efficiency of national authorities through improved cross-border communication. For more specific examples of benefits of sub-regional coordination on monitoring, control and surveillance see Appendix 1.



Map of Sub-regional MCS cooperation areas

Partners

The regional cooperation will comprise the member countries bordering at Southern Andaman Sea, namely: Indonesia, Malaysia, and Thailand.

The potential donors and other International Organisations, Countries and Entities can be cooperating partners or collaborators to support the technical assistance.

The Network may also work cooperatively and collaboratively with other similar Network arrangement as deemed appropriate.

Scope and Works

The regional cooperation will be a voluntary operational framework of cooperation in the fight against IUU fishing in the region with the following guiding principles:

1. The Network should not duplicate the existing mechanisms but to support them, notably the RPOA-IUU and AN IUU (ASEAN Network for Combatting IUU Fishing).
2. The Network will be an operational framework of cooperation against IIU fishing and not an "operational instrument", which has legal implications.
3. The Network should not be a legally binding instrument.
4. The Network should not be mandated as an enforcement instrument.
5. The Network will function as communication platform for cooperation and capacity building to combat IUU fishing for AMS.
6. The Network will provide support on strengthening the capacity of AMS that are still in the process of establishing national efforts to combat IUU fishing.

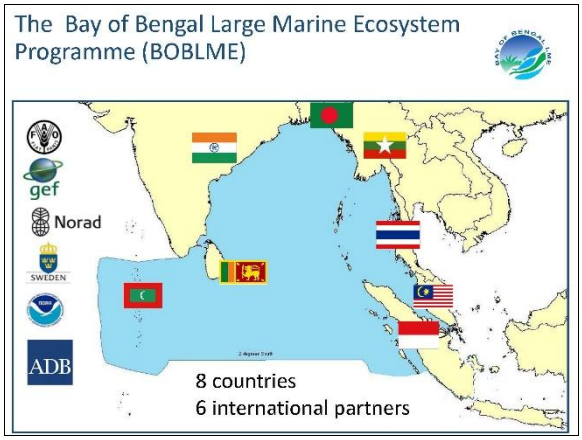
This framework seeks to improve coordination of the existing MCS tools to prevent, deter, and eliminate IUU Fishing in the region. To accomplish the objectives of the IUU Network, the following works may be covered:

- Each country member of this Network will designate a focal point who will be in charge of facilitating the information sharing and exchange. Additionally, the Network should meet as deemed appropriate or as when necessary to discuss challenges and follow-up activities.
- The Network should set up the criteria and organization of its activities. If requested by Members, case-specific assistance may be provided to them, which may come in the form of legal opinions, investigative support, inspection support and operational support and advice, historical analysis of vessels and companies, as well as advice on options for taking actions forward.
- The Network should promote the strengthening of investigative capacities and capabilities in identifying and tracking down IUU operators in their EEZs.
- The Network will support a wider cooperation among internal agencies of Network countries to further enhance the capability of the MCS.
- The Network will identify best practices to share among Network member countries and international community through trainings, capacity building and other instruments of dissemination.

Annex 14

UPDATES PROGRESS ON FORMULATION OF BOBLME PHASE 2

By *Mr. David Brown*



Some features of BOBLME (as on 2015)

- **The Bay of Bengal number of countries** - 8
- **Combined coastal population** - 185 million
- **Number of fishers** - 3.7 million
- **Number of boats** - 415 000
- **Annual catch** - 6 million tonnes / US$ 4 billion
- **Marine and coastal ecosystem (marketable) services in the BOBLME are estimated to be worth over** - US$ 72 billion a year
  - **Aquaculture** US$ 9.4 billion
  - **Fisheries** US$ 32.4 billion
  - **Tourism** US$ 18.7 billion
  - **Others** US$ 11.79 billion

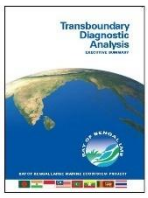
BOBLME Phase 1 focused on the following

- Increasing capacity in natural resources management;
- Increasing knowledge about the ecosystem;
- Developing indicators for tracking changes; and
- Starting to improve ecosystem health through transboundary demonstration activities.

Two major outputs

A Transboundary Diagnostic Analysis – TDA

- Review and analysis of the major transboundary issues and their causes



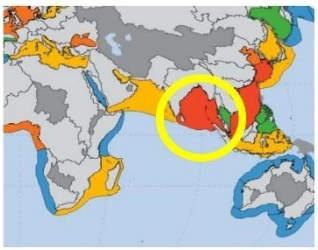
A Strategic Action Programme – SAP

- A (strategic action) plan for addressing the major transboundary issues and their causes

Bay of Bengal Large Marine Ecosystem

The TDA identified the following three major threats:

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



BOBLME Phase 1 Key Achievements

Science for Fisheries Management (1/2)

- Hilsa (ilish) stock assessment, resource status analysis and management recommendations (India, Bangladesh and Myanmar)
- Indian mackerel genetic stock structure analysis and fisheries biology
- Draft National Plan of Action (NPOA) for sharks and rays in most countries
- Development of Draft Regional Plan of Action (RPOA) Sharks

BOBLME Phase 1 Key Achievements

Science for Fisheries Management (2/2)

- Assessing performance of fisheries management
- Review of impacts of Illegal, Unregulated and Unreported (IUU) fishing (all countries)
- Scoping study on migrant fishers and transbondary fishing in Bay of Bengal

BOBLME Phase 1 Key Achievements

Science for Ecosystem and Environment (1/2)

- Exploratory ecosystem model for the Bay of Bengal and the coasts of India
- Ecosystem Characterization of BOBLME
- Ecosystem services valuation for the Bay of Bengal
- Marine Protected Area atlas and database for the Bay of Bengal
- Review of Coastal Pollution Loading and Water Quality Criteria for the Bay of Bengal coast of each country

BOBLME Phase 1 Key Achievements

Science for Ecosystem and Environment (2/2)

- Nutrient loading and eutrophication study for the Bay of Bengal
- Review of Shipping in Bay Bengal
- Study on Integrated Coastal Management in BOBLME countries

BOBLME Phase 1 Key Achievements

Capacity development 1/2

- Capacity development on Ecosystem Approach to Fisheries Management (EAFM)
- Gulf of Mannar dialogue between India and Sri Lanka
- Science communication training
- Empowerment of fisher community members with focus on EAFM

BOBLME Phase 1 Key Achievements

Capacity development 2/2

- Capacity development on improved governance
- Promotion of small scale fisheries guidelines (VG-SSF)
- Training on Code of Conduct for Responsible Fisheries
- Assessment of regional governance architecture and science-policy interface
- Training workshop on fishing capacity assessment
- Participation in regional reviews, studies, workshops and trainings

Other important country specific or sub-regional achievements 1/3

- Marine Protected Area management effectiveness and related capacity development in Indonesia and Bangladesh
- Study on conservation and management of sea cucumber and seahorse in India
- Socioeconomic Monitoring (SocMon) capacity development workshops in Bangladesh, India, Sri Lanka and Myanmar
- Support to Chilika Lake ecosystem health report card in India
- Strengthening fisheries data collection in Sri Lanka and Indonesia

Other important country specific or sub-regional achievements 2/3

- Reef connectivity study in Malacca straits, Malaysia
- BOBLME communication hub in Bangladesh and Malaysia
- Grouper resources conservation through spatial protection measures, Maldives
- Rapid fisheries assessment in markets in Maldives, Thailand and Myanmar
- Series of hilsa fisheries studies in Myanmar
- Series of works on Myeik Archipelago MPA and its management

Other important country specific or sub- regional achievements 3/3

- Fish stock assessment and marine ecosystem surveys with RV Dr Fridtjof Nansen (EAF Nansen)
- Assessment of Bar Reef Marine Sanctuary and capacity development on habitat conservation and Marine Protected Area management in Sri Lanka
- Study on community perceptions of marine protected area livelihood impacts, governance and management in Thailand
- Integrated Coastal Management (ICM) in selected seagrass areas in the coast of Satun province, Thailand

BOBLME Phase 2

The BOBLME Phase 2 project is designed to implement the SAP

- Based on the priority areas identified under each SAP theme
- It works at both national and decentralized levels, with a regional component
- It has and 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 form more effective management coupled to regional cooperation and consensus building

Funding and time frame

- GEF Program Financing: USD14 266 055
  - (of which USD 4 587 156 is for Asian Development Bank for eco-waste infrastructure solutions in Mandalay City, and USD 504 587 is from the CC-M in Bangladesh to be used for the Sundarbans Forest Reserve).
- The financing for the FAO Regional "child" project is USD 9 174 312.
- Co-financing ratio of at least 1:6
- Duration : 5 years, implementation from mid 2020 (at earliest)

Prospective Regional and National partners of BOBLME phase 2

Regional partners

- BOBP-IGO (Sub regional hub)
- SEAFDEC, Sub regional hub)
- IUCN/MFF,
- UN Environment (e.g. COBSEA, GPA),
- UNIDO;
- APFIC

National execution partners

- Ministries of Fisheries and Agriculture, Ministries of Environment, and other national agencies from all 8 participating countries

Other stakeholders

- Civil Society Organizations
- Private sector

There are 5 BOBLME Phase 2 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
- 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 are we with the project design August 2019

- Project document inception workshop (March 2019)
- Regional project steering committee (March 2019)
- 8 National PPG consultation workshops completed (Maldives, Sri Lanka, Bangladesh, Myanmar, Thailand, Malaysia and Indonesia).
- India Federal level consultation pending, 4 State level consultations for completed.
- Meetings with implementation partners underway including SEAFDEC, BOBPIGO and IUCN;
- Regional donor and partner dialogue meetings (IUCN, ADB, Sweden, Norway, USAID, SEAFDEC, BOBPIGO, COBSEA/UNEP).
- Project document submission planned 31 October 2019

Southern Andaman MCS Network most aligned with Outcome 1.2 (IUU catch in the BOBLME reduced)

- BOBLME countries join and implement a Regional Plan of Action (RPOA) on IUU fishing
- 8 national POAs-IUU and national IUU MCS systems and Vessel Monitoring System (VMS) strengthened
- Tools for promoting best practices, such as MCS, PSM and traceability, and policies and national actions to combat IUU fishing developed and implemented in national pilot/investment projects
- Regional Capacity Development Program on port inspections, MCS and traceability implemented

Southern Andaman Sea MCS network and BOBLME 2 ?

- Indonesia, Malaysia and Thailand positive towards network;
- Network objectives well aligned with BOBLME 2 objectives;
- We need time needed to consult stakeholders, establish network, process and objectives
- What are the next steps for BOBLME 2 design (follow up to this meeting ?)
- Noting BOBLME2 National Validation meetings in October 2019

Thank You

BAY OF BENGAL LME

www.boblme.org

Annex 15

CLOSING REMARKS

By Dr. Kom Silapajarn,
SEAFDEC Secretary-General

Distinguished National Technical Group for MCS from Indonesia, Malaysia and Thailand, representative from FAO, my colleague from SEAFDEC, ladies and gentlemen,

Good Afternoon!

As we have come to the end of our Meeting, I would like to thank the representatives for participating countries for providing valuable inputs and active participation during our deliberations. We have to bear in mind that since the Southern Andaman Sea is well recognize for its important habitats and abundance of fishery resources, it has become necessary to properly manage and regulate use of fishery resources and extend national regulation to a regional perspective through sub-regional coordination.

We are therefore grateful to all of you for maximizing the momentum to data sharing of priority areas and discuss issues on coordination in fisheries, suggested communication mechanism, move forward for establishing an MCS Network in the Southern Andaman Sea sub-region, as a stable safeguard to combat illegal and destructive fishing and integrate fisheries and habitat management, especially with respect to Monitoring, Control and Surveillance. Most importantly, we were also able to come up with effective and efficient collaboration and coordination across the relevant agencies on MCS.

Secondly, I would also like to thank the representatives from other organization such as FAO/RAP and BOBLME for your very valuable inputs, recommendations and suggestions.

Lastly, please allow me to thank the SEAFDEC-Sweden Project for enabling SEAFDEC to organize this Meeting so that the countries in the Southern Andaman Sea Sub-region could strengthen sub-regional MCS network cooperation for sustainable fisheries development in the Southern Andaman Sea.
I would also wish to thank the Meeting Secretariat for their support and enable the Meeting run smoothly.

Considering the success of our 2 days Meeting, I now declare this Meeting closed. I wish all of you safe journey back home to your countries and families.

Thank you.