



Report of the 4th Meeting of the Gulf of Thailand Sub-region

Bangkok, Thailand

18-19 December 2013

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Southeast Asian Fisheries of Development Center

The Secretariat

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I. INTRODUCTION

1. The 4th Meeting of the Gulf of Thailand Sub-region was convened in Bangkok, Thailand from 18 to 19 December 2013, and attended by representatives from the Gulf of Thailand countries, namely: Cambodia, Malaysia, Thailand, and Vietnam, as well as from regional organizations such as the Asian Coastal Resources Institute Foundation (CORIN-Asia) Alliance Programme, FAO Regional Office for Asia and the Pacific (FAO/RAP) and Secretariat of the Asia-Pacific Fisheries Commission (APFIC), Institute of Oceanography (Nha Trang, Vietnam), International Union for Conservation of Nature-Asia (IUCN Southeast Asia), the Learning Institute (Cambodia), Secretariat of the Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating Illegal, Unreported and Unregulated (IUU) Fishing in the Region (Indonesia), Bangkok-based Sustainable Development Foundation (SDF), and the United Nations Environment Programme (UNEP) Regional Office. Senior officials from SEAFDEC and the SEAFDEC Departments, and members of the Regional Fisheries Policy Network, also attended the Meeting. The list of participants appears as **Annex 1**.

2. The Meeting served as a process to move from initiation to commitment on a more concrete action as recommended during the 3rd Meeting of the Gulf of Thailand Sub-region in 2011. Discussions were organized to allow for parallel meetings among neighboring countries on specific subject matters, such as the status of *Rastrelliger* spp., port monitoring, and national initiatives to eliminate illegal and destructive fishing. Establishment of working groups/task forces on priority areas common to the sub-region's fisheries such as capacity/monitoring of fishing efforts; monitoring and capacity-building at ports and landing sites; and options for joint approaches to conserve the Indo-Pacific mackerel (*pla too*) and related species, was also one of the main objectives of the Meeting. On the whole, the Meeting was aimed at identifying the suitable actions for continued work at the sub-regional level.

3. The Secretary-General of SEAFDEC, *Dr. Chumnarn Pongsri* welcomed the participants of the Meeting and expressed his appreciation for the full representation of the Gulf of Thailand countries. He envisioned the Gulf of Thailand Sub-regional grouping as a stable safeguard to combat illegal and destructive fishing in the Gulf, and as avenue to promote the integration of fisheries and habitat management in order that fishing capacity in Gulf's waters could be checked. He also believed that the Meeting would enable the countries involved to have a common understanding of long-term priorities and adequate resource allocations that could be transformed into action agenda to address the joint interest of the Gulf of Thailand. His Opening Statement appears as **Annex 2**.

II. BACKGROUND AND AGENDA OF THE MEETING

4. The SEAFDEC-Sweden Project Manager, *Ms. Pattaratjit Kaewnuratchadasorn* presented the background, objectives and expected outputs of the Meeting (**Annex 3**) especially highlighting on the issues discussed during the 1st and the 2nd Meetings of the Gulf of Thailand Sub-region in 2008 and 2009, respectively. Such issues include MCS network,

combating IUU fishing, improving vessel registration/licensing and port monitoring, identification and development of larger fisheries resources conservation areas, and sustainable harvesting of the Indo-Pacific mackerel and related species.

5. The Meeting was also informed of the major concerns discussed during the 3rd Meeting of the Gulf of Thailand Sub-region in 2011. The concerns included among others, the (a) Development of Regional and National Management Approach to Fisheries Habitat, (b) Data Collection and Information Sharing on the Management of Fishing Capacity, (c) Research and Development Activities, and (d) Communication with International Community.

6. The Agenda which appears as **Annex 4** was adopted.

III. INTEGRATION OF FISHERIES AND HABITAT MANAGEMENT, EFFECTIVE MANAGEMENT OF FISHING CAPACITY, AND REDUCING ILLEGAL AND DESTRUCTIVE (COMBAT IUU) FISHING IN THE GULF OF THAILAND

7. Based on their experiences, representatives from the various organizations represented during the Meeting and Member Countries concerned provided information on the Integration of Fisheries and Habitat Management and Effective Management of Fishing Capacity, and Reducing Illegal and Destructive (combat IUU) Fishing in the Gulf of Thailand. The summary of the presentations is shown as follows:

3.1 Lessons learned from the UNEP/GEF/South China Sea Project

Regional Working Group on Fisheries for Thailand

8. The representative from the Department of Fisheries (DOF) of Thailand and former member of the Regional Working Group on Fisheries under the UNEP/GEF/South China Sea Project, *Mr. Pirochana Saikliang* presented the experiences of the Regional Working Group during the implementation of the UNEP/GEF/South China Sea Project: Development of Fisheries *Refugia* on Closed Season and Areas in the Gulf of Thailand. He recalled that the Chinese purse seine was introduced in the Gulf in 1925 to catch the Indo-Pacific mackerel, during which time the DOF of Thailand also conducted research study on pelagic fishes in parallel with such introduction. The DOF of Thailand thereafter provided scientific justifications for the development of management measures for pelagic species that included the temporary and permanent closures of spawning and nursery areas, and prohibition of the operations of some fishing gears. This is in line with the concept of fisheries *refugia* in the context of the UNEP/GEF South China Sea Project which defines *refugia* as “spatially and geographically defined, marine or coastal areas in which specific management measures are applied to sustain important species [fisheries resources] during the critical stages of their life cycle, for their sustainable use.” He also informed the Meeting that stakeholders’ consultations have been carried out in order to develop the effective measures and resolutions. He explained that adequate scientific information, stakeholders’ consultations, and monitoring, control and surveillance are significant factors that support the establishment of *refugia* in the Gulf of Thailand. His presentation appears in **Annex 5**.

9. On the migratory route of the mackerel in the eastern Gulf of Thailand as requested by the representative from the Sustainable Development Foundation (SDF), it was clarified that there are two main fishing grounds in the Gulf of Thailand. However, based on the results of a recent study conducted by SEAFDEC in 2013 in collaboration with relevant institutions, juveniles of mackerel were found in Trat Province, but the DOF of Thailand has no record in the past of adult mackerel present in the area although there were records of the presence of adult mackerel in neighboring areas.

10. In response to the query of the representative from Malaysia on the period of research surveys needed to get sufficient results to support management measures for pelagic fishes in the Gulf of Thailand, the Meeting was informed that the DOF of Thailand had been monitoring the results of the management measures for possible updating/revision as appropriate, since the implementation of the first closed season in the Gulf of Thailand in 1957. In fact, DOF Thailand has already issued 14 Notifications in relation to the changing of the closed areas, durations and fishing gears based on scientific information gathered from the surveys.

11. The representative from the Institute of Oceanography, Vietnam also suggested that a study of the migratory route of trans-boundary species especially the mackerel should be carried out in order to draw a full picture of the species' migratory route in the Gulf of Thailand. He informed the Meeting that large sizes of the mackerels have been caught off Phu Quoc Island in Vietnam. In this connection, the Secretary-General of SEAFDEC concurred with the suggestion on the need to conduct more research on the migratory route of mackerels and related species especially in the eastern Gulf of Thailand in the near future.

Regional Working Group on Coral Reefs for Vietnam

12. A former member of the Regional Working Group on Coral Reefs for Vietnam, *Dr. Nguyen Van Long* reported on the activities implemented by the UNEP/GEF/South China Sea Project, specifically reviewing the lessons learned on the establishment of fisheries *refugia* in Phu Quoc Island in Vietnam. He highlighted on the importance of local fishers' knowledge in compiling scientific evidence, compilation of results of inventories and assessments of aquatic species as well as the involvement of local communities and local government units in developing fisheries *refugia* for their role in identifying specific fisheries issues and appropriate management measures. He informed the meeting of the recommended actions for the project that includes the conduct of inventory and assessment of spawning aggregation and nursery grounds of target species, improvement of the network of stakeholders, updating of the fisheries profile of the areas, improving the system of compiling fisheries statistics and management of scientific data, and training on monitoring the status of target species. He added that under this project, a Memorandum of Agreement between two neighboring provinces (Kampot in Cambodia and Kien Giang in Vietnam) was signed and the implementation of five programs had been stipulated under the MOA. The presentation appears in **Annex 6**.

13. The Meeting was also informed that the protected area of the UNEP/GEF/SCS project comprises large areas of sea grass and numerous coral reefs, which was identified through remote sensing. Lastly, he also highlighted on the need to compile local knowledge and information provided by local fisherfolk in Phu Quoc communities which should be gathered through a series of consultations, as well as proper data collection and efficient program

implementation. The combination of these aspects would be essential in attaining the objectives of the project.

3.2 Current situation of fisheries in the countries bordering the Gulf of Thailand

Cambodia

14. The representative from Cambodia, *Mr. Ing Try* presented the status and information on coastal habitats in Cambodia including the management framework and actions implemented by the Fisheries Administration (FiA) of Cambodia. He informed the Meeting that with regards to management of the fisheries resources, Cambodia has implemented various activities such as the enforcement of closed fishing season from 15 January to 31 March, installation of artificial reefs, and declaration of protected areas for sea grass beds. In this regard, he also pointed out the challenges and existing issues that were experienced during the implementation of the activities such as occurrence of illegal fishing in Cambodian waters during closed season, inadequate system for data collection, insufficient number of researchers and research activities, which need to be considered. His presentation appears in **Annex 7**.

Malaysia

15. The representative from Malaysia, *Mr. Abdullah Bin Jaafar* presented Malaysia's Experience in the Implementation of Port State Measures in Combating IUU Fishing: A Brief Case Study (**Annex 8**). His presentation focused on a case study regarding the detention of the M.V. Tiantai, which was achieved through a collaborative mechanism of several related agencies in the country that include the Malaysian Maritime Enforcement Agency and Marine Department of Malaysia, working in line with the Department of Fisheries Malaysia that aims to combat IUU fishing. The vessel was apprehended upon the notification from the Australian Fisheries Management Authorities (AFMA). He also informed the Meeting of the several legislative frameworks used by Malaysia in combating IUU Fishing such as the: i) Exclusive Economic Zone Act 1984; ii) Fisheries Act 1985; iii) Merchant Shipping Ordinance 1952; iv) Fisheries Development Authority 1971; v) Malaysian Quarantine & Inspection Services Act 2011; and vi) Customs Act 1967. Other actions taken by Malaysia to combat IUU fishing in the country include the creation of appropriate policy and legislation, and development of operational measures. Currently, several enforcement agencies in Malaysia have teamed up to handle the cases of IUU fishing vessels including foreign vessels upon receiving notification from RPOA-IUU Secretariat or AFMA. In conclusion, Malaysia has made several actions and will continue to take actions to combat IUU fishing at the domestic, regional and international levels as part of sustainable fisheries management and good governance, all aiming towards securing the supply of fish as food source for the country.

Thailand

16. The representative from the DOF of Thailand, *Mr. Pirochana Saikliang* reported on the status of fisheries in Thailand (**Annex 9**), by briefly providing information on the results of research studies on Indo-Pacific mackerel in Thailand, fishery status such as fishing effort, catch, fishing ground, fishing season by using surrounding net, gill net, encircling gill net, and bamboo stake trap. The Meeting was informed that many countries have already agreed in principle on the need to take measures to eliminate IUU fishing and the Government of Thailand has been implementing several measures to manage its fishing grounds, gears, boats,

processing plants, and fish landings to ensure that no IUU fishing would take place in its waters in the future.

17. He added that the DOF has established a Catch Certification Coordination Centre to issue certifications for non-IUU fishing products in compliance with the EU regulations. Two main activities have been conducted including the monitoring of catch at ports and certification of the catch. Furthermore, the Meeting was informed that Thailand, in collaboration with FAO, had developed a pilot project for monitoring of fish catches landed at the Phuket Fish Landing Port.

Vietnam

18. The representative from Vietnam, *Mr. Le Hoang Khai* presented the status of fisheries in Vietnam (**Annex 10**) focusing on the southwestern part of Vietnam. He illustrated the marine fisheries resources, fishing grounds and fishing capacity in Kien Giang and Ca Mau Provinces where most of fishing efforts are conducted on the waters of the Gulf of Thailand. The Meeting was also informed on the legal and policy frameworks related to fisheries that are implemented including the results of fishing ground zoning, logbook monitoring and inspection system in Vietnam. He also shared some information on the implementation of VMS and catch documentation as well as market state controls. He concluded that the need for (a) scientific stock assessment and fishing grounds prediction, (b) re-organization of fishing activities at sea by restructuring fishing fleets, and (c) having additional investment for environmental protection, resource renewable and protection, and development of MPA and Fish *Refugia* systems, should be taken into consideration.

3.3 Regional Initiatives

SEAFDEC Marine Fishery Resources Development and Management Department

19. The representative from SEAFDEC MFRDMD, *Mr. Mohammad Faisal bin Md Saleh* presented the research projects conducted by MFRDMD with funding from the Japanese Trust Fund II involving *Rastrelliger* spp. and *Decapterus* spp. in this region. The projects include: (a) Tagging of Economically Important Small Pelagic Species in the South China Sea (SCS) and Andaman Sea (AS), and (b) Genetic Study on Population Structure of the Indian Mackerel (*Rastrelliger kanagurta*) and Japanese Scad (*Decapterus maruadsi*) in the SCS and AS. These projects aim to ascertain the migration route and existence of sub-populations of small pelagic fishes in the above-mentioned study areas.

20. The Meeting was informed that results of these studies pointed towards the genetic structure of *Rastrelliger kanagurta* and *Decapterus maruadsi*, and that Indian mackerels in the South China Sea and Andaman Sea, and the Japanese scad in the South China Sea are shared or derived from the same stock with high genetic variation among stocks in the sampling sites. Through the use of mtDNA as molecular marker, detailed results on the variations among haplotypes of the selected samples had been attained. His presentation appears as **Annex 11**.

SEAFDEC Training Department

21. Based on the previous studies on migratory route of Indo-Pacific mackerel conducted by the DOF of Thailand, the representative from SEAFDEC/TD, *Ms. Penchan Laongmanee*

presented the new acoustic technology, which could provide localization of fish and habitats. She also presented the outputs of the collaborative cruise surveys conducted in April 2013, which indicated high abundance of the Indo-Pacific mackerels in eastern Gulf of Thailand (around Trat Province). In this regard, it was proposed that more areas should be covered during the surveys of the whole of Gulf of Thailand in order to compile sufficient information on the nursery and spawning grounds of the Indo-Pacific mackerels. Her presentation appears as **Annex 12**.

IV. SELECTED GLOBAL AND INTERNATIONAL INSTRUMENTS AND THEIR RELEVANCE TO FISHERIES AND HABITAT MANAGEMENT (AND TO COMBAT IUU FISHING) INCLUDING REFERENCES TO THE ASEAN COMMUNITY DEVELOPMENT

22. Representatives from regional organizations shared their experiences from their initiatives on fisheries management including activities to combat IUU fishing. The summary of their presentation are as follows:

RPOA-IUU Secretariat

23. The representative from RPOA-IUU Secretariat, *Mr. Ardiansyah Hasyim* presented the updated activities of RPOA-IUU including the results of the 6th RPOA-IUU Coordination Committee Meeting in November 2013 in Kota Kinabalu, Malaysia; and key issues and activities of its two MCS Sub-Regional Groups in Arafura Timor Sea, and in the southeastern part of South China Sea and Sulu-Sulawesi Seas. He also shared the RPOA-IUU Work Plan for 2013-2014 which includes follow up actions for RPOA-IUU member countries to strengthen their capacity in MCS to combat IUU fishing in preparation for the implementation of the FAO Agreement on Port State Measures and FAO Global Records on Fishing Vessels. He also highlighted on some problems and constraints in its two MCS Sub-Regional Group including unreported and misreported catch, unlicensed fishing vessels, unauthorized mothership activity, duplication of licenses, double flagging, non-compliant VMS, bunkering, and limited human and institutional capacity in relevant government agencies to implement MCS effectively. He then updated the Meeting on the future activities of RPOA-IUU for future reference. His presentation appears as **Annex 13**.

FAO/RAP

24. The representative from FAO/RAP and Secretary of APFIC, *Dr. Simon Funge-Smith* presented the status of “Port inspections of fishing vessels - Port State Measures” (**Annex 14**) and shared his experiences on the implementation of the Port State Measures (PSM) Agreement. He discussed the several ways of combating illegal, unreported and unregulated fishing on both levels (water and port). Specifically, he cited that combating IUU fishing in the waters can be done through: (a) monitoring, control & surveillance, and (b) on-board observers; whereas, combating IUU fishing in ports can be done through: (a) conduct of port inspections, (b) search for evidence of illegal activity, and (c) conduct of clear procedures for taking actions.

25. He also presented some highlights on the PSM pilot project conducted in Thailand, and stressed on some issues related to power, authority and responsibility of concerned agencies in the implementation of PSM in Thailand, of which the agencies involved are the: (a) Marine

Department, (b) Immigration Department, (c) Customs Department, and (d) Department of Fisheries. He also stated that the APFIC/FAO Technical Guide to Port Inspection is already available online and can be downloaded for reference.

V. GROUP DISCUSSION

26. In order to proceed with the development of action plans for the Gulf of Thailand, the participants were divided into two (2) groups to address the following issues, namely: (a) integration of fisheries and habitat management and the importance of trans-boundary stocks and habitats, and (b) promotion of more effective management of fishing capacity and to reduce illegal and destructive (combat IUU) fishing in the Gulf of Thailand. The two (2) groups were tasked to brainstorm and discuss the gaps, constraints and key requirements/areas to move towards collaborative approaches and identify the list of priority actions and timelines for the tasks to be carried out by the group members from each country in cooperation with responsible national agencies and NGOs.

5.1 Integration of fisheries and habitat management and the importance of trans-boundary stocks and habitats

27. The representative from the Institute of Oceanography of Vietnam, *Dr. Nguyen Van Long* presented the results of Group 1, which discussed the issues and management measures for integration of fisheries and habitat management, and the importance of trans-boundary stocks and habitats (**Annex 15**). References to important trans-boundary species in the Gulf of Thailand, which include mackerels (e.g. *Rastrelliger brachysoma* and *R. kanagurta*), and neritic tunas (e.g. longtail tuna), were identified. Since species are economically important for the countries in the sub-region, priority should be placed on the formulation of collaborative activities for these species in the future. In addition, it was suggested that close linkage between fishery activities and the ecosystems should be enhanced, and the importance of other species that share the same ecosystems/habitats should be recognized, e.g. endangered aquatic species (dolphins, dugongs), blue swimming crabs. However, considering their non-economic importance, discussion on such endangered species was not given much focus.

28. After the discussion, the Meeting agreed on the goal towards regional cooperation for enhancing small pelagic fisheries (mackerels and neritic tunas) in the Gulf of Thailand through the integration of fisheries and ecosystem management approaches. While noting that there are wide ranges of information on *Rastrelliger* spp. available from researches conducted by Thailand, Malaysia and MFRDMD, e.g. biology and migration, spawning period, gonad maturation, population study using DNA analysis, these could be mobilized to provide a good picture of the status of these resources in the region and serve as basis for the development of appropriate management measures. However, since some of the information could already be outdated, additional and updated information would be necessary to fill the gap especially for the transboundary areas, which could be easily attained through sub-regional collaboration.

29. Furthermore, considering that the project aims to also address ecosystem approach, it was agreed that regional collaboration in the Gulf of Thailand should focus not only on fisheries aspects but also on other habitat and management aspects including those involving wide range of stakeholders involved in the utilization of resources, e.g. small-scale fishers, commercial fishers, tourism activities. In addition, since impacts could also emerge from other crosscutting issues, e.g. on climate change and availability and migration of labor, these

issues need to be addressed in order to ensure sustainable small pelagic fisheries in the Gulf of Thailand.

30. While noting the recommendation to establish a Regional Scientific Working Group to discuss the detailed activities to be undertaken, the representative from Vietnam suggested that focus could be placed on the management for biodiversity conservation, since the activities under fisheries and habitat aspects are closely inter-related. For marine spatial planning which is an integrated way of planning, activities should be undertaken to identify important trans-boundary areas, including important habitats, spawning grounds and nursery grounds; and review existing data and information on fisheries resources and ecosystems as immediate activities. In addition, it was also suggested that follow-up activities on the development of joint management plan should be included after the initial data collection process.

31. While supporting this recommendation, the representative from SDF suggested that there should be concrete example/case to demonstrate the application of the concept on habitat management that relate to trans-boundary fisheries stock for the sub-region, which could also be applied in other areas.

32. The representative from Thailand provided additional information on four (4) important neritic tuna species in Thailand, namely: *Thunnus tonggol* (longtail tuna), *Auxis thazard* (frigate tuna), *Auxis rochei* (bullet tuna), and *Euthynnus affinis* (kawakawa). He also suggested that since longtail tuna is very important for the sub-region, it should be given increased focus under this grouping. The representative from FAO/RAP added that since there is an existing Working Group on Neritic Tuna in Thailand, the work discussed under this Group should be linked with this Working Group.

33. While supporting the strong and urgent need to review existing information, the representative from Cambodia emphasized on the importance of discussion and consultation in order to formulate the necessary future work plan. The Secretary-General of SEAFDEC added that although the existing information, e.g. on mackerels, have been compiled since long time ago and may already be outdated, such information could still be used as baseline data to compare with the updated data to be collected in the future. He also emphasized that in addition to the activities that could be formulated and undertaken under the SEAFDEC-Sweden project, relevant activities undertaken by other agencies/organizations should also be considered and linked.

5.2 Promotion of more effective management of fishing capacity and to reduce illegal and destructive (combat IUU) fishing in the Gulf of Thailand

34. The Meeting took note of the presentation of Group 2, which focused on the promotion of more effective management of fishing capacity and reduction of illegal and destructive fishing in the Gulf of Thailand (**Annex 16**). The identified priority issues included: (a) monitoring of fishing effort, catches and landing (MCS Networks) in the Gulf of Thailand; (b) port monitoring and monitoring of landings by “neighboring” vessels; and (c) catch documentation and certification/validation.

35. The representative from Malaysia, *Mr. Abdul Rahman b. Abdul Wahab* presented the results of the discussion on strengthening institutional capacity and sub-regional cooperation on monitoring, surveys and control of fishing efforts and landings of fisheries products in the

Gulf of Thailand. The priority issues identified during the discussion included: 1) illegal (IUU) and destructive fishing in the Gulf of Thailand; 2) double flagging of fishing vessels; 3) deregistration and re-registration of vessels; and 4) landing of catches across boundaries. In order to address such issues, the proposed actions included the conduct of roundtable discussions between sets of two neighboring countries (i.e., Cambodia-Vietnam, Thailand-Malaysia, and Thailand-Cambodia).

36. The representative from RPOA-IUU Secretariat inquired on the system or mechanism adopted by the countries in the Gulf of Thailand to deal with IUU fishing vessels entering into their ports. In response, it was clarified that countries could pursue the RPOA framework as a guidance to tackle this issue since the Gulf of Thailand is one of the identified sub-regions covered in the RPOA framework. Subsequently, notifications of IUU fishing vessels could be shared among the countries in the sub-region.

37. The representative from SDF suggested that multi-stakeholders should be allowed to participate in the discussions and supported the development of regional initiatives. He also inquired whether it is possible to determine the gaps or factors that lead to illegal (IUU) and destructive fishing in the Gulf of Thailand, and that SEAFDEC could play an important role in the development of a mechanism to address this issue. He made connections of illegal (IUU) to migrant workers in the fisheries sector, as often, most migrant fishers do not have proper documentation to work on fishing vessels. He also cited how various NGOs and agencies are starting to address such growing issues and encourages SEAFDEC to also look/research into it.

38. The representative from FAO/RAP informed the Meeting that APFIC has conducted numerous studies on IUU fishing in the Asia-Pacific region while the RPOA-IUU also conducted similar study in Arafura Sea. However, since the nature of illegal fishing in each sub-region in Southeast Asia might be different, proactive actions should be taken into consideration in the implementation of the activities. In this regard, he suggested that SEAFDEC could review some forms of IUU fishing activities in the sub-region and provide recommendations to the countries in order to address such aspects.

39. The representative from Cambodia raised the concern on IUU fishing in the sub-region, which could be performed mostly by medium and small-scale vessels doing illegal (IUU) or destructive fishing. However, it was emphasized that any scale of IUU fishing operations by fishing vessels would create the same severe impact on the health of the ecosystem. He pointed out that under the RPOA – IUU framework, member countries has facilitated the establishment of agreement in the subregional Arafura - Timor Seas area while in the Gulf of Thailand the process is still in the first step of development. In this regard, he suggested that the experience gained from the adoption of the Arafura-Timor framework could be used as an example in developing a collaborative arrangement for the Gulf of Thailand sub-region.

40. Following up with the recommendations of the representative from FAO/RAP, the SEAFDEC Secretary-General added that once the status of IUU fishing in this region is known and a set of recommendations is available, SEAFDEC would initiate the process of scoping the activities to be undertaken for the sub-region focusing on activities related to tackling illegal and destructive fishing. In this connection, the representative from SDF pointed out that such activities might include national and regional actions, and that SEAFDEC could play a significant role at the regional level. In addition, the representative from FAO/RAP urged the Member Countries to come up with their respective NPOA-IUU

fishing that could be the first step to address IUU fishing at the national context and would allow partners to be involved in the process of combating IUU fishing. In order to obtain policy support in counteracting illegal (IUU) and destructive fishing in the sub-region, the relevant mechanism within the ASEAN should be taken into consideration in developing the necessary measures.

VI. LOCAL CAPACITY-BUILDING, STRENGTHENING OF COMMUNITY FISHERIES AND DIVERSIFIED LIVELIHOODS TO ENHANCE COMMUNITIES' RESILIENCE AND CAPACITY TO ADAPT TO CHANGE

41. The experiences of organizations and local partners were also shared during the Meeting by their representatives especially those working on local level capacity-building with reference to their accomplishments and ongoing activities. The summary of their presentation follows:

CORIN-Asia Cambodia

42. The representative from CORIN-Asia Cambodia, *Ms. Rebeca Fontanilla Andong*, presented the Integrated and Participatory Approaches: Enhancing Community Resilience to Adapt to Changes (**Annex 17**), emphasizing on the several mechanisms and tools available that can be used for fishery resource and habitat management as well as for the promotion of sustainable livelihood development in the local communities of Cambodia. The several programs and mechanisms presently implemented are: (a) Coastal Cambodia Local Alliance (CCLA), (b) Livelihood Development Framework (LDF), (c) Locally-Initiated Fund (LIF), (d) Crab Banking, (e) Trans-boundary Collaboration, (f) MCS, (g) Ecotourism, and (h) Skills Bridging and Professional Program.

43. In response to the query of the representative from Malaysia, *Mr. Raja Bidin Raja Hassan* regarding the availability of “success stories” on the implementation of the programs in Cambodia, *Ms. Andong* cited that currently there is still no available publication on their activities since the data are still in their raw form. However, she also suggested that the participants of the Meeting could see and observe the activities under their projects at the local level.

Learning Institute (Cambodia)

44. The representative from the Learning Institute (Cambodia), *Mr. Bunthoeun SIM*, presented the Local Capacity Building, Strengthening of Community Fisheries and Diversified Livelihoods to Enhance Communities Resilience and Capacity to Adapt to Climate Change (**Annex 18**). He introduced the overview of the fisheries management programs implemented in Cambodia since 2000 including those that involved the partnership between the Institute, Fisheries Administration and SEAFDEC. The Meeting was also informed that during the period from 2006, most of the programs in Cambodia emphasized on the role of women in fisheries management. He recommended the need to improve the capacity of local facilitators and the Community Fisheries (CFi) committees and stakeholders, conduct of annual forum on CFi management, and to consider the need to provide technical and financial assistance towards CFi management and planning.

Sustainable Development Foundation (Thailand)

45. The Director of Bangkok-based Sustainable Development Foundation (SDF), *Ms. Ravadee Prasertcharoensuk* provided information on their organization and the projects it has been implementing (**Annex 19**). She explained that SDF has conducted a wide array of activities related to sustainable fisheries and coastal resource management. Currently, SDF operates four field sites located in Trat, Chanthaburi, Phatthauong and Trang Provinces, where SDF has brought together a diverse range of stakeholders in the field sites to work cooperatively towards achieving common objectives with individual ecosystems or common areas of implementation. SDF also conducts the following activities: (a) production and distribution of educational materials, (b) capacity building of local coastal communities focusing on disaster risk reduction and climate change adaptation with active participation from women sector, (c) analysis of policy and legislation related to fishery management, and (d) active participation in ongoing National Reform Process.

46. The Meeting was informed that SDF seeks to form possible collaboration with SEAFDEC in the implementation of an ecosystem based and trans-boundary management in the eastern region of Thailand. Furthermore, the institution would like to seek technical support for sustainable fisheries in their project sites and to partner in micro/macro link to promote multi-stakeholders participation in sustainable fisheries and ecosystem management.

IUCN Southeast Asia Group

47. The representative from IUCN *Ms. Saisunee Chaksuin* informed the Meeting on the structure and the function of the IUCN Southeast Asia Group and the current programs being implemented by IUCN, namely: (1) Building Resilience to Climate Change Impacts- Coastal Southeast Asia (BCR); and (2) Mangroves for the Future (MFF).

48. The BCR project aims to increase adaptive capacity of people and the ecosystems on which they depend to cope with the anticipated impacts of climate change and plan for Disaster Risk Reduction (DRR), through sound governance and planning. It will be implemented in the coastal zones of Thailand (Trat and Chantaburi provinces), Cambodia (Koh Kong and Kampot) and Vietnam (Can Gio, Ben Tre, Soc Trang and Kien Giang). The partners who are engaged to this project are namely: Sustainable Development Foundation (SDF) (Thailand), Vietnam Administration of Seas and Islands (VASI), GIZ Associates (Vietnam), Ministry of Environment's General Department for Administration for Nature Conservation and Protection (GDANCP) including Climate Change Department (CCD) and Department of Wetlands and Coastal Resources (DWCR) (Cambodia), Department of Marine and Coastal Resources (Thailand), Institute of Terrestrial Biodiversity (ITB) (Vietnam), Can Tho University (Vietnam) and Department of Meteorology, Hydrology and Climate Change (DMHC) (Vietnam).

49. The representative from IUCN also informed about the MFF project which is a unique partnership for healthy coasts, ecosystems and communities in the Indian Ocean. The member countries under this project are namely: Bangladesh, Cambodia, India, Indonesia, Maldives, Pakistan, Seychelles, Sri Lanka, Thailand and Vietnam. The outreach countries are Myanmar and Timor-Leste while the Dialogue Countries are Kenya, Malaysia and Tanzania. The Thailand National Coordinating Body (NCB) was approved by the Permanent Secretary of the Ministry of Natural Resources and Environment on the 31st August 2007. The Chair of the Thailand NCB is the Director General of the Department of Marine and Coastal Resources (DMCR).

VII. WAY FORWARD FOR SUB-REGIONAL AND BILATERAL COOPERATION IN FISHERIES AND HABITAT MANAGEMENT INCLUDING EFFORTS TO COMBAT ILLEGAL AND DESTRUCTIVE (IUU) FISHING IN THE GULF OF THAILAND

50. Taking into consideration the outputs of the break-up groups (**Annex 14** and **Annex 15**) and the corresponding recommendations of the Meeting, two task forces with specific duties will be established, namely: (1) regional cooperation for enhancing the small pelagic (mackerels and neritic tunas) fisheries in the Gulf of Thailand through the integration of fisheries and ecosystem management approaches; and (2) strengthening of capacity and sub-regional cooperation on monitoring, surveys and control of fishing efforts and landings of catches in the Gulf of Thailand. The responsibilities of the task force(s) could be carried out through the establishment of regional working group(s) to work on identified specific areas and to develop the regional strategic programs. Subsequently, experts groups could also be developed corresponding to the issues identified. The support of Member Countries concerned will be sought for the realization of the regional strategic programs, which will be secured through the SEAFDEC meetings and mechanisms. Moreover, since this endeavor will be implemented at the regional level, the support of the ASEAN bodies involved in fisheries will also be tapped.

51. In response to the recommendations during the discussions of the break-out groups, a set of initial studies and/or surveys will be launched to respond to what the groups described as “immediate” needs. This will include a follow-up on the suggestion made by FAO/RAP to commission a review on illegal and destructive fishing activities in this sub-region and provide recommendations to countries in order to address the issues through the implementation of the identified activities. In this connection, SEAFDEC was requested to follow-up this matter with FAO.

52. Furthermore, the Regional Strategic Programs shall include two main aspects, namely: Research and Development, and Capacity Building. Research and Development could include: review of existing data and research works, exchange of information, improve data collection, study on genetic aspects, promote ecosystem approach to fisheries, policy development; while Capacity Building could include identification of the needs for capacity building/training programs, development of SOPs, tools and standardized data collection systems, conduct of regional training programs (**Annex 20**). In this regard, the countries have been encouraged to develop their respective internal mechanisms to support the regional strategic programs. Nevertheless, in order to facilitate the implementation of the various activities under the Regional Strategic Programs, cooperation with other concerned sub-regional, regional and international organizations, NGOs and private fisheries sector will be established and/or strengthened.

VIII. CLOSING OF THE MEETING

53. In his closing remarks, the Secretary-General of SEAFDEC, *Dr. Chumnarn Pongsri* thanked the participants for their active participation that enabled the Meeting to clarify many issues with regards to the status of fisheries in the Gulf of Thailand. After wishing the participants safe journey for their respective home countries, he declared the Meeting closed.

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Annex 2

Opening Remarks

By Dr. Chumnarn Pongsri, SEAFDEC Secretary-General

All distinguished delegates, representatives from international organizations, Ladies and Gentlemen....Good Morning!

It is my pleasure to be with you here today to deliver the Opening Remarks, I would like to convey my warmest welcome to the 4th Meeting of the Gulf of Thailand Sub-region, here in Bangkok. Thank you all for coming. I know that many of you have travelled long distances and this serves to remind us all just how important our work is in the next two days.

Ladies and Gentlemen, this Meeting would be another attempt to move from a process of initiation to a more concrete action based on the recommendations that was provided during the last 3rd Gulf of Thailand Meeting. This gathering will enable us to have a common understanding of longer-term priorities and adequate resource allocations to develop and implement an action agenda capable of addressing the joint interests and in reaching a consensus among countries participating in this meeting.

I believe that the first stage in achieving a clear solution to various problems is through straightforward dialogue. The organizers have therefore structured this meeting to provide a venue to allow for parallel meetings on specific subject matters, such as management of fisheries and habitat, and reduce the destructive fishing and trans-boundary discussion among the neighboring countries. Hence, over the next two days, we will have some focused discussions – about our desired outcomes, and specific routes to take toward those outcomes.

This gathering will sharpen the vision of the Gulf of Thailand as a stable safeguard to combat illegal and destructive fishing and integrate fisheries and habitat management in efforts to manage the fishing capacity in these waters. The 4th Sub-Regional Meeting provides us with an invaluable opportunity to outline such a framework.

Our effort would be incomplete without the participation of various concerned agencies to allow for an intensified dialogue, not only between countries, but also between key institutions involved in matters such as habitat and fisheries management, MCS network development, vessel registration and port monitoring together with selected provincial/state representatives from the four countries. I am glad to note the high level of participation of such agencies in this meeting.

I am confident that your goals will be achieved and accordingly recognized leading to an outcome that will be consistent with the hopes and expectations of all the countries involved since I can see the characteristic dedication and commitment of all our participants.

Let me conclude by again wishing our guests and participants a nice stay in Thailand.

On behalf of the organizers, officers and staff of SEAFDEC, allow me to thank you all in advance for coming here.

PROVISIONAL PROSPECTUS

I. BACKGROUND

There is a consensus around the Gulf of Thailand on the need and importance to re-establish the momentum created on the cooperation among countries of the Gulf of Thailand sub-region in terms of the integration of fisheries and habitat management and in efforts to manage fishing-capacity (reducing over-capacity and to combat illegal (IUU) and destructive fishing. The Gulf of Thailand Countries should cooperate on the promotion and establishment of a “sub-regional fisheries management body” and/or related arrangements for the Gulf of Thailand sub-region, including as appropriate bi- and trilateral arrangements/agreements for fisheries and habitat management. Management measures to control the fishing effort on important and popular pelagic species such as the Indo-Pacific mackerel (*Rastrelliger brachysoma*) and other important species have been called for. Increased urgency has been voiced to be able to indicate the sustainability of targeted (and non-targeted) fishing activities, such as the fishing on *neritic* tuna. Moreover, the availability and reproduction of fisheries resources is affected by destruction and degeneration of important habitats, such as mangroves, coral reefs, sea-grass beds and mud flats – a trend that leaves coastal communities more vulnerable to effects of natural hazards and climate variability.

Working towards sustainability, attempts are being made by fisheries and environmental agencies to improve fisheries and habitat management. An important step in this direction is to try to better control the active fishing effort, both large-scale and small-scale, and to reduce illegal, unreported and unregulated (IUU) fishing as well as destructive fishing.

The nature of fishing, the migration of fish and the mobility of people and vessels involved in fishing – implies that there need to be regional, sub-regional and/or bilateral dialogues on measures to improve fisheries management and to safeguard important habitats. This is also emphasized by the Regional Plan of Action (RPOA-IUU) to promote responsible fishing practices including combating IUU fishing in the region (May 2007). The RPOA-IUU is a voluntary initiative to which all the Gulf of Thailand has been signed up to.

II. PREVIOUS THREE SUB-REGIONAL MEETINGS ON THE GULF OF THAILAND

To address critical issues related to fishing capacity (including combating illegal (IUU) and destructive fishing), the integration of fisheries and habitat management and to promote sub-regional cooperation SEAFDEC, together with the Thai DOF, organized the “1st Sub-Regional meeting on the Gulf of Thailand” from 28-29 March 2008 at SEAFDEC Secretariat, Bangkok, Thailand. In February 2009, the “2nd Sub-Regional Meeting on the Gulf of Thailand” was organized by SEAFDEC in Bangkok, Thailand. The “3rd Sub-Regional Meeting on the Gulf of Thailand” was held in Siem Reap, Cambodia in September 2011.

The common aim of the three earlier events was to review background/baseline information, discuss and come up with recommendations on matters relevant to fisheries and habitat management in the context of the Gulf of Thailand Sub-region as defined by the RPOA-IUU meeting in Bali (4-6 March 2008) and by the UNEP/GEF/SCS project. The countries have agreed on moving towards a process to improve cooperation on fisheries and habitat management, to initiate the development of MCS networks (needs/constraints) and to share information on vessel registration/fishing licensing. Specific attention is given to the importance to cooperate on port monitoring – the common practices of landings across national boundaries was during the Bali meeting and at later events highlighted as something that needed special attention in the perspective of fisheries in the Gulf of Thailand. Furthermore, the meetings discussed the identification and development of **larger fisheries resources conservation areas**, including cooperation on trans-boundary fisheries and habitat management –

options for joint approaches to Indo-Pacific mackerel, and related species to indicate suitable actions for continued work at the sub-regional level has been given special priority.

III. RATIONALE OF THE MEETING

SEAFDEC and the SEAFDEC-Sida Project has since the signing of a new agreement (March 2013) with Sweden (Sida) been able to start to follow up with each individual Gulf of Thailand country, institutions and initiatives involved in programs of relevance to fisheries, habitats and the management of fishing capacity, such as Wetlands Alliance, the Learning Institute (Cambodia), IUCN, WWF, CORIN Asia and others. The Gulf of Thailand is now one of four defined sub-regions for the implementation of the SEAFDEC-Sida cooperative program, 2013 – 2017. Continued cooperation with RPOA-IUU, FAO/APFIC, UNEP and ASEAN is foreseen

The intention with this event is to move from a process of initiation to agreements on more concrete action based on the recommendations that was provided during the 3rd Gulf of Thailand Meetings (and other priorities that have emerged since that Meeting).

To facilitate discussions and decisions on key aspects identified during earlier meetings the event will be organized to allow for parallel consultations and as/if requested by countries to facilitate trans-boundary discussion between neighbouring countries. Initiating bilateral discussions are of specific relevance as the three preceding meetings all have highlighted elements of trans-boundary issues and opportunities as specific to the Gulf of Thailand sub-region, including landings of catches across boundaries. The three sub-sub-regional focus areas include:

- Cambodia and Vietnam
- Thailand and Cambodia
- Malaysia and Thailand

The meeting will follow up on options for cooperation on trans-boundary fisheries and habitat management – options for joint approaches to gain a broader knowledge and understanding on the status and migration of Indo-Pacific mackerel (Pla Too), and related species to indicate suitable actions for continued work at the sub-regional level with an aim towards cooperation and the improved management of fishing efforts. Linked to ambitions by Gulf of Thailand countries to improve fisheries management and the expressed need to follow-up on trans-boundary movement of catches are efforts to regulate active fishing capacity, the reduction of illegal and destructive fisheries and strengthened capacity to monitor and record fish landings in ports and landing sites. Parallel to dialogue among Gulf of Thailand countries there is a need to promote the strengthening of the capacity at local administrations (fisheries, environment, landing sites, and district/provincial offices) and fishing communities around the Gulf.

Participants will be invited from different concerned agencies to allow for strengthened dialogue, not only between countries, but also between key institutions involved in matters such as habitat and fisheries management, MCS network development, vessel registration, processes to provide licenses to fish, port monitoring, etc. together with selected provincial/state representatives from the four countries. Resource persons with an expertise in *Rastrelliger spp* will be specifically invited. The broader institutional presence will also provide an opportunity to follow up on, and decide on continued actions to be taken by responsible partners and indicating the establishment of sub-contracts to facilitate field-level work and capacity-building. The event should also provide an opportunity for the group of “legal advisors” to get look into the relevance of existing and planned (under preparation) legal and regulatory framework.

Indo-pacific mackerel (*Rastrelliger brachysoma/neglectus*): The increasing fishing pressure needs to be regulated and there is an immediate need to develop conservation measures for species such as the Indo-Pacific mackerel also known as “Pla Too” in Thai (and related species) in the Gulf of Thailand

similar to the schemes initiated by the Department of Fisheries (DOF) of Thailand. There are strong indications of trans-boundary migration of Indo-Pacific mackerel travel between the eastern Thai waters and the Cambodian waters and possibly including migration into Vietnamese waters. However, stocks migrating between Cambodia and Vietnam could be different. There are uncertainties about the stocks on the eastern side of the Gulf and more research should be conducted and the meeting should be able to support the establishment of a working group to for coordination on research and conservation of mackerel migrating between Thailand, Cambodia and Vietnam. *(Similarly a working group could be established to look into the sustainability of neritic tuna fisheries (especially tonggol tuna) including Malaysia, Thailand, Cambodia and Vietnam).*

As indicated during preceding Gulf of Thailand Meetings, the following criteria should be applied in defining suitable fisheries resources conservation areas, or **larger fisheries resources conservation areas**: The area should be large enough to include and to protect trans-boundary habitats and migratory species “embracing” a number of existing defined management areas. The more specifically defined size of the area should gradually be developed through consultative processes involving coastal villagers, the traditional users of the resources, researchers, local and central authorities and other stakeholders, taking into consideration the following factors:

- 1) *To build upon an aggregation of smaller management areas (established for local fisheries, fisheries resources protection, habitat management and/or other purposes)*
- 2) *To recognise the existing zoning schemes (like trawling free zones)*
- 3) *To take note of the seasonality in fishing, fish migration/spawning, etc*

Strengthened capacity and sub-regional cooperation on monitoring, surveys and control of fishing effort and the landings of fisheries products

The recommendations from the Gulf of Thailand countries have highlighted the importance to initiate the development of a Gulf of Thailand MCS Network by initially focusing on the “Monitoring” component through the sharing of information of vessels, licenses to fish as well as on surveys and monitoring of fish being landed at ports and landing sites - recognizing both the importance as well as the difficulties e.g. lack of man-power and financial resources need, as well as the political will of key stakeholders (Government sector, fisheries and the private sector). Apart from the contextual framework it allows the group to report to the RPOA-IUU and get feedback from countries based on their experiences around other sub-regions.

There is a recognized need to provide awareness and understanding on the important roles and functions of ports and landing places while recognizing the large amount of institutions involved management and activities related to **ports and landing sites**. This should also be recognized in terms of being the point of “entry” (and control) of goods being transported by seas and for the landing of resources harvested at sea and in this sense being on the “threshold” between the sea and the land. Support should be provided to facilitate cooperation and strengthen the role of concerned authorities, e.g. of custom office, immigration office, fishing port authorities, etc. in port monitoring, inspections on-board vessels and to collect relevant data and information. Landings in neighboring ports require special consideration in the process of validation of the legal status of landed catches, especially with regards to artisanal fisheries as indicated in the FAO Agreement on Port State Measures. Initially this will be/should be followed in relation to cross-boundary relations with regards to Cambodia and Vietnam and Cambodia and Thailand in the Gulf of Thailand.

Catch documentation (log books, etc) is a key to effective fisheries management and for traceability of fishery products. The responsibility for the implementation of rules to ensure that fishing vessels provide necessary catch documents rests with the flag state. The registration documents and licenses, including documents on crew members, are among the basic documents to be provided at fishing ports, together with the catch documents. These documents will also be scrutinized during port inspection

with a purpose combat IUU fishing. One critical elements is to be able to **provide reliable and trustworthy validation** of catch documents and other required documents.

The existence of a whole range of **local level initiatives** aiming to monitor and policing illegal fishing activities suggests that it would be useful to collect information on such local initiatives, both traditional and project based, in order to provide information to the countries in the region on best/good practices that work at a given local area.

IV. THE OBJECTIVES OF THE MEETING

The objectives of the meeting is to recapture the momentum of earlier initiatives among Gulf of Thailand member countries including on-site events in Thailand, Cambodia and Vietnam (2005 – 2007) and to provide directions for steps to take to address key issues for the integration of fisheries and habitat management, the management of fishing capacity, to improve social well-being while building up adaptive capacity to effects of climate change. A perspective should be kept on the process to establish sub-regional and sub-sub-regional arrangements and agreements. Working groups, or task forces, should be established as suitable to facilitate the processes to reach consensus among Gulf of Thailand countries and to support capacity-building.

The intention with this event, the Fourth Gulf of Thailand Meeting, is to move from a process of initiation to agreements on more concrete action based on the recommendations that was provided during the 3rd Gulf of Thailand Meetings.

To facilitate discussions and decisions the event will be organized to allow for parallel meetings (on specific subject matters, such as *Rastrelliger spp.*, monitoring/port monitoring) and trans-boundary discussion among neighbouring countries as/if requested. The bilateral discussions are of specific relevance as the three preceding meetings all have highlighted elements of trans-boundary issues and opportunities as specific to the Gulf of Thailand sub-region, including landings of catches across boundaries. The three sub-sub-regional focus areas indicated so far are a) Cambodia and Vietnam; b) Thailand and Cambodia; and c) Malaysia and Thailand

Specific aim of the event would be to establish working groups/task forces on priority areas common to the sub-region fishing capacity/monitoring of fishing efforts; monitoring and capacity-building at ports and landing sites; and to explore options for joint approaches to Indo-Pacific mackerel (Pla Too) and related species with a purpose to indicate suitable actions for continued work at the sub-regional level. Establishment working groups should be established (with names) composed of persons from concerned departments. Finally, national focal points should be indicated (prior to the event) and invited to the event.

V. EXPECTED OUTCOMES

5.1 Strengthened the bilateral and multilateral cooperation and sub-regional arrangements by building upon trans-boundary “opportunities”

Integration of fisheries and habitat management and the importance of trans-boundary stocks and habitats

1. Steps and action plan developed to establish larger fisheries resources conservation areas, building upon and incorporate existing “managed” areas (MPAs, Wildlife Sanctuaries, Ramsar sites, Heritage sites, etc.), including trans-boundary agreements on management, rules and regulations, e.g. for restrictions on fishing activities, closed seasons and conservation of critical habitats
 - *Indicate steps to take to increase knowledge on trans-boundary stocks (particularly Mackerels) through biological studies, studies on life history and life cycle, genetic analysis, studies on linkages between oceanographic data and fish productivity data, etc.*

- *Established task force(s) and working groups to define reliable (scientific and anecdotal) information and to indicate appropriate management measures and to develop coordinated research, capacity-building and information sharing*
 - *Options explored for a “larger fisheries resources conservation area” in the eastern part of the Gulf of Thailand based on indication of migrations patterns of indo-pacific mackerel (Pla Too) and related species.*
 - *A specific working group with Thailand, Cambodia and Vietnam on mackerels could build upon already ongoing work, with DOF Thailand as lead country, in the eastern part of the Gulf*
2. Steps identified on the development of appropriate measures (e.g. rules and regulations, closed seasons, closed areas etc.) for the conservation, rehabilitation and management of important habitats in consultation with stakeholders by building on available and obtained information.
- *Studies and joint actions identified on important habitats, including actions for rehabilitation and conservation of mangrove areas, sandy beaches/mud flats, sea-grass beds, coral reefs, etc.*
 - *Task forces and working groups establishment for important habitats recommended and potential trans-boundary agreements identified in sub-sub regions or in the sub-region as applicable*

5.2 Strengthened capacity and sub-regional cooperation on monitoring, surveys and control of fishing effort and the landings of fisheries products

During previous meetings, there have been repeated references to the development of MCS networks – but with a follow-on recommendation to “begin with” information sharing as a first step to promote collaboration in building up of MCS networks. Furthermore, given the range of institutions involved in M, C and S, respectively, with significant variations among the Gulf of Thailand Countries another starting point is to focus on the “M” or monitoring with identification provided on key institutions to be involved. Recognition has been growing on the important functions to be implemented at ports and landing sites with regards to information to be collected on the amount of fish landed, quality, species identification, legal status. There is a consensus on the growing need to provide awareness and understanding on the important roles and functions of ports and landing places while recognizing the large amount of institutions involved in management and activities related to ports and landing sites.

1. Steps identified for the build-up of working relations for institutions and entities responsible for the collection of information of relevance to fisheries and the management of fishing capacity in fishing ports and landing sites
- *Needs identified to develop and **improve catch monitoring systems in existing ports and landing sites,***
 - *Working group(s) to be established on development of monitoring functions and routines in ports and landing sites, including capacity building – ensure that partners/institutions with responsibility for surveys and information of catches being landed, port management and port inspections are involved*
 - *Ways identified to facilitate the support the cooperation and the strengthening of the roles of concerned authorities, e.g. of fisheries administration, custom office, immigration office, fishing port authorities, etc. in port monitoring, inspections on-board vessels and to collect relevant data and information. Link to discussions on outcomes under point 2 above*
 - *Capacity-building recommended for personnel groups in fishing ports to improve information collection, landing statistics, control of legal status of fishing vessels (and catches) and port management*
2. The application and **relevance of the PSM Agreement and agreement to validate the legal status of catches from small-scale fishing** vessels landing the catch at border fishing ports should be assessed.
- *Establish as/if necessary bi- and trilateral institutional cooperation to negotiate and **establish agreements on the status of artisanal catches***

- *Share experiences in local arrangements with regards to landing of catches from vessels of neighboring countries, which is a common feature in all three “border areas” of the Gulf*
3. Indications provided on the suitability to explore, or assess, steps needed to align and build upon (if possible) trans-boundary practices as a basis for sub-regional efforts to agree on restrictions and regulations on allowable active fishing efforts (vessel type, gears and people)
- *The set up **one working group for each sub-sub-region** recommended to develop a better understanding on active fishing capacity in the sub-sub-regions and to facilitate sharing/exchange of data/information to provide better basis for the monitoring of vessels movements and reporting among neighboring countries (as needed study ways of converting data to become comparable among countries)*
 - *Recommendation provided on the suitability to undertake a **census or inventory** as needed in selected countries to provide an updated baseline on the number of vessels.*

5.3 Local capacity-building, strengthening of community fisheries and diversified livelihoods to enhance communities’ resilience and capacity to adapt to change through sub-contracts to relevant organizations (and NGOs) in support of the strengthening of local organization and capacity-building

4. A general recognition of the importance to support initiatives to establish mechanisms to enhance resilience of local communities and to facilitate income diversification and to reduce dependence on fishery resources by capacity building for local people on non-fishery alternative livelihoods, e.g. tourism, diving trips, handicraft, etc.
- *Local (fisheries/habitat) organization should be strengthened to increase adaptive capacity and move towards social recognition (encourage registration of community members and vessels).*
 - *Conduct studies on (local) fishing/coastal communities, including documentation of the traditional livelihood, indigenous knowledge, indigenous fishing practices, etc,*

5.4 Information and information sharing

With reference to indicated priority areas (see above) working groups and other stakeholders should continuously identify the type of information/data that the Gulf of Thailand Countries would be needed to provide baselines for information sharing as a basis for sub-regional dialogue.

- *Indications of steps to take to improve the collection of information and data to be shared among countries in the Gulf of Thailand sub-regional level)*
- *Data and information sharing for bilateral and tri-lateral arrangements should be enhanced in the process and neighboring countries should/could be encouraged to participate in capacity-building activities*

AGENDA

- Agenda 1 Opening of the Meeting
- Agenda 2 Background of the Meeting, objectives of the Meeting and Adoption of the Agenda and Meeting Arrangement
- Agenda 3 Integration of Fisheries and Habitat Management, Effective Management of Fishing Capacity, and Reducing Illegal and Destructive (Combat IUU) Fishing in the Gulf of Thailand
- 3.1 Lesson learnt from the UNEP/GEF/South China Sea Project
- 3.2 Country report on the current status
- 3.3 Regional Initiatives
- Agenda 4 Information on selected global and international instruments and its relevance to fisheries and habitat management (and to combat IUU fishing) Include references to ASEAN Community Development
- Agenda 5 Breakout group Discussion
- 5.1 Integration of fisheries and habitat management and the importance of trans-boundary stocks and habitats
- 5.2 Strengthened capacity and sub-regional cooperation on monitoring, surveys and control of fishing efforts and landings of fisheries products in the Gulf of Thailand
- Agenda 6 Local capacity-building, strengthening of community fisheries and diversified livelihoods to enhance communities' resilience and capacity to adapt to change
- Agenda 7 Way forward for Sub-Regional and bilateral cooperation in fisheries and habitat management including efforts to combat illegal and destructive (IUU) fishing in the Gulf of Thailand – plenary discussion
- Agenda 8 Conclusion and Recommendations and follow-up actions
- Agenda 9 Closing of the Meeting

Annex 5

Lesson learnt from the UNEP/GEF/South China Sea Project: Development of Fisheries Refugia on Closed Season and Areas in the Gulf of Thailand

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Department of Fisheries, Kaset-Klang, Chatuchak, Bangkok 10900, Thailand

Lesson learnt from the UNEP/GEF/South China Sea Project :
Development of Fisheries *Refugia* on Closed Season and Areas
in the Gulf of Thailand
4th Meeting of the Gulf of Thailand sub-region
18-19 December 2013
Swissotel Le Concorde
Bangkok, Thailand

Mr. Pirochana Saikliang
Regional Working Group on Fisheries for Thailand
Senior Expert on Marine Fisheries

Marine Fisheries Research and Development Bureau,
Department of Fisheries, Thailand

Scope of presentation

- Development of fisheries *refugia* on closed seasons and areas
- Management of fisheries *refugia* on spawning/nursery grounds
- The Needs for Fisheries Management or Fisheries *Refugia* Management

Fisheries Management Tools in Thailand

1. The Fisheries Act, B.E. 2490 (1947);
The Fisheries Act (No. 2), B.E. 2496;
The Fisheries Act (No. 3), B.E. 2528;
2. The Act Governing the Right to Fish Within Thai Fishery Waters, B.E. 2482

↓

- Notification of Ministry of Agriculture and Cooperative and
- Notification of Provincial Government

Development of Marine Fisheries

Thai's Marine Fisheries:-


- Marine fishery was the tradition career of Thai people for long time ago and operated near shore waters.
- Since 1925, Chinese purse seine was introduced for catching the pelagic fish (Indo-Pacific mackerel) and after that it was modified to Thai purse seine.
- In 1960, the otter-board trawl net (German type) was introduced to Thailand for catching the demersal fish.



Development of Fisheries *Refugia* on Closed Seasons and Areas in the Gulf of Thailand

Pre-1953

- Identification of the importance areas of Indo-Pacific mackerel (*Rastrelliger brachysoma*)



1953

- Establishment of a spawning season closure for Indo-Pacific mackerel (1st April - 31st May) :- prohibition of purse seine fishing

Development of Fisheries *Refugia* on Closed Seasons and Areas in the Gulf of Thailand

Gears prohibited:- Thailand

- Large Chinese purse seine
- Chinese purse seine type 1
- Siamese purse seine type 2
- Thai nurse seine

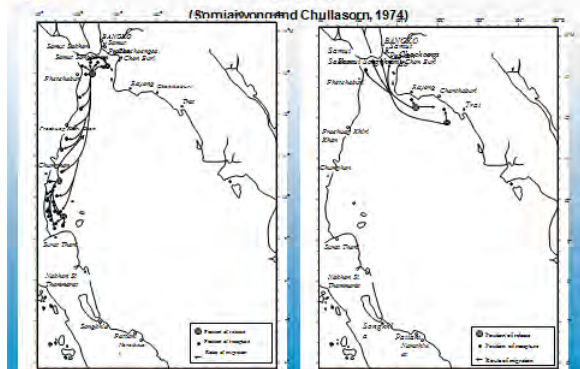


Development of Fisheries *Refugia* on Closed Seasons and Areas in the Gulf of Thailand

1953-1959

- **Realizations** that the 1953 spawning closure was ineffective (site was too large, insufficient enforcement capabilities, and based on limited information)
- **Establishment** of the Indo-Pacific mackerel research team in 1957
 - Collection of fishery biological information (mainly fish larvae)

The Result Indo-Pacific mackerel tagging in the Gulf of Thailand



The conclusion of tagging programme

Life cycle of Indo-Pacific mackerel in the Gulf of Thailand
(courtesy of the Marine Fisheries Division)



Development of Fisheries *Refugia* on Closed Seasons and Areas in the Gulf of Thailand

Led to changing in 1959 of spawning closure area and duration from 1st April to 31st May to 1st January – 30th April



Development of Fisheries *Refugia* on Closed Seasons and Areas in the Gulf of Thailand

1953-1959 (cont.)

- Purse seine and gill net fishing was prohibited during the January - April closure
- **Department of Fisheries included a provision in the regulation that enabled fishers to operate these gears during closes season if they were licensed and maintained fishery log books.**
- Follow up the study on the status of Indo-Pacific mackerel



Development of Fisheries *Refugia* on Closed Seasons and Areas in the Gulf of Thailand

1960-1963

- On-going fishery research, focus on larval fish
- **Establishment of specific spawning (1st January-31st March) and nursery closures (15th April-14th June) in 1962**
- Purse seine and gill nets prohibited during spawning closure
- **Except Mackerel encircling gill nets could be used during nursery closure if mesh size >4.7 cm . with log book operation**



Development of Fisheries *Refugia* on Closed Seasons and Areas in the Gulf of Thailand

1964-1972

- Over-fishing of demersal resources led **trawl fishers to modify their gears and practices to target pelagic species**
- List of fishing gear prohibited was extended to include trawling during the periods 1st February - 31st March 1972

1973-1975

- Rapid increase in the use of light luring purse seines – led to **ban of this practice and extension of nursery closure to 14th July**



Development of Fisheries *Refugia* on Closed Seasons and Areas in the Gulf of Thailand

1976 - 1984

- Identification of importance of the site to other species.
- Notification extended closures to **multiple species** – led to large protests by fishers in 1983.
- Negotiations between Department of Fisheries and fishermen led to the area of the site being reduced (50,000 sq. km) and duration of spawning and nursery closures were reduced – areas managed for multiple species.





Development of Fisheries Refugia on Closed Seasons and Areas in the Gulf of Thailand

1985-1994

- Anchovy purse seine fishing permitted in area for 6 years.
- Conflicts between fishers using anchovy purse seines and other gears.

1995-1999

- Rapid increase in the use of new fishing gears and practices – 1999 Notification of permitted fishing gears and practices (Mackerel encircling gill net).



Recent Challenges in the Management of the Prachuab Khiri Khan – Surat Thani Fisheries Refugia Site

2000-present

- Pressure from fishers to reduce the area of the site by 3,000 sq.km in the Chumphon area.
- Inappropriate use of Mackerel gill net by both large and small scale sectors

Mackerel gill net: Mesh size = 4.7cm
Net Length =>14 km

- Schools detected using echo-sounders
- Net set in zig-zag manner
- Hauled by power-block
- Fishers target Indo-Pacific mackerel
- Practice highly species/size selective
- Species targeted during spawning aggregations
- ~100% of mackerel landed at maturity stage (stage 4 & 5)



Gears prohibited:-

- Mackerel encircling gill net
- Thai purse seine
- All type of trawler and Push net

Research vessel



Otter board trawl



Pair trawl



MCS system



Monitoring & Evaluation of Conservation Measure Committee

1. Public Relation Working Group

2. Control & Enforcement Working Group

3. Monitor on the Prosecution Working Group

4. Technical Evaluation Working Group

15



Monitoring Areas for Patrol Fisheries



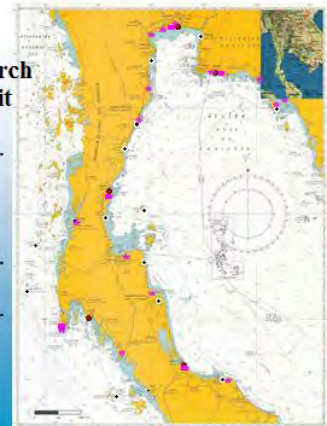
Site of Marine Research & Management Unit

Marine Fisheries Research.....

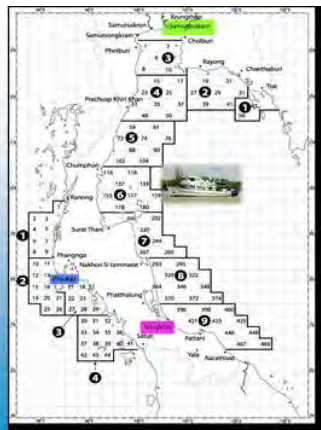
Fisheries Management.....

Fisheries Management Unit.....

Fisheries Radio Station.....



Research areas



The Challenges for Management of the Fisheries Refugia Site, 2011 - 2012



**The Challenges in the Management of Fisheries *Refugia* Site
(Prachuap Khiri Khan, Chumphon and Surat Thani provinces)**

Immerging issue:-

Gill net fisheries



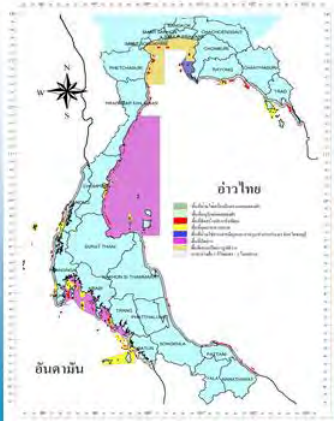
Medium-size fishing boats – adapted for use of long gill net



Long-tail fishing boats – adapted for use of long gill net

Large-size fishing boats – adapted for use of long gill net

The Marine Protected Areas for Fisheries in Thailand



The Needs for Fisheries Management or Fisheries *Refugia* Management

1. Scientific information
2. Stakeholder consultation
3. Evaluation of the site



Conclusion and Recommendation

- There are many challenge for closure area in the Gulf of Thailand
 - Changing a fishing gears and practice
 - Reduce a area and period of time
 - Should have enough scientific information to supporting before establish fisheries *refugia*
- The scientific information should be significant to supporting
- Stakeholder consultation are needs before *refugia* establishment
- The area should be the critical area of the life cycle of the important economic fish or rare species
- Monitoring Control and Surveillance (MCS) should be improved

Fisheries *refugia* in the context of the UNEP/GEF South China Sea Project are defined as:

“Spatially and geographically defined, marine or coastal areas in which specific management measures are applied to sustain important species [fisheries resources] during critical stages of their life cycle, for their sustainable use.”

Annex 6

Lessons Learnt From Establishment and Management of Fisheries Refugia in Phu Quoc Marine Protected Area

Nguyen Van Long

Head, Department of Marine Living Resources, Institute of Oceanography (VAST), 01-Cau Da, Nha Trang, Vietnam



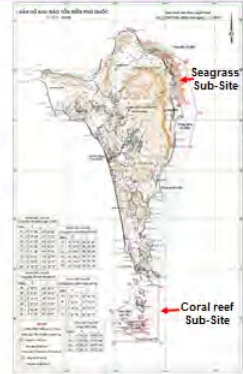
LESSONS LEARNT FROM ESTABLISHMENT AND MANAGEMENT OF FISHERIES REFUGIA IN PHU QUOC MARINE PROTECTED AREA

Nguyen Van Long
Institute of Oceanography (VAST)



Introduction to Phu Quoc MPA

- ❖ Archipelago located in the gulf of Thailand and composed of 26 islands
- ❖ Seagrass area = 12,000 ha and coral reef area = 473 ha
- ❖ Highly productive fishing grounds: 900 tons (swimming crabs, cuttlefish, octopus) from seagrass beds and 80,000 seeds of groupers from coral reefs.
- ❖ Declared as MPA in 2007 by Kien Giang Provincial People's Committee: 26,863 ha with three zones (seagrass beds: 6,825 ha; coral reefs: 9,720 ha and socio-economic development: 10,318 ha)

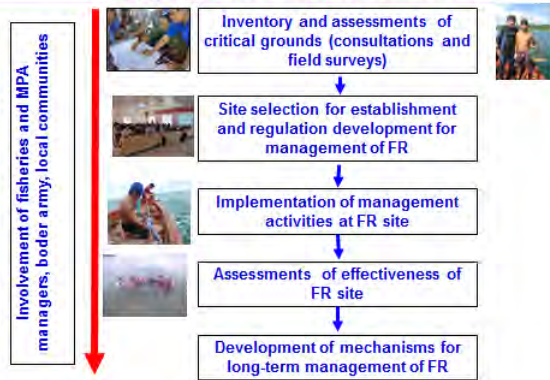


Why Fisheries Refugia needed ?

- ❖ Zoning plans of MPA mainly based on biodiversity, resource use and human impacts
- ❖ Lack of sufficient information on spawning and nursery grounds of target species for developing management plan of MPA
- ❖ Large MPA but weak capacity management (8 staff, 1 speed boat, 1 office located in the southern part of MPA, small financial support)
- ❖ Monitoring results between 2006-2010: condition of key habitats declined and associated target resources did not significantly recover
- ❖ Communes of Phu Quoc almost entirely dependent on fisheries resources associated with seagrass and coral reefs
- ❖ Intensive fishing causing loss of seagrass and coral reefs and over-exploitation of coastal fish stocks



Approaches and Methods



Achievements to Date

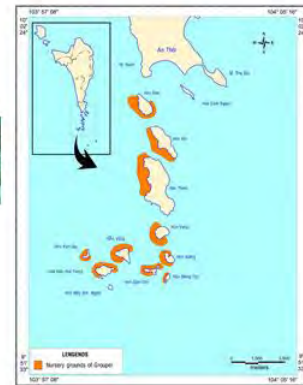
SEAGRASS BEDS:

- ❖ 11 spawning and nursery grounds of octopus, strombids, squids, cuttlefishes, swimming crabs, seahorses, rabbitfishes

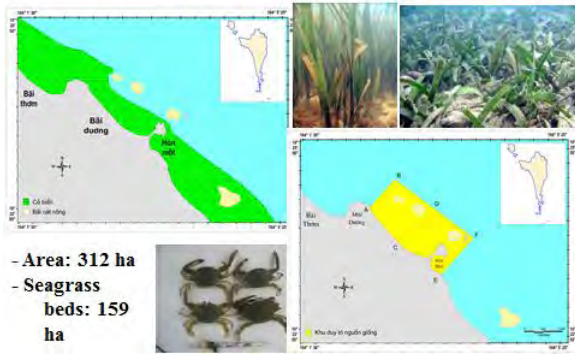


CORAL REEFS:

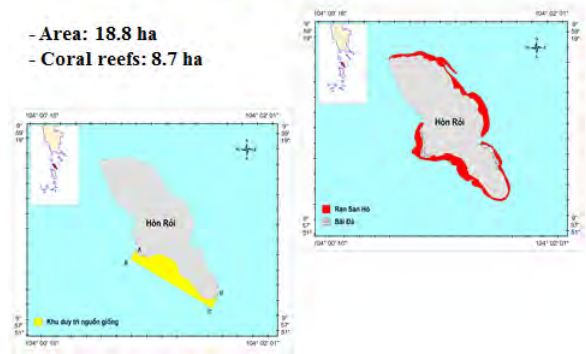
- ❖ 10 nursery grounds of groupers



Establishment of nursery ground of strombids, seahorses, swimming crabs in seagrass beds



Establishment of nursery ground of grouper in coral reefs



Management at Fisheries Refugia demonstration sites

Development of local regulations for management at FR sites	Establishment of community-based management teams	Daily management activities at FR sites
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Lessons learnt from FR to date

- ❖ Using local fisher knowledge in compiling scientific studies have been considered as an important step for inventory and assessments of FR.
- ❖ Involvement of local communities and local government officers plays an important role at all steps of development of FR in identifying specific fisheries issues and appropriate management measures.
- ❖ Establishment of small area of FR easier accepted and managed by local communities.

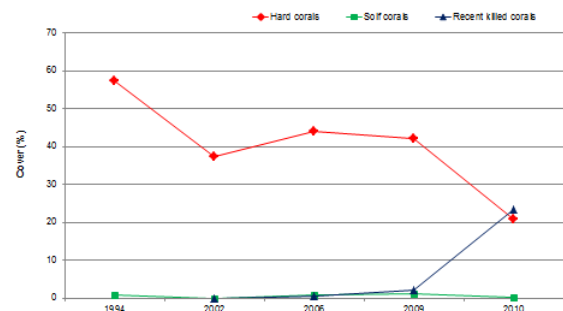


What experience from work on coral reefs in Phu Quoc ?

- ❖ Small area of coral reefs but high production of target resources (groupers, carangids, sea cucumbers).
- ❖ Habitats declined and target resources overfished but slow recover since MPA establishment due to low management capacity, lack of appropriate planning and management measures.
- ❖ Recently impacted by bleaching (more serious in 2010 and lower in 2013).



Temporal decline in live coral cover



What concerns to move forward in Phu Quoc and adjacent waters ?

- ❖ Inventory and assessments of spawning aggregation and nursery grounds of target species in coral reefs in Phu Quoc, Nam Du and Tho Chu islands, especially migratory species (mackerel).
- ❖ Development of a network of *FR* at Phu Quoc, Nam Du and Tho Chu.
- ❖ Developing fisheries profile at each site (resources, fishing sector, post-harvest sector).
- ❖ Improvement of fisheries statistics and management of catching size .



What concerns to move forward in Phu Quoc and adjacent waters (cont.) ?

- ❖ Developing guideline for sustainable use and training for monitoring of target species.
- ❖ Developing mechanism and measures for long-term *FR* management at demonstration sites and other potential sites in Phu Quoc and adjacent islands (financial sustainability, size management and monitoring production and size of target resources, modification of regulations and guidelines for adaptive management).



Important of transboundary waters

- ❖ Kampot (Cambodia) and Phu Quoc (Vietnam): 7388 km².
- ❖ Regionally significant seagrass beds (37,000 ha), 1,500 ha coral reefs and 7,900 ha mainly in Kampot province.
- ❖ Important fishing grounds.
- ❖ Large number of spawning and nursery grounds and shared stocks of migratory species (dugongs, dolphins and sea turtles).



Major outputs from UNEP/GEF Project in transboundary waters between Cambodia and Vietnam


- ❖ Signing the MOA on policy and framework for cooperation in the management of coastal ecosystems and natural resources on 28th March 2008.
- ❖ Development of guideline for sustainable use of coastal habitats and associated resources.
- ❖ Establishment of joint GIS database
- ❖ Capacity building through training & exchange
- ❖ Development of a concept paper entitled "Sustainable management of coastal habitats in the transboundary waters between Cambodia and Viet Nam".



Country Report, Cambodia

Ing Try

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Country Report, Cambodia

Presentation by
Mr. Ing Try

4th Meeting of the Gulf of Thailand Sub-Region
18-19 December, 2013 Bangkok, Thailand.

Outlines for Presentation

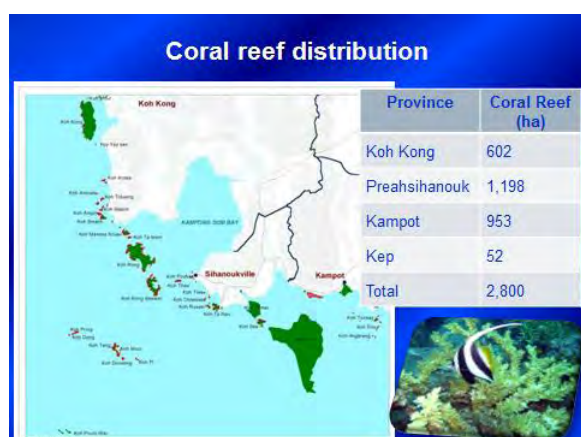
1. Current information
2. Integration of Fisheries and Habitat Management and Trans-boundary Stocks and Habitat on *Rastrelliger* spp.
3. The Promotion of Effective Management of Fishing Capacity

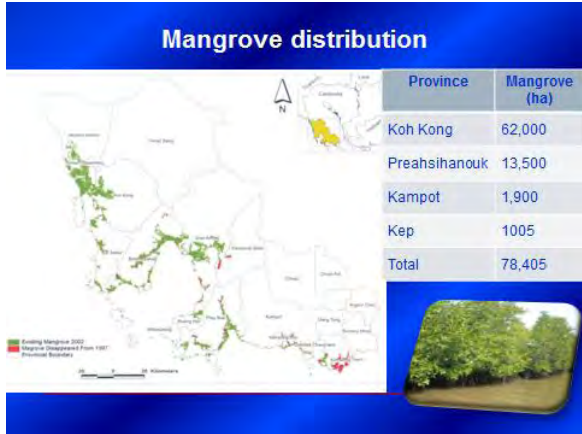
1. Current Information

- Vision for the Fisheries Sector
"Management, conservation, and development of sustainable fisheries resources to contribute to ensuring people's food security and to socioeconomic development in order to enhance people's livelihoods and the nation's prosperity".
- The key targets for the overall fisheries development program are:
 - Wild fish capture production is stabilized and sustained at not more than 300,000 tons per year.
 - Rice field fish production is increased by 15% annually, to reach 500,000 tons per year by 2019.
 - Aquaculture production is increased by 15% annually, to reach 185,000 tons per year by 2019.

1. Current Information(con't)

- Fisheries sector supports 6 million Cambodian People through out the country
- The total catch from fresh and marine water is about 350,000 to 500,000 tons annually, in which about 85,000 tons is contributed from marine water
- Marine fin fish consists of 500 species and other aquatic animal
- Marine endangered species consists of 29 species
- Coral reef; 2,800ha, seagrass: 30,000ha and mangrove; 78,405ha
- Fisheries Sector policy, Law on Fisheries, Strategic Planning Framework for Fisheries: 2010-2019 and other sub-law or planning framework are in place to achieve the target.





Criteria for Establishment of Marine Management Area

- ❑ **Criteria:**
 - Importance of biodiversity and fisheries resources and role of ecosystem
 - Economy, socio-economy and culture
 - Type and Size
 - Level of threats

Step of Marine Management Area Establishment

Steps to be followed:

1. Primarily identification of potential area for management, conservation and development of resources
2. Research study and analysis of scientific data on fisheries resources, habitats, ecosystem, economics, socio-economics, culture and threats
3. Produce map with location, boundaries, size and GPS points
4. Conduct consultation meeting with relevant institution, local authorities, fisheries community and other stakeholders.
5. Prepare management framework

Management Framework

- ❑ **Major actions:**
 - Establishment of Consultative Committee (Management Board and Management Advisory Group)
 - Zoning map
 - Demarcation and creation of artificial spawning ground
 - Law enforcement
 - Public awareness
 - Livelihood
 - Monitoring and evaluation

2. Integration of Fisheries and Habitat Management and Trans-boundary Stocks and Habitat on *Rastrelliger* spp.

2.1 Integration of Fisheries and Habitat Management

- ❑ Family Scombridae have 7 species but for Genus *Rastrelliger* have only 2 species: *R. kanagurta* and *R. bachysoma*
- ❑ *Rastrelliger* spp. catch by:
 - Large, medium and small scale according to the fishing gear.
 - *R. bachysoma* were catch by Purse seine net (big boat/medium scale) and gill net (small boat/small scale family fishing) and *R. kanagurta* were catch by small boat/small scale family fishing.

2.1 Integration of Fisheries and Habitat Management (cont.)

- ❑ Prohibit during spawning season: From 15 January to 31 March
- ❑ Created the artificial reef by concrete box
- ❑ Protection seagrass areas.
- ❑ Main landing site is located in Tomnup Rolork, Preah Sihanouk province.

2.2 Trans-boundary Stocks and Habitat on *Rastrelliger* spp.

- ❑ Fish stock were decreased
- ❑ Habitat should create MOU between close province boundary of related country
- ❑ Should cooperate institution by institution of between related county
- ❑ Should prepare integration of management plan and implement activities for eliminate illegal fishing, improve management, cooperate to conduct research and prepare refugia.
- ❑ Should organize meeting to show results, and idea exchange

2.3 Challenges, Issues and Constrains

- Illegal outsider fisherman during close season.
- Slow speed of patrolling boat
- A lots of fishing boat from outside
- Difficult to collect data
- Lack of fund for patrolling and researching
- Lack of researcher
- A lots of landing site
- Less research activities
- Fish stock going down family fishing.

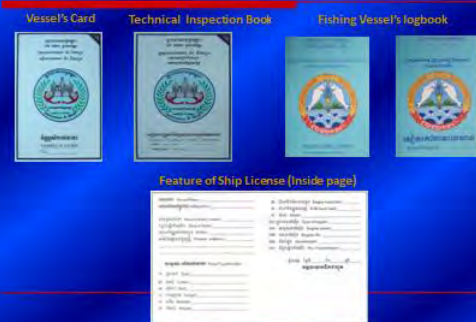
3. The Promotion of Effective Management of Fishing Capacity

- ❑ All fishing vessels will be accepted their applications for fishing operation, if they have registered into Dept of Marine Merchant of the Ministry of Public Works and Transport (MoPWT).
- ❑ **The legal procedure on fishing vessel registration is:**
 - At National level-under MoPWT and then into Ministry of Agriculture Forestry and Fisheries (Fisheries Administration),
 - At International level (it mean for High sea fishing) is under Council Ministers of the Government.
 - The fishing activities will followed the Fishery Law, Sub Degree, and Proclamations,
 - All fishers need to comply the Cambodian Code of Conduct for Responsible Fisheries(CamCode), the Technical Requirement of Fishing Vessel Management, and the Fishing vessel Logbook.

3. The Promotion of Effective Management of Fishing Capacity(Con't)

- ❑ **To combat illegal and destructive fishing:**
 - Every year the Fisheries Administrative conduct the activities of fishing vessel registration and re-registration fishing vessel that hold over validation for fishing operation.
 - Regularly monitoring and controlling fishing activities by checking the use of fishing permission, the validation, the mechanism of the use of fishing gears, catch species, and the catching yield.
 - Conducting dissemination workshop among the fishery stakeholders and fishery community members.

The Vessel Card and Technical Inspection Book



The Validation of Fishing License

- The validity of fishing license is one year from January 01 to December 31.
- The fishing license is issued by two categories according to the capacity of engine power:
 - The capacity of engine power less than <33 Hp, is required to register to provincial fisheries Administration level, logbook and license for fishing,
 - The capacity of engine bigger than >33 Hp is ordered to apply to the Fisheries Administration (Central) for licensing, logbook.

Current Statistic of Marine Fishing Capacity

VESSEL					
Without Engine		With Engine			
Province	Number	< 10Hp	10-30HP	30-50HP	>50Hp
Kampot	335	456	176	2	
Shihanoukville	590	1,095	1,361	3	286
Koh Kong	215	2,241	595	155	93
Total: 1,140 Units		Total: 4,064 Units			

Source: Fisheries Administrative report 2012

Challenges, Issues and Constrains

- 1- **Monitoring, Control and surveillance:**
 - Still poor in term of facilities and mechanism of MCS network,
 - Some fishing vessels not to register yet for fishing operation.
- 2- **Catch Documentation Scheme:**
 - Use the Catch Documentation Scheme and Certificate by the regulation and Law of Fishery,
 - With SEAFDEC and MFRDMD, we have attended to develop a Catch Certification Scheme that needs for the region and, in particular, the needs of small scale fisheries.

Suggestion and Skill to Be Developed

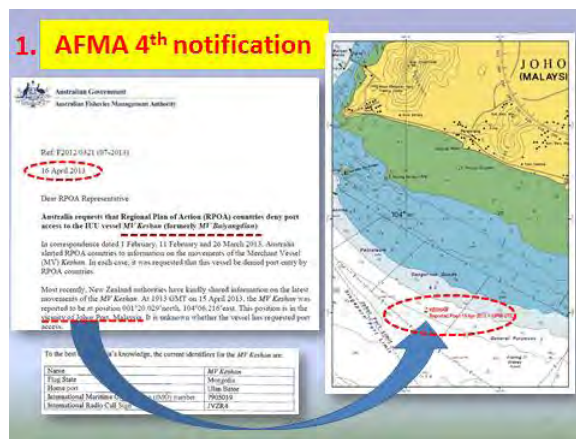
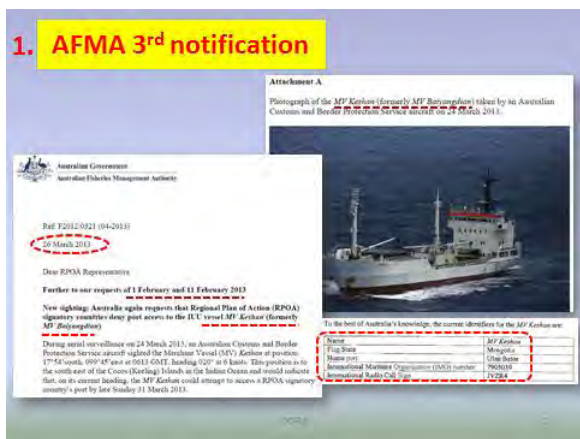
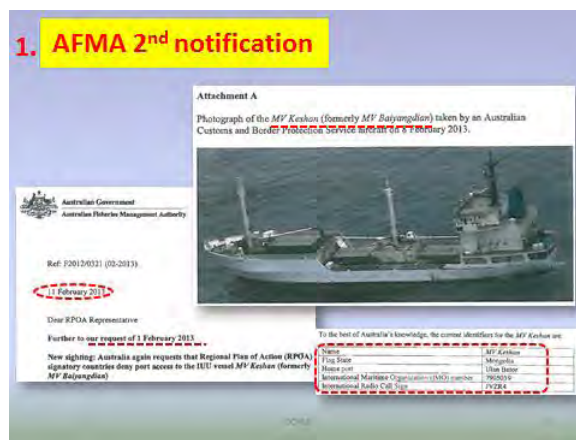
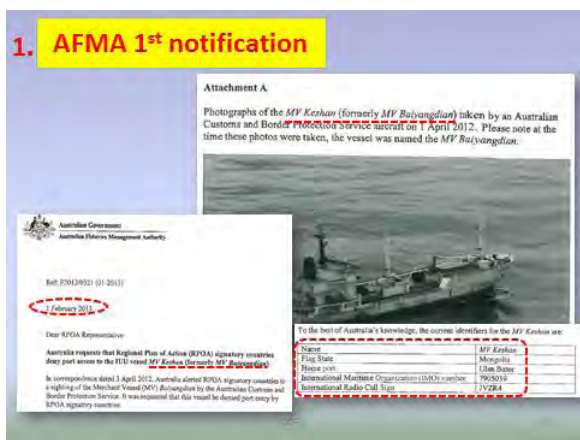
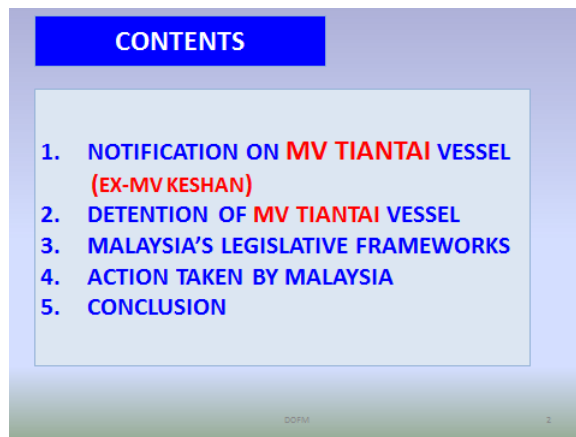
Objectives of the MCS Curriculum and Training Programme:

- Practical grounding in the concept of MCS, MCS systems (elements, suitability for specific situations),
 - Analytical approach to develop appropriate MCS mechanisms,
 - Design, analysis and evaluation of the effectiveness of national MCS measures.
-

Malaysia's experience in the Implementation of Port State Measures in Combating IUU Fishing: A Brief Case Study

Abdullah bin Jaafar

Head of Operation Section, Resources Protection Division, Department of Fisheries Malaysia, 5th Floor, Tower Block 4G2, Wisma Tani, Precint 4, Federal Government Administrative Centre 62628, Putrajaya, Malaysia



2. DETENTION

Record shows that MV Tiantai (IMO: 7905039) was detained by **Malaysian Maritime Enforcement Agency (MMEA)** on 15th April 2013 for investigation:

- No cargo on the ship
- No offence committed under Fisheries Act 1985

MMEA surrenders MV Tiantai to **Marine Dept. Of Malaysia (Southern Region)** on 30th April 2013 for investigation under Merchant Shipping Ordinance 1952 (MSO 1952).



2. DETENTION

During inspection of Port State Controls by **Marine Dept. Of Malaysia (Southern Region)**, MV Tiantai is registered under Mongolian Flag.

Upon inspection, Mongolian authority informed that MV Tiantai (ex-MV Keshan) is not registered under their flag and no statutory certificate issued under MV Tiantai.

Mongolian authority only confirmed their registration under MV Keshan.



2. DETENTION

Marine Dept. Of Malaysia (Southern Region) request the agent to contact the owner of MV Tiantai to resolve outstanding issues before making final decision.

The agent indicates having difficulty to manage MV Tiantai dan do not wish to be their agent.



Dept. of Fisheries Malaysia was informed that until now the owner of MV Tiantai failed to contact **Marine Dept. Of Malaysia (Southern Region)** in order to solve the case.

2. DETENTION

As of now, MV Tiantai (ex-MV Keshan) is still being detained for investigation under Port State Control (PSC) since **21st May 2013** due to major deficiencies.

Dept. of Fisheries Malaysia was informed that **MV Tiantai will remain be detained** in the vicinity of Johor Port until the owner resolve any outstanding issues.



3. MALAYSIA'S LEGISLATIVE FRAMEWORKS



- I. Exclusive Economic Zone Act 1984;
- II. Fisheries Act 1985;
- III. Merchant Shipping Ordinance 1952;
- IV. Fisheries Development Authority 1971;
- V. Malaysian Quarantine & Inspection Services Act 2011;
- VI. Customs Act 1967.

3. MALAYSIA'S LEGISLATIVE FRAMEWORKS



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

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



3. MALAYSIA'S LEGISLATIVE FRAMEWORKS

ACT 317
FISHERIES ACT 1985
PART V - FOREIGN FISHING VESSELS

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

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

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

(a) if the vessel is in distress;

(b) for the purpose of obtaining emergency medical assistance for a member of its crew; or

(c) to render assistance to persons, ships or aircraft in danger or distress.

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

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

(a) without prejudice to the requirement to observe any other law of Malaysia which may be applicable, observe such regulations as may be made under section 61, including regulations regarding the stowage of fishing appliances; and

(b) return to a position outside such waters as soon as the purpose for which it entered such waters has been fulfilled.

4. 1) POLICY AND LEGISLATION

As part of the management tools, Malaysia has developed, implemented and published the Malaysia's National Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (Malaysia's NPOA – IUU).

The document strengthened Malaysia's commitment at international level in effort to combat IUU fishing.



4. 2) OPERATIONAL

In 2012 and 2013, DOF Malaysia has received notifications from RPOA Secretariat/Australian Fisheries Management Authority (AFMA) regarding many vessels that might embark at RPOA member countries port. These vessels are:

- | | |
|---|---|
| <p>2012</p> <ol style="list-style-type: none"> 1. FV Pion (formerly The Bird) – Feb 2012; 2. FV Thunder – Mar 2012; 3. MV Baiyangdian – Apr 2012; 4. FV Lana and FV Shaanxi Henan 33 – Oct 2012. <p>2013</p> <ol style="list-style-type: none"> 1. MV Tiantai/MV Keshan (formerly MV Baiyangdian) – Feb & Mar 2013; Apr & Jul 2013; 2. FV Hongshui (formerly FV Huang He 22) – Mar 2013; 3. FV Lana (formerly FV Zeus/FV Triton 1) – Apr 2013; Sep 2013; 4. FV Thunder (formerly FV Kuko/FV Typhoon 1) – Apr & Sep 2013; 5. FV Wuhan No.4 (formerly FV Thunder/FV Kuko/FV Typhoon 1) – Mei 2013; 6. FV Nihewan (formerly FV Huiquan) – Apr 2013; 7. FV Snake (formerly FV Octopus 1) & FV Chengdu (formerly FV Shaanxi Henan 33) – Jul 2013; 8. FV Chang Bai (formerly FV Hongshui) – Sep 2013; 9. FV Berber (formerly FV Snake & Octopus 1) – 29th Oct 2013; 10. FV Octopus 1 (formerly FV Berber and FV Snake) – 06th Dec 2013. | <p>Was detained, inspected & released. The brief case study of IUU fishing vessel FV Pion was presented during 5th CC Meeting of the RPOA on 21st Nov 2012 in Singapore.</p> <p>Was detained on 21/05/13 under Sec. 453(2) Malaysia Shipping Ordinance 1952 - where "major deficiencies" were founded by Marine Dept. of Malaysia</p> <p>Application to lend the fish was rejected by Dept. of Fisheries Malaysia</p> |
|---|---|

5. CONCLUSION

Malaysia has made **life difficult** for IUU actors and will continue to take action in combatting IUU fishing at domestic, regional and international level as part of **sustainable fisheries management** and **good governance** towards **securing the supply of fish as a food source for the country and the entire world.**

4. ACTION TAKEN BY MALAYSIA IN COMBATING IUU FISHING



- 1) POLICY & LEGISLATIONS
- 2) OPERATIONAL

4. 2) OPERATIONAL

At present time, several enforcement agencies in Malaysia have teamed up to handle the case of IUU fishing vessel including foreign vessel upon receiving notification from RPOA Secretariat or AFMA (e.g. case of MV Tiantai).

Summary of actions taken by various Malaysian enforcement agencies is shown in flow chart in the Malaysia's NPOA IUU document.



5. CONCLUSION

- In line with the government's commitment, the DOF Malaysia of the view that Malaysia had reason to carry out enforcement against IUU vessels that enter into the country.
- This can be done in accordance with the provisions of the domestic law of the existing **Fisheries Act 1985**, the **Merchant Shipping Ordinance 1952**, **MAQIS Act 2011**, **Fisheries Development Authority 1971** and the **Customs Act 1967** OR any other relevant laws.



Country Report: Thailand

Pirochana Saikliang

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The 4th Gulf of Thailand Meeting
Bangkok, Thailand
17-19 December 2013

Country Report : Thailand



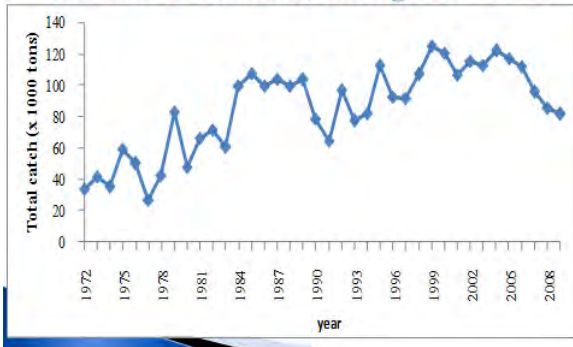
Pirochana Saikliang

Senior Expert on Marine Fisheries
Department of Fisheries, Thailand

Scope of Presentation

1. Indo-Pacific mackerel Management in the Gulf of Thailand
2. Research Works for Indo-Pacific mackerel →
3. Promotion of more Effective Management of Fishing Capacity and to Reduce Illegal and Destructive Fishing
 - 3.1 MCS Networks
 - 3.2 Port Monitoring and Monitoring of “Neighboring Vessels” Landing →
 - 3.3 Catch documentation and Catch certification/Validation
4. Improvement of Fishing Vessel Sanitation →

Total catches of Indo-Pacific mackerel in the Gulf of Thailand, during 1972 - 2009



Existing: Indo-Pacific mackerel management measures in the Gulf of Thailand

- Closed area and closed season
 - In the middle Gulf of Thailand
 - Area 26,400 Sq-Km.
 - Between Feb. 15th to May 15th

14 Notification announcements
1953 (2496 B.E.) → → → 2007 (2550 B.E.)

▶ To protected the spawner and juvenile of economical fish species

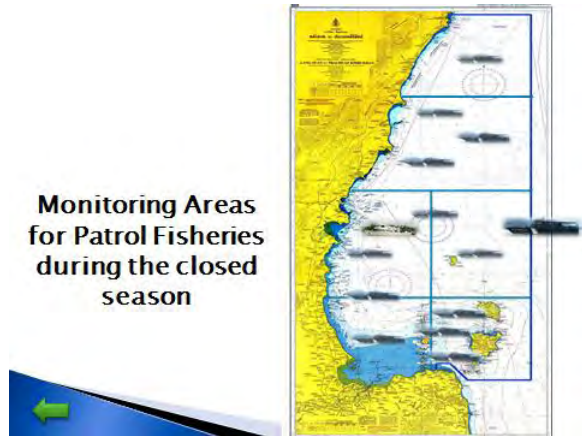
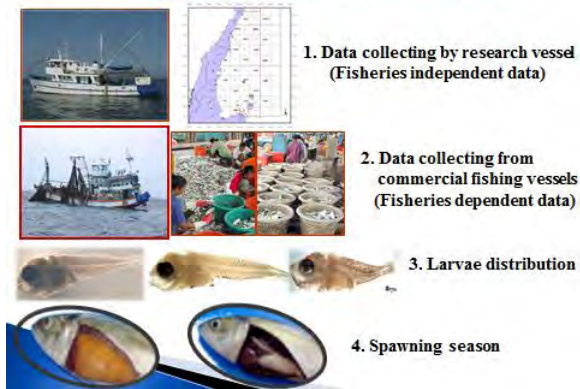


Gears prohibited:-

- Mackerel encircling gill net
- Thai purse seine
- All type of trawler and Push net



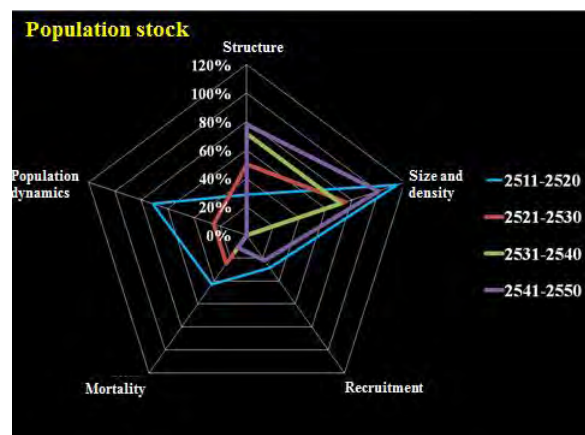
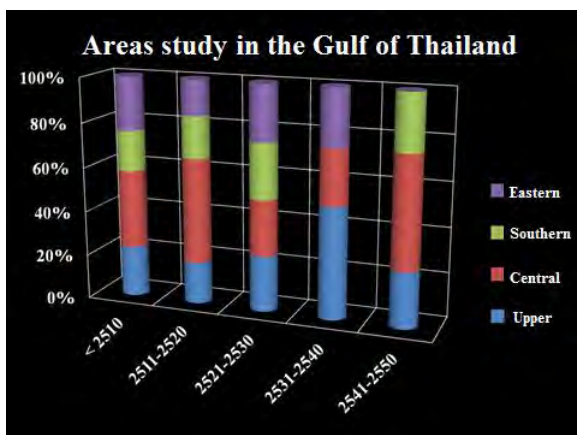
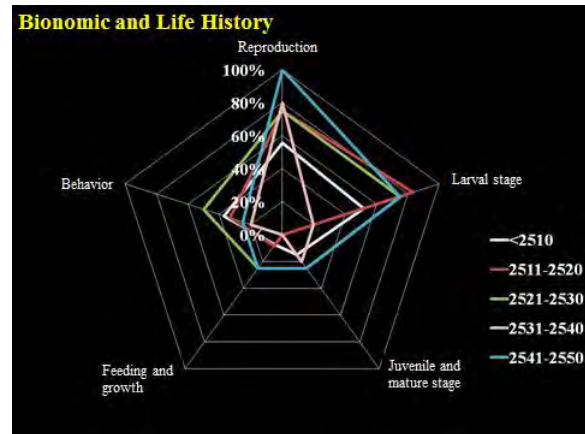
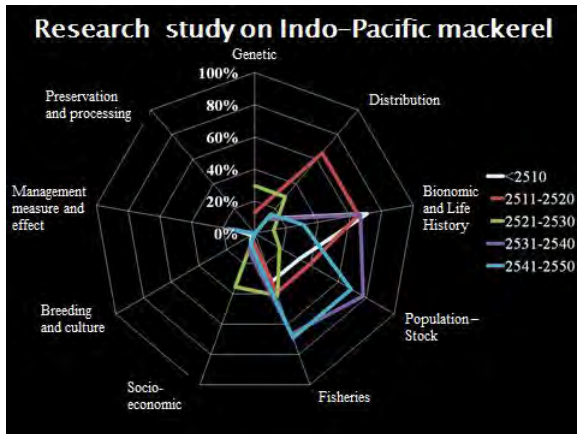
Effectiveness of management measure monitoring

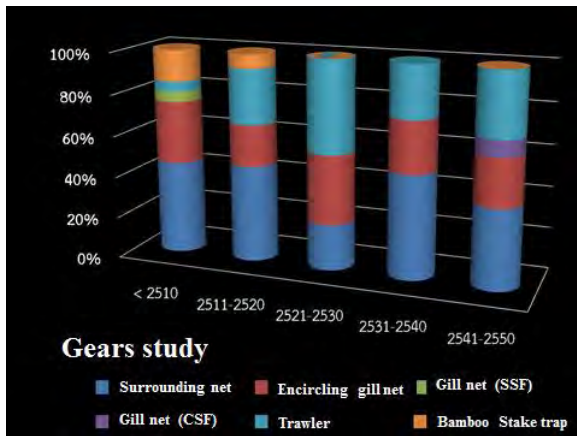
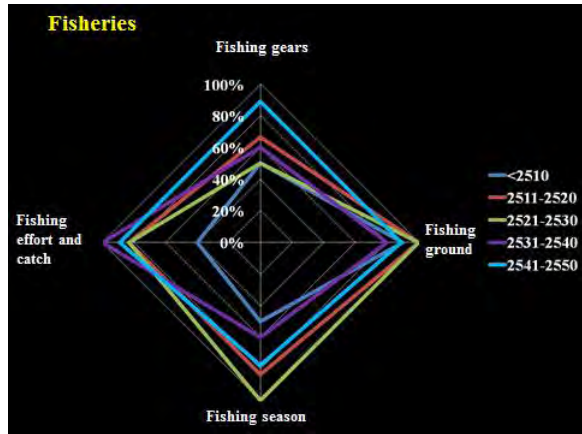
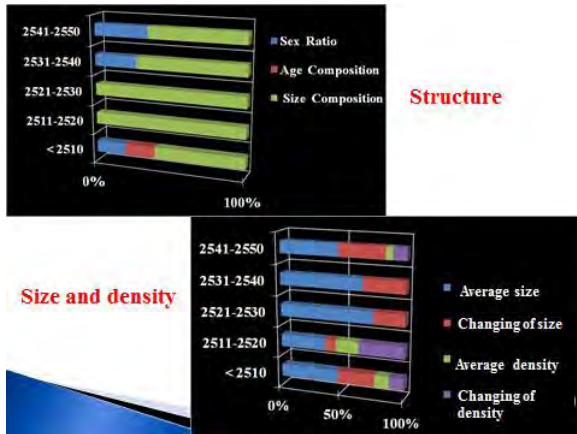


Research and studies of Indo-Pacific mackerel in Thailand



Number of published technical papers which studied of Indo-Pacific mackerel in Thailand



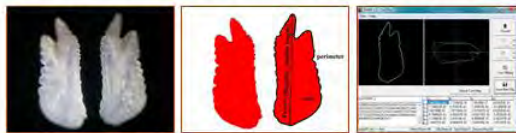


Research Projectory of Indo-Pacific mackerel in Thailand

1. Stocks assessment 
2. Fishing gears development  
3. Stock identification and breeding ground by genetic technique
4. Stomach content and feeding

Research trajectory of Indo-Pacific mackerel in Thailand

5. Stocks discrimination by otolith shape analysis technique



6. Age and growth determination by otolith microstructure technique



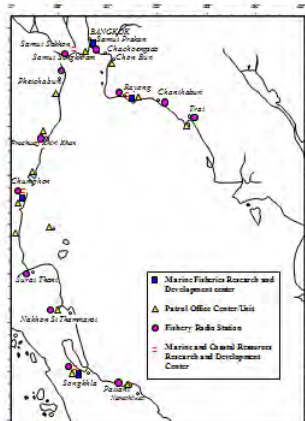
Combating IUU fishing in Thailand

- > Many countries agree to this principle and find out the measure to
 - prohibit and
 - get rid of the IUU fishing
- > The EU was the first in application of this matter by means of the commercial regulation
- > Thailand has to prepare the certificate to assure the non-IUU fishing from the government. This covers fishing grounds, gears, boats, processing and fish landings.



MCS Network along the Coast of the Gulf of Thailand

1. Marine Fisheries Research Centres
2. Monitoring, Control, and Enforcement Sites



Port State Measures (PSM)

To strengthening regional/international cooperation in PSM

1. Seminar on PSM pilot project, during 30 - 31 May, 2013 at Kantary Bay, Phuket
2. Second meeting on the PSM committee meeting, July 2, 2013 at DOF



3. PSM training on officer from organizer relevant and stakeholder, July 26, 2013 at Kantary Bay, Phuket



4. PSM training on organizer relevant,



3. Activities on enhancement of Thai fishing boat registration and fishing license requirement

- Marine Catch Transhipping Documents (MCPD)
 -The DOF authorized persons or groups or persons to have rights for certifying the MCPD and the meeting held on the April 2011, to acknowledge the officials from DOF and the Fish Marketing Organization (FMO)



Improvement of Fishing Vessel Sanitation

DOF planned to certify the fishing boats and landing port by certifying into 3 levels

- very good
- good
- satisfied

including a training courses for the DOF officers and the owners of fish landings port to maintain the level of sanitation and transfers technologies to other stakeholders.



Catch Certification Coordination Centre

was established by the DOF to engage with the certification of non-IUU fishing according to the EU requirement

Activities :-

1. Examination of aquatic animals landed and certify the catching
 - Issuing of the Certificates in the fiscal year 2010
 - Import of aquatic animals at custom offices in the fiscal year 2011, fish were processed and export to the EU

2. Control of fishing activities according to the IUU

Distribution of fishing logbooks

-During Jan. 1st, 2010-Aug. 24th,2011, 7,688 logbooks were distributed to fishing boat in 22 Province for 6 types of fishing gears; trawler and push net, purse seine, gill net, lift net, trap and other gears.



4. IUU fishing training for stakeholder, Sep. 10, 2013



The 4 months implement for project testing

Problems in operation of the project

1. Problem due to the internal DOF

-Lack of understanding of the concerning officials including the process of certification e.g. the fishing gears, species of aquatic animals and catch rates of each gear.

2. Problems due to the business holders

- Problems on documents preparation
- Lack of understanding in the system of catching certification

Annex 10

The Current Status of Vietnam Fisheries

Le Hoang Khai

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MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT (MARD)
DIRECTORATE OF FISHERIES (D-Fish)

THE CURRENT STATUS OF VIET NAM FISHERIES

4th Meeting of the Gulf of Thailand sub-region

I. INTRODUCTION (contn'd)

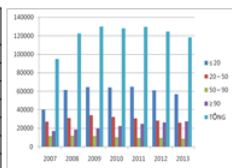
- ✓ Marine fish resources of South-western Vietnam: 479 fish species, belonging to 204 genus and 162 families (RIMF).
- The total of fish stocks estimated at 1,07 million tons
 - +Small pelagic fish: 945,000 tons (88,4%),
 - +Demersal fish is estimated at 124,000 tons (11,6%).
 - +Mackrell species (*Rastrelliger* spp.) - highest ability catch in small pelagic group.
- In the southwest monsoon, the total biomass estimated at 264 thousand tons, and the total allowable catch (TAC) 106 thousand tons (Nghia et al., 2007. RIMF)
- In the northeast monsoon, the mackrell species biomass about 169 thousand tons and TAC: 87 thousand tons (Nghia et al., 2007. RIMF)

II. THE CURRENT STATUS OF VIET NAM FISHERIES

Fishing fleets and capacity

- Total number of fishing boats in Viet Nam: 117.756 (11/2013)
- Less than <20 HP: 56.089 (47,60%)
- 20 - <50 HP: 25.636 (21,8%)
- 50 - <90 HP: 8.523 (7,2%)
- 90 HP up ward: 27.508 (23,40%); vessels with ≥ 24 meter: 313
- The increased/decreased trend of vessel fleets from 2007-2013

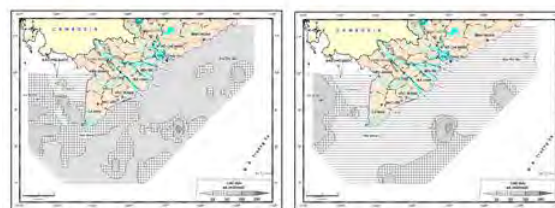
No	Year	Vessels (HP)				Total	Note
		≤20	20-50	50-90	≥90		
1	2007	39798	26733	11268	16819	94618	
2	2008	61273	30810	11865	18345	122293	
3	2009	64512	33968	11304	19927	129711	
4	2010	63843	31921	10018	22061	127843	
5	2011	64793	30499	9413	24510	129395	
6	2012	60866	28181	9237	26284	124568	
7	2013	56523	25644	8546	27285	117998	



I. INTRODUCTION

- ✓ Coastline: 3260 km
- ✓ EEZ: more than 1 millions km²
- ✓ Total fisheries production 2012: 5.8 million tones
 - +Marine and inland capture: 2.6 MT
 - +Aquaculture: 3.2 MT
- ✓ Export value: 6,12 billion USD
- ✓ There are four main fishing areas:
 - Gulf of Tonkin; Central Vietnam; South-eastern Vietnam; and South-western Vietnam (part of Gulf of Thailand).
- ✓ There are more than 2,000 fish species in the waters of Vietnam, 130 species have been identified for economic exploitation. The total standing biomass is estimated to be around 5.0 million tonnes (Son et al., 2009).

The fish resource distribution map (mackerell - *Rastrelliger kanagurta*) in the- South-western and eastern Vietnam by windy season (South western - L; North - Eastern - R) (Hà, 2011)



Mackerell species group include: *Megalaspis cordyla*, *Rastrelliger brachyoma*, *Rastrelliger kanagurta*, *Scomberomorus commerson*, *Scomberomorus guttatus*. In which *Rastrelliger* spp is main species (Nghia et al., 2007).

Fishing fleets and capacity (contn'd)

- Viet Nam has about more than 40 kind of fishing gears, includes 7 main fishing gears: In 2010, Trawls (18%); gillnets (37,9%); hook and line (17,5%); purse seines (4,9%); fix (0,3%), and other ones (13,1%). However, the trawls fishing has decreased in 2011.

The percentage of fishing gears by HP (2010)

No	Fishing gears	Total	< 20 cv		20 - 90 cv		> 90 cv	
			Number	%	Number	%	Number	%
1	Trawls	22.554	3.024	4,7	11.088	24,3	8.442	46,7
2	Gillnets	47.312	35.053	54,1	10.476	23,0	1.783	9,9
3	Purse seines	6.188	119	0,2	3.670	8,1	2.399	13,3
4	Hook and line	21.896	8.865	13,7	10.508	23,1	2.523	14,0
5	Lift net	9.872	4.613	7,1	3.793	8,3	1.466	8,1
6	Fix net	4.240	2.568	4,0	1.455	3,2	217	1,2
7	Other	16.387	10.560	16,3	4.594	10,1	1.233	6,8
8	Total	128.449	64.802	100	45.584	100	18.063	100

Fishing fleets and capacity (contn'd)

➤ Fishing fleets and capacity in KIEN GIANG, CA MAU (South-western of Vietnam)

Province	Boats Registration and License (%)				
	Numbers	Registration	Rate (%)	Licenced	Rate (%)
CAMAU	4. 642	4.642	100	4.588	98.8
KIEN GIANG	10.714	10.696	99.8	10.453	97.5
Total	15.356	15.338	99.9	15.041	98.1

Fishing fleets and capacity (contn'd)

➤ Fishing fleets and capacity in KIEN GIANG, CA MAU (South-western of Vietnam)

Province	Fishing gears	Numbers	Rate (%)
CAMAU	Trawls	460	9.24
	Gillet	2580	51.84
	Purse seines	90	1.81
	Hook and line	1224	24.59
	Trap	228	4.58
	Others	395	7.94
	Total	4977	100.00

	Fishing gears	Numbers	Rate (%)
KIEN GIANG	Trawls	2914	24.86
	Gillet	4956	42.28
	Purse seines	369	3.15
	Hook and line	2350	20.05
	Traps	284	2.42
	Others	813	6.94
	Total	11722	100.00

THÔNG KÊ CHI TIẾT TÀU CÁ TỈNH KIEN GIANG NĂM 2012

STT	Số đăng ký	Tên đăng	Tên chỉ số	Khai thác cơ bản của cá và các loài				Vật liệu	Mức đánh	Thước số	Nơi đánh	Ghi chú
				Lượt	Đánh	Đ	Đang đánh					
1	800		Đài vận biển	11,8	3,98	1,27	17.080	100	04	10	Đánh bắt	
2	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
3	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
4	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
5	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
6	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
7	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
8	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
9	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
10	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
11	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
12	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
13	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
14	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
15	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
16	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
17	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
18	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
19	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
20	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
21	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
22	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
23	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
24	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
25	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
26	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
27	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
28	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
29	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
30	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
31	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	
32	8100		Thuyền đánh bắt	13,18	3,28	1,01	17.080	100	04	10	Đánh bắt	

LEGAL AND POLICY FRAMEWORKS towards Sustainable Development

- Fisheries Laws (2003)
- Strategy and Master Plan for Sustainable Fisheries Development to 2020 approved by the Government (2013).
- NPOA of IUU and Fishing Capacity Management are being drafted.
- Vietnam became a Cooperating Non-Member of WCPFC since 2009 and thus legal and policy arrangements have also being reviewed in the light of WCPFC's requirements.
- UNCLOS ratified by Vietnamese Government in 1994 is used as basis for fisheries management arrangements.
- Member of RPOA

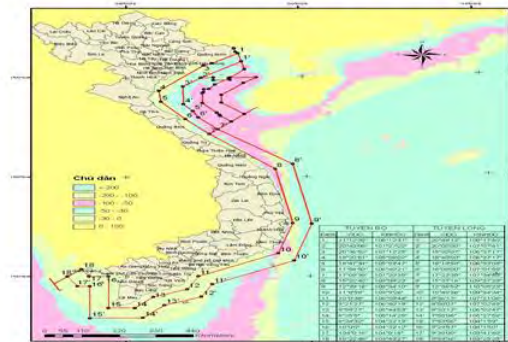


ZONING FISHING GROUND and ROUTES

- Decree No 33/2010/NĐ-CP of the Government regarding the management of fishing operation conducted by Vietnamese organizations and individuals in all marine areas.
- a. Zoning fishing grounds and routes**
- Coastal area – <20cv (from shoreline up to 6 nm or over based on specification of each area)
- Contiguous fishing zone – 20-90cv (6 - 12nm)
- Offshore zone ->90cv (12nm up)
- Up to now, there are 12 in which 28 coastal provinces delimited coastal area between neighboring provinces.



ZONING FISHING GROUND and ROUTES



ZONING SYSTEM

b. Marking of fishing vessels

This is the measure to manage and survey the operation of fishing vessels: There were 15 in which 28 coastal provinces implementing the marking of fishing vessels; the number of vessels which marked were 10,992 vessels, compared to 27,000 in total (at this stage, the regulation is required to mark vessels with higher than 90 HP)



Monitoring & inspection of fishing activities

- Decree 102/2013/ND-CP dated 29/11/2012 of Viet Nam government on Fisheries inspection force. The main mission including: monitoring, inspection and patrolling of fishing activities at sea.



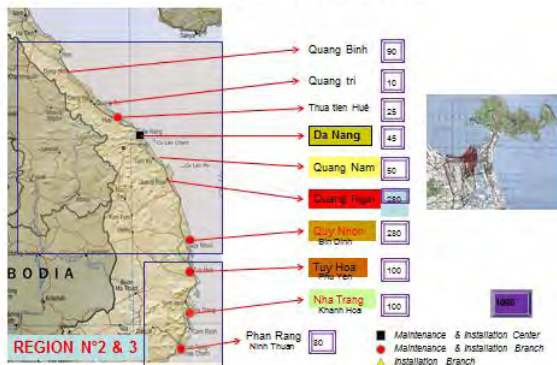
VESSEL MONITORING SYSTEM

- Support infrastructure and facilities:

Monitoring vessels and fishing grounds, fisheries resources by satellite (2012-2014):

Implement for 3000 offshore fishing vessels: (1.900 vessels)

The first installations

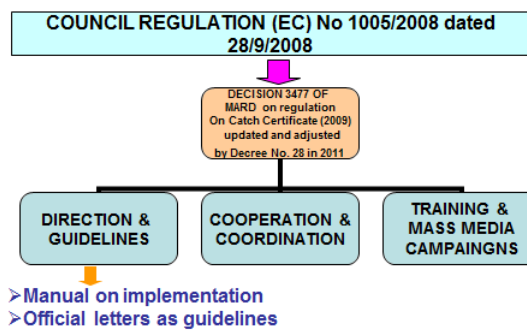


LOGBOOK SYSTEM

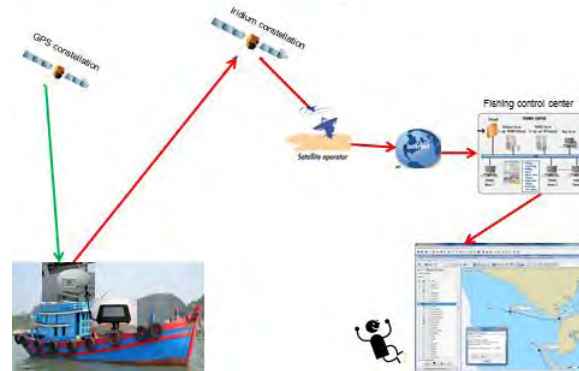
- Circular No. 48/2010/TT-BNNPTNT for fishing activity management of fishing individuals and organization operating in Vietnam's water
- The logbook are required to complete and submit to local fisheries management authorities.
- At this stage the regulation is stipulated for vessels with capacity higher than 90HP but there is intention to apply for vessels from 20-90HP in 2013.
- Currently implementation is gradually improved better and better.



IMPLEMENTATION OF CATCH DOCUMENTATION SCHEAM



The VMS system



Vessel name	Report date	Latitude	Longitude	Zone	Species	Weight
QNG-9889-TS	06/09/2013 12:04:00	17°53'36.6"N	110°47'23.28"E	34	Cá ngừ sọc đũa	300 kg
QNG-94888-TS	08/09/2013 12:56:00	16°24'43.92"N	109°21'17.64"E	12	Cá ngừ sọc đũa	800 kg
QNG-91863-TS	05/09/2013 16:38:00	15°52'17.4"N	109°03'59.04"E	34	Cá nục	1 kg
QNG-91863-TS	09/09/2013 15:12:00	15°28'53.28"N	109°06'19.44"E	34	Cá nục	1000 kg
QNG-97793-TS	06/09/2013 09:01:00	18°07'04.08"N	113°12'52.56"E	15	Cá ngừ mắt to	400 kg
QNG-97793-TS	10/09/2013 15:20:00	18°12'08.64"N	113°33'22.68"E	18	Bạch tuộc	20 kg
QNG-97793-TS	10/09/2013 15:20:00	18°12'08.64"N	113°33'22.68"E	18	Cá ngừ mắt to	200 kg

MARKET STATE CONTROLS

- All exporters must be registered and licensed with the Department of Trading in order to legally export to foreign countries to ensure that their product is fulfilled in term of sanitary and phyto-sanitary measures.
- Clam harvest fishery at Ben Tre province, Vietnam had been granted with a certificate by the Marine Stewardship Council (MSC) for sustainable methodology of sea resources exploitation.
- Vietnam will also explore the possibility of extending the application of eco-labeling schemes to other fisheries such as blue swimming crab and tuna fisheries.

THE WAY FORWARD

- Stock assessment and grounds prediction;
- Re-organizing fishing activities at sea by:
 - Restructure of fishing fleet and gears
 - Establishment of a suitable mechanism
(Commence a compulsory logbook scheme for all vessels over, for example, 90HP; Eradication of destructive and illegal fishing activities; establishment of cooperative model in fishing, ...)
- More investment for environment protection and resource renewable and protection, develop MPA and Fish Refugia systems, promote co-management

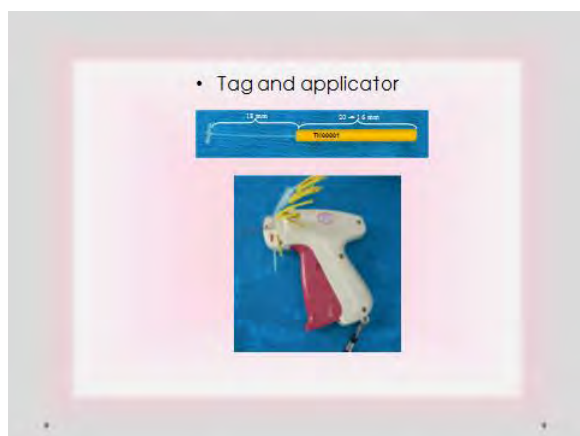
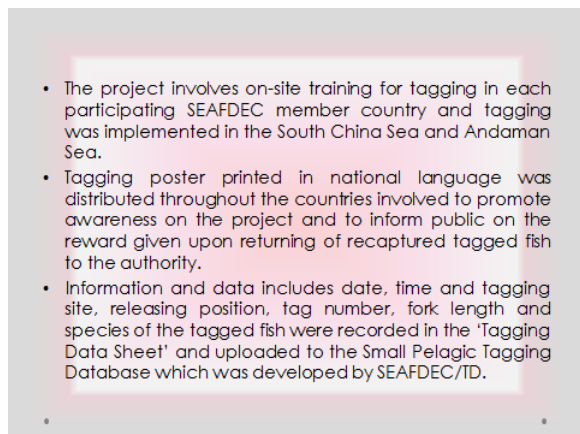
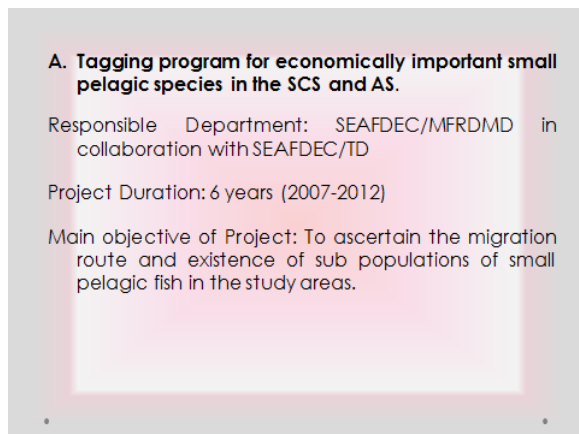
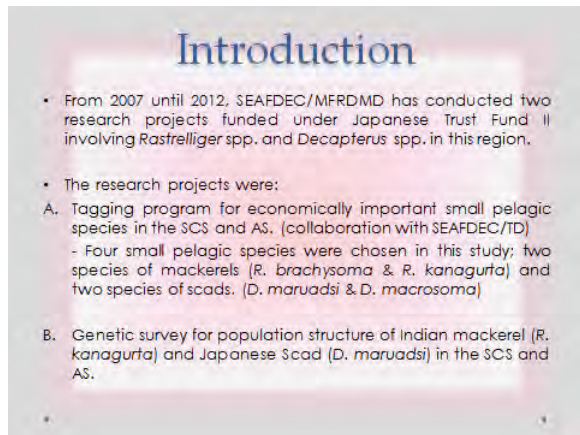


Annex 11

Initiative by MFRDMD on Assessment of *Rastrelliger* spp. In Southeast Asia

Mohammad Faisal bin Md Saleh

Research officer, SEAFDEC Marine Fishery Resources Development and Management Department (MFRDMD), Department of Fisheries Malaysia, Taman Perikanan, Chendering 21080, Kuala Terengganu, Malaysia



Outcomes

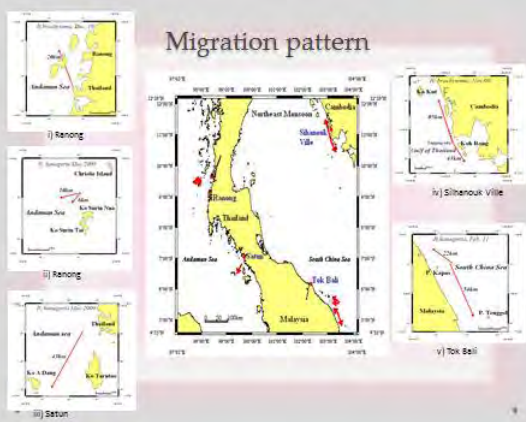
Rastrelliger brachysoma (Short mackerel)

	SCS	AS
No. of tagged fish (Total: 11,195 tails)	5220	5975
No. of recaptured	12	33
Recoveryrate(%)	0.23 %	0.55 %

Rastrelliger kanagurta (Indian mackerel)

	SCS	AS
No. of tagged fish (Total: 14,278 tails)	7642	6636
No. of recaptured	16	8
Recoveryrate(%)	0.21 %	0.15 %

Migration pattern



Conclusions

- Most tagged fishes were recaptured within the vicinity of released location.
 - Within the EEZs
- Tagged fishes does not migrate too far from released site
- Information obtained are insufficient due to;
 - Unclear migration pattern
 - Low recovery rate of tagged fishes
- Other possible methods such as the use of genetics at the molecular level could possibly be a better way to confirm the population structure and identity of the stocks that may be shared by the countries in this region.

Genetic Study

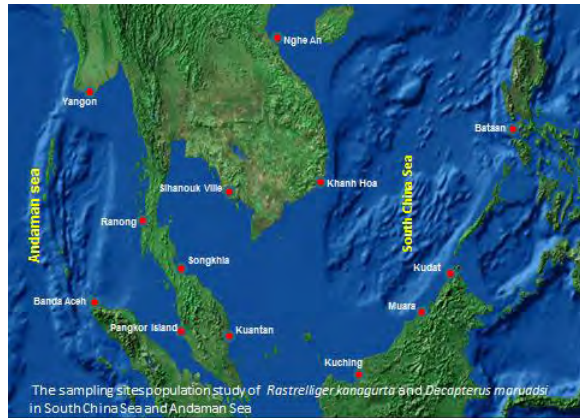
B. Genetic survey for population structure of Indian mackerel (*R. kanagurta*) and Japanese Scad (*D. maruadsi*) in the SCS and AS.

Responsible Department: SEAFDEC/MFRDMD

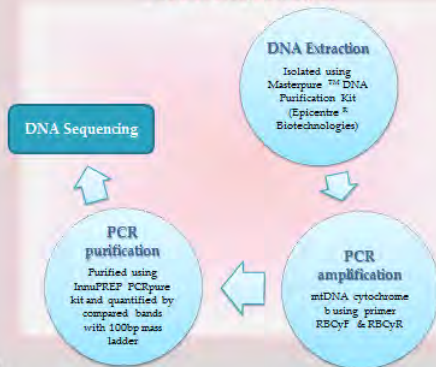
Project Duration: 2 years (2011-2012)

Main objective of Project: To ascertain the existence of sub-populations or one panmictic population within the species of Indian mackerel (*Rastrelliger kanagurta*) and Japanese scad (*Decapterus maruadsi*).

- Tissue sample of 35 individual from each *R. kanagurta* and *D. maruadsi* were collected from 10 sites in SCS and 4 sites in AS.
- Molecular marker used was mtDNA cytochrome b (910 basepairs)
- Primer used were RBCyF and RBCyR.

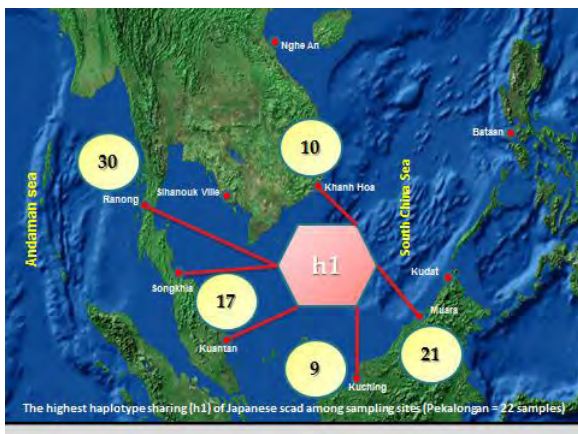
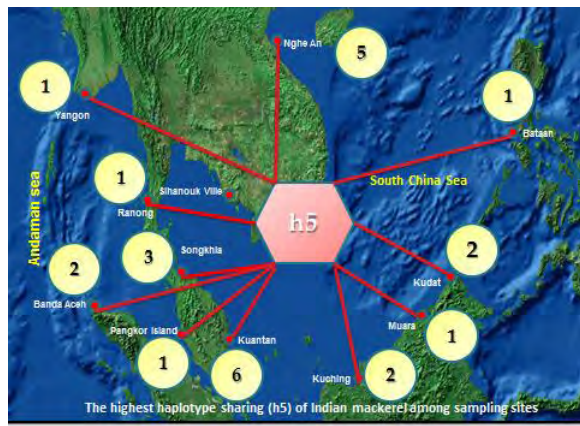


Laboratory analysis



Outcomes

- Out of 777 samples collected, 434 individuals are *R. kanagurta* and 343 individuals are *D. maruadsi*.
- From 434 individuals of Indian mackerel, 323 haplotypes were produced and 115 haplotypes were produced from 343 individuals of Japanese scad.
- 14 haplotypes shared by more than one sites for *R. kanagurta* and 15 haplotypes for *D. maruadsi*.
- Among of 14 shared haplotype in *R. kanagurta*, h5 was shared by the most number of sites (25 samples). Meanwhile, in *D. maruadsi*, h1 was shared by most number of sites (109 samples)



Conclusions

- This study provided the genetic structure of *Rastrelliger kanagurta* and *Decapterus maruadsi*.
- It shows that Indian mackerel in the South China Sea and Japanese scad in the South China Sea are **shared or derived from the same stock** with high genetic variation among the sampling sites.
- The use of mtDNA as molecular marker was able to gives detailed results on variation among haplotype of the selected samples.

Lesson Learnt and Propose Activities of SEAFDEC/TD in the Gulf of Thailand

Penchan Laongmanee

Head of Fishing Ground and Fishery Oceanography Section, Southeast Asian Fisheries Development Center Training Department (SEAFDEC/TD)

Lesson learnt and propose activities of SEAFDEC/TD in the Gulf of Thailand

Penchan Laongmanee

Southeast Asian Fisheries Development Center Training Department

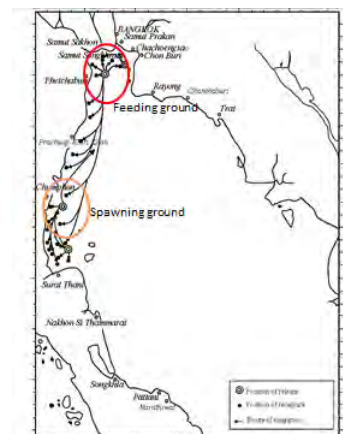
1. Migration of Indo-Pacific mackerel in the Gulf of Thailand by using telemetering technique



Prepared by: Dr. YuttanaTheparoonrat

Background (1)

The study on migration of Indo-Pacific mackerel (*Rastrelliger brachysoma*) in the GOT by DOF Thailand that was conducted during 1962-1964 by using fish tagging technique. Result of studies found that two major stocks existing



The migratory route of tagged Indo-Pacific mackerel in the GOT (Somjaiwong and Chullasorn 1974)

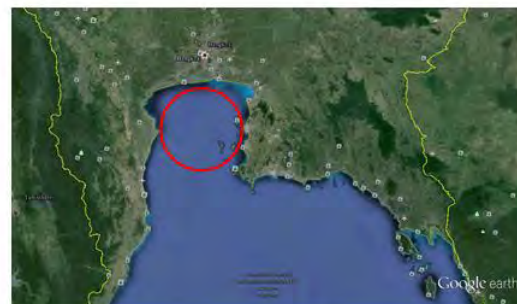
1. Central-Western Gulf stock are
 - Spawning around Chumphon and Surathani province.
 - Juvenile migrate upward along coastal shallow water up-to Samutsakorn and Samutsongkram province.



The migratory route of tagged Indo-Pacific mackerel in the GOT (Somjaiwong and Chullasorn 1974)

2. Eastern Gulf stock are
 - Spawning around Sihanouk Ville, Cambodia.
 - Juvenile migrate westward along coastal to Trad and Chantaburi province, Thailand.

- Local fishermen reported that there are mackerel stock of inner GOT. Their migration route around inner GOT.





- The understanding of migration route and period are key for the development of Fisheries Refugia Site (1), seasonal protected area for Indo-Pacific mackerel to protect spawning and nursery area of this economically important fish species

Background (2)

• The biotelemetry provides continuous and simultaneous monitoring of fish in their natural environment, in both space and time.

• New acoustic telemetry technology which rely on an advanced coding and modulation scheme to provide precise localization of fish in high noise marine coastal environments

• Telemetry data can be overlay to high resolution habitat mapping and bathymetry to permit association of position with components of habitat.

Expected Outputs:

- Know distribution and migration of Indo-Pacific mackerel in the Gulf of Thailand,
- Understand migration behavior of Indo-Pacific mackerel related to the season and stock age,
- Know the spawning and nursing ground of Indo-Pacific mackerel in the Gulf of Thailand,

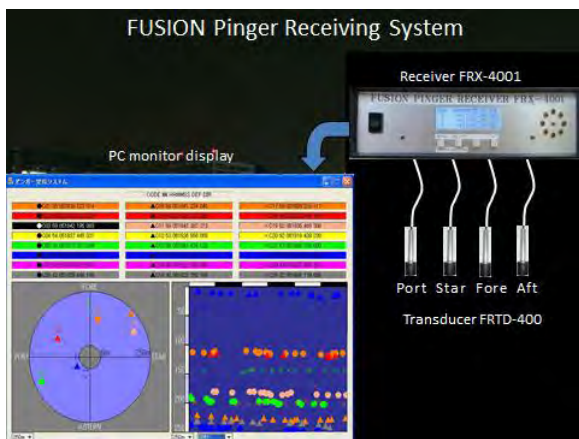
Specification of FPX Pinger series

- Frequency: 62.5kHz
- Repetition Interval: 1, 10, 90, 280 sec
- Battery life: 14 days for 10 sec repetition interval (see table 1)
- Source level: 155 dBuPa at 1meter
- Detection distance: 500m (depend on ambient noise condition)
- Depth range: maximum 2000 m to minimum 50 m full scale
- Transmitting signal: 31 bits Gold code sequence signal
- IDs: 32,768
- Modulation: Phase modulation for M-sequence signal
- Transducer: Multi layer PZT

Repetition interval can be changed by the magnet

Table 1: Battery life vs. repetition interval

TX interval	Battery life
1	1.5 days
10	2 weeks
90	4 months
280	1 year



Project Description/Framework

- Activity 1: Information collection of spawning season and possible migration route of Indo-Pacific mackerel stock around Southern part (Chumphon and Suratthani province) and Eastern part (Trad province) in the Gulf of Thailand.
- Activity 2: Verification and application of Bio-telemetry technique to study on migration route of Indo-Pacific mackerel during spawning season in the Southern and Eastern part of the Gulf of Thailand.
- Activity 3: Technical transferring on Indo-Pacific mackerel migration study technique through regional training and workshop.

Expected Outcomes:

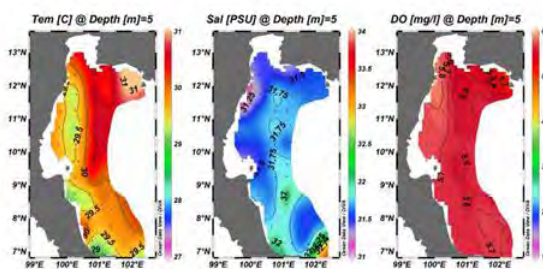
- Science-based Indo-Pacific mackerel fisheries management policy at national and sub-regional levels,
- Enhanced cooperation of scientist/research institutes with and among participating countries.

For cooperation in this propose project especially in the trans-boundary area, please contact :
yuttana@seafdec.org

2.Collaborative research in the Gulf of Thailand

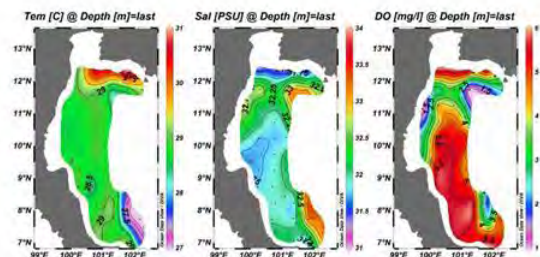
- 14 March – 12 April 2013
- SEAFDEC & educational institute & DOF & DMCR & PCD & private company
- 4 Groups of survey activity
 - Physical oceanography & meteorology
 - Chemical oceanography
 - Marine biology
 - Fishery resources

Oceanographic condition



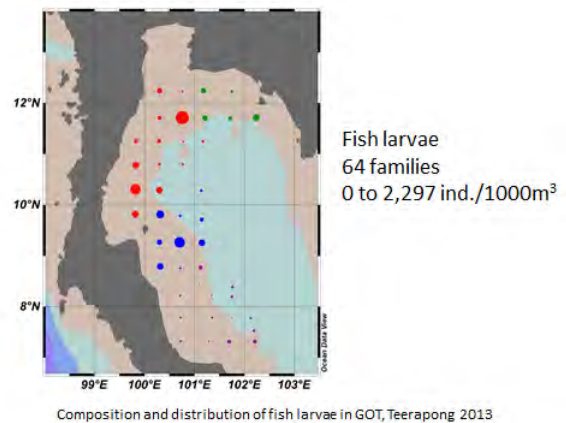
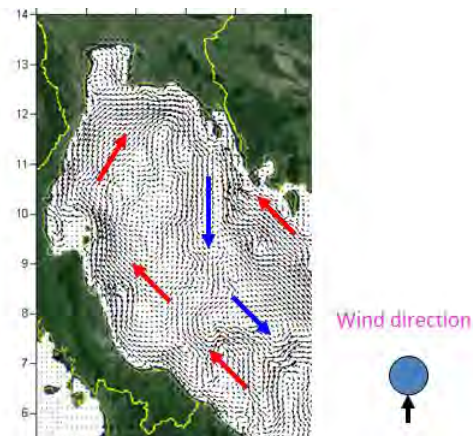
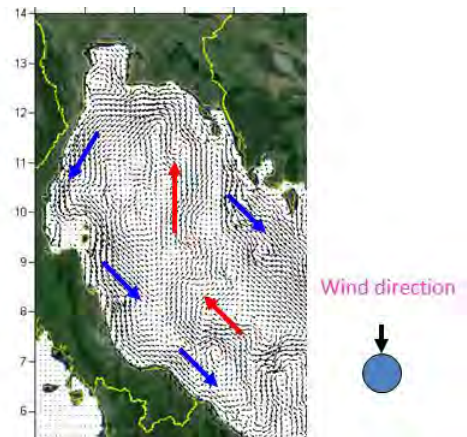
Stratification and mixing of water mass in GOT, Anukul 2013

Oceanographic condition

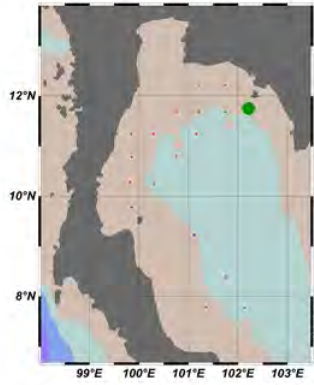


Stratification and mixing of water mass in GOT, Anukul 2013

Water circulation



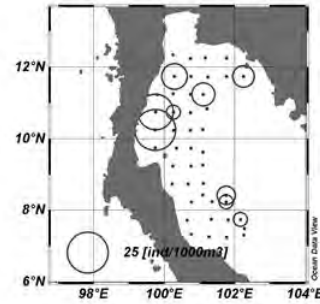
Composition and distribution of fish larvae in GOT, Teerapong 2013



Indo-Pacific mackerel larvae
2 to 432 ind./1000m³

Composition and distribution of fish larvae in GOT, Teerapong 2013

Enoploteuthidae spp. [ind/1000m³]

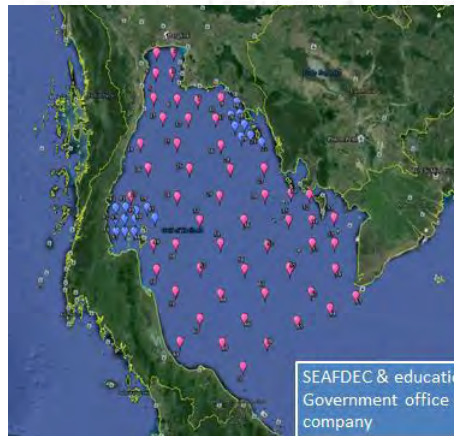


Oceanic species

Distribution and Abundance of Cephalopod Paralarvae in the GOT by Natinee 2013

Questions for future research

- Resident time of fresh water in GOT?
- GOT and SCS water exchange?
- Influence of water column on Hypoxia (low oxygen) and primary production?
- Distribution and abundance of fishery resource?
- Spawning and nursery ground of fishery resource?



Future plan
Pre and post Monsoon season

SEAFDEC & educational institutes & Government office of MC & private company

Regional Plan of Action to Promote Responsible Fishing Practices Including Combating IUU Fishing in the Southeast Asia Region

Ardiansyah Hasyim

RPOA IUU Secretariat, Ministry of Marine Affairs and Fisheries, Jl Medan Merdeka Timur No.16, Jakarta, Indonesia

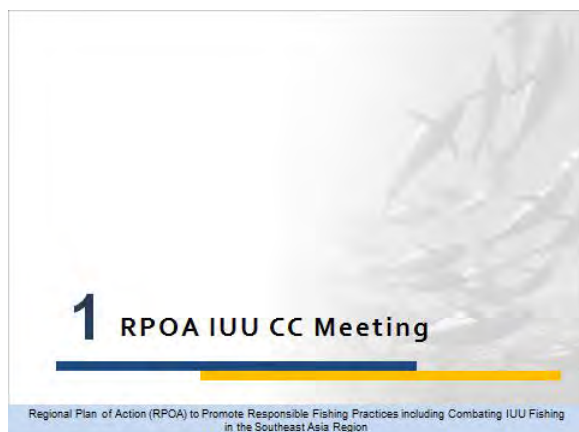


OUTLINE

Update –

1. RPOA IUU CC Meeting
2. Subregional Arafura-Timor Seas
3. Subregional SESCS-SSS

Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating IUU Fishing in the Southeast Asia Region



RPOA IUU CC Meeting

- A voluntary instrument endorsed in Bali, May 2007 with 11 participating countries
- 11 Agreed Action Plan including PSM, Regional Capacity Building, Strengthening MCS System, Coastal State Responsibility, Transshipments at Sea, etc.
- Southern Eastern Area of South China Seas and Sulu-Sulawesi Seas, the Arafura-Timor Seas, and the Gulf of Thailand
- Coordination Committee (CC) meeting is the high level decision making conducted annually to evaluate the workplan
- The 6th RPOA CCM was held in Kota Kinabalu, Malaysia, 19-21 Nov 2013
- The meeting was also assessed and evaluated the 5 years implementation - as point of reference in implementation, directional guidance, and better coordination in adoption of measures to enhance implementation

Workplan 2013-2014

- continue to assess the status of fisheries resources to ensure that the best available scientific information is used to assist fisheries management decision making - share with all RPOA participating countries as appropriate.
- to continue to consult internally on implementation of the FAO Agreement on PSM and report to the CC on action taken.
- to continue to designate and publicise on their national websites ports to which foreign fishing vessels may request entry, consistent with international instruments such as the FAO Agreement on PSM



Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating IUU Fishing in the Southeast Asia Region

Workplan 2013-2014

- to work with relevant regional bodies to prepare a matrix of activities being undertaken that are relevant to the FAO Global Record and report back to the next CCM.
- SEAFDEC, RPOA and other advisory bodies to work with the FAO towards the development of the FAO Global Record
- continue to work with regional organisations to strengthen fisheries management and conservation in the south east Asian region.
- endeavour to increase their participation in regional and multilateral organisations, including RFMOs.



Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating IUU Fishing in the Southeast Asia Region

Workplan 2013-2014

- to continue to review its specific Model Fisheries Legislation report and identify action to strengthen its fisheries legislation consistent with the findings of its report. To report to the annual RPOA CC its progress in implementing improved fisheries management legislation.
- to develop a discussion paper on the concept of genuine link and flag state responsibilities.
- undertake to refuse entry to their port (s) of vessels on RFMO IUU Fishing Vessel Lists. Endeavour to inspect and/or investigate any suspected fishing vessel that enters its port(s), and where evidence is found to confirm IUU activities, take further action as appropriate.
- subject to adoption out-of-session of the *Procedure for listing and delisting vessels presumed to have carried out IUU activities in RPOA waters* (RPOA Vessel Watch List), countries to implement the RPOA Vessel Watch List.

Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating IUU Fishing in the Southeast Asia Region

Workplan 2013-2014

- Vietnam to work with SEAFDEC on the development of a catch certification scheme for the region that is relevant to the needs of the region and, in particular, the needs of small scale fisheries and report back to the next CC meeting.
- continue to review and promote the findings of the report *Net Returns: A Human Capacity Development Framework for Marine Capture Fisheries Management in Southeast Asia* and the RPOA MCS Curriculum and Training Program, and consult internally with their relevant national agencies and local authorities including donor agencies. Countries to also facilitate internal inspector training consistent with the material provided at the Inspector Training Workshop (June, 2011).
- report annually to the CC on improvements with respect to fisheries management capacity building.

Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating IUU Fishing in the Southeast Asia Region

Workplan 2013-2014

- to continue to provide data and information on IUU fishing vessels to the Secretariat.
- to consider the draft *Procedure for listing and delisting vessels presumed to have carried out IUU activities in RPOA waters*
- to adhere to the MCS Network Communication Procedures as endorsed by the CC.
- to identify action, both nationally and regionally, with regard to illegal transshipments of fisheries products at sea/in port and report to the CC on action taken. Where applicable, to consider strengthening measures to regulate transshipment at sea by fishing vessels flying their flags and by foreign flagged vessels operating in their waters.

Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating IUU Fishing in the Southeast Asia Region

Workplan 2013-2014

- to assess areas of priority and work either nationally, bilaterally or sub-regionally to develop a Public Information Campaign (PIC) in addressing these areas.
- to implement the Strategic Plan for RPOA PIC
- to develop a common evaluation and reporting tool to assist in evaluating the PIC for consideration at the next CC meeting.
- as part of the development of a five year RPOA strategic plan, countries to report to the Secretariat on the national impediments to implementing sustainable fisheries management and combatting IUU fishing in their waters.
- progressing the development of a 5 year strategic plan for consideration at the next CC meeting.
- to develop procedures and the Terms of Reference for participation in RPOA meetings by Advisory Bodies, Observers and other parties.

Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating IUU Fishing in the Southeast Asia Region

Workplan 2013-2014

- continue to provide comments on the draft RPOA Evaluation and Assessment paper. The Secretariat to finalize the paper and upload to the website (private) and the Executive Summary to the public site.

Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating IUU Fishing in the Southeast Asia Region

2 Subregional Arafura-Timor Seas

Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating IUU Fishing in the Southeast Asia Region

Arafura-Timor Seas

Update MCS Sub-Regional (Arafura and Timor Seas) Group

- Key IUU Issues and Action Plan 2013
- Developed at the 3rd MCS Sub-Regional Workshop held in Port Moresby, Papua New Guinea 25-26 February 2013 .

Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating IUU Fishing in the Southeast Asia Region

Arafura-Timor Seas

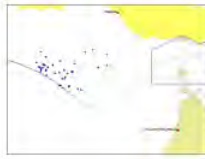
2013 KEY IUU ISSUES

- Significant IUU activity - air surveillance (Sept 2012)
- Uncensored fishing vessels
- Unauthorised mothership activity
- Duplicate licenses (multiple vessels using one licence/duplicate vessel markings)
- Double/dual flagged vessels
- Non-compliant VMS



Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating IUU Fishing in the Southeast Asia Region

Arafura-Timor Seas



- > 45 vessels sighted during 3 flights
- > 64% of vessels sighted in Indonesian waters suspected of illegal fishing
- > 58% of vessels sighted in PNG waters suspected of illegal fishing



Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating IUU Fishing in the Southeast Asia Region

Arafura-Timor Seas

CAPACITY BUILDING

- Fisheries Management & MCS Training program
- Law of the Sea training
- Workshop on Law of the Sea
- Fisheries Officer exchange program
- Capacity building on patrol activities
- Investigation training
- Development NPOA IUU Fishing



Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating IUU Fishing in the Southeast Asia Region

3 Subregional SESCS-SSS

Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating IUU Fishing in the Southeast Asia Region

SESCS - SSS

Update MCS Sub-Regional (Southern Eastern of South China Seas and Sulu-Sulawesi Seas) Group

- Key IUU Issues and Action Plan 2013-2017
- Developed at the 4th SESCS-SSS meeting, held in Manila, Philippines 29 June 2013

Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating IUU Fishing in the Southeast Asia Region

SESCS - SSS

Key Issues & Actions:

- Large number of variously flagged fishing vessels operating in Southern and Eastern Area of South China Sea and Sulu Sulawesi Sea
- Unreported transshipping activities
- Unauthorised use/transfer of one license between multiple fishing vessel
- Bunkering mean the unregulated and illegal provision of supplies, materials and fuels or other to fishing vessels.
- Unreported catches from illegal fishing activities
- Unreported and misreported catches from licensed fishing vessels
- Fraudulent licensing and registration activities

Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating IUU Fishing in the Southeast Asia Region

SESCS - SSS

Key Issues & Actions:

- Limited human and institutional capacity within relevant government agencies to effectively implement MCS.
- Lack of stakeholder (i.e industry) engagement in MCS and general fisheries management.
- Impacts on shared/ migratory and endangered fish stocks (including other associated and dependent species such as sea turtles, sharks, dolphin, dugong, whales) across region.
- Status of fishery resources and fishery management

Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating IUU Fishing in the Southeast Asia Region

Upcoming Event in 2013 - 2014

- 4th meeting of the Subregional Gulf of Thailand, Bangkok, Thailand, 18-19 December 2013
- 5th meeting of the Subregional Southern and Eastern of South China Seas and Sulu-Sulawesi Seas, Brunei Darussalam, First Quarter 2014
- 4th meeting of the Subregional Arafura-Timor Seas, Bali-Indonesia, First Quarter 2014
- 7th RPOA CC Meeting in (Australia?), November/December 2014

Regional Plan of Action (RPOA) to Promote Responsible Fishing Practices including Combating IUU Fishing in the Southeast Asia Region

Annex 14

Port Inspections of Fishing Vessels

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Port inspections of fishing vessels

Port State Measures

Simon Funge-Smith

FAO Regional Office for Asia and the Pacific

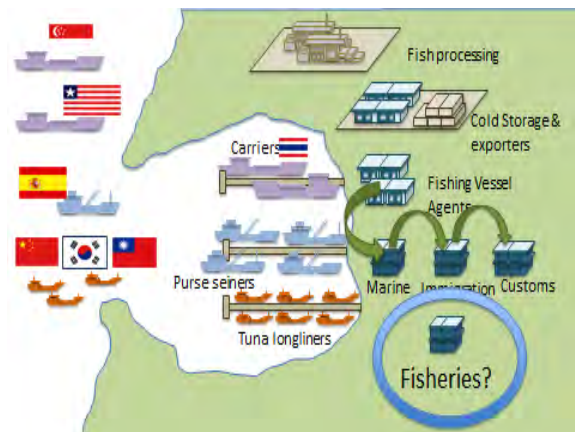


Background

- How to combat illegal, unreported and unregulated fishing?
- On the water
 - Monitoring, control & surveillance
 - On-board observers
- In port
 - Port inspections
 - Looking for evidence of illegal activity
 - Clear procedures for taking action

Port State Measures

- Ports are the most convenient control point
- Port controls aim to take away economic incentives to fish and trade in fish illegally
 - deny access to port
 - report illegal activity to RFMO / flag country / other countries
 - take relevant actions (e.g. impound vessels or catch)
- Port controls apply to foreign vessels:
 - fishing vessels
 - fish carrier vessels
 - transshipment vessels
 - servicing vessels
- Mainly aimed at controlling illegal fishing of stocks covered by RFMOs
 - Eg. tuna (IOTC, WCPFC)
 - Toothfish (CCAMLR)
- Also supports the EU-IUU regulation (for fish landed by foreign vessels)
- May also help combat other illegal activity:
 - Trafficking, drugs, weapons, contraband, smuggling



Pilot project

- A first step towards developing a system for the inspection of foreign fishing vessels in Port
 - 5% inspections
 - Develop staff capacity
 - Resolve institutional responsibilities and coordination
 - Review legal and jurisdictional constraints/weaknesses
- Aims to ensure country does not become home to Ports of Convenience:
 - for the landing or transshipment of illegal fish
 - for servicing of vessels known to engage in IUU fishing

First steps

- Start by trying to see how port controls are currently operating:
 - Customs Dept.
 - Immigration Dept.
 - Marine Dept.
 - Department of Fisheries
- Try to understand:
 - who has the authority
 - what legal framework is in place
 - what may need to be adjusted or modified

Country example of issues relating to Powers, authority, responsibility

- Marine Dept.
 - Provide entry clearance based on an entry request (48 hours advance notice)
 - Will not allow if there's a serious problem
 - Only inspect vessels under the Tokyo MOU (does not cover fishing vessels only merchant shipping)
 - Fishing vessels are not inspected
 - Sample based and based on prior history
 - Would consider vessels at long stay are not registered sailing vessels
- Immigration Dept.
 - Inspect the crew manifests
 - Must provide 48 hours notice
- Customs Dept.
 - Have the main power to clear the cargo to be landed
 - Clear the cargo for unloading (??), once all the other inspections or clearances been obtained
 - Inspect manifest and sub-bulk goods, inspect for contraband?
 - This is the last step
- Department of Fisheries
 - no legal rights inspect a foreign fishing vessel
 - currently - seems to have no power to request to see the fishing license of a foreign vessel
 - This power is conferred along with aviators in the new fishery law expected to be refined this year
 - Fishery officers could accompany another inspection
- Foreign vessels
 - If they are clearly illegal (i.e. no valid license) they simply inform immigration and police, fisheries and customs

There are two steps to Port state controls for fishing vessels

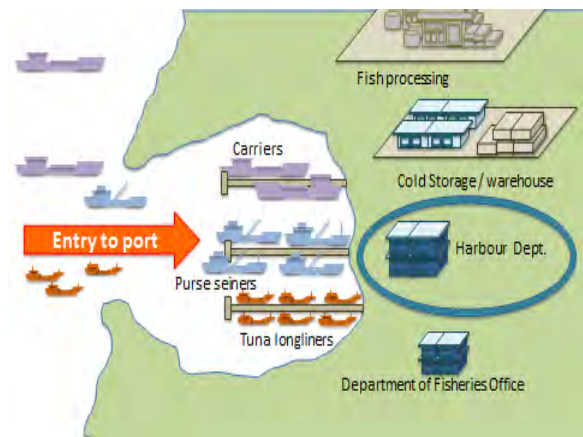
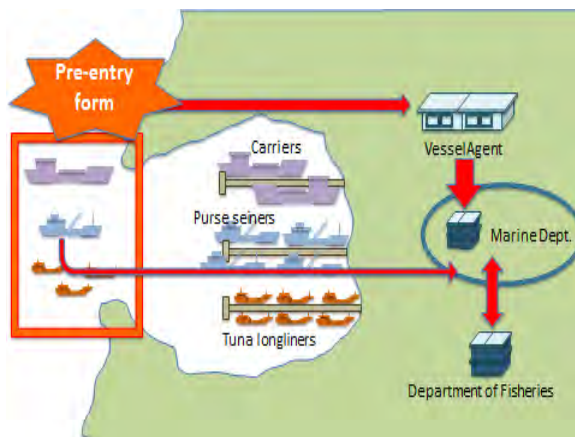
- Step 1 - Pre-entry
 - Before the vessel enters port
 - Try to determine if the vessel is a legal vessel or not
 - Is it known IUU vessel? (ID - from any RFMO)
 - any reason to suspect? (received information for another country)
- Step 2 - after entry to port
 - Decision is made to undertake a fuller inspection
 - Based on reports
 - Suspicious activity
 - Request by flag state or other state
 - also random inspections based on evaluation of risks
 - 5 - 10% of vessels randomly inspected

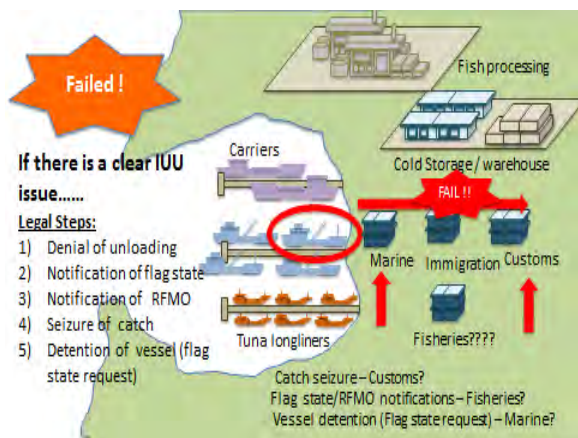
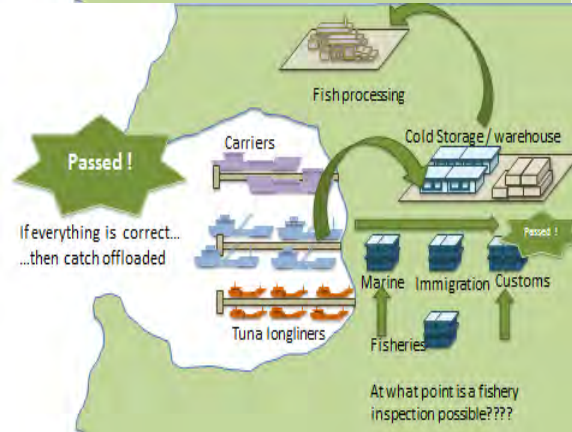
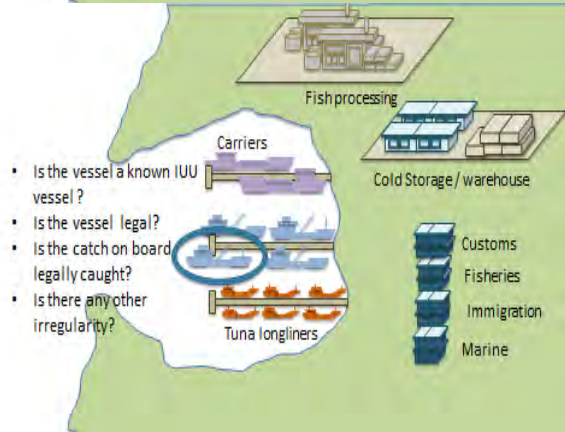
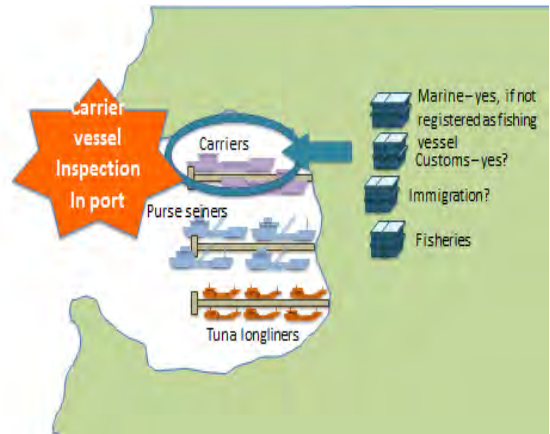
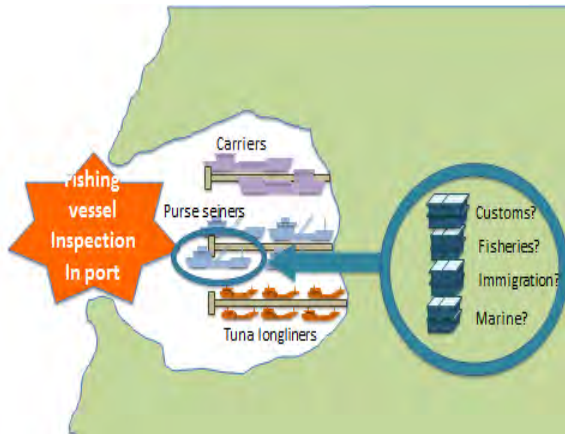
Step 1 - Pre-entry

- Pre-entry form
 - Submitted by agent or vessel before entering port (usually 48 hours)
 - Basic information:
 - about the fishing boat
 - its license to fish and registration
 - its cargo
 - what it intends to do when it enters the port (load/unload/trans-ship/refuel etc.)
 - Is there known IUU activity by this vessel?
- Allows the country to make a decision before arrival
 - Allow entry / deny entry
 - Inspect the vessel upon entry to port

Step 2 - Inspection form

- If it is decided to inspect a fishing vessel
- The inspection form is used
 - This verifies the information supplied in the pre-entry form
 - Checks on licenses, registration, catch, volume of catch declared, species etc.
- Attempts to determine whether the catch on board and activity of the vessel
 - has been legal and
 - in accordance with the (RFMO) regulations
 - in accordance with permissions granted (e.g. license)
- Gathers forensic evidence to support a legal action
- Provides the evidence for the next steps to be taken
 - Legal measures (depend on national laws/powers/authority to act)
 - Report to flag country
 - Report to RFMO





GROUP 1

**Integration of Fisheries and Habitat Management and the Importance of
Transboundary Stock and Habitats**

Goals	Key Management Intervention and Priority	Working Groups, Taskforces
GOAL: Regional cooperation for enhancing small pelagic (Mackerels and Neritic tunas) fisheries in the Gulf of Thailand through the integration of fisheries and ecosystem management approaches		
Fisheries Resources Aspect	<ul style="list-style-type: none"> • Reviewing of existing data/information <i>(immediate)</i> • Transboundary cooperation <i>(on-going/long-term)</i> • Mobilizing local knowledge (using technologies, e.g. GIS) <i>(immediate)</i> • Collection of scientific data on fish, identification of spawning and nursery grounds, spawning seasons, etc. <i>(immediate)</i> • Marine spatial planning <i>(parallel with collection of scientific data)</i> • Information collection on fishing capacity, fishing efforts, fishing vessels <i>(immediate)</i> • Fishing gears and technologies (use of irresponsible gears/practices) <i>(medium-term)</i> • Stock assessment (stock identification) <i>(medium-term)</i> 	Regional Scientific WG Existing mechanism: - Malaysia –Working Group for small pelagic and neritic tunas - Cambodia – Fisheries Technical Working Group
Ecosystems Aspect	<ul style="list-style-type: none"> • Identification of transboundary areas for conducting pilot study (common agreement for collaboration among countries) <i>(Immediate)</i> • Study on impacts of fishing gears to habitats and species <i>(Immediate)</i> • Study on socio-economic impacts to vulnerable groups, e.g. small-scale fishers <i>(Immediate)</i> • Involvement of local community, and stakeholders participation mechanism to deal with conflicts, use of illegal fishing gears <i>(on-going)</i> • Need for common/agreed rules and regulation (incl. monitoring and evaluation) <i>(long-term)</i> • Baseline indicator/ecosystem plan (at sub-regional and national levels) <i>(medium-term)</i> • Monitoring and socio-economic assessment <i>(medium/long-term)</i> 	e.g. transboundary between Malaysia-Thailand, Cambodia-Thailand, Cambodia-Vietnam
Climate Change Aspect	<ul style="list-style-type: none"> • Impacts from climate change to fisheries sector (capture fisheries) –link to move of nursing grounds, etc. 	Regional WS

Group 2

Strengthened capacity and sub-regional cooperation on monitoring, surveys and control of fishing efforts and landings of fisheries products in the Gulf of Thailand



Priority issues	Proposed activities	Timeline	Actions taken by	Remarks
1) Inadequate data on occurrence of IUU fishing in GOT	Identify ports/landing sites in trans-boundary location • Establish working group	To be determined during roundtable discussion among countries concerned		Taking into consideration the recommendations of the 3 rd Meeting of GOT in 2011
	Data collection/fact-finding on • Dual flagging • Transferring of flags • Deregistration and re-registration vessels • Compliance with EU/IUU requirements • Landing of catches across boundaries	6 month/1 year		Ibid (same as previous)
	Information sharing on VMS data	To be determined during roundtable discussion among countries concerned		ibid

Proposed actions	Timeline	Actions taken by	Remarks
2) Establishment of bilateral discussion between Cambodia-Vietnam • Set up joint committee • Review legal framework • Identify trans-boundary species (mackerel, endangered species) • Identify needs for capacity building	On-going (the next meeting will be on the first week of March 2014)	Fisheries related agencies in Cambodia and Vietnam, SEAFDEC	Taking into consideration the recommendations of the 3 rd Meeting of GOT in 2011
3) Discussion among agencies concerned with fisheries in Thailand and Malaysia on combating IUU fishing • Propose that first meeting discuss potential issues • Illegally landing of catch • Double flagging • Etc.	By mid of 2014	Fisheries related agencies in Malaysia and Thailand, SEAFDEC	ibid

Proposed actions	Timeline	Actions taken by	Remarks
4) Roundtable discussion on fisheries related issues between Thailand-Cambodia • Share information on trans-boundary species • Strengthen cooperation among authorities concerned with labor in fisheries • Conduct capacity building to improve working conditions (e.g. safety at sea) of labor in fisheries sector • Enhance participation of fisheries agency staff in discussions on labor issues in fisheries	First meeting by mid of 2014	Fisheries related agencies in Thailand and Cambodia, SEAFDEC, FAO/RAP, ILO	Taking into consideration the recommendations of the 3 rd Meeting of GOT in 2011

Annex 17

Integrated and Participatory Approaches: Enhancing Community Resilience to Adapt to Changes

Rebeca Fontanilla Andong

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INTEGRATED AND PARTICIPATORY APPROACHES: Enhancing Community Resilience to Adapt to Changes

Rebeca Fontanilla Andong
CORIN-Asia

4th Sub-regional Meeting on the Gulf of Thailand
18-19 December 2013
Swissotel Le Concorde
Bangkok, Thailand

Presentation Content


Mechanisms and tools

- Coastal Cambodia Local Alliance (CCLA)
- Livelihood Development Framework (LDF)
- Locally-Initiated Fund (LIF)
- Crab Bank
- Transboundary Collaboration
- MCS
- Ecotourism
- Skills Bridging and Professional Program

- What is it about
- Its objectives
- Its benefits

Coastal Cambodia Local Alliance (CCLA): a mechanism for locally-based, poverty-focused sustainable resource management

- a strong, functional and mutually-committed alliance among relevant government departments in Coastal Cambodia whose mandates are directly geared toward wetlands resource management and livelihood development



CCLA as a mechanism: its objectives

- Develop capacity of its manpower in the area of Project Cycle Management (Planning, Implementation, Monitoring and Evaluation).
- Develop functional systems and mechanisms relevant to the needs of their department toward sustainable wetlands management and poverty reduction.
- Effectively backstop and facilitate Community Fisheries Groups (CFIs) toward discovering innovative approaches to improve their own livelihood and sustainably manage their wetlands resources.
- Progressively develop the synergy, complimentary knowledge sharing and accountability within the Local Alliance wherein the LPs' respective strengths, expertise and mandates contribute to an improved capacity in project management, as well as check and balance amongst all partners within the alliance.

CCLA as a mechanism: *key processes and approaches*

- Participatory Approach
- Empowerment and Capacity Building Approach
- Livelihood Development Approach
- Sustainable Local Funding Approach

Livelihood Development Framework (LDF): *a tool in building community resilience*

- livelihood development interventions facilitated by CCLA becomes sustainable at the household level and even get strengthened at the community level



CCLA as a mechanism: *its benefits*

- Empowered government agencies closest to the grassroots level can provide longer-term help to the communities
- Heightened accountability and synergy in the alliance reinforce the people's trust toward their government servants, making community participation and ownership of projects high.
- Empowered Local Government agencies working in close collaboration with target communities can develop interventions that are most relevant to the local needs and contexts.
- With further coaching in the area of diversified fund outsourcing, the Local Alliance can channel more direct funding from donors to target communities where funds are most needed and with minimal indirect costs.
- The Alliance also offers a fertile ground for multi-sectoral or multi-disciplinary collaborations for a more integrated and comprehensive development of the target areas.

LDF as a tool: *its objectives*

- Go beyond the level of merely training people to acquire livelihood skills
- Help community establish and develop systems and mechanisms that will provide structure, support and sustainability to the various livelihood skills being imparted to the people
- Allow for avenues whereby common people in the community can serve as potential resource for expansion of the livelihood skills along with the systems and mechanisms they have learned

LDF as a tool: *its benefits*

- Long-term, community-managed livelihood support group helps ensure sustainability and success of project initiatives
- Established pattern with accompanying systems and mechanisms make it easier to replicate and expand the process to other interested communities
- This comprehensive livelihood development framework has also contributed significantly in reducing unhealthy dependency among beneficiaries
- A number of these livelihood groups have now evolved into small and medium-scale enterprises (SMEs) with potential of forming cooperatives or private corporations as further backstopping inputs are strategically extended along the way

Locally-Initiated Fund (LIF): *a tool to sustainable livelihood development*

- a sustainable community-based/owned/managed microfinance entity that further enhances the target communities' capacities in developing livelihood toward reducing poverty and vulnerability to various changes



LIF as a tool: *its objectives*

- Develop capacity of its manpower in the area of managing micro-savings and micro-credit programs.
- Develop relevant and functional systems and mechanisms at the level of the community that will enable them to run efficiently and effectively the affairs of their LIF microfinance operations.
- Accumulate sufficient capital build-up that will help minimize and if possible eliminate the community's dependence on exorbitant and oppressive loan sources.
- Work towards a synergized and expanded operation at the level of the Commune and eventually later on, the District.

LIF as a tool: *its benefits*

- Empowered community leaders who are capable of managing their own micro-savings/micro-credit operations.
- Former beneficiaries of livelihood trainings have accessible funds to loan as start-up capital for sustaining and expanding their respective livelihood.
- Reduction of the people's reliance on exorbitant or oppressive loan schemes around.

Crab Bank: a tool in stock enhancement and sustainable livelihood development

- a sustainable community-based/owned/managed Crab Bank that enhances the target communities' capacities to better manage the existing resources toward reducing poverty and vulnerability to adverse effect of various changes



Crab Bank as a tool: its benefits

- Empowered community leaders who are capable of managing their own Crab Bank with its micro-credit operations.
- Crab fishers in the target and neighboring communities develop a sense of responsibility in caring for and managing their coastal resources.
- More gravid crabs deposited in the Crab Bank and given a chance to spawn contributes to stock enhancement

Crab Bank as a tool: its objectives

- Develop a strong sense of responsibility among fishermen toward participating in the sustainable management of coastal resources (e.g. donating gravid crabs to the Crab Bank)
- Develop capacity of CFI leaders in managing and growing their own Crab Bank
- Establish relevant mechanisms, systems and regulations at the level of the community for effective and efficient implementation of their Crab Bank operations
- Help accumulate sufficient capital build-up in the community that will help minimize and if possible eliminate the people's dependence on exorbitant and oppressive loan sources

Transboundary Collaboration: a tool in resource fishery and habitat management

- a mutually-enriching relationship between Kampot and the neighboring province of Kien Giang, Vietnam that contributes to a harmonious and synergized management of fishery resources and critical habitats



Transboundary collaboration as a tool: its objectives

- Develop a strong collaborative relationship with the Provincial Office of Agriculture in Kien Giang, Vietnam that can open up opportunities for synergized co-management of fishery resources
- Develop capacity of Local Partner's manpower in the area of cross-cultural and trans-national/political collaboration.
- Establish relevant mechanisms, systems and MOUs to guide and govern this collaborative process.
- Provide conducive environment for mutual exchange of learning, skills and technologies related to sustainable management of fishery resources toward reducing poverty and vulnerability to changes.

Transboundary collaboration: its benefits

- Empowered Local Partners' leaders and staff capable of sustaining healthy dialogue across socio-cultural and political barriers, toward discovering win-win solutions to their long-standing problems and conflicts.
- Mutual exchange of learning, skills and technologies benefiting the constituents of both sides.
- More efficient co-management of fishery resources and critical habitats, including more efficient enforcement of each other's fisheries laws.

MCS: a tool for practical, local institutional collaboration in fisheries law enforcement

- a workable and sustainable MCS System that supports fisheries law enforcement and fisheries co-management among the coastal communities of Cambodia



MCS as a tool: its objectives

- Establish a strong collaborative relationship among various stakeholders that can help contribute to the effective implementation and enforcement of fisheries law as well as management of fishery resources.
- Develop capacity of Local Partner's manpower and also that of the community in the area of using basic communications technology and equipment available for MCS implementation.
- Set up practical and efficient mechanism governing the flow of information, reporting and documenting relevant incidents and results.

MCS as a tool: its benefits

- Empowered Local Partners and community fisheries groups becoming more and more efficient in communicating relevant information regarding fisheries law enforcement.
- Timely reporting and apprehension of illegal activities and fisheries law violators.
- More efficient co-management of wetlands resources, spearheaded by the very people having closest influence and impact upon these fast-deteriorating natural resources.

Ecotourism as a tool: its objectives

- Develop approaches in eco-tourism development that are sustainable and empowering to the community
- Build the capacity of the Local Partner's staff, the community-based eco-tourism committees, and the various tourism service providers in Kampot toward providing sustainable eco-tourism services that enable tourists to play an active role in efforts to effectively manage wetlands resources
- Put in place necessary systems and mechanisms to sustain the initiatives related to eco-tourism and get them ready for cross-learning and possible adoption in other places

Ecotourism: a tool for learning, livelihood development and resource conservation

- a comprehensive model of eco-tourism development keeping up with national and regional trends while contributing to sustainable management of wetlands resources



Ecotourism as a tool: its benefits

- Local Partners and target communities understand the added potential benefit they can avail when eco-tourism becomes fully integrated in their efforts to properly manage their wetlands resources
- General population gets an avenue to directly participate in responsible environmental management, conservation and enhancement of the coastal ecosystems
- Expanded opportunities for supplemental livelihood options enabling coastal communities to better mitigate poverty and cope with climate change

Skills Bridging and Professional Program: a tool in local capacity building

- modified basic education course at high school is combined with vocational skills and provides for the above mentioned program from level 1 to level 3, which is equivalent to high school degree



Skills Bridging and Professional Program as a tool: its objectives

- Develop a comprehensive course curriculum that enables school dropouts to regain their chance to pursue higher education while learning relevant livelihood skills, with the added capacity to contribute toward sustainable management of fishery/coastal/wetlands resources.
- Build capacity of resource persons from each Local Partner in imparting knowledge, concepts and skills related to coastal/wetlands resource management.

Skills Bridging and Professional Program as a tool: its benefits

- Youth will be capacitated to recover the chance they've lost to pursue higher education, with practical and relevant skills to start their own livelihood and contribute in the wise and responsible management of coastal resources
- Resource persons from the CCLA Local Partners gained a deeper understanding and appreciation of the various concepts of integrated coastal zone management which are now embedded in the program curriculum, as a result of their participation
- Target communities got encouraged and are now looking forward to help these students with their practical immersion to the coastal community context as they apply theory to the actual community setting

Local Capacity-building, Strengthening of Community Fisheries and Diversified Livelihoods to Enhance Communities Resilience and Capacity to Adapt to Change

Bunthoeun SIM

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Contents

1. Overview of Fisheries Management in Cambodia
2. Relationship between the Learning Institute with FIA, SEAFDEC and other collaborative partners in the region
3. Progresses
4. Challenges
5. Recommendations

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Overview of fisheries management

- Since October 2000, the fisheries reform has been made followed by 2011 and early 2012 of fishing cancellation as well deep fisheries reform meant while there is no more fishing lots operation in Cambodia.
- The Learning Institute and other development partners as well NGOs were partners with FIA in order to put more effort in supporting FIA to strengthen fisheries management in Cambodia
- 516 CfI have been established throughout country " 477 CfI are inland fisheries communities and 39 CfI are coastal community fisheries". Up to date there are 360 CfI officially registered at MAFF" (Ly Vuthy)

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The Learning Institute, FIA & SEAFDEC

- The Learning Institute had been working together with FIA since 2001 until present time. We work on research on community fisheries management, gender awareness raising and capacity building....etc. And the Learning Institute is one of members of Technical Working Group on Fisheries.
- Since 2006-2009, the project called a study on Asserting Rights on Small-Scale Community Fisheries Management and Roles, Needs and Aspiration of Women in Community Fisheries Management in Cambodia which was the co-funding commitment of ICSF, Oxfam GB, IDRC, HBF and SEAFDEC.
- Again reconnection with SEAFDEC was in May 2013 for the project called **STRENGTHENING COMMUNITY FISHERIES MANAGEMENT AND LIVELIHOODS DIVERSIFICATION IN CAMBODIA**

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Progress 2006 - 2013

Asserting Rights on Small-Scale CFIM and Roles, Needs and Aspiration of Women in CFIM in Cambodia, 2006 - 2009

- a. Men have more recreational time - including the time for sleep - than women do
- b. We still found that woman's role and responsibility are doing housework and caring for children while men are in charge of generating an income for the family
- c. Main responsibility of women in fisheries-related livelihoods is in the post-harvest sector, including processing and trading fish

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Progress

- d. Increasing involvement of women in CF activities, particularly in savings groups and information dissemination
- e. Overall, there is also limited representation of women in the CF committee, with only one or two women represented on the committee across all study sites
- f. A typical role for women is that of an accountant or a disseminator of CF information. However, women leaders feel that they are only token members and do not have a significant role in the CF committee

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Progress

Women best practices has been highlighted, especially the Cfi in Stung Treng, Kampot and Battambang province.

- a. Integrated Cfi workplan with commune investment plan/ commune development plan
- b. Generating the saving scheme in the community, especially Cfi in Kampot and Kampong Chhnang province
- c. Generating the souvenir Kep province
- d. Generating fish processing (smoked-fish)
- e. Other income generating activities

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How important of women involve in Cfi 2009 – 2013

- In many Cfis, the number of women are very limited due to capability, ability, volunteer as well supporting from family.
- However, the culture norm has been changed, especially in coastal provinces.
- Strong leadership in saving group and crab bank
- Good at extension activities “ young generation/youth”
- Good and communication and gathering people for any events
- Initiation and creation related to livelihood activities

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How important of women involve in Cfi 2009 - 2013

- Cfi management plan has been integrated into CDP, especially related to natural resources management. For example, in Stung Treng Deep pool conservation project has been integrated with CDP and jointly patrolling to the deep pool conservation areas
- Woman is a deputy chief of Trapaing Ropove Cfi/ saving group and crab bank and a member of commune councilor which she can play two important roles in-term managing all finance in the community and tries to integrate Cfi management plan into CDP
- Co-management (Koh Kong) case is the key lesson learn for Cfi in Cambodia
- On the other hand, many Cfi workplan have been integrated into CDP and CIP in the Tonle Sap provinces.

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Challenges/ Concerns

1. Gender and Rights still the gap at the community level
2. Gender division of labor still an issue at community and household level
3. Level of education is the gap of women expressing their voice
4. Capacity is the gap in connecting women into community's work, livelihood activity as well linking them into market
5. Networking among women from one community to another still not functioning well in practice
6. Gender mainstreaming still not yet spread/ apply at local level

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Recommendation

- Co-management on Cfi is strong suggested
- Improving capacity of local facilitators and Cfi committees and stakeholders is needed
- Annual forum on Cfi management is very important to share all practical lesson learns to researchers, development agencies for their consideration or interest in development planning.
- Technical and financial still need to be considered toward Cfi management and planning

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Reconnection

- Women in all the case study sites aspire to have better livelihoods based on improved fisheries resources through the CF and other external assistance for capacity building and alternative job creation
- Series of capacity building/ gender awareness should strongly considered
- Youth are now very strong movement and strengthen their capacity and involve them into Cfi workshop is very important

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Annex 19

Sustainable Development Foundation

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Sustainable Development Foundation

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 Presented at the 4th Meeting of the gulf of Thailand Sub-region
 18-19 December 2013, Swissotel, Bangkok




- Established : 1996
- Registered as Foundation : 2000
- Vision :
HUMAN SECURITY AND SUSTAINABLE DEVELOPMENT

Experiences relating to Sustainable Fishery and Coastal Resource Management

- Building community participation in management of Natural resources funded by Danced and Danida
- Ecosystem-based integrated coastal resource management through multi-stakeholder participation in southern Thailand as part of the Mangroves for the Future (MFF) initiative under IUCN coordination.
- Increasing Coastal community Capacity for Climate Change Adaptation (INCA) supported by UNDP
- Building Coastal Resilient climate change adaptation (BCR) funded by EU under IUCN coordination.



SDF work in relation to Sustainable Fishery and Coastal Resource Management



- ▲ SDF field sites
 -Trat , Chantaburee Pattalong and Trang, provinces
- ★ Social Assets : NGO network , Association of the Federation of Fisher folks , Association of women fisherfolks of the South, Concrete field based and Policies link, Demonstrate good Practice
- ♥ Commitment.

SDF AGENDAS



- Small scale fishermen vs Commercial fisher.
- Small scale fishermen vs GO laws and Policies. (conservation/protected area)
- Small scale fishermen vs upland communities/development projects.
- Segregate of related GOs agencies. In performing duties and responsibilities.

Turn conflict to Cooperation

Turn conflict to Cooperation



Issues to be addressed:

- Depletion of coastal resources/lost of biodiversity.
- Segregated and top down approaches of related agencies.
- Agency based not area and eco system based
- Building coastal Communities to Reduce threats from disaster and have an ability climate change aaptation

Good practices : Approaches

- Ecosystem based
- Rights based approach
- Strengthen gender participation
- Multi stakeholders appreciation and trust building through cooperation at field /recognized by policies makers.
- Information and knowledge based for decision making through participatory fact finding .
- Participatory process/ Capacity building.
- Localization and decentralization/ rules and regulation agreed endorsed
- Formalized collective mechanism agreed to continue communication/ Monitoring / Planning/Implementing.



What had we done in field sites?

Bringing together a diverse range of stakeholders to work in cooperatively towards achieving common aims and objectives, within individual ecosystems or common areas of implementation.



What had we done at fields sites?

- A wide variety of awareness raising and educational materials have been produced, including various documents and exhibitions displays, both of general relevance as well as focused specifically on topics of importance in each of the project's target sites. These materials have been disseminated directly, via participation at various events and in various forums locally, nationally and internationally, and also through SDF's website (www.sdfthai.org) and Facebook Page (www.facebook.com/sdfthai).



What had we done at fields sites?

Conduct activities to raise awareness, build capacity and generally accelerate this part of the work, and to enable local coastal communities to begin to be able to make more concrete linkages between disaster risk reduction, climate change adaptation, natural resource management and also regarding the full breadth and scope of the concept eco-system approaches and ecosystem management.



The project has involved women actively participate in the protection, conservation rehabilitation and management of local marine and coastal resources, this helps secure their families' food sources and livelihood options.

What had we done in with policy and legal ?

- Substantial analysis of policy and legislation related to fishery management and marine and coastal resource management. Promoting participation.
- Learning and Sharing in Public forums
- Active participation in an ongoing National Reform process, ongoing national consultation processes e.g. Department of Fisheries, Department of Marine and Coastal Resources and ONEP, and planned national forums with provide several continued opportunities to influence policies.

Good Practices

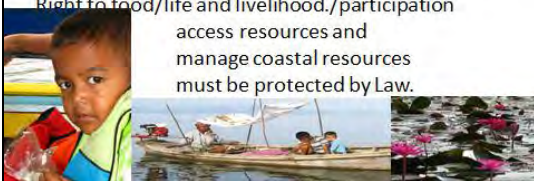
- CBCEM plans formulated through a multi-stakeholder participatory process involving capacity building, awareness raising, knowledge management and networking .
- CBCEM plans, rules and regulations recognised and endorsed at Tambon and Provincial Government levels and elements of the plan integrated into local government plans together with budgets
- Concrete habitat and species rehabilitation, conservation and protection achieved through multi-stakeholder collaboration in the implementation of the CBCEM plan
- National policy with regard to community based coastal ecosystem management influenced through the dissemination of outcomes and lessons learned gained

Getting it Right

Incorporating Social Aspects into eco-system based to Coastal Resource Management

The rights of the Marginalise SSF (men, women, children) to an equitable, safer and sustainable livelihood

Right to food/life and livelihood./participation access resources and manage coastal resources must be protected by Law.



Getting it Right

- Reduce inappropriate fishing gears (Trawlers/push nets/using small net in fishing)
- Proved increasing of fishes/ shrimps/ crabs and others marine diversities.
- Reduced conflicts
- More effective in financial resources management.
- Technical and knowledge back up



SDF Expectation for our participation

- Seeking possible concrete collaboration with SEAFDEC in an implementation of Ecosystem based and trans-boundary management in Eastern region .
- Technical support for sustainable fishery in our project sites.
- Partners in micro-macro link in promoting Multi stakeholders participation in Sustainable Fishery and Ecosystem management.



Way Forward

