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**Report of the First Technical Meeting of the Joint Working  
Team for Fisheries Management between Cambodia and  
Vietnam**

**Phu Quoc Island, Kien Giang Province, Vietnam**

**5-7 March 2014**



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**Southeast Asian Fisheries of Development Center**

**The Secretariat**

**Supported by the Government of Sweden**

## **PREPARATION AND DISTRIBUTION OF THIS DOCUMENT**

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**I. INTRODUCTION**

1. The First Technical Meeting of the Joint Working Team for Fisheries Management between Cambodia and Vietnam was organized from 5-7 March 2014 at Phu Quoc Island, Vietnam. The Meeting co-hosted by the Government of Vietnam through Department of Fisheries, Vietnam and the Southeast Asian Fisheries Development Center (SEAFDEC), with support from the SEAFDEC-Sweden Project on “Fisheries and Habitat Management, Climate Change, Social Well-being in Southeast Asia”. The Meeting aimed at follow-up on the initial discussions held previously on 17 December 2013 in Bangkok.

2. The Meeting was attended by twenty one (21) concerned officers having important roles in central and provincial levels in the fisheries agencies of Cambodia and Vietnam. The Meeting was also attended by resource persons from two local institutions, namely: the Coastal Resources Institute-ASIA (CORIN-Asia) of Cambodia, the Institute of Oceanography of Vietnam as well as SEAFDEC officials, three (3) Regional Fisheries Policy Network members and two (2) representatives from the Department of Livestock and Fisheries in Lao PDR as observers to the forum. The List of Participants appears as **Annex 1**.

3. As part of the Meeting, a one day study trip was scheduled to provide an understanding on the current fisheries situation in this area. The group visited the Qun An pearl culture farm, floating cages for culturing various fishery products. The group could, experience and enjoy actual hook and line fishing, diving and snorkelling in the Marine Protected Area (MPA) and they observed the local fishery products at the fishing village market. The study trip provided through the observations and understanding of the local livelihood situation and they learned about products that have been locally produces and they learned about the distribution of its products.

4. The Meeting was formally opened by the head of delegations of both countries. *Mr. Ing Try*, Deputy Director-General and Head of delegation of Fisheries Administration, Cambodia delivered his opening remark. He emphasized the significance of the bilateral cooperation between two nations. He mentioned the importance to study available types of habitats and biodiversity of species in the ecosystem. He also said that this Meeting was a good opportunity to all participants from both countries to discuss in order to have a better understanding on the status and issues relevant to fish and habitat management. He wished that we have a fruitful discussion during the two (2) days meeting.

5. *Ms. Nguyen Thi Trang Nhung*, the Deputy Director of Science and Technology and International Cooperation Department and the head of delegations from Department of Fisheries, Vietnam delivered her opening remark and wished for both countries to discuss and finalize the MOA of cooperation in order to manage the shared trans-boundary resources. She also mentioned that cooperation is very important in order to have common priorities with regards to fisheries and habitat management based on the same level of objectives to enhance

communication and cooperation in areas of common concerns. Finally, she declared the Meeting opened.

## **II. BACKGROUND, RATIONALE, OBJECTIVES AND ADOPTION AGENDA OF THE MEETING**

6. *Ms. Pattaratjit Kaewnuratchadasorn*, SEAFDEC-Sweden Project Manager briefly highlighted the background, rationale and objectives of the Meeting as shown in the **Annex 2**. She explained the expected outputs to the Meeting, noting that this Meeting is vital to revitalize efforts to manage the shared trans-boundary areas and resources, to address identified issues and concerns due to unsustainable use of fishery resources. She hoped that the participants would be able to formally finalize the drafted MOA to be signed by representatives of both countries. After clarification and modification of the Agenda, the Agenda which appears as **Annex 3** was adopted.

## **III. FINALIZATION OF THE MEMORANDUM OF AGREEMENT (MOA)**

7. Based on the framework of the MOU signed between Fisheries Administration of Ministry of Agriculture, Forestry and Fisheries, the Kingdom of Cambodia and Directorate of Fisheries of the Ministry of Agriculture and Development of Vietnam on 28 December 2011, Cambodia and Vietnam during the informal discussion on 17 December 2013 in Bangkok agreed to draft the MOA which focus in the areas of collaboration on 1) exchange of information related to fisheries management, research and development, such as laws and regulations, statistical data, research results and publications, policy papers, extension materials, etc.; 2) identification and implementation of strategies and schemes for joint management of shared trans-boundary fishery resources; and 3) and marine capture fisheries and safety at sea. To support communication and cooperation in priority areas, efforts would be made to strengthen “human resource development in the fisheries sector of both countries” in areas of relevance to three components indicated above.

8. The said MOA was revised and finalized according to the concerns expressed and developed to be beneficial to both countries. The signed MOA of the joint fisheries management between countries were attached as **Annex 4**.

## **IV. STATUS OF FISHERIES RESOURCES**

9. The SEAFDEC-Sweden project requested two former Regional Fisheries Policy Network members of year 2013, *Mr. Leng Sam Ath* of Cambodia and *Mr. Tran Van Hao* of Vietnam, to present the initial surveys on status of fisheries resources of Cambodia and Vietnam, respectively.

10. The first presentation was delivered by *Mr. Leng Sam Ath*, Deputy Director of Marine Fisheries Conservation Center, FiA. He presented the status of fisheries resources of Cambodia (**Annex 5**). He provided baseline information on trans-boundary stocks with special reference to the provinces of Kep, Kampot and Preah Sihanoukville. In the Meeting, he discussed the most important habitats (mangrove, seagrass, coral reefs) that can be found along the coastal and inshore waters of Cambodia. He explained about fishing in Cambodia, including fishing capacity, seasonal occurrence of major species (mackerel), fish landing sites, and production, processing and marketing. He also emphasised the occurrence of mackerels with an indication of areas where mackerels are present, the location of migration paths and



the seasonal distribution. According to him, Cambodia have a policy regulation on the banning of catching short and Indian mackerels during the period of 15 January to 31 March of the year. He emphasised that there little knowledge on the mackerel spawning ground.

11. *Mr. Tran Van Hao* presented a case study of trans-boundary species in areas bordering the two countries Vietnam and Cambodia (**Annex 6**). He presented the scope of his initial resource survey and started by the fishing effort. The number of fishing vessels operating in Kien Giang started to decline in numbers at year 2013 while the combined horse power continue to increase. This means there is an upgrading of the fishing vessels. The average fishing productivity of the fisheries in Kien Giang was slightly decreased in the same year (2013). He mention the main fishing method to catch mackerel in Phu Quoc is by using of purse seiners. According to him the fishing season of *Rastrelliger sp.* (mackerel) is from September to March of next year. He informed also that at the traditional fishing grounds in Phu Quoc, mackerel accounts for 70-80% of the total catch of mackerel purse seiners, the remaining catches are sardines and others. He also added information on the anchovy fishery which is very popular for fish sauce making. The fishing season is from March to September.

12. Concerns were raised on how the availability of data of fishing vessel/ boat and fishing gears operating in Southwest area and how the catches being reported were linked to the areas of fishing and how are the availability of data on fishing vessel registration in concerned provinces connected to statistics of catches from vessels operating in the trans-boundary area.

13. A second concern was related to the migration of species, spawning season and fishing ground especially in South China Sea with a question on existing studies on breeding and spawning ground in Vietnam. The representative from Vietnam referred to a meeting in Japan that he had attended where they had concluded that spawning ground, especially for mackerels, were found in Thai waters with mackerels migrating to Cambodian and Vietnamese waters. To provide further information, it was suggested that studies should be conducted on physio-chemical, larvae and egg distribution including stock assessment on the target species in specified study areas and neighbouring waters.

## **V. COUNTRY REVIEWS BASED ON COMPONENTS UNDER MOA**

### **5.1 Legal Framework**

14. The representative from Cambodia, *Mr. Ing try* provided brief points on the existing national fishery legal framework of Cambodia which for fisheries management in Cambodia is divided on the responsibilities between central and local governments. At central level, the Fisheries Administration of the Ministry of Agriculture, Forestry and Fisheries is responsible while and at the local level, fisheries are managed by the Provincial Fishery Administration Cantonment. The Cantonment has the necessary powers to ensure compliance with the law in the area under their jurisdiction.

15. He informed the Meeting on the Cambodian management of fisheries resources, Cambodia identifies a range of control measures to be used as main management tools such as fishing license/permits to commercial fishing vessel, a license for offshore boats, license for foreign vessel fishing in Cambodian waters, prohibition of illegal fishing practices/methods, prohibition to trawling in waters less than 20 meter deep, the protection of mangrove areas, coral reef and sea grass beds. He also mentioned that there are zoning schemes for small scale fisheries and enforcement of closed fishing season from 15 January to 31 March.

Furthermore, the Royal Decree on establishment of community fisheries was signed on 29 May 2005, and Sub-decree on community fisheries management was promulgated on 10 June 2005. To reduce illegal fishing, the law allows serious penalties to be applied to those who break the law including government officers. To investigate, prevent and counteract illegal activities and compile documents for submission to courts the FiA are considered as a “judicial fisheries police”.

16. *Mr. Tran Van Luan*, the representative from Vietnam presented an update on the recent national fisheries legal framework of Vietnam. He discussed the fisheries management responsibility and its structure under the fishery laws of Vietnam series of 2003, in terms of protection and development of fisheries resource, capture fisheries and fisheries aquaculture. He also mentioned and made reference to some of the decrees made by the government related to fisheries management including the ministerial legal documents in terms of boat registration, trading and production of fisheries related occupations, fishing behaviours, fishing capacity, geographical zonation and fishing operations at sea. His presentation is shown in **Annex 7**.

17. In response to the question on any regulation or scheme to report the landing catches to the authorities in Vietnam, it was informed that in Vietnam the record of catch and fishing vessels are provided by fishing logbook that are to be kept on to fishing boats depending on the size of the boats. The documents are well inspected and Vietnam also collect data from landing sites for statistical purposes.

## **5.2 Management measures of trans-boundary species**

18. *Mr. You Chanpraset*, Deputy Director of Fisheries Conservation Department, Fisheries Administration, Cambodia, gave a presentation on identified important trans-boundary species such as mackerel, neritic tuna, anchovy, as well as on endangered species like dugong, dolphin, sea turtle and seahorse. He further continued to discuss management measures needed for the conservation and protection of these marine species. Measures that would include the rehabilitation of identified critical and threatened aquatic habitats. He also stressed the need to strengthen the fishery law enforcement which is very vital to the conservation and management of marine fishery resources. The presentation appears in **Annex 8**.

19. Suggestion was made by *Ms. Rebecca Andong* to consider and identify the strength and weaknesses or gaps between two countries. The identified differences (and similarities) would provide a good basis to guide the continued discussion and preparation process of the joint activity workplan.

20. The representative from Vietnam, *Mr. Tran Van Cuong* presented the country review on management measures of trans-boundary species. He informed the Meeting on the marine research programs in the trans-boundary waters in the south-western part of Vietnam in the provinces of Kien Giang (Vietnam) that borders to Kampot (Cambodia) in 2000-2006 and 2011-2015. He pointed on the status of important trans-boundary species such as anchovy, blue swimming crab and mackerels. Though there is not much available information on biomass, catches, fishing effort, etc. of mackerel groups, anchovy species and Neritic tunas, he still emphasized that, based on available date, protection of spawning/breeding areas should be implemented in the trans-boundary areas. Based on the findings of surveys of blue swimming crab in Kien Giang province, he also informed that a release program for

fingerlings or other resource enhancement programs should be carried out in order to allow the blue swimming crab resources to recover. His presentation appears in **Annex 9**.

21. The representative from Cambodia, *Mr. Ing Try* suggested that before the two countries will further develop a study, both countries should identify and prioritize the trans-boundary species to be studied. In this connection, the representative from the Institute of Oceanography of Vietnam, recommended that both countries should consider develop a study on dugong, dolphin, sea turtles as Kien Giang province has a large area of seagrass that could be a spawning ground of such species and therefore protection measures might be needed. In this regard, the representative from Cambodia suggested that the second phase of the UNEP/GEF South China Sea project where Cambodia and Vietnam are actively involved would address the declining fishery resources and critical habitats.

22. The representative from Cambodia informed the Meeting that several trans-boundary species especially sea turtle, dugong, dolphin are protected based on fishery laws of the country and international framework that the country complies with. He then suggested that the existing framework would not necessary to strengthen at the moment. Nevertheless, a study on the migratory route is more essential in order to prevent or prohibit some activities on certain period or areas. While agreeing with Cambodia, the representative from Vietnam raised that shared stock is also important for livelihood of people in the areas and both countries should have enough justifications before issuing any relevant measures. The representative from SEAFDEC pointed out that seasonal changes in migration of trans-boundary species should be considered and both countries should also include seasonality in the approach to cooperate with other agencies/sectors for improving management of these trans-boundary species

### **5.3 Marine capture fisheries, combating illegal (IUU) and destructive fishing**

23. *Mr. Heng Sotharith*, Deputy Director of Department of Fisheries Affairs (Cambodia) informed the Meeting on the current status and numbers of marine fishing vessels/boat in Cambodia. He explained the necessary obligations that apply to every fishing vessel before being allowed to operate in the national waters of Cambodia. License, technical inspection book, fishing logbook are required before and during fishing operations as means to improve fisheries management and to minimize illegal fishing. He stressed that there were existing activities ongoing to solve and minimize illegal fishing. The strengthening of law enforcement is one of the solutions to solve the problem. He also provided information on other suggested solutions to prevent and avoid illegal (IUU) and destructive fishing such as capacity-building (workshops) and to initiate activities to develop national plans of action (NPOAs). For further reference to his presentation see **Annex 10**.

24. A clarification was requested on the renewal of the license to be issued to the fishing boat owner by 1<sup>st</sup> of January or by New Year every year. The concern was that if all licenses should be renewed at the same time, and at a time when many would like to be out of office, the offices would be very bust and licenses might not be issued in time. However, the schedule of renewal license was already set by FiA and the licenses needs to be renewed at that day.

25. *Mr. Tran Van Luan*, the representative from the Department of Capture Fisheries and Resource Protection of Vietnam provided an updated on the status of fishing vessels and levels of production in Kien Giang province. There is a decline in fishing effort but an overall

increase in fisheries production due to increase of aqua culture production. He further reviewed the national legal and policy framework and the international fisheries policy instruments towards sustainable development in Vietnam. The regulations include a fishing zonation system, vessel marking and the logbook system to control and minimize illegal fishing in the country. He also presented the Vietnamese vessel monitoring system (VMS) which were installed on industrial vessels doing offshore fishing. The purpose is to monitor the actual position of fishing vessels and for search and rescue in times of distress. He also discussed some strategies to combat illegal and destructive fishing practices such as cyanide and explosive fishing. The presentation appears at **Annex 11**.

26. Presently, there are 3,000 VMS units installed in fishing vessels, however, a concern raised by the Meeting was how often the fishers transmit data and position to main base to provide information on the location of the vessel and the catch per day. In response to this matter, Mr. Luan replied that they monitor the vessels and they are required to transmit information on their position every two (2) hours, including the catch information on the fish species and weight.

27. *Mr. Raja Bidin* stated that sometimes the fishermen turn off the system of VMS as they do not like the vessel to be tracked. Therefore, he suggested that the countries should develop a clear regulation or law on the use of VMS and incorporate a provision of higher penalty than usual in order for them to follow regulations and to use the system.

## **VI. GROUP DISCUSSION AND PRESENTATION ON THE WORKPLAN FOR THE THREE (3) COMPONENTS**

28. Following the set of presentations that each country provided to the Meeting, participants were divided into three groups, based on their expertise and experiences in the field of fisheries management. The parallel group discussions focused on the earlier identified three (3) components namely: Group 1: Legal Framework, Group 2: Management Measures of Trans-boundary Species and Group 3: Marine Capture Fisheries, and Combating Illegal (IUU) and Destructive Fishing Practices.

29. Every component assigned facilitators to direct the discussions. Ms. Jenny Nord facilitated on the legal framework component, Mr. Raja Bidin Bin Raja Hassan was assigned to facilitate management measures of trans-boundary species and Ms. Rebecca F. Andong was assigned to Marine Capture Fisheries, Combating illegal (IUU) and Destructive fishing Practices. The three groups discussed and identified lists of priority issues, doable activities and they ranked activities according to the level of priority: furthermore, they indicated responsible agency/s and person/s for the implementation in each country, including potential funding agency. The outputs of each group are shown in the **Annex 12**.

30. After the deliberation of the outputs, the Secretariat consolidated the three group outputs in one matrix, refer to **Annex 13**.

## **VII. SUMMARY AND WAY FORWARD**

31. The Meeting noted that it is important to consider the scientific data that is available on common species when discussing the management plans for mackerel and other important species. However, information from both countries should be based on and presented in a

similar format. In this regard, SEAFDEC is requested to provide technical inputs for the countries to develop the format.

32. The Meeting noted that the next meeting would be in Cambodia during August or September 2014 (6 months after this Meeting). The place will be decided and information provided later. The Meeting was suggested that before the next Meeting, the following steps should have been taken:

- Establish Working Groups to harmonize the template formats for data collection and presentation;
- Compile available data and information, together with additional surveys including information on breeding areas of mackerel; and
- Awareness-raising on laws and regulations including organization of Workshops/Training events on the legal frameworks in Cambodia (Kep, Kampot, Sihanouville) and Vietnam (Ha Tien, Phu Quoc, Kien Luong), (to be implemented prior to next meeting – August/September 2014)

33. The Meeting also agreed that the agenda of the next Meeting should be based on the Components of the MOA namely: 1) Legal framework; 2) Trans-boundary species and 3) Marine Capture fisheries as well as to include in the Agenda steps to follow-up/finalize the priority Workplan (based on the outputs from March 2014). However, the proposed Agenda will be circulated for feedback from both countries prior to the Meeting.

## **VIII. CLOSING OF THE MEETING**

34. *Mr. Ing Try* stated that the outputs from the group discussion would be step on the way to further define project related activities for the conservation of fishery resources in the trans-boundary areas and for the sustainable use of fishery resources.

35. Likewise, *Ms. Nhung*, thanked the SEAFDEC-Sweden project for organizing this Meeting, she thanked also the facilitators and observers coming to help and mediate during the discussion. She also thanked the participants from both countries.

## Annex 1

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## PROVISIONAL PROSPECTUS

### I. BACKGROUND

The issues on overcapacity and uncontrolled fisheries are global concern. It is necessary to seriously consider, in cooperative manner, effective ways to improve the management of fisheries by controlling the active fishing capacity and to reduce illegal, unreported and unregulated (IUU) and destructive fishing. In effort to improve sustainability of this sector, attempts are being made by fisheries agencies and managers, however, by nature of fisheries –the migration of fish and the mobility of people and vessels involved in fishing sector, fisheries agencies could not manage these things alone. Therefore, there is a need for inter-agency cooperation and agencies at local, regional, sub-regional and/or bilateral levels to recognize and to work together to develop measures to improve fisheries management, control/manage fishing capacity, to build MCS Networks and to safeguard important habitats.

The importance of global instruments such as the UN Law of the Sea Convention (UNCLOS 1982), the Code of Conduct for Responsible Fisheries (CCRF), and the Ecosystem Approach to Fisheries in promoting regional and sub-regional discussions and agreements should be recognized. In the Southeast Asian region, ASEAN and SEAFDEC have since many years provided a forum for dialogue among countries in aspects related to fisheries, economic cooperation and social development. As the background shows there is a momentum growing in the promotion of regional and sub-regional cooperation in Southeast Asia. SEAFDEC and the SEAFDEC-Sweden project is well placed to build upon some of the issues – and opportunities – that has been identified as matters of common management challenges for Southeast Asia and the Andaman Sea sub-region.

### II. RATIONALE

In the Gulf of Thailand, the UNEP/GEF South China Sea (UNEP/GEF/SCS) project entitled “Reversing Environmental Degradation Trends in the South China and Gulf of Thailand” implemented during 2002-2008 took a major leap in formalizing regional marine environmental cooperation in the South China Seas and the Gulf of Thailand and in support to the undertaking of substantive cooperative activities to address marine environmental problems. Cambodia and Vietnam in particular, with the mutual interests of both countries to promote cooperation for the achievement of their parallel objectives in fisheries management and coastal development together with their common concern on implementing sustainable development and responsible fisheries management, conservation, and utilization of marine living resources. Furthermore, to underline the importance of fisheries the two countries developed the **Memorandum of Understanding on Bilateral Cooperation in Fisheries Sector** in 2011. With that MoU as basis, actions have been carried out such as, translation of Cambodian Fisheries Law to Vietnamese language, the exchange information and experiences on crab bank, establishment of Cambodian coastal alliance in order to support fisheries sector in implementing joint actions, the development of the Memorandum of Agreement (MOA) between Kien Giang Province of Vietnam and Kampot Province of Cambodia etc. The fishery authorities of the two countries have continued by conducting bi-annual meetings to review the implementation of activities under the MOU. However, collaboration from other related agencies in fisheries resources and habitat management still need to be strengthened and the two countries need to explore options for an MOA providing directions for continued cooperation.

The two countries are expressed their willingness to activate and strengthen collaboration in order to enhance the trans-boundary fisheries resources management including capacity building of human resources who utilize and manage the resources. In order to strengthen the collaboration between the two countries, SEAFDEC through the SEAFDEC-Sweden project are requested to provide support to the dialogues/discussions and to agree on relevant activities to spearhead cooperation on the management of the utilization of trans-boundary fisheries resources and on the conservation of

habitats, including efforts to improve livelihood conditions of fisher-folks in designated areas. The MOA for continued collaboration would be developed in the spirit of with the MOU signed in 2011. The scope of collaboration would be extended to include other agencies (than fisheries) responsible for resources and habitat management, improving livelihood of people, including local agencies and NGOs.

This event is organized in direct follow-up to the Roundtable Discussion Meeting of Joint Fisheries Management between Cambodia and Vietnam that was held back-to-back with the 4<sup>th</sup> Meeting of the Gulf of Thailand on 17 December 2013 in Bangkok. The Meeting was attended by the representatives from the Fisheries Administration (FiA), the Ministry of Agriculture, Forestry and Fisheries, the Kingdom of Cambodia; and the Directorate of Fisheries, the Ministry of Agriculture and Rural Development, the Socialist Republic of Vietnam. The Meeting agreed in principle to expand the existing cooperation between the two countries to cover the scope of conservation of trans-boundary species involving the officials from the central government and provincial levels.

The Meeting in December 2013 also agreed to develop an MOA under framework of the MOU signed between Fisheries Administration of Ministry of Agriculture, Forestry and Fisheries, the Kingdom of Cambodia and Directorate of Fisheries of the Ministry of Agriculture and Development of Vietnam on 28 December 2011. The collaboration would focus on; 1) exchange of information related to fisheries management, research and development, such as laws and regulations, statistical data, research results and publications, policy papers, extension materials, etc.; 2) identification and implementation of strategies and schemes for joint management of shared trans-boundary fishery resources; and 3) and marine capture fisheries and safety at sea. To support communication and cooperation in priority areas efforts would be made to strengthen “human resource development in the fisheries sector of both countries” in areas of relevance to three components indicated above.

The Meeting agreed to establish the “Joint Committee” to support the implementation of the MOA. The Joint Committee will develop their own national working group(s) to support the implementation activities to address specific identified subject areas. At this junction, indicative timelines for the implementation of planned activities for 2014 should be established. As part of the initial set of planned activities the 1<sup>st</sup> meeting of the Joint Committee should be conducted in March 2014. The 1<sup>st</sup> meeting of the Committee would discuss and finalize the (zero draft) MOA and work out a detailed plan of activities for the next coming year(s).

The Committee meeting is to be organized back-to back with a workshop to review and share information on relevant laws and regulations applicable to each of the countries (as one of priority actions indicated during the 17 December 2013 Roundtable Meeting).

### **III. OBJECTIVES OF THE FIRST MEETING OF THE JOINT COMMITTEE**

The intention of this event is to provide a forum for the two countries i.e. Cambodia and Vietnam to discuss and finalize the MOA for cooperation on elements of common priority with regards to fisheries and habitat management. A detailed work plan for implementation under this MOA as well as mechanism for the two countries to work together towards the establishment of the MOA would be also discussed and agreed.

### **IV. EXPECTED OUTPUTS**

The Memorandum of Agreement (MOA) between Cambodia and Vietnam with the objective to enhance communication and cooperation in areas of common concern, such as 1) Exchange of information related to fisheries management, research and development, such as laws and regulations, statistical data, research results and publications, policy papers, extension materials, etc; 2) Identification and implementation of strategies and schemes for joint management of shared trans-boundary fishery resources; and 3) Marine capture fisheries and safety at sea, is expected to be finalized and agreed upon (signed) at this Meeting. The MOA would provide a platform for the two

countries to implement collaborative activities in the next coming years. A detailed workplan including timelines and responsible agencies would also be developed.

**V. DATE AND VENUE OF THE MEETING**

The First Meeting of the Joint Committee on Fisheries Management between Cambodia and Vietnam will be organized from 5-7 March 2014 in Phu Quoc, Vietnam.

**VI. PARTICIPANTS OF THE MEETING**

The expected participants are the officials from the central government and provincial levels responsible for the issues identified in the draft MOA. The participants also included local agencies and NGOs who are working on the identified areas.

### **Annex 3**

#### **AGENDA**

- Agenda 1      Opening of the Meeting
- Agenda 2      Introduction and arrangement of the meeting
- Agenda 3      Finalization of the Memorandum of Agreement (MOA)
- Agenda 4      Status of fisheries resources
- Agenda 5      Country reviews based on components under MOA
  - 5.1      Legal framework
  - 5.2      Management measures of trans-boundary species
  - 5.3      Marine capture fisheries, combating illegal (IUU) and destructive fishing
- Agenda 6      Group discussion and presentation of the workplan for the three (3) components
- Agenda 7      Summary and way forward
- Agenda 8      Closing of the meeting

MEMORANDUM OF AGREEMENT  
BETWEEN  
THE FISHERIES ADMINISTRATION  
MINISTRY OF AGRICULTURE, FORESTRY AND FISHERIES  
KINGDOM OF CAMBODIA  
AND  
THE DIRECTORATE OF FISHERIES  
MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT  
SOCIALIST REPUBLIC OF VIETNAM

**PREAMBLE**

WHEREAS the Fisheries Administration of the Ministry of Agriculture, Forestry and Fisheries, hereinafter referred to as FiA with offices at 186 Preah Norodom Boulevard, Khan Chamcar Mon, Phnom Penh, the Kingdom of Cambodia, represented herein by Mr. Ing Try, Deputy Director-General of the Fisheries Administration, Kingdom of Cambodia;

WHEREAS the Directorate of Fisheries of the Ministry of Agriculture and Rural Development hereinafter referred to as DFISH with offices at 10 Nguyen Cong Hoan, Ba Dinh, Hanoi, the Socialist Republic of Vietnam, represented herein by Dr. Pham Anh Tuan, Deputy Director-General of the Directorate of Fisheries, Socialist Republic of Vietnam;

WHEREAS, this Memorandum of Agreement (MOA) is entered into force between FiA and DFISH under the purview of the Memorandum of Understanding on Bilateral Cooperation in the Fisheries Sector between Fisheries Administration, Ministry of Agriculture, Forestry and Fisheries, Kingdom of Cambodia and Directorate of Fisheries, Ministry of Agriculture and Rural Development, Socialist Republic of Vietnam signed on 28 December 2011;

WHEREAS, this Memorandum of Agreement (MOA) is developed to support both Cambodia and Vietnam in implementing the MOU through collaborative activities of these two countries with support in the process of cooperation, from the SEAFDEC-Sweden Project;

NOW, therefore, in consideration of their mutual desire for cooperation, FiA and DFISH agree on the following:

**Article I**

The objective of this Memorandum of Agreement is to enhance communication and cooperation in areas of common concern, specifically on:

1. Exchange of information related to fisheries management, research and development, laws and regulations, statistical data, research results and publications, policy papers, extension materials, etc.;
2. Identification and implementation of strategies and schemes for joint management of shared trans-boundary fishery resources; and
3. Marine capture fisheries and safety at sea.

**Article II**

The three main components identified jointly by both countries, would be conducted under this MOA. These are: 

**Component 1: Legal framework**

This component includes activities that focus on sharing of information on the scope and rationale of national laws and regulations of relevance to the management of fisheries and related aspects.

**Component 2: Management measures on trans-boundary species**

This component includes activities related to the compilation of available data and information on trans-boundary species including endangered species with a view to identify areas needing additional research and surveys to form the basis for recommendations on “strategies and schemes for joint management of shared trans-boundary fishery resources”.

**Component 3: Marine capture fisheries and safety at sea including combating illegal and destructive fishing**

This component includes activities related to awareness-raising on the need to eliminate illegal and destructive fishing practices including capacity building activities on combating illegal fishing. This may include improvement of safety at sea measures, identification of illegal and destructive fishing activities and improvement of regulations and reporting.

**Cross-cutting: Capacity Building**

In order to support communication and cooperation in the abovementioned priority areas, efforts would be made to strengthen “human resource development in the fisheries sector of both countries”, in areas of relevance to the three components indicated above.

**Article III**

This MOA will be governed by the following considerations:

1. Each party will nominate members of the joint committee, which will be responsible for executing the overall activities under the terms of this agreement, as well as identifying the focal points for each component in Article II;
2. The initial period of validity of this Memorandum of Agreement is from the date of signing until the end of 2016;
3. The annual plan of activities under this Memorandum of Agreement including the indicative financial resources should be prepared and agreed by and between the two parties;
4. This Memorandum of Agreement has been done in English in two copies with one copy provided to each Party; and
5. Dispute and disagreement relating to this Memorandum of Agreement will be resolved amicably by negotiations between the FiA and DFISH.

The Memorandum of Agreement is made on 01 April 2014.

For and on behalf of  
Fisheries Administration



Mr. Ing Try  
Deputy Director-General,  
Fisheries Administration of Cambodia

For and on behalf of  
Directorate of Fisheries



Dr. Pham Anh Tuan  
Deputy Director-General  
Directorate of Fisheries of Vietnam



# Study on Status of Fisheries Resource along Coastal of Cambodia: “Baseline Survey on Situation in Trans-boundary Fisheries Area between Cambodia and Vietnam in GoT, Collect and Compile Information on Mackerel, Neritic Tuna, Anchovy and Related Species”

Leng Sam Ath

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Study on Status of Fisheries Resource along Coastal of Cambodia:  
 “Baseline Survey on Situation in Trans-boundary Fisheries Area between Cambodia and Vietnam in GoT, Collect and Compile Information on Mackerel, Neritic Tuna, Anchovy and Related Species”  
 (Cambodia site: Preah Sihanouk, Kampot and Kep Provinces)



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The 1<sup>st</sup> Technical Meeting of Joint Working Team for FM between Cambodia-Vietnam 5-7 March 2014, Phu Quoc Island, Vietnam

## Outline of Presentation

1. Introduction
2. Literature Review
3. Habitat
4. Fishing Capacity
5. Mackerel Fishing Season
6. Catch Estimation of Mackerel, Neritic Tuna and Anchovy
7. Fish Landing Site
8. Mackerel Production, Processing and Marketing
9. Way forward to study

The 1<sup>st</sup> Technical Meeting of Joint Working Team for FM between Cambodia-Vietnam 5-7 March 2014, Phu Quoc Island, Vietnam

## 1. Introduction

- This presentation shows a preliminary report on output of a study on **Status of Fisheries Resource along Coastal of Cambodia**.
- Any comments will use to improve final report which be finalized in June 2014.



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## Significant of study

**Conduct** “baseline survey on situation in trans-boundary fisheries area between Cambodia and Vietnam in GoT, collect and compile information on Mackerel, Neritic Tuna, Anchovy and related species” in trans-boundary area between Cambodia (Kep, Kampot & Preah Sihanouk provinces) and Vietnam (Kieng Giang province and Phu Quoc island).



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## Objective of Study

- Conduct a baseline survey on fishing capacity: number of fishing boats, fishing gears, fishers and landing sites.
- Collect information on Mackerels (*Rastrelliger spp*), Neritic Tuna and related species, contribution in total catch, spawning season, fishing ground and fishing season.
- Prepare report to synthesize the results of the above-mentioned activities.



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## Methodology of Study

- Group discussion with fishers, middlemen, processors.
- Individual interview to fishers, middlemen, processors
- Collaborate with relevant fisheries cantonments
- Information collection (primary and secondary data)
- Compile information and reporting.



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## Area of Study

In trans-boundary area between Cambodia and Vietnam. In Cambodia site: Kep, Kampot and Preah Sihanouk provinces.

- There are 10 sites selection in study:
  - 3 in Kep: O Krasa, Prey Thom/Phum Thmei and Angkol.
  - 4 in Kampot: Prek Chak/Lok, Spean Khiev/Kbal Romeas, Troey Koh, and Trapaing Ropov.
  - 3 in Preah Sihanouk: Stoeung Hav, Tomnub Rolok, and Prey Nub/Koh Kchang.

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## 2. Literature Review

### Coastline & Resources

- Cambodia has coastline of 435 km which covers four provinces stretches between Vietnamese borders in the south to Thai border in the west.
- The provinces located along the coastline of Cambodia are Kep (26 km), Kampot (67 km), Preah Sihanouk (105 km), and Koh Kong (237 km).
- There are 525 species of marine finfish, 20 species of marine crabs, 42 species of marine gastropods, 24 species of marine bivalves, and 11 species of marine mammals (Tana 1997, Try 2003).
- The marine fish stocks are a heavily exploited resource due to the high density of the coastal population.

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## 2. Literature Review (Con't)

### Sea floor & Ecosystem

- There are two zones concerning fisheries in Cambodia's EEZ:
  1. From the high water mark to a depth of 20m is the inshore zone; and
  2. From the outer boundary of the inshore zone to the border of the claimed EEZ is the offshore zone. As maximum depth of Cambodia's sea, in the GoT is not more than 80m, there is not true offshore zone (deeper than 200m).

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## 2. Literature Review (Con't)

- **In Kampot Bay:** the ecosystem is characterized by swampy, sandy and rocky habitats with little freshwater influence.
- Salinity near the shore varies between 30.5 ppt and 32 ppt during the rainy season and increases up to 32.5 ppt to 33.4 ppt during dry season.
- The deepest area (< 20m) is in the trans-boundary water area near Phu Quoc Island (Koh Tral), in general the depth of water is from 5-10m.
- **In Kampong Som Bay:** is normally deeper than Kampot bay. This area is the main habitats of fishes, jellyfish, mollusks, dolphins, octopus, and other sea animals such as hawksbill, loggerhead, and green turtles.

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## 2. Literature Review (Con't)

- **In Koh Kchang area,** (Prey Nup district, Phreah Sihanouk province) is the main harvesting area for blood cockle (*Anadara spp*) and short-neck clam (*Paphia undulate*) and also a nursing ground of mud crabs, mangrove crabs, shrimp and other crustaceans.



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## 3. Habitat

- The main habitat contains in these areas are mangrove, seagrass and coral reefs:
  - **Mangrove forests:** A total area of mangrove is about 33,087 ha (MLMUPC, 2006)
  - The mudflats in front of mangrove forests harbor a rich fauna of bivalves. The main fishing activity in mangrove forests is for snail, clam, crabs especially mud crab and mangrove crabs, and other crustaceans.

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## 3. Habitat (Con't)

### Seagrass beds:

- There are 9 species of seagrasses. A total of seagrass beds is 32,494ha (DoF, 2004 b), of which the seagrass area located in Kampot territorial covers 25,241ha (about 78%)
- These seagrasses are a main habitat of mollusks such as blood cockle, clam, and the feeding ground for a number of resident and migratory fishes, squids, octopus and crustaceans. They are also the main habitat of dugong, which migrates to this area (Nov-Jan).

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## 3. Habitat (Con't)

**Coral reefs:** are most common around offshore and inshore islands. A total area is about 2,806ha (MoE, 2007).

- Tana (1997): only 24 species of *hermatypic* corals and 14 species of soft corals (*octocorals*) had been identified.
- In 1998, a limited survey carried out in the Preah Sihanouk province, 45 species of *hermatypic* corals were identified (CZM 1999c).
- in 1998, a survey around Koh Tang, reported "at least 70 species" of hard corals (Nelson 1999).
- Surveys in Koh Kong province, 67 species of hard corals and 17 soft corals were identified (CZM 2002a).

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## 4. Fishing Capacity

### Fishers:

- Family or artisanal and middle scales of fishers
- Most fishers who fishing in open sea are men and full time in fishing (all most 100%)
- Most fishers who fishing in the beach, swamp, mangrove area and rice field are women and children (about 60%).



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## 3. Fishing Capacity (Con't)

### Fishing boats:

- Most of fishing boats are smaller boats and have engine power less than 30 hp.
- Total boats is **6,463**, in which:
  - 3,792 boats (59%) have engine power under 10 hp,
  - 2,132 boats (33%) have engine power from 10-30 hp,
  - 160 boats (2%) have engine power from 30-50 hp,
  - 379 boats (6%) have engine power above 50 hp.
 These number exclude boats without engine.
- This existing data does not enable the estimation of the number of fishing boats by the different types of fishing gears used. Some fishing boats may operate with more than one type of fishing gear and they change the type of gear used according to the season or abundant species of resources.



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## 3. Fishing Capacity (Con't)

### Fishing gears

There are 2 categories: small or artisanal scale and middle scale fishing gears

- The proclamation of MAFF identified the types of small-scale and middle-scale fishing gears
- The middle scale of fishing gear used are required to pay tax to government, but the small-scale is not required to pay tax.



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## 5. Mackerel Fishing Season

### Map showing the fishing Area



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## 3. Fishing Capacity (Con't)

### Number of fisher in coastal area in Cambodia

Province	Fishers who fishing in open sea		Fishers who fishing in near beach, swamp and rice field		Total	
	Family of Fisher	Fisher	Family of Fisher	Fisher	Family of Fisher	Fisher
Kep & Kampot	1,096	2,192	8,610	17,220	9,706	19,412
Preah Sihanouk	1,630	7,120	15,000	31,100	16,630	38,220
Koh Kong	1,600	4,800	5,500	11,000	7,100	15,800
<b>Total:</b>					<b>33,436</b>	<b>73,432</b>

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## 3. Fishing Capacity (Con't)

### Number of Fishing Boats by engine hp in 2013

Province	hp<10	hp=10-30	hp=30-50	hp>50	Total
<b>Kep &amp; Kampot</b>	456	176	2		634
<b>Preah Sihanouk</b>	1,095	1,361	3	286	2,745
<b>Koh Kong</b>	2,241	595	155	93	3,084
<b>Total</b>	3,792	2,132	60	379	<b>6,463</b>



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## 3. Fishing Capacity (Con't)

### The main Fishing Gears Used in 2013

Fishing Gear (Called in English)	Fishing Gear (Called in Kh.)	Unit	Kep & Kampot	Preah Sihanouk	Koh Kong	Total
Trawl net	Ourn Ous	set	115	1,562	330	2,007
Beach Seine	Ourn Khov	set	20	3	0	23
Purse Seine/ring net	Ourn Tith	set	0	0	0	0
Anchovy Encircling seine	Ourn Kakeum	set	0	0	0	0
Drift Gillnet	Mong Beka	m	300	335,000	66,500	401,800
Mackerel Gillnet	Mong Kamong	m	27,000	132,000	205,400	364,400
Gillnet (catch multi-fish)	Mong Peak	m	10,500	255,000	70,600	336,100
Mullet Gillnet	Mong Kbork	m	10,500	45,000	49,000	104,500
Shrimp Trammel Gillnet	Mong Bangkear	m	87,000	138,000	51,700	276,700
Crab Gillnet	Mong Kdam	m	33,000	450,000	625,500	1,108,500

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## 5. Mackerel Fishing Season (Con't)

### Fishing season and effort

- Last survey by USSR's scientists and Cambodian indicated that high catches period of mackerel is from **Sept to Feb**, yet the peak period is in **December**.
- The fishers fishing mackerel in year round. They note that *R. kanagurta* is normally caught in offshore when *R. brachysoma* not abundantly in inshore.
- Most of fishing boats (long tail boat) use gillnets to catch in inshore and offshore approximately 25 days a month in year round. However, the drift gillnet for Spanish Mackerels operates only during night time and in dark moon period of the month.

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## 5. Mackerel Fishing Season(Con't)

### Spawning ground of *Rastrelliger spp*

- Cambodia's offshore waters are considered important spawning and nursing grounds for regional stocks of Indian and short mackerels.
- During rainy season the small fish of *R. brachysoma* observed that is caught in inshore area, such as near Koh Daekol, Koh Pours, Koh Thas, in front of Thmorsor and Stoeung Have areas, by trawlers.



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## 5. Mackerel Fishing Season(Con't)

### Spawning season of *Rastrelliger spp*

- The Fisheries Law of Cambodia ban to fish in closed season of Short and Indian Mackerel species, during the peak spawning period, from **15 Jan to 31 Mar**.
- Steamed fish processors observed that during **Jan-Apr** the steamed fish always break its belly because egg is bigger and this period is not good for this processing.
- It is believed that from **Jan to Aug** is the spawning period of *Rastrelliger spp*, because the most fish caught are observed having egg. A limited survey was conducted in Dec 2002 to Aug 2003.

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## 6. Catch Estimation of Mackerel, Neritic Tuna & Anchovy

### Marine catches

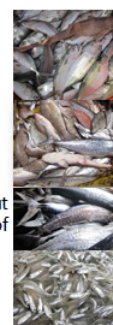
- The annual marine catches, from year 2010 to 2013, were estimated about **110,000 tons in average**. This number excludes the catches of subsistence and illegal foreign fishing.
- Table below shows an annual marine catches by coastal provinces:

Year	Kep & Kampot	Preah Sihanouk	Koh Kong	Total (ton)
2010	10,300	40,100	34,600	85,000
2011	9,500	9,500	42,000	91,000
2012	11,100	7,800	99,000	157,900
2013	19,476	7,800	40,320	107,596

The 1<sup>st</sup> Technical Meeting of Joint Working Team for FM between Cambodia-Vietnam 5-7 March 2014, Phu Quoc Island, Vietnam

## 6. Catch Estimation of Mackerel, Neritic Tuna & Anchovy (con't)

- Main species of mackerels contribute in marine catch include Short and Indian mackerel (*R. brachysoma*, *R. kanagurta*), Spanish mackerel (*Scomberomorus spp*) and Scads (*Atule mate* and *Megalaspis spp*) are observed about **5,455 tons** per year, contribute about **5.07%** of total marine catch.
- Main species of neritic tuna in the catch observed including *Sarda spp* and *Scomberoides spp* is about **1,534 tons** per year, contribute only about **1.43%** of total marine catch.
- For Anchovy is about **3,851 tons** per year and contribute **3.58%** of total marine catch.



The 1<sup>st</sup> Technical Meeting of Joint Working Team for FM between Cambodia-Vietnam 5-7 March 2014, Phu Quoc Island, Vietnam

## 6. Catch Estimation of Mackerel, Neritic Tuna & Anchovy (con't)

The main species of Mackerel, Neritic Tuna and Anchovy in catch (2013)

No	Species		Coastal Province			Total (tons)
	Scientific Name	Khmer Name	Kep & Kampot	Preah Sihanouk	Koh Kong	
1	<i>Scomberomorus spp</i>	Trey Beka	54	758	474	1,286
2	<i>Rastrelliger spp</i>	Trey Kamong	112	1,650	1,742	3,504
3	<i>Megalaspis spp</i>	Trey Kantuy Reoung	102	133	153	388
4	<i>Atule mate</i>	Trey Konkum	110	146	21	277
5	<i>Sarda spp</i>	Trey Chheam	81	347	431	859
6	<i>Scomberoides spp</i>	Trey Kalaing	19	-	656	675
7	<i>Anchovy</i>	Trey Kakoeum	35	3,356	460	3,851

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## 6. Catch Estimation of Mackerel, Neritic Tuna & Anchovy (con't)

### Contribution of *Rastrelliger spp*

- There are only two species of Short and Indian mackerel: *Rastrelliger brachysoma* and *Rastrelliger kanagurta* occur in coastal water of Cambodia.
- The contribution of *Rastrelliger spp* in total marine catch is **3,504 tons** per year, about **3.26%** (2013). During a study observed that *Rastrelliger brachysoma* in catch is more amount than *Rastrelliger kanagurta*, about 60%.

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## 7. Fish Landing Site

- Fish landing sites are mostly in private, located in house yard of people who build those for fish landing in fishing village.
- The fish landing sites are not separated from fishing villages/ locations and harbor facilities. Most landing sites/ harbors are small and rural, services and facilities are poor.
- A study found that at least **16 fish landing sites** are grouped in Kep, Kampot and Preah Sihanouk provinces. These fish landing sites are called as fishing location/village/area, it is not individual harbor in that area.
- In each fish landing site/area has many small harbors and their owner, for example:
  - In Tomnub Rolok has 55 owners,
  - In Stoeung Hav has 12 owners,
  - In Koh Khyang has 9 owners, and
  - In Tek Thla has 5 owners.



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## 7. Fish Landing Site(Con't)

The main Landing Site in Kep, Kampot & Preah Sihanouk provinces

No	Landing Site	Location/Area	# of owner	Province
1	PhnomLeav	PhnomLeav	n/a	Kep
2	O Krasa	O Krasa/Damnak Chambock	n/a	Kep
3	Trapaing Ropov	Trapaing Ropov	n/a	Kp
4	Kdat	Kdat	n/a	Kp
5	Krong Kampot	Krong Kampot/Kampong Bay	n/a	Kp
6	Spean Khiev	Spean Khiev/Kbal Romeas	n/a	Kp
7	Lok	Lok/Koh Knima	n/a	Kp
8	Phum Thkov	Phum Thkov	n/a	Kp
9	Tomnub Rolok	Tomnub Rolok	55	PS
10	Stoeung Hav	Stoeung Hav	12	PS
11	Koh Khyang	Koh Khorng/Prey/Nup	9	PS
12	Tek Thla	Tek Thla/Prey/Nup	5	PS
13	Koh Rong Sanlem	Koh Rong Sanlem	n/a	PS
14	Koh Rong	Koh Rong/Lor Tek Trey/Phum Daem Thkov	n/a	PS
15	Koh Rong	Koh Rong/Phum Prek Svay	n/a	PS
16	Phum Ong	Phum Ong/Ream	n/a	PS

The 1<sup>st</sup> Technical Meeting of Joint Working Team for FM between Cambodia-Vietnam 5-7 March 2014, Phu Quoc Island, Vietnam

## 8. Mackerel Production, Processing & Marketing

### Mackerel production

- Mackerel production includes Short body mackerel, Indian mackerel, Indo-Pacific mackerel, Spanish mackerel and island mackerel
- Production of mackerels in year 2010 to 2013:
  - Rastrelliger brachysoma* and *R. kanagurta* were harvested increasing from **2,416** to **3,504 tons**,
  - Scads (*Atule mate*) from **226** to **277 tons**,
  - Selar crumenophthalmus*, *Selaroides leptolepis*, *Megalaspis cordyla*, and *Selar boops* from **215** to **388 tons**,
  - Spanish mackerels (*Scomberomorus spp*) from **1,282** to **1,286 tons**.

These mackerel species contribute to 4.87% to 5.07% in total marine catches of **85,000 tons** (2010) to **107,596 tons** (2013).

The 1<sup>st</sup> Technical Meeting of Joint Working Team for FM between Cambodia-Vietnam 5-7 March 2014, Phu Quoc Island, Vietnam

## 8. Mackerel Production, Processing & Marketing (Con't)

- The mackerel in Cambodia is traditionally processed by salting and steaming.
- The steamed fish usually made from Short body and Indian mackerels (*R. brachysoma* and *R. kanagurta*) and Scad (*Atule mate*), which is locally called "**Trey Chamhoy**".
- The salted fish normally made from Spanish mackerel (*Scomberomorus spp*), which is called locally "**Trey Baub**".
- Most steamed fish production is for domestic market, but for salted fish is exported to Thailand market.



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## 8. Mackerel Production, Processing & Marketing (Con't)

Number of Steamed Oven and Salted Fish Production(2013)

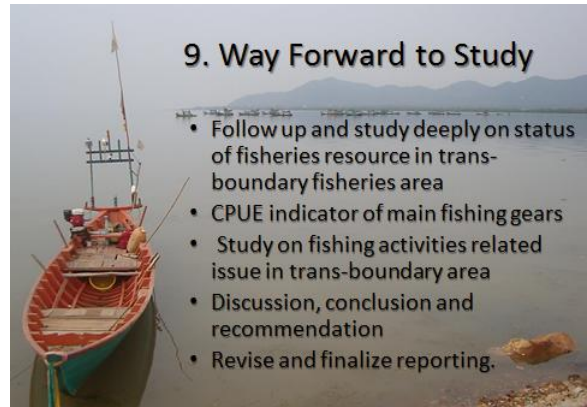
Province	Steamed fish oven (place)	Steamed fish production (ton)	Salted fish production (ton)
Kep	-	-	-
Kampot	5	357	-
Preah Sinanouk	23	540	490
Koh Kong	-	64	16
<b>Total</b>	<b>28</b>	<b>961</b>	<b>506</b>



The 1<sup>st</sup> Technical Meeting of Joint Working Team for FM between Cambodia-Vietnam 5-7 March 2014, Phu Quoc Island, Vietnam

## 9. Way Forward to Study

- Follow up and study deeply on status of fisheries resource in trans-boundary fisheries area
- CPUE indicator of main fishing gears
- Study on fishing activities related issue in trans-boundary area
- Discussion, conclusion and recommendation
- Revise and finalize reporting.



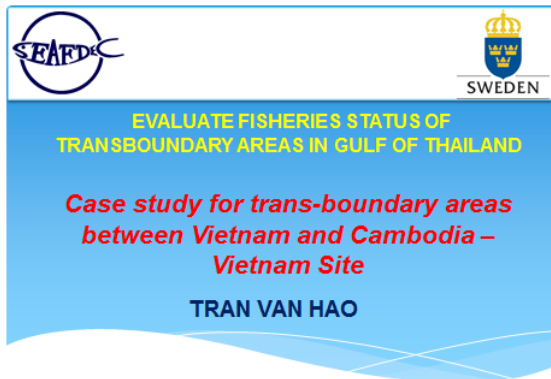
The 1<sup>st</sup> Technical Meeting of Joint Working Team for FM between Cambodia-Vietnam 5-7 March 2014, Phu Quoc Island, Vietnam

## Annex 6

### Evaluate Fisheries Status of Transboundary Areas in Gulf of Thailand: Case Study for Trans-boundary areas between Vietnam and Cambodia-Vietnam Site

Tran Van Hao

Researcher, Capture Fisheries and Resources Protection Department Research Institute for Aquaculture No. 3 (RIA 3), 33 Dang Tat St., Nah Trang, Vietnam



### I. INTRODUCTION (1)

Kien Giang province: 200 km coastline, 2 island districts (Phu Quoc island (573 km<sup>2</sup>) and Kien Hai archipelago) and more than 140 small islands with fishing areas is more than 63 thousand km<sup>2</sup>

- In Kien Giang fishing grounds: 71 families with 139 genera and 273 species of marine species (SEAFDEC, 2006)
- Stock capacity in Kien Giang areas: app 460 thousands tons: pelagic stock is 240 thousand tons and demersal fish is 220 thousand tons (SEAFDEC, 2006)

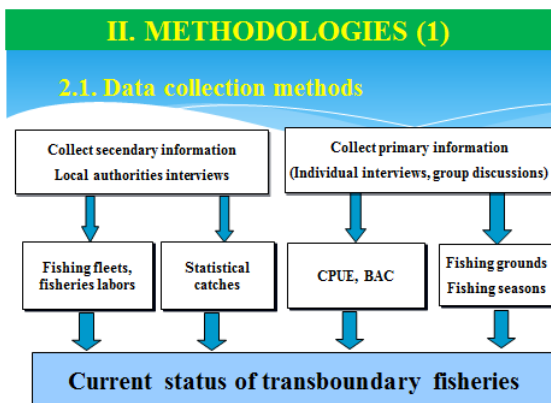


### I. INTRODUCTIONS (2)

**Objectives of study:**

Primary evaluation of fishing capacity in Kien Giang province which operate in trans-boundary areas between Vietnam and Cambodia in Gulf of Thailand: number of fishing vessels: by fishing gears, by localities, by fishing grounds, number of fishers and landing sites...etc

- \* Information about some target fisheries in trans-boundary areas such as mackerel species (*Rastrelliger spp*), anchovy, swimming crab (fishing gears, fishing season, fishing grounds, catches estimation...etc)
- \* Better manage and solve problems / conflicts on fisheries activities in trans-boundary areas.



## II. METHODOLOGIES (2)

2.2. Working time: From January to June, 2014

2.3. Catches estimation methods

$Y = CPUE * \text{potential fishing days} * \text{Number of fishing vessels} * BAC$  (FAO, 2002)

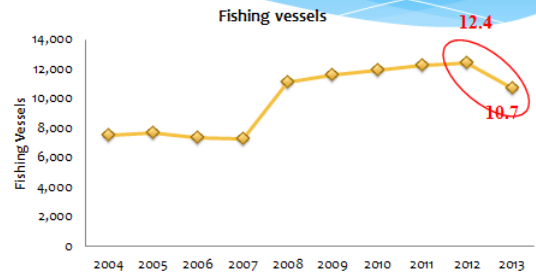
BAC: Boat active Coefficient

The catches will be estimated for each fisheries by groups of the size of vessels.

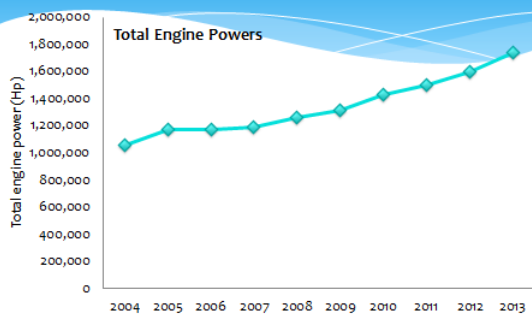
## III. PRELIMINARY RESULTS (1)

3.1. The trend of fisheries capacity in Kien Giang

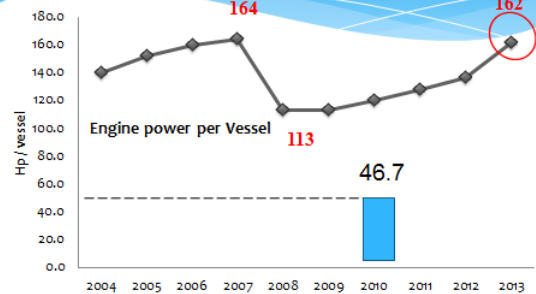
3.1.1. The number of fishing vessels



## The fishing efforts



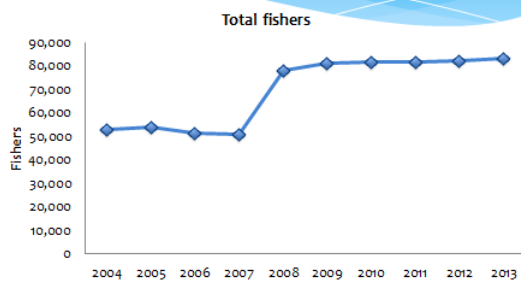
## The average engine power



## III. PRELIMINARY RESULTS(2)

3.1. The trend of fisheries capacity in Kien Giang

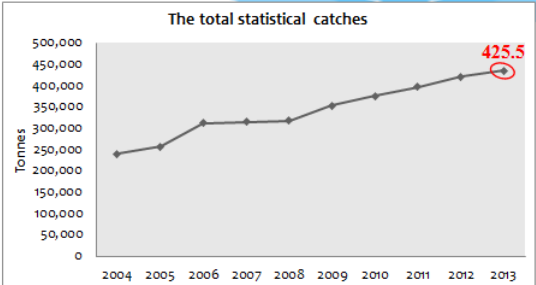
3.1.2. The total fishers (directly fishers on capture fisheries)

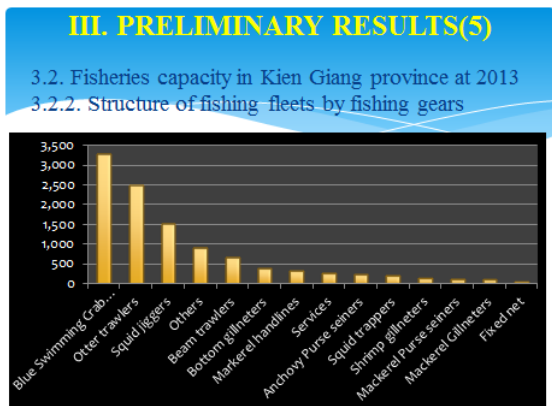
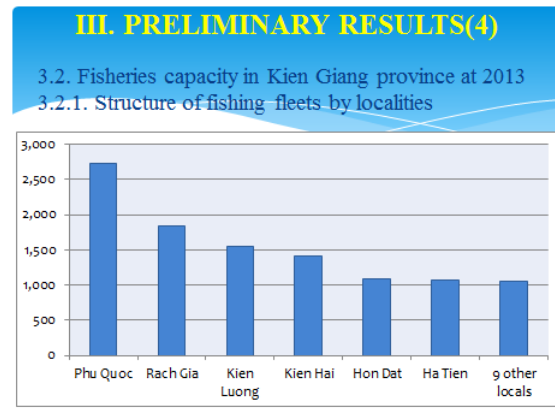
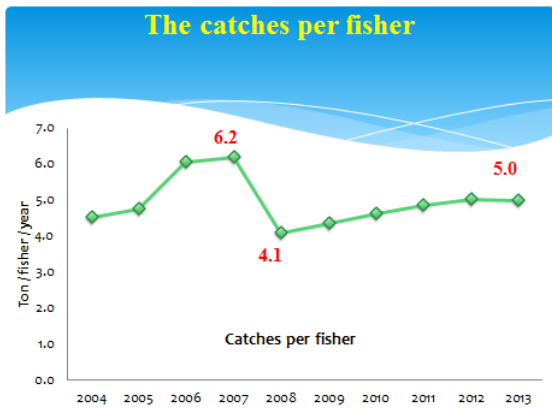
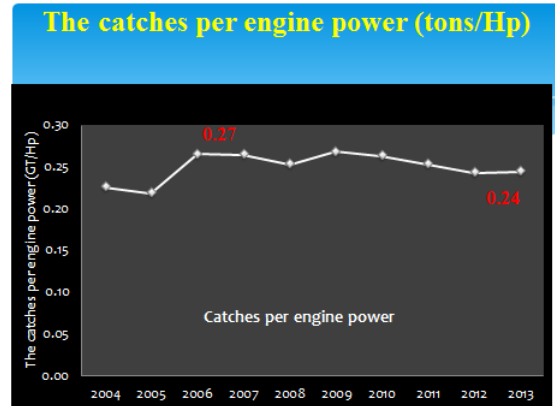
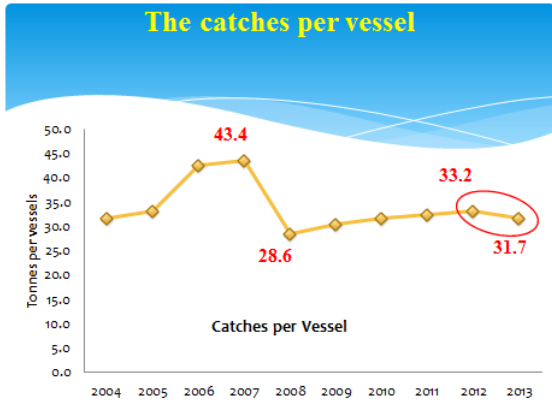


## III. PRELIMINARY RESULTS(3)

3.1. The trend of fisheries capacity in Kien Giang

3.1.3. The catches





### III. PRELIMINARY RESULTS(6)

3.3. Main fisheries with target species  
3.3.1. Mackerel (*Rastrelliger* spp) purse seine fisheries

Indian Mackerel

Class: [Actinopterygii](#)  
Order: [Perciformes](#)  
Family: [Scombridae](#)  
Genus: [Rastrelliger](#)

Species: *R. kanagurta*

Scientific name: *Rastrelliger kanagurta* (Curver 1817)  
Vietnamese name: Ca Bac Ma

### Rastrelliger spp purse seine fisheries

Short Mackerel / Short-bodied Mackerel Class:  
[Actinopterygii](#)  
Order: [Perciformes](#)  
Family: [Scombridae](#)  
Genus: [Rastrelliger](#)  
Species: *R. branchysoma*

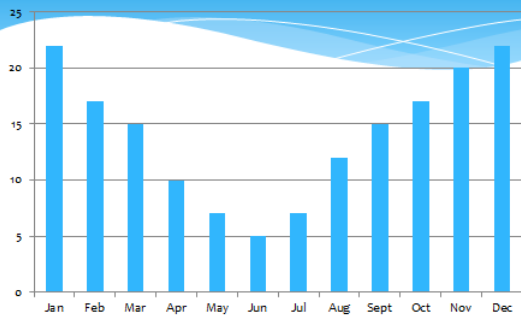
Scientific name: *Rastrelliger branchysoma* (Bleeker, 1851)  
Vietnamese name: Ca Ba Thu

### Fishing efforts of mackerel purse seiners

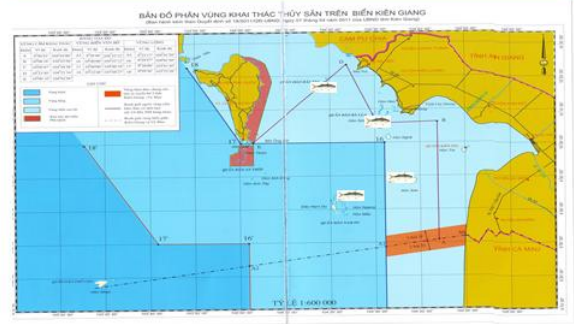
Localities	Small group < 90 Hp	Medium group 90 – 250 Hp	Large group Over 250 Hp	Total
Phu Quoc	13	7	46	66
Rach Gia	0	4	26	30
13 other locals	0	1	28	29
<b>Total vessels</b>	13	12	100	<b>125</b>
Sampled vessels	1	1	8	10



### Fishing seasons of Rastrelliger spp



### Fishing grounds of Rastrelliger spp



### CPUE indicators and estimated catches

Groups	Vessels	CPUE	BAC	Fishing days	Estimated catches	Number of samples
Small	13	1.2	0.7	170	1,856	1
Mid	12	1.7	0.8	190	3,101	1
Large	100	2.1	0.8	210	35,280	8
<b>Total</b>	<b>125</b>				<b>40,237*</b>	

(\*): Total estimated catches of purse seiners in Kien Giang, of which, Rastrelliger only accounted for 70-80%, the remaining is Sardine (herring) and some more others

### III. PRELIMINARY RESULTS (7) Anchovy purse seine fisheries

Anchovy species: 16 genus with 140 species. In this transboundary fishing grounds: 6 genus with 70 species

Class: Actinopterygii

Order: Clupeiformes

Family: Engraulidae

Genus: 16 genus (6 genus in GOT)

Species: 140 species (70 species in GOT)

5 main species in Phu Quoc: *E. heteroloba*, *E. punctifer*, *E. devisi*, *E. oligobranchus* and *E. purpurea* (Thi.D.V, 2007)

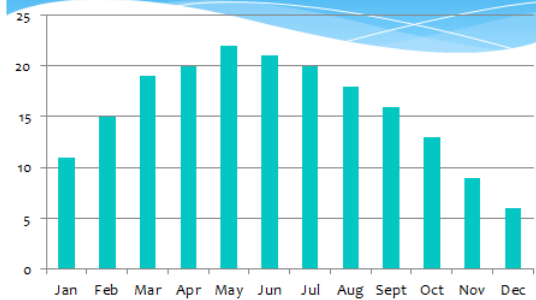
Vietnamese name: Ca com



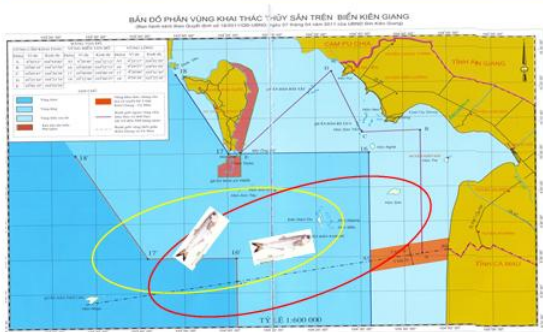
### Fishing efforts of anchovy purse seiners in Kien Giang

Localities	< 90 Hp	90 – 250 Hp	Over 250 Hp	Total
Phu Quoc	9	<b>58</b>	<b>150</b>	<b>217</b>
Rach Gia	0	1	5	6
Kien Hai	0	3	9	12
12 other locals	0	0	5	5
<b>Total vessels</b>	<b>9</b>	<b>62</b>	<b>169</b>	<b>240</b>
<b>Sampled vessels</b>	<b>1</b>	<b>5</b>	<b>14</b>	<b>20</b>

### Fishing seasons showed by fishing days per month



### Fishing grounds of anchovy fisheries



### CPUE indicator and estimated catches

Groups	Vessels	CPUE	BAC	Fishing days	Estimated catches	Number of samples
Small	9	0.9	0.9	220	1,604	1
Mid	62	1.2	0.8	210	12,499	5
Large	169	1.8	0.7	190	40,459	14
<b>Total</b>	<b>240</b>				<b>54,562</b>	<b>20</b>

#### IV. NEXT ACTIVITIES

- 4.1. Investigate on blue swimming crab gillnet fisheries, shrimp trawl fisheries, squid jiggers. (fishing grounds, fishing seasons, CPUE, estimated catches...etc)
- 4.2. More detail information on target species (Mackerel, anchovy, neritic tuna, blue swimming crab, shrimp trawlers) such as spawning areas, length and weight frequency distributions...etc
- 4.2. Organize group discussions (collect more information, confirm information from individual interviews, find out conflicts and solutions)

#### REFERENCES

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2. Le Tran Nguyen Hung, 2010. Strengthening fishing efforts management in Vietnam. The report at National Workshop on Strengthening Fisheries Management in Vietnam was organized in Nha Trang, Vietnam from 20th to 23rd, May, 2010. In Vietnamese.
3. SEAFDEC, 2006. Report of On-site Training/National Workshop on Capacity Building for Establishment of "Fisheries Refugia" and Coastal Resources Management 14 – 16 June 2006, Phu Quoc, Vietnam
4. Vietnam Fisheries Society (VINAFIS), 2000. Economic marine fish species in Vietnamese waters. In Vietnamese

#### ACKNOWLEDGEMENTS

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- To Science, Technologies and International Cooperation Department (D-FISH) for create best advantages
  - Kien Giang Sub-Decafirep on secondary data
  - Fisheries officers in Phu Quoc, Kien Luong, Ha Tien, Rach Gia , Kien Hai
  - Especial thankful to fishers at mentioned locals

## The Legal Framework for Fisheries Management in Vietnam

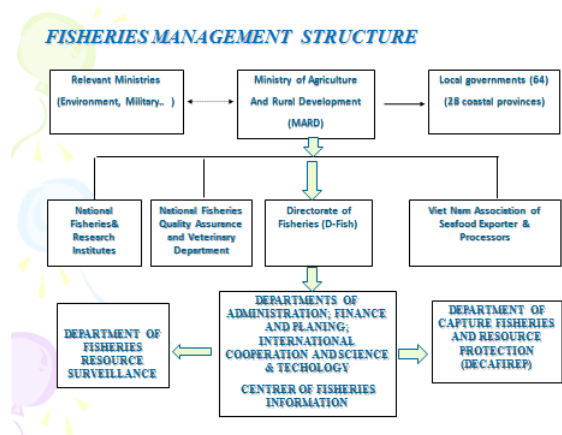
Tran Van Luan

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### I. FISHERIES MANAGEMENT RESPONSIBILITY

- Ministry of Agriculture and Rural Development (MARD) is the central focal point for State management of fisheries sector as well as the main government body responsible for protecting and developing fisheries resources.
- Directorate of Fisheries (D-Fish) is the important office that has the State management function, specializing in the capture fisheries and aquaculture sector.
- Provincial People's Committee: Direct the specialized agencies and supervise the implementation of the planning in the province, and regulation documents of central government in fisheries sector.
- Department of Agriculture and Rural Development (DARD) that has the State management function in fisheries sector.
- Sub-Decafirep has the State management function and advise for (DARD) specializing in the capture fisheries .
- District People's Committee ...



### II. THE LEGAL FRAMEWORK

#### 1. THE LAW OF FISHERIES (2003): 10 chapters and 62 articles

##### □ Chapter 1: General provisions

- **Article 1, Application of the Law:** Vietnamese individuals, organizations and foreign organizations and individuals conducting fisheries activities...
- **Article 2, Definitions:** The fishing vessels are included specialized vessel, boat, and other floating structures to be used in fishing operations, aquaculture, preservation and processing of fish and products.
- **Fisheries activities means:** fishing operation, aquaculture, transfer of exploited fisheries resources, preservation and processing, trading, services...the survey, protection and development of fisheries resources.  
**Fishing port...**

#### I. THE FISHERIES LAW (2003)

- **Chapter II: Protection and development of fisheries resource**
- **Article 7:** All organizations and individual have to Responsible for protection of aquatic and habitat
- **Article 8:** Policies conservation and rehabilitation; Publishing the list of the valued aquatic species in Red Book and endangered and threaten aquatic species which are prohibit to fish endangered and threatened species and restricted fishing areas.
- **Article 10:** Financial sources for conservation and rehabilitation of fish stocks; MPA and inland areas.

#### 1. THE FISHERIES LAW (2003)

##### □ Chapter III: Capture fisheries

- **Article 11:** Principles in fishing operation
- **Article 16** deals with fishing license: All organizations and individual have to get a fishing license when going to fish.
- **Article 17:** Condition for granting fishing license: fishing vessels are registered and inspected; having proper fishing gear and devices; having masters and driver certificate.
- **Article 18:** deals with withdraw of fishing license
- **Article 18:** Fishing report and logbook
- **Article 20, 21:** Fishing rights and responsible of individual and Organizations;

## 1. THE LAW OF FISHERIES

- Chapter IV: Fisheries Aquaculture
  - Article 28: Allocation and lease of marine areas for aquaculture
  - Article 29: Withdrawal of marine areas
- Chapter V: Fishing vessels and services of fisheries activities
  - Article 37: Development of fishing vessels;
  - Article 38: building and upgrade of fishing vessel;
  - Article 39, 40: boat registration and inspection of safety at sea; fishing ports
- Chapter VI: Processing and trade, quality and hygiene
- Chapter VII: International cooperation
  - Principles in international cooperation on fisheries sector

### • The Circular letter No 10/2006/TT on conditions and procedures for boat registration:

- A form of certificate including:
  - Owners' name, registry place, registration number
  - Vessel's technical information: Overall length, width, Depth, Gross tonnage, main engine capacity....



## 2. THE DECREES AND CIRCULAR DOCUMENTS

- Decree No. 59/2005/ND -CP regarding the conditions of trading and production of fisheries related occupations.
  - The Circular letter No 02/2006/TT-BTS regulation on Decree No. 59/2005/ND-CP (MARD).
- The section II deals with regulations related to issue fishing license including a form of fishing license, condition of issue of fishing license, etc.
- Requirements to get a fishing license
    - A certificate of registration (for fishing boat equipped with engine of over 20hp)
    - A certificate of technical safety
    - A registered list of Crew
    - A master's certificate and chief mechanic's certificate
    - Fishing gear registered is not prohibited by management measures (mesh and fish size.. Power of light will not be exceed)

**GIẤY PHÉP KHAI THÁC THỦ SẢN**

*(Giấy này chỉ dùng để khai thác thủy sản)*

Chức vụ: \_\_\_\_\_  
 Địa chỉ: \_\_\_\_\_  
 Ngày cấp: \_\_\_\_\_

Lần gia hạn	Thời gian gia hạn	Người gia hạn
Lần đầu	Từ ngày _____ Đến ngày _____	Thủ trưởng đơn vị
Lần thứ _____	Từ ngày _____ Đến ngày _____	Thủ trưởng đơn vị
Lần thứ _____	Từ ngày _____ Đến ngày _____	Thủ trưởng đơn vị
Lần thứ _____	Từ ngày _____ Đến ngày _____	Thủ trưởng đơn vị

Chức vụ: \_\_\_\_\_  
 Ngày cấp: \_\_\_\_\_

## 2. THE DECREES AND CIRCULAR DOCUMENTS

- The Decree No 66/2005/ND-CP on safety at sea for crew and fishing boat.
- The Circular letter No 10/2006/TT on conditions and procedures for boat registration:
  - Requirements for registration:
    - a) A approval document by competent authorities for building of new fishing vessel
    - b) The vessel must be checked to comply with technical standards;
      - Technical safety document of the vessel which was certified by the register authority.
    - e) Original receipt of VAT for vessel's hulls and machine

### The Circular letter No 02/2006/TT 20/03/2006 (MARD) on regulation No 66/2005/ND-CP on safety at sea for crew and fishing boat

- To ban building the new vessels with engine less than 30 HP and 90 HP (trawler fishing)
- To prohibit using some kind of fishing gears which destroy the fisheries resource and habitat
- To be not allow the boat registration when it has not a approval document by competent authorities for building of new fishing vessel

**MỘT SỐ LƯU Ý KHI SỬ DỤNG GIẤY PHÉP KHAI THÁC THỦ SẢN**

**Withdraw of fishing license:**

A. Thu hồi giấy phép khai thác thủy sản

Tổ chức, cá nhân khai thác thủy sản bị thu hồi Giấy phép khai thác thủy sản trong những hạn sau đây:

1. Tất cả các hành vi vi phạm quy định của Luật Thủy sản, trừ trường hợp không được phép vào sản phẩm khai thác;
2. Không còn đủ 4 điều kiện quy định của Luật Thủy sản;
3. Vi phạm nghiêm trọng các quy định của Luật Thủy sản về khai thác thủy sản hoặc đã bị xử phạt vi phạm hành chính về hoạt động thủy sản ba lần trong thời hạn của Giấy phép khai thác thủy sản;
4. Tội xâm phạm quyền lợi của Giấy phép khai thác thủy sản;
5. Có hành vi vi phạm khác mà pháp luật quy định phải thu hồi Giấy phép khai thác thủy sản.

B. Sử dụng giấy phép

1. Chuyển đổi phương tiện, chuyển đổi loại sản phẩm khai thác;
2. Phải mang theo Giấy phép khi đi khai thác thủy sản;
3. Phải báo cáo khai thác, ghi nhật ký khai thác thủy sản cho cơ quan quản lý thủy sản.

**GIẤY PHÉP KHAI THÁC THỦ SẢN**  
 Số:...../KTTS

Tên tàu: \_\_\_\_\_  
 Số đăng ký: \_\_\_\_\_

### □ The Circular letter No 02/2006/TT-BTS (MARD) regulation on Decree No. 59/2005/ND-CP (MARD).

- The section III deals with regulations related to fishing behaviors that shall not be licenced:
  - The capture of prohibited fish species; fishing the closed areas, fishing during closed seasons; fishing for the species on the list of seriously depleted species which are in danger of extinction as proclaimed by MARD.
  - Using fishing gears with small mesh size

Số TT	Fishing gear	mesh size 1a (mm), không nhỏ hơn
1	Đã tách	25
2	Đã tách ngư	20
3	Đã mắt	60
4	Đã tách (1 lớp, 3 lớp lưới)	44
5	Đã tách bìa	120
6	Vây rùa chỉ, vó mảnh, rùa, rùa, sừng, sừng bìa hoạt động ngoài vó cá cơm	15
7	Các loại lưới đánh cá cơm (gồm có vây rùa chỉ, vó mảnh, rùa, rùa, sừng, sừng bìa, phà sọc hoạt động trong vó cá cơm)	10
8	Lưới kéo cá	
	-Thuyền thu công và tàu lập máy dưới 50cv	25
	-Tàu lập máy từ 50 cv đến dưới 150 cv	34
	-Tàu lập máy từ 150 cv trở lên	40
9	Lưới kéo tôm	

**DANH MỤC KHU VỰC CÀM KHAI THÁC THỦ SẢN CÓ THỜI HẠN TRONG NĂM**  
(Ban hành kèm theo Thông tư số 69/ 2011/TT-BNNPTNT ngày 29 / 12/2011 của Bộ trưởng Bộ Nông nghiệp và Phát triển nông thôn)

TT	Khu vực càm	Tỉnh	Phạm vi/ Tọa độ càm	Thời gian càm	Đối tượng chính cần được bảo vệ
15	Vùng biển ven bờ Kiên Giang	Kiên Giang	Giới hạn bởi mép nước biển tại bờ biển đến các đoạn thẳng gặp khúc nối liền các điểm A, B, C, D, E có tọa độ: A: 10444'00"E (09°30'53"N, 10444'00"E) B: 10443'56"E (10°06'18"N, 10443'56"E) C: 10430'38"E (10°05'47"N, 10430'38"E) D: 10423'34"E (10°23'30"N, 10423'34"E) E: 10400'00"N 10402'58"E	01/4-30/6	Bảo vệ các loài tôm giống trong thời gian sinh sản như: họ tôm he (Penaeidae), giống tôm rêu (Metapenaeus); Họ cá phân (Mullidae), cá chỉ vàng (Sclerooides leptolepis).

**2. THE DECREES AND CIRCULAR DOCUMENTS**

- Decree No. 33/2010/ND-CP on Management of fishing activities of organizations and individuals in all marine areas of Vietnam
  - The Circular letter No : 25/2013/TT-BNNPTNT dated on 10/5/2013 :
    - Zoning marine areas and fishing routes and the decentralization to the local authorities on fisheries management
    - Marking fishing vessels
    - The logbooks are required to complete and submit to local fisheries agencies



**Decree 33/2010/ND-CP on Management of fishing activities of organizations and individuals in all marine areas of Vietnam**

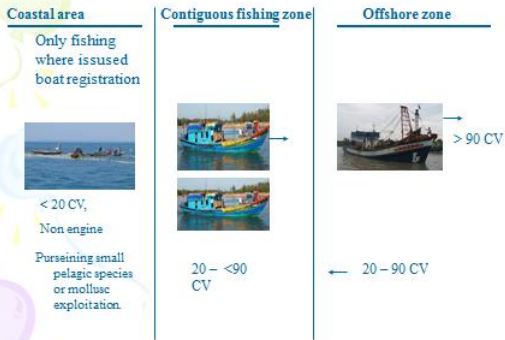
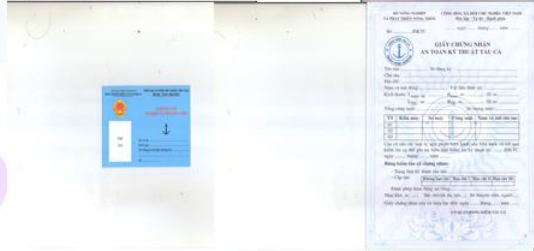
**a. Zoning fishing grounds and routes**

- 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)



**b. During the fishing operation at sea:**

- Fishing license;
- Technical safety certificate;
- Boat registration certificate;
- Crew book



**The Circular letter No : 25/2013/TT-BNNPTNT dated on 10/5/2013 :**

- Regulating on condition and Requirements to get a fishing license for the vietnamese vessels to fish in marine waters beyond the jurisdiction of Viet Nam
  - Application form
  - Fishing contraction which has approved by competent authorities where vessel going to fish
  - A certificate of registration
  - A certificate of technical safety
  - A registered list of Crew
  - A master's certificate and chief mechanic's certificate

**2. THE DECREES AND CIRCULAR DOCUMENTS**

- Decree No. 32/2010/ND-CP on the management of foreign fishing vessels operating in Vietnam's waters
- Decree No. 52/2010/ND-CP on the importation of fishing vessels.
- Decree 103/2013/ND-CP on administrative violations in fisheries sector.
- Decree 102/2012/ND-CP dated 29/11/2012 of Viet Nam government on Fisheries inspection force.
- Decree 80/2012/ND-CP, datet 08/10/2012 regarding on management of fishing port, anchoring vessel and avoiding storm.
- Circular No. 28/2011/TT-BNNPTNT certification regulations and certification for export of aquatic exploitation on the European market.

**2. THE DECISION OF GOVERNMENT**

- Decision 131/2004/QĐ-TTg dated 16/7/2004 on approval of the program of aquatic resource protection by 2010;
- Viet Nam has issued the Decision 1690/QĐ-TTg dated 16 September 2010 on approval of Master plan of Vietnam's fisheries to 2020.
- Decision 485/QĐ-TTg dated 02 May 2008 on approval Project of conservation of the endangered and threaten aquatic species to 2015.
- Decision 1479/QĐ-TTg dated 13/10/2008 on Planning and management of inland reserved areas and; Decision 742/QĐ-TTg dated 26/5/2010 on Planning and management of Marine protected areas by 2020.

### 3. THE MINISTERIAL LEGAL DOCUMENTS

- At the present, MARD is drafting the following circulars:
  - i) Circular regarding the management of trawler fishing
  - ii) Circular regulating on regulation of decree of fisheries inspection force
  - iii) Circular regarding on technical regulations on collection, transportation and processing tuna in Vietnam
  - iv) Circular regulating on management of tuna fishing in Vietnam
  - v) Circular regulating on the investigation and evaluation of fisheries resources
  - vi) Circular regarding the revision and supplement of Circular 02/2006/ND-CP guiding the implementation of Decree 59/2005/ND-CP of Government.

## Country Reviews on management Measures of Trans-boundary Species in Cambodia

You Chanpraset

*Deputy Director, Department of Fisheries Conservation, Fisheries Administration, #186 Preah Norodom Blvd., Sangkat Tonle Basac, Khan Chamcar Mon, Phnom Penh, P.O. Box. 582 Chamkamon, Phnom Penh, Cambodia*

### Country Reviews on Management Measures of Trans-boundary Species in Cambodia

5-7 March 2014

Phu Quoc Island, Viet Nam

Fishery Conservation Department, FiA

### Presentation Outlines

- Objective
- Trans-boundary Species
- Endanger Species
- Management Measures
  - FiA's Vision
  - STRATEGIC PLANNING FRAMEWORK FOR FISHERIES: 2010 – 2019
  - Sub-decree
  - Proclamation
- Future Action

### Objectives

#### \* Programme objective of FiA:

The contribution of the fisheries sector to the achievement of national development objectives maximised.

#### \* Sub-programme Objective of Conservation

Sustainable fisheries resources through protection and conservation are realized to ensure sustainable utilization.

### Current Status of Fisheries Habitats

Province	Coral Reef (ha)	Seagrass (ha)	Mangrove (ha)
Koh Kong	602	3,993	62,000
Preahsihanouk	1,198	164	13,500
Kampot	953	25,000	1,900
Kep	52	2,790	1,005
<b>Total</b>	<b>2,800</b>	<b>30,000</b>	<b>78,405</b>

### Trans-boundary Species

The trans-boundary Species are found that:

\* Short and Indian mackerel (*R. brachysoma*, *R. kanagurta*), Spanish mackerel (*Scomberomorus* spp) and Scads (*Atule* spp and *Megalaspis* spp)

\* Neritic tuna (*Sarda* spp and *Scomberoides* spp)

\* The Anchovy spp

\* Dugong

\* Dolphin

\* Sea horse

\* Sea Turtle.



### Endanger Species

Totally are 28 marine endanger species that have been mentioned in Sub-decree # 123.



## Management Measures

### ❖ The Vision for the Fisheries Sector:

#### Policy and Activities:

1. **Management and development of fisheries**
2. **Management of community fisheries and family fisheries**
3. **Management and development of aquaculture**
4. **Management and development of fish processing**
5. **Conservation of fisheries resources**
6. **Development of fisheries institutions and their infrastructure**
7. **Budget and Fisheries Infrastructure**

2

### Goal 3 of the Strategic Planning Framework for Fisheries: 2010 – 2019: The fisheries domain and associated resources are in a healthy and resilient condition and sustainably managed

Indicators	2 Year Targets (by end of 2011)	5 Year Targets (by end of 2014)	10 Year Targets (by end of 2019)
The area of critical fisheries habitats and Endangered Species under sustainable management	-3,000ha of seagrass -300ha of coral reef -300ha of mangrove replanted -At least 5 endangered species are increased by 20% in population	-5,000ha of seagrass -500ha of coral reef -700ha of mangrove are replanted -At least 4 species are removed from the list and at least 10 species are increased by 30% in population	-7,000ha of seagrass -840ha of coral reef -1000ha of mangrove are replanted -At least 15 species are removed

### The responsibility for major activity areas of the 10 year Strategic Planning Framework for Conservation

- \* Identify critical or threatened aquatic habitat, protect and rehabilitate them.
- \* Identify critical or threatened aquatic species.
- \* Raise awareness among resource users.
- \* Enhance fish stocks through the release of fish into the wild (including the culture and release of endangered species), through the use of refuges in communities and through conservation measures in areas.
- \* Collaborate with regional partners to develop and implement large ecosystem approaches to the management of fisheries and aquatic resources.
- \* Understand, through research, the likely and actual changes that are occurring as a result of climate change. Where possible mitigate these changes through appropriate action.

## Management Measures (Con't)

- Sub-decree on Endanger Species # 123.
- Proclamation on protection endanger species #517

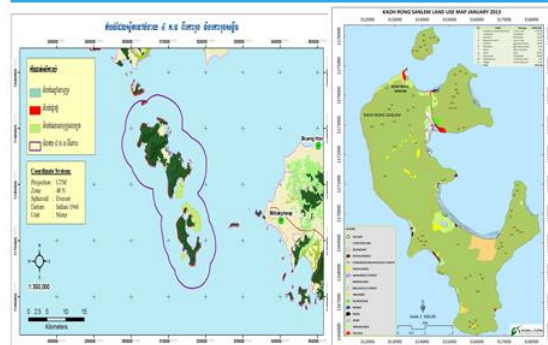


## Management Measures (Con't)

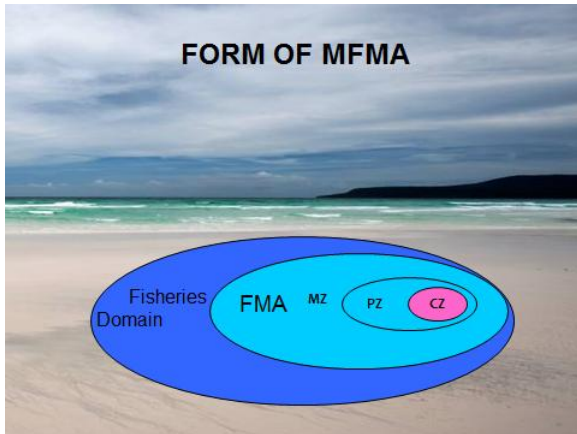
Joint Management activates between 3 coastal provinces(KS, Kampot & Kep), Cambodia and Kien Giang province, Vietnam:

- **Strengthen Law Enforcement**
- **Conservation Species**
- **Aquaculture**

### Marine Fisheries Management Area in Prahshianouk Province







- ### Future Actions
- \* Propose RGC to approve on coastal master plan
  - \* Public campaign on zoning (fishing zones, conservation, protected zone.....)
  - \* Promote livelihood for poor fishermen
  - \* Strengthen law enforcement
  - \* Zoning identification and boundary demarcation
  - \* Strengthen capacity building and strengthen net work communication.

## Challenges

- \* No costal master plan
- \* No clear zone identification
- \* Poor fishermen, trawler with small horse power in the Offshore fishing area
- \* Weak law enforcement
- \* Overlap responsibility
- \* Unsustainable coastal development and investment
- \* Lack of funding and human resource
- \* Political interference
- \* Cooperation network limited

# Annex 9

## Country Review on Management Measures of Trans-boundary Species

Tran Van Cuong

Researcher, Research Institute of Marine Fisheries (RIMF), Fisheries Administration No. 224, Le Lai Street, Ngo Quyen District Hai Phong City, Vietnam



### Country review on Management measures of trans-boundary species

Tran Van Cuong  
Research Institute for Marine Fisheries

### Scope of presentation

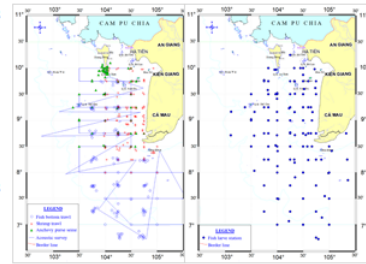
1. Introduction
2. Research program in the southwestern waters
3. Status of marine resources
4. Shared trans-boundary fishery resources
  - 4.1. Anchovy group
  - 4.2. Blue swimming crab
  - 4.3. Mackerel group
5. Discussion and suggestion

#### 1. Introduction

- The transboundary waters between the provinces of Kien Giang (Viet Nam) and Kampot (Cambodia) are located in the eastern portion of the Gulf of Thailand.
- The coastlines of the two provinces totals 295 km, including 95 km in Kampot province and 200 km in Kien Giang province.
- In Kien Giang province, Phu Quoc, Nam Du and Tho Chu islands are important landing side and main fishing grounds
- According to RIMF, total biomass of marine resources in southwestern waters was estimated at 1.07 mill. tons.
- Depending on fishing gears and areas, fishing time of resource groups can be varied from area to area.

#### 2. Research programs in the SW waters

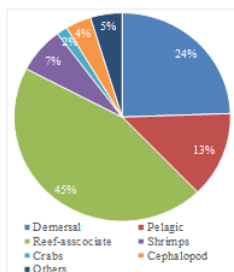
- **Year 2000 - 2006**
  - 7 Fish bottom trawls
  - 4 Shrimp trawls
  - 4 Acoustic survey
  - 4 Purse seine survey
  - 10 Fish larve survey
- **Year 2011 - 2015**
  - 2 Fish bottom trawls
  - 1 Shrimp trawls
  - 2 Acoustic survey
  - 4 Fish larve survey



#### 3. Status of marine resources

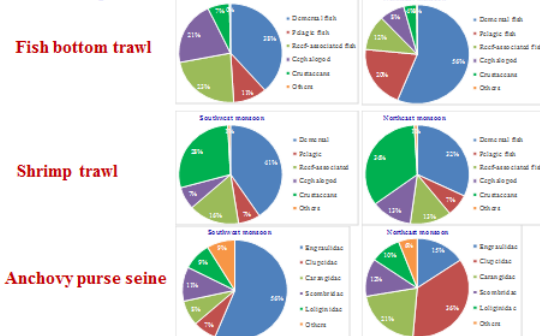
- **Fish: 479 species**
  - + Demersal fish: 134 species
  - + Pelagic fish: 73 species
  - + Reef-associate fish: 246 species
  - + Others: 26 species
- **Crustaceans: 48 species**
  - + Shrimp: 39 species
  - + Crab: 9 species
- **Cephalopod: 21 species**
  - + Squid: 7 species
  - + Cuttlefish: 12 species
  - + Octopus: 2 species

Diversity of marine species



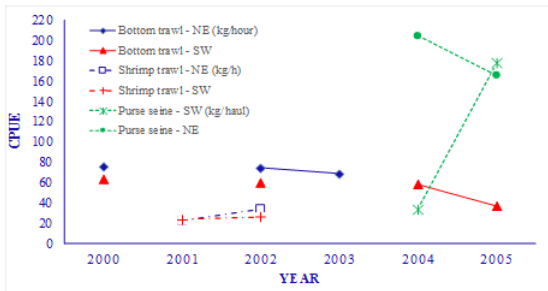
#### 3. Status of marine resources (cont's)

##### Catch composition

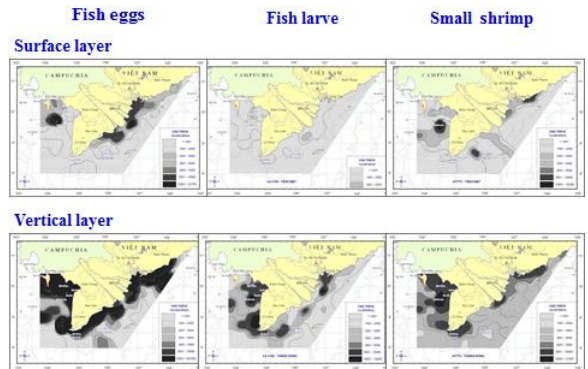


### 3. Status of marine resources (cont's)

#### Trend of catch rate

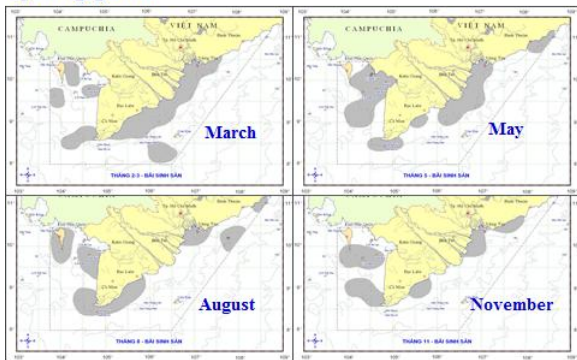


### 3. Status of marine resources (cont's)



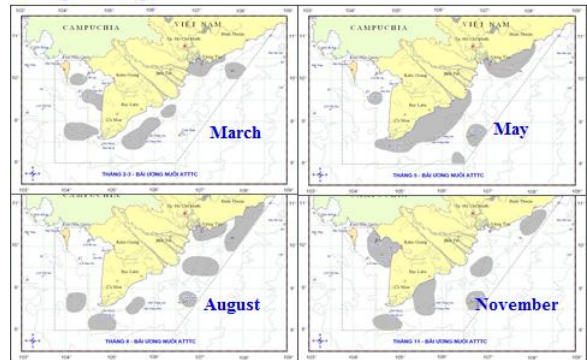
### 3. Status of marine resources (cont's)

#### Spawning ground



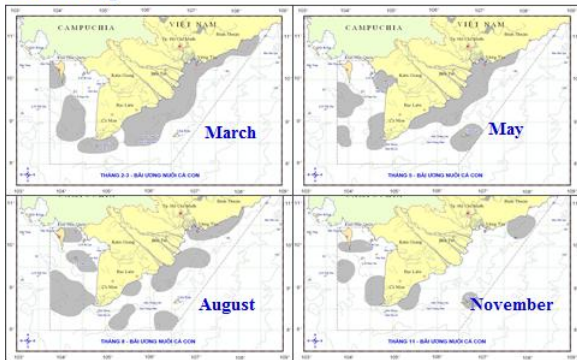
### 3. Status of marine resources (cont's)

#### Shrimp breeding



### 3. Status of marine resources (cont's)

#### Fish breeding



### 4. Trans-boundary species

#### List of important species in the southwestern waters

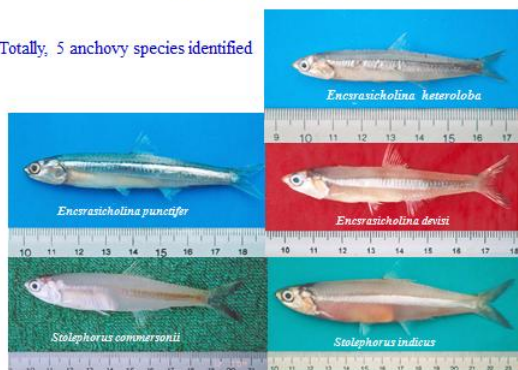
Group	Common name	Species group
Pelagic fish	Anchovy	<i>Encrasicholina</i> spp. ; <i>Stolephorus</i> spp.
	Mackerel	<i>Scomberomorus</i> spp. ; <i>Rastrelliger</i> spp.
	Scad	<i>Decapterus</i> spp.
Demersal fish	Lizardfish, Rays	<i>Saurida</i> spp. ; <i>Dasyatis</i> spp.
	Threadfin bream	<i>Nemipterus</i> spp.
	Groupers	<i>Epinephelus</i> spp.
Crab	Blue swimming crab	<i>Portunus pelagicus</i>
Shrimp	Shrimp	<i>Penaeus</i> spp. ; <i>Metapenaeopsis</i> spp.
Cephalopod	Squid...	<i>Loligo</i> spp. ; <i>Sepia</i> spp. ; <i>Octopus</i> spp.

#### Trans-boundary species

1. Anchovy group (*Encrasicholina* spp., *Stolephorus* spp.)
2. Blue swimming crab (*Portunus pelagicus*)
3. Mackerel group (*Rastrelliger* spp.)

### 4.1. Anchovy group

Totally, 5 anchovy species identified

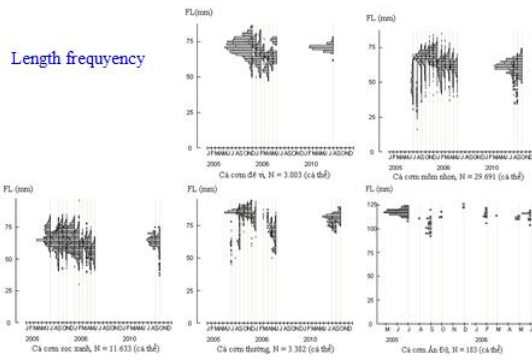


### 4.1. Anchovy group (cont's)

- Biological characteristics of 5 anchovy species in south-western water include length frequency, mean length, length-weight relationship, sex ratio, length at first maturity, spawning season, absolute fecundity...

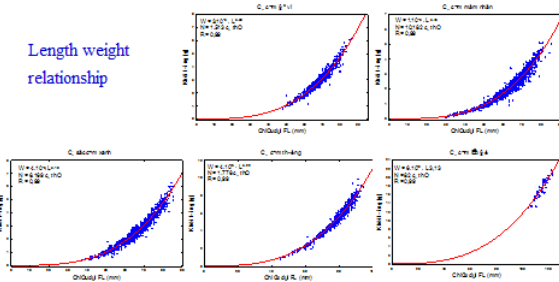
English name	Shorthead anchovy	Buccaneer anchovy	Devis' anchovy	Commerson's anchovy	Indian anchovy
Size range (mm)	16-85	39-85	48-86	45-94	92-126
Mean length (mm)	62.3	63.8	69.0	79.7	114.6
$W=aL^b$	$1.10^4 \cdot L^{3.4}$	$4.10^4 \cdot L^{3.18}$	$3.10^4 \cdot L^{3.20}$	$4.10^4 \cdot L^{3.22}$	$6.10^4 \cdot L^{3.13}$
$L_m, k, t_0$	86; 1.82 -0.028	89; 1.93 -0.037	90; 2.09 -0.021	99; 2.14 -0.007	-
Sex ratio	1.20:1.00	1.20:1.00	0.95:1.00	0.95:1.00	-
$L_{m50}$ (mm)	63.0	69.0	64	74	-
Fecundity (oocytes)	1,670-14,946	3,587-15,357	1,917-7,697	1,230-5,062	-
Spawning season	May-June Nov-Jan	May Sep-Dec	Jan-Apr Oct-Dec	May-July Sep-Dec	-

#### 4.1. Anchovy group (cont's)



#### 4.1. Anchovy group (cont's)

Length weight relationship



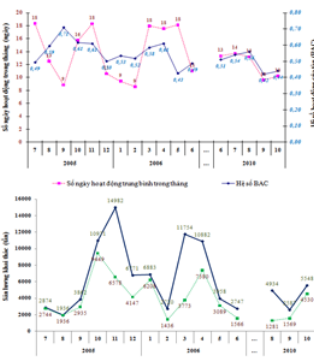
#### 4.1. Anchovy group (cont's)

- Biomass of anchovy group in the southwest waters was estimated at 120 thousand tons (year 2006)
- Shorthead anchovy was the largest stock biomass about 74 thousand tons, accounted for 60.1% total biomass, followed by Buccaneer anchovy (25 thousand tons - 21.2%), Commerson's anchovy (14.4 thousand tons - 12.1%)

Scientific name	English name	Biomass (ton) Year 2006	%
<i>Encrasicolina heteroloba</i>	Shorthead anchovy	72,066	60.1
<i>Encrasicolina punctifer</i>	Buccaneer anchovy	25,430	21.2
<i>Encrasicolina devisi</i>	Devis' anchovy	4,537	3.8
<i>Stolephorus commersonii</i>	Commerson's anchovy	14,489	12.1
<i>Stolephorus indicus</i>	Indian anchovy	3,458	2.9

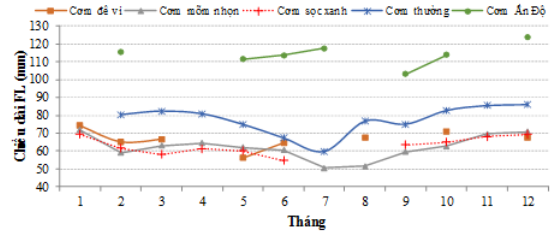
#### 4.1. Anchovy group (cont's)

- In 2011, there were 230 anchovy purseiners operating in Kien Giang province
- Mean BAC of anchovy purseiner was 0.54.
- The average of fishing efforts was 2,246 boat days/month
- Mean catch per unit effort was about 1,7 tons/day
- In 2010, the total catches were about 40,000 tons year.
- The maximum sustainable yield (MSY) and maximum of fishing effort estimated about 38,736 tons year and 210 anchovy purseiners, respectively.
- The total fishing effort need to be reduced



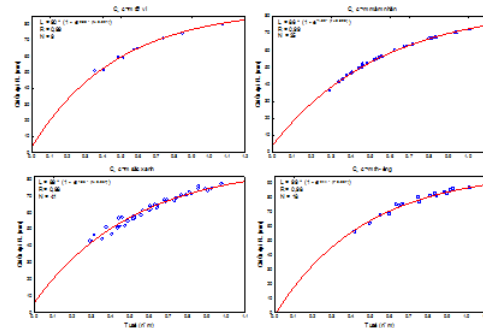
#### 4.1. Anchovy group (cont's)

Mean length trend of anchovy species by month



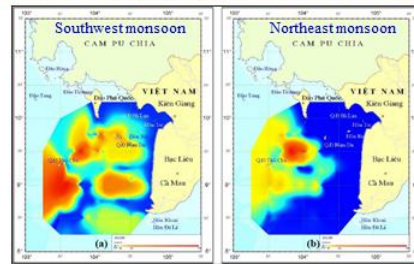
#### 4.1. Anchovy group (cont's)

Graph of Von Bertalanffy function



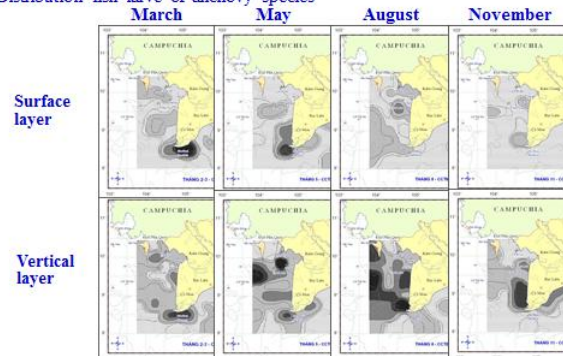
#### 4.1. Anchovy group (cont's)

- Spatial distribution of anchovy group shows clearly seasonal changes.
- In the SW monsoon, the high density was found in the south-western of Tho Chu Island, southern of Phu Quoc Island, western of Ca Mau pro.
- In the NE monsoon, distribution is sparse, lower density occurred in the SW monsoon, which mainly concentrate in southern of Phu Quoc Island



#### 4.1. Anchovy group (cont's)

Distribution fish larve of anchovy species



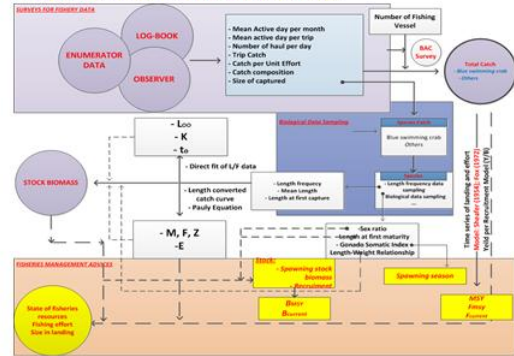
## 4.2. Blue swimming crab (BSC)

- Morphology of blue swimming crab in Kien Giang water



## 4.2. Blue swimming crab (cont's)

Model for assessment blue swimming crab



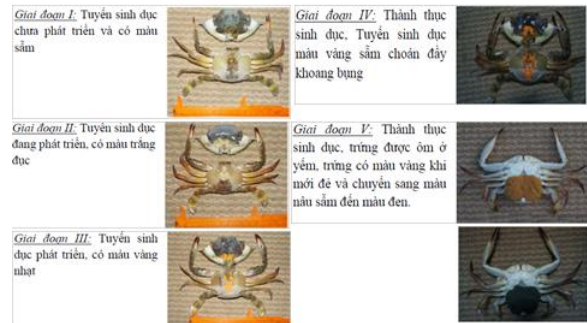
## 4.2. Blue swimming crab (cont's)

- Period: 2010-2015
- Data sampling: survey, logbook, biological sampling
- Landing observer



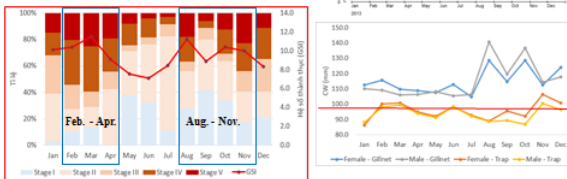
## 4.2. Blue swimming crab (cont's)

Maturity stage



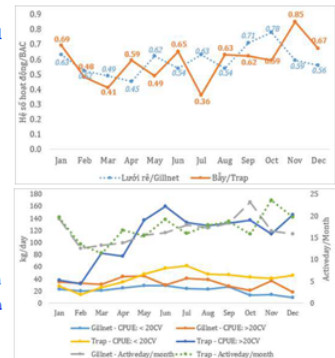
## 4.2. Blue swimming crab (cont's)

- Carapace width (CW) ranged 59 - 167mm
- L-W rel:  $W = 0.037776 \cdot CW^{3.1633}$  (female)
- $W = 0.035038 \cdot CW^{3.3706}$  (male)
- Gonado Somatic Index (GSI) ranged
- Spawning season: Feb. - Apr. and Aug. - Nov.
- $Lm_{50}$  was estimated at 99.28mm
- VB function:  $CW = 175.88 \cdot (1 - \exp^{-0.99 \cdot t})$
- Sex ratio approximately 1.45:1.00



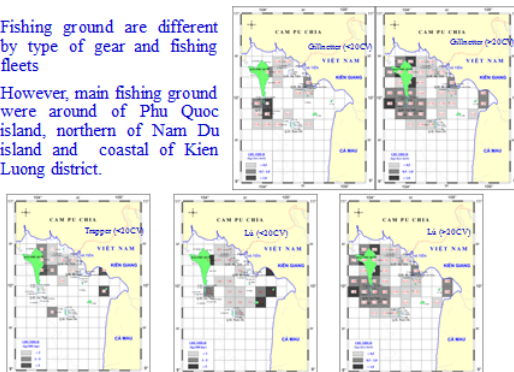
## 4.2. Blue swimming crab (cont's)

- Fishing vessel
  - Totally, 1728 fishing boats: 381 trappers and 1337 gillnetters
- Catch per unit effort
  - Gillnetter: 0.4 kg/km net
  - Trapper: 4.9 kg/100 traps
  - 6.1-7.4 kg/100 traps
- Mean BAC:
  - Gillnetter: 0.45-0.78
  - Trapper: 0.36-0.85
- Mean activeday
  - Gillnetter: 11.3-23.6 days/month
  - Trapper: 12.5-23.1 days/month



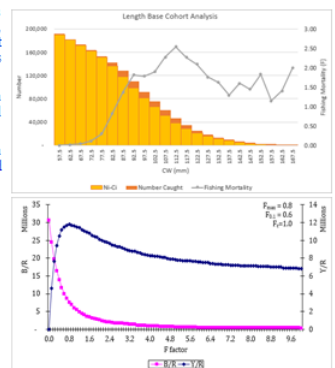
## 4.2. Blue swimming crab (cont's)

- Fishing ground are different by type of gear and fishing fleets
- However, main fishing ground were around of Phu Quoc island, northern of Nam Du island and coastal of Kien Luong district.



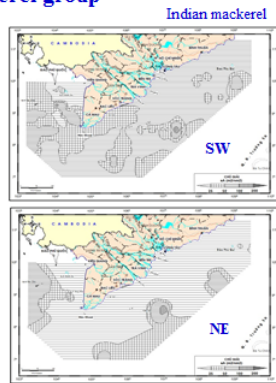
## 4.2. Blue swimming crab (cont's)

- In 2013, total catch of BSC was about 7,854 tons. In which, gillnetters accounted for about 53.4% (4,196 tons) and trappers about 46.6% (3,658 tons).
- Biomass of BSC stock in Kien Giang waters was estimated about 7,130 tons.
- Actually, BSC stock in southwestern waters is caught overfishing ( $E > 0.5$ )



### 4.3. Mackerel group

- Mackerel group (MACK) include 4 species: Short mackerel, Indian mackerel, Narrow-barred Spanish mackerel and Indo-pacific king mackerel.
- In which, Short mackerel and Indian mackerel are main main resource
- Spatial distribution of Indian mackerel resources shows clearly seasonal changes.
- The stock biomass of mackerel group estimated at 264 thousand tons in southwest monsoon and 169 thousand tons in northeast monsoon
- There are no information about reproductive biology for mackerel group in this (spawning season, spawning ground, maturity ...)



### 5. Discussion and suggestion

- There are no much available information on resources of the mackerel groups (*Rastrelliger spp.*; *Scomberomorus spp.*), anchovy species and neritic tunas
  - Should conduct more survey to collect specific information (biomass, catches, fishing effort, fishing seasons, fishing grounds, spawning/breeding areas, biology, genetic analysis...) about mentioned species in the trans-boundary areas.
- Based on available data about anchovy species in south-western waters
  - Should have activities to protect spawning/breeding areas in transboundary areas
- Based on results about blue swimming crab in Kien Giang province
  - Should have activities on release fingerlings to recover the blue swimming crab resources.

## Country Review on Marine Capture Fisheries, Combating Illegal (IUU) and Destructive Fishing

Heng Sotharith

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**Country Review on Marine Capture Fisheries,  
Combating Illegal (IUU) and Destructive Fishing**

by

Heng Sotharith Deputy Director Dep't of Fisheries Affairs, Fisheries  
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Presenting  
to the

First Technical Meeting of the Joint Working Team for Fisheries Management between  
Cambodia and Vietnam.  
5-7 February, Phu Quoc Island, Vietnam

**Contents**

1. Introduction on Marine fisheries in Cambodia,
2. Current statistic of Marine fishing Vessel/boats,
3. The obligation of Fishing vessel for Fishing Operation,
4. The sample of Vessel Card and Technical Inspection Book,
5. The Fishing License,
6. The Issues of Fishing Vessels Records in Cambodia,
7. The Marine Fishing Gears,
8. The Existing Activities to Solve the Issues,
9. Suggestion to Solve the Issues of Fishing Vessels Records.

**Introduction on Marine fisheries**

By the Law on fisheries of Cambodia, the Marine fishery domain is divided into:

1. Inshore fishing area, which extends from the coastline at higher high tide to the 20 meter deep line,
2. Offshore fishing area, which extends from the 20 meter deep line to the outer limits of the EEZ,
3. Fishery conservation area, sea grass area, and coral reef area which are habitats for marine aquatic animal and plants,
4. Mangrove forest area, including mangrove and forest zone, which are important feeding and breeding habitats for aquatic animal and protected inundated areas.

**The Current statistic of Marine fishing Vessel/boats**

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: 3.084 Units			

*Fisheries Administrative Report 2013*

**The obligation of Fishing Vessel for Fishing operation**


All marine vessel/boats need to be registered into the Merchant Marine department. If they want to do fishing operation, they can apply to the fishery authority with the Vessel Card and Technical Inspection Book, Fishermen should also be applying with the using of fishing gears to the provincial fishery administrative office.

Without the Vessel Card and Technical Inspection Book, fishery authority do not accept to registration for fishing.


All fishing vessel/boats need to comply the Prakas (Proclamation) on Technical Requirement of Fishing Vessel Management of MAFF and Fishing vessel Logbook will given by the Fishery authority.

**The Sample of Vessel Card and Technical Inspection Book**


Vessel's Card



Technical Inspection Book



Fishing Vessel's logbook



**Feature of Ship License (Inside page)**

<ul style="list-style-type: none"> <li>1. Name of vessel</li> <li>2. Type of vessel</li> <li>3. Net tonnage</li> <li>4. Gross tonnage</li> <li>5. Length</li> <li>6. Beam</li> <li>7. Draft</li> <li>8. Horse power</li> <li>9. Name of skipper</li> <li>10. Name of owner</li> <li>11. Name of operator</li> <li>12. Name of agent</li> <li>13. Name of port of registry</li> <li>14. Name of port of destination</li> <li>15. Name of port of call</li> <li>16. Name of port of arrival</li> <li>17. Name of port of departure</li> <li>18. Name of port of call</li> <li>19. Name of port of arrival</li> <li>20. Name of port of departure</li> </ul>	<ul style="list-style-type: none"> <li>1. Date of issue</li> <li>2. Date of expiry</li> <li>3. Date of renewal</li> <li>4. Date of cancellation</li> <li>5. Date of suspension</li> <li>6. Date of reinstatement</li> <li>7. Date of revocation</li> <li>8. Date of annulment</li> <li>9. Date of withdrawal</li> <li>10. Date of forfeiture</li> <li>11. Date of forfeiture</li> <li>12. Date of forfeiture</li> <li>13. Date of forfeiture</li> <li>14. Date of forfeiture</li> <li>15. Date of forfeiture</li> <li>16. Date of forfeiture</li> <li>17. Date of forfeiture</li> <li>18. Date of forfeiture</li> <li>19. Date of forfeiture</li> <li>20. Date of forfeiture</li> </ul>
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## The 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.

## The Issues of Fishing Vessel Record in Cambodia

- Some of owners of fishing boats/vessels do not register yet,
- Many fishing boat/vessels not meet the technical requirements of fishing vessel management to ensure safety, waterway, orderliness and the lives of fishermen.
- Not requested or not reported to the competence authorities:
  - New building fishing vessel/boats,
  - Changing vessel capacities in term of engine,
  - stop fishing without reporting.

## The Marine Fishing gears

- By the Law of Fishery, article 45: all fishery exploitation in the marine fishery domain, except subsistence fishing shall be allowed in the possession of license and these exploitations shall follow the conditions and obligations in fishing logbook.
- Marine capture fisheries in Cambodia are divided into two categories called middle-scale fisheries and small-scale or artisanal fisheries
- The middle scale fisheries refer to those fishing activities that have highly efficient fishing gears and have the capacity to fish offshore and inshore using all fishing gears with the exception of trawling in inshore water.
- Use legal fishing gears mentioned in the proclamation of the Minister of Agriculture, Forestry and Fisheries.

## The Fishing gears (con't)

Fishing operation is needed to follow the rule and regulations of the Ministry of Agriculture Forestry and Fisheries. Absolutely prohibited by using or do fishing activities by:

- Trawling in the inshore fishing areas, or do fishing operation in the depth less than 20 meter,
- Fishing operation with new fishing gears or those fishing gears that not allowed by regulations,
- illegal fishing by bomb and all kinds of poisons.
- Fishing in the conservation areas, sea grass areas, coral reef.

Based on the Code of Conduct for Responsible Fisheries in the Region, all fishing operations in should be followed and implemented by the Code of Conduct for Responsible Fisheries for Cambodia (CamCode) that reinforced the value of the Code as a source of guidance and good practice.

## The Marine fishing gears (con't)

List of fishing gears in the coastal areas:

1. Trawl,	(2,007 Units)
2. Surrounding Net,	(5,100 Units)
3. Purse seine/Ring Net,	(301 Units)
4. Anchovy Encircling Net,	(3 Units)
5. Beach Seine Net,	(23 Units)
6. Encircling Seine Net,	(5,100 Units)
7. Gill Net,	(325,600m)
8. Mackerel Gill Net,	(364,400m)
9. Scomberomorus Gill Net,	(401,800m)
10. Shrimp Gill Net,	(276,700m)
11. Crab Gill Net,	(1,108,500m)
12. Clupea Gill Net,	(104,500m)
13. Traps,	(329,160 Units)
14. Horizontal Long lines,	(109,200 hooks)
15. Hooks and Lines, and more .....	

Fisheries Administrative Report 2013

## The Existing activities to solve the issues

- Strengthening the legal knowledge of inspection unit at all level,
- Fishery authorities collaborate with marine police to monitor all navigating fishing vessels/boats for checking up on technical regulations,
- Illegal fishing vessels/boats without any license will be offered to register (in the case of compromising with minute of meeting on not complying by condition stipulated in the fishing vessel logbook).
- Some cases is subjected to a transactional fine by the Fisheries Administrative.



### Suggestion to Solve the Issues of Fishing Vessel Record and Fishing Activities to avoid of IUU Fishing.

To be solved the issues of the fishing vessels records and avoided of IUU fishing operation, we suggest to propose regularly workshop to be upgraded the knowledge among competence agencies such as:

- Inter-ministerial workshop to be solving the issues on fishing vessels registration,
- Conduct activities on marine regulation dissemination workshop among of the fishery competence agencies, fisheries stakeholders and fisheries communities on Law on fishery, fishing zone, fishing gears, concept of solving the fishing conflict operation,...
- Offer to support the procedure development of Cambodia National Plan of Action to Prevent, Deter and Eliminate Illegal, unreported and Unregulated Fishing (IUU Fishing).

We hope that all those activities above will be the regularly of lessons learned that can upgrade the knowledge of all people concerned on fishing activities and marine fishery resources.

# Annex 11

## Country Review on Marine Capture Fisheries, Combating Illegal (IUU) and Destructive Fishing

Tran Van Luan

*Fishery Officer, Capture Fisheries and Resources Protection (DECAFIREP), Fisheries Administration, 10 Nguyen Cong Hoan Street, Ba Dinh District, Hanoi, Vietnam*

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

### COUNTRY REVIEW ON MARINE CAPTURE FISHERIES, COMBATING ILLEGAL (IUU) AND DESTRUCTIVE FISHING

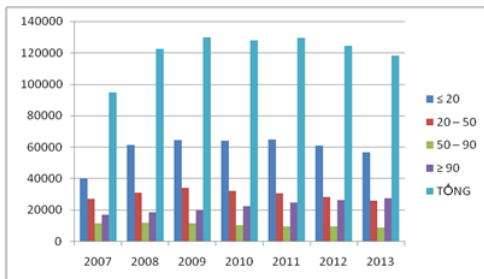
Tran Van Luan  
Nguyen Huu Binh  
DEPARTMENT OF CAPTURE FISHERIES  
AND RESOURCE PROTECTION

### FISHING FLEETS AND CAPACITY

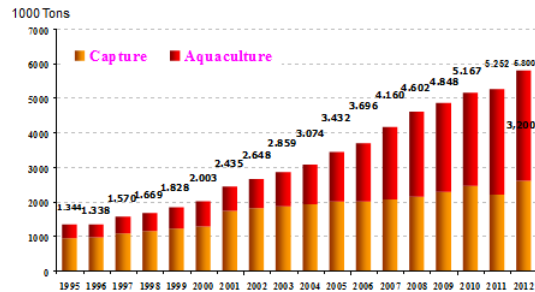
- Total fishing vessel in 2013: 117.998
- + >90CV: 27.285
- + < 90CV: 90.713 in which 56.523 boats smaller than 20CV
- Total Production in 2012: 5,8 Million Tonnes (Catching: 2,6 Million Tonnes)
- Export Turnover in 2012: \$US 6.1 Billion



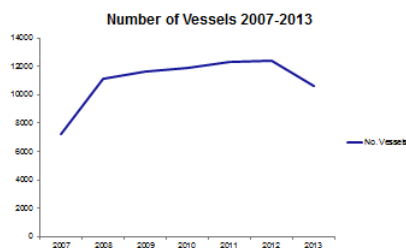
### THE TREND OF VESSEL FLEETS



### TOTAL PRODUCTION



### KIEN GIANG



### KIEN GIANG

Fishing gears	2007	2008	2009	2010	2011	2012	2013
Trawler	3815	2793	2713	2903	3191	3276	3136
Perseim	168	331	356	369	375	350	331
Gillet	1723	4842	4971	4956	4933	4918	4050
Hook and line	703	2204	2379	2354	2360	2358	1857
Service	278	236	236	255	254	261	260
Other	581	736	995	1070	1174	1262	1000

## LEGAL AND POLICY FRAMEWORKS towards Sustainable Development

- Fisheries Laws (2003)
- Strategy and Master Plan for Sustainable Fisheries Development to 2020 approved by the Government.
- NPOA- Fishing Capacity Management and NPOA- IUU 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



## LEGAL AND POLICY FRAMEWORKS towards Sustainable Development

- Decision 131/2004/QĐ-TTg dated 16/7/2004 on approval of the program of aquatic resource protection by 2010;
  - Decision 485/QĐ-TTg dated 02 May 2008 on approval Project of conservation of the endangered and threaten aquatic species to 2015.
  - Decision 1479/QĐ-TTg dated 13/10/2008 on Planning and management of inland reserved areas and;
  - Decision 742/QĐ-TTg dated 26/5/2010 on Planning and management of Marine protected areas by 2020.
- Establishment and planning of 45 (inland reserved areas); 16 (Marine Protected Areas); Restocking some marine species..

## ZONING FISHING GROUND and ROUTES

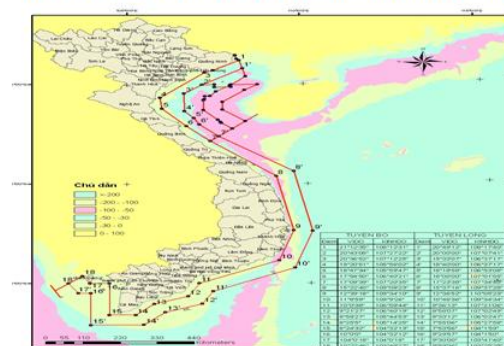
- Decree No 33/2010/NĐ-CP of the Government regarding the management of fishing operation conducted by Vietnamese organizations and individuals in all marine areas.

### 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 20 in which 28 coastal provinces delimited coastal area between neighboring provinces.



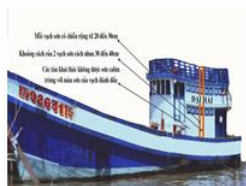
## ZONING FISHING GROUND and ROUTES



## 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 22,000 in total (at this stage, the regulation is required to mark vessels with higher than 90 HP)

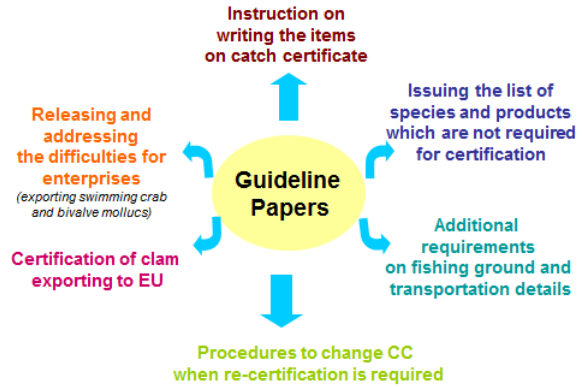
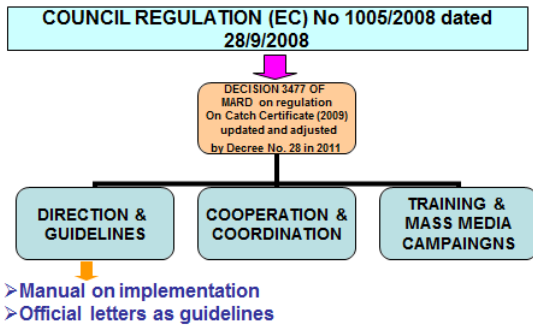


## LOGBOOK SYSTEM

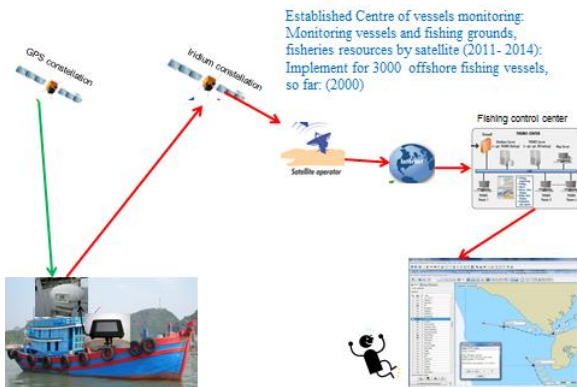
- Circular No. 48/2010/TT-BNNPTNT for fishing activity management of fishing individuals and organization operating in Vietnam's water
- The logbook are required to complete and submit to local fisheries management authorities.
- At this stage the regulation is stipulated for vessels with capacity higher 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



## 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.

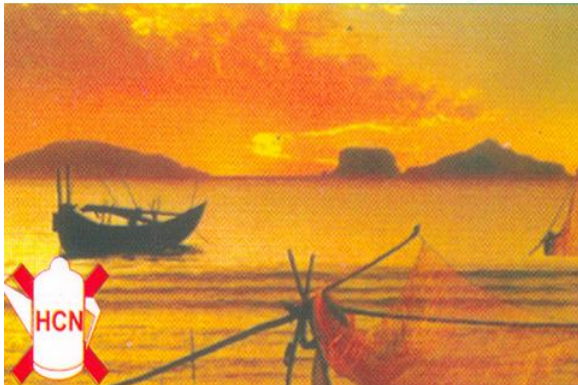
## ADMINISTRATIVE VIOLATIONS IN FISHERIES SECTOR

- Decree 102/2012/ND-CP dated 29/11/2012 of Viet Nam government on Fisheries resource surveillance force. The main mission including: monitoring, inspection and patrolling of fishing activities at sea.
- Decree 103/2013/NĐ-CP 12/9/2013 on administrative violations in fisheries sector Including, IUU violations, the sanctions and measures for handling violations; additional behavior and the sanctions relating to the management of fishing ports and measures to manage fishing operations.

## ADMINISTRATIVE PUNISHMENT:

- Non recording a logbook and unreport fishing while fishing
- Use of fishing licenses expired; None of fishing licenses; erasing and repairing fishing licenses; catching the species are not in the licensed contents; using the trawler fishing to catch in prohibited fishing ground.
- Marking recognizable vessels are incorrect; No marking..
- Having the agent behavior to organize/arrange for the vietnamese vessels to fish in marine waters beyond the jurisdiction of Viet Nam;
- Using excessive power light; the small mesh size less than regulate
- Vessel building is not permitted by fisheries agencies.....

Cấm Khai thác Thủy sản bằng chất độc



Cấm khai thác Thủy sản bằng chất nổ



Cấm đánh bắt các loài động vật hoang dã như: Rùa biển



### 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 12

### Group 1: Legal Framework

**Members – Cambodia;** 1) Mr. Ing Try  
 2) Dr. Em Puthy  
 3) Mr. Sar Sorin  
 4) Mr. Kao Monirith  
**Lao PDR** 1) Mr. Sommano Phounsauvanh

**Vietnam;** 1) Ms. Nguyen Thi Hong Nhung  
 2) Mr. Tran Van Cuong  
 3) Mr. Nguyen Huu Binh  
 4) Mr. Le Van Tinh

**Focal points: CM, Mr. Ing Try**  
**VN, Ms. Nguyen Tri Trang Nhung**

**Alternate focal point, Mr. Deap Loeung**  
**Alternate focal point, Mr. Nguyen Huu Binh**

List Prioritized issues	Prioritized activities	Priority level of activities (Low, Medium, High)		Objectives/Why we do this action	Period	Responsible agencies	Focal points	Financial resources	Remarks
		CM	VN						
Dissemination of fisheries laws and regulations between the countries	1) Comparison study and selection of the laws and fisheries regulations between the countries to be translated	High	High	To raise awareness among fishers to minimize IUU fishing	2 months (Jun - Jul 2014)	CM: FiA VN: DFISH	CM: na VN: na	National inputs (in-kind), SEAFDEC-Sweden	By conducting a work meeting between lawyers of both countries
	2) Translation of selected laws into both languages	High	High	To raise awareness among fishers and concerned authorities to minimize IUU fishing	6 months (Aug 2014 - Feb 2015)	CM: FiA VN: DFISH	CM: na VN: na	SEAFDEC-Sweden	Take long process starting from the financial, administration etc.
	3) Production of information materials	High	High	To raise awareness among fishers to minimize IUU fishing	2 months (Mar – Apr 2015)	CM: FiA VN: DFISH	CM: na VN: na	SEAFDEC-Sweden	User-friendly materials from 1) and 2)

	4) Training workshops for central/local authorities and leader of fisher groups	High	High	To raise awareness among authorities and relevant stakeholders to minimize IUU fishing	2 month (May – Jun 2015)	CM: FiA VN: DFISH	CM: na VN: na	SEAFDEC-Sweden	Two workshops participated by the representatives from both countries
	5) Organization of training workshops to disseminate the laws including fisheries regulations in the shared fishing zone for fishermen and local authorities	High	High	To raise awareness among fishers to minimize IUU fishing	2 months (Jul-Aug 2015)	CM: FiA VN: DFISH	CM: na VN: na	SEAFDEC-Sweden	CM: 15 meetings (15 communities) VN: 15 meetings (A fisheries extension officer from CM-VN will join the meeting in another country)
Increase compliance with legal framework	Set up the procedure on 24hr hotline for authorities agencies between CM and VN to share information on relevant issues in fishing activities such as accident of fishing vessel, illegal activities, lost direction, etc.	M	M	To increase the effectiveness of the law enforcement	6 months (after identified the financial resources)	CM: FiA and Kampot Fisheries Administration Kantonment VN: DFISH and Kian Giang Agriculture and Rural Development Department	CM: na VN: na	CM: ? VN: ?	VN has already the 24hr hotline with China and Philippines
	Exchange program of enforcement officers between CM-VN to observe enforcement/inspection practices in each others countries	M	M	To increase the effectiveness of the law enforcement	1 year (after identified the financial resources)	CM: FiA and Kampot Fisheries Administration Kantonment VN: DFISH and Kian Giang Agriculture and Rural Development Department	CM: na VN: na	SEAFDEC-Sweden ?	6 exchanges per country during the year

Harmonization of laws and regulations	Establish a joint working group aiming at establishing common fisheries regulations in the shared fishing zone	M	M	To increase the effectiveness of the law enforcement	na	CM: FiA VN: DFISH	CM: na VN: na	na	
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## Group 2 Management measures of trans-boundary species

List Prioritized issues	Prioritized activities	Priority level of activities (Low, Medium, High)		Objectives/Why we do this action	Period	Responsible agencies	Focal points	Financial resources	Remarks
		CM	VN						
Insufficient data for management of transboundary species, - Anchovey (1), -Mackerel (2) - blue swimming crab(C-4, V-3), -Blood cockle (C-3, V-5) -Neritic tuna (C- 5, V-4)	Data collection by <ul style="list-style-type: none"> <li>• Landing survey+local knowledge</li> <li>• Joint-Acoustic survey + egg &amp;larvae survey at the transboundary area</li> </ul>	1	1	To obtain stock assessment status, biological parameters, lifecycle and migration data for establishment of the refugia for transboundary species	2014-2016, Landing Monthly, Scientific 1 cruise in 2015	C-FiA  V-DFISH	C-Mr.Ing Try  V-Ms. Nhung	SEAFDEC Sweden and others	
Lack of human resources on research capacity	<ul style="list-style-type: none"> <li>• Capacity building for -fishery research</li> <li>- Transfer technology for producing swimming crab fingerling</li> </ul>	2	2	Upgrading skill and expertise of researcher involve	-Oct 2014, and  -Feb 2015	C. FiA  DFISH	C. Mr. Ing Try V-Ms. Nhung	SEAFDEC Sweden and others	
Declining of blue swimming crab stock	<ul style="list-style-type: none"> <li>• Restocking - Crab fingerling releasing (Viet)</li> <li>- Improve Restocking practice of Cam</li> </ul>	3	3	To increase population of Blue swimming crab	2-3 time/year from March 2015	C. FiA  V-DFISH	C-Mr.Ing Try  V-Ms. Nhung	National program, NGO and IO	

List Prioritized issues	Prioritized activities	Priority level of activities (Low, Medium, High)		Objectives/Why we do this action	Period	Responsible agencies	Focal points	Financial resources	Remarks
		CM	VN						
Insufficient data of endanger specie (Dugong, sea turtle, Dolphin)	Data collection from <ul style="list-style-type: none"> <li>Local knowledge</li> <li>Observer for monitoring EDG sp.in the protected area</li> <li>Scientific survey</li> </ul>	1	1	To obtain comprehensive data for appropriate management and increase population of the EDG sp.	2015-2016	C-FiA  V-DFISH	C-Mr.Ing Try  V-Ms. Nhung	SEAFDEC Sweden ,IUCN, WWF, WAR	
Decreasing of EDG sp.	Awareness program for local people (group discussion), tourism	3	3	To increase awareness and exchanging information on management measure for EDG sp.	2014-2015	C-FiA  V-DFISH	C-Mr.Ing Try  V-Ms. Nhung	Potential Donor	
	Protection of Breeding/nesting area for sea turtle	2	2	Increase population of the Sea turtle	Continuously	C-FiA  V-DFISH	C-Mr.Ing Try  V-Ms. Nhung	Potential Donor	
List Prioritized issues	Prioritized activities	Priority level of activities (Low, Medium, High)		Objectives/Why we do this action	Period	Responsible agencies	Focal points	Financial resources	Remarks
		CM	VN						
Degradation of critical habitat	<ul style="list-style-type: none"> <li>Joint study/survey in transboundary area</li> </ul>	2	2	To obtain comprehensive data / information	Mar-May 2015	C-FiA	C-Mr. Ing Try		

				for appropriate management of critical habitat		V-DFISH	V-Ms. Nhung		
	<ul style="list-style-type: none"> <li>Workshop for compiling data Information sharing of two country</li> </ul>	1	1	To compile existing data/info	Dec 2014	C-FiA V-DFISH	C- Mr. Ing Try V-Ms.Nhung	SEAFDEC-Sweden	
	<ul style="list-style-type: none"> <li>Re-habilitation of the damaged habitat of sea grass,mangrove and coral reef</li> </ul>	4	4	To restore/enhance the habitat and associated resources	2015-2016	C-FiA V-DFISH	C- Mr. Ing Try V-Ms.Nhung	Potential Partners such as CORIN-ASIA, WWF-Cambodia/VN, IUCN, MFF	
	<ul style="list-style-type: none"> <li>More enforcement</li> </ul>	5	5	To minimize the illegal activities	2014-continuously	C-FiA V-DFISH	C-Mr.Ing Try V-Ms. Nhung	National	
	<ul style="list-style-type: none"> <li>Identify and demarcation of the protected habitat</li> </ul>	3	3	To mark the specific boundary of the protected area	2014-2015	C-FiA V-DFISH	C-Mr. Ing Try V-Ms. Nhung	NGOs, National	
	<ul style="list-style-type: none"> <li>Awareness program for local people, tourism</li> </ul>	6	6	To increase public awareness on the importance of critical habitat	2014-2015	C-FiA V-DFISH	C-Mr.Ing Try V-Ms. Nhung	National/NGOs	

Mr.Thao- Deputy director of Agriculture and rural development of Kien Giang province

### Group 3: Marine capture fisheries, combating illegal (IUU) and destructive fishing

List prioritized issues	Prioritized activities	Prioritized level of activities ( <i>low, Medium, High</i> )	Objectives/ WHY we do that?	Period 2014 - 2017	Responsible agencies	Focal points	Financial resources	remarks
Boat registration Fishing/ Record	*Sharing experience through workshops,  *cross-site visits,  *Inter-ministerial meetings (Cambodia & Vietnam)	Cambodia – H/ Vietnam – H  Cambodia -H/ Vietnam -H Cambodia - M/ Vietnam - M	*Lessons learned from each countries (experiences) in order to improve current practices Improve/ synergize registration  *Fishing license issuance  *Discuss advantages & disadvantages of single agency or multiple agency responsibility	*Inter-ministerial meeting between 2 countries in 2014  *Cross-site visits in 2014  *Sharing experience in 2014	VN- Directorate of Fisheries & Local fisheries departments  C- central FiA & in provinces  SEAFDEC	Head of working team from each country	SEAFDEC & in kind from national resource	
Over fishing in near-shore areas	*Implementation of zoning regulation through marking  *Information dissemination through seminars, radio, posters, leaflets,	Cambodia -H/ Vietnam -H  Cambodia -H/ Vietnam -H	*Protect fisheries resources  *To improve knowledge and effect positive changes in the attitude and practices of fishermen	*Information dissemination through seminars, radio, posters, leaflets, ... in 2015  *Implementation of zoning regulation through marking in 2015	VN- Directorate of Fisheries & Local fisheries departments  C- central FiA & in provinces  SEAFDEC	Head of working team from each country	SEAFDEC & in kind from national resource *check availability of funding of other sectors  *link to group 1&2	
Illegal fishing / Destructive fishing gear	*Awareness – raising through seminars, radio, posters, leaflets,	Cambodia -H/ Vietnam -H	*Protect fisheries resources  *To improve	* Awareness in 2015  * Survey on effectiveness law	VN- Directorate of Fisheries & Local fisheries	Head of working team from each country	SEAFDEC & in kind from national resource *check	

	<p>*Survey on effectiveness of law enforcement</p> <p>*Sharing of MCS (2 countries)</p>	<p>Cambodia -M/ Vietnam -M</p> <p>Cambodia -H/ Vietnam -H</p>	<p>knowledge and effect positive changes in the attitude and practices of fishermen</p> <p>*To be able to assess effectiveness of law enforcement activities to improve, adjust regulations “Lessons learned from each countries (experiences) in order to improve current practices”</p> <p>* Improve/ synergize registration”</p>	<p>enforcement in 2016</p> <p>*sharing of MCS in 2015</p>	<p>departments</p> <p>C- central FiA &amp; in provinces</p> <p>SEAFDEC</p>		<p>availability of funding of other sectors</p> <p>*link to group 1&amp;2</p>	
<p>Conflict in fishing areas</p> <p>- Between small + big fishing boats</p> <p>- Encroachment between two countries</p>	<p>*Information dissemination through workshops + seminars (co-management)</p> <p>*consultative workshop/ meeting between 2 countries (fisheries staffs)</p> <p>*Information dissemination</p>	<p>Cambodia -H/ Vietnam -H</p> <p>Cambodia -M/ Vietnam -M</p> <p>Cambodia -M/ Vietnam -M</p>	<p>*To have common understanding between small-large scale fishermen</p> <p>*To come up with co-management plans</p> <p>*To understand each country’s laws &amp; regulations</p> <p>*To start,</p>	<p>*Information dissemination in 2016</p> <p>* Consultative workshops in 2017</p> <p>* Information dissemination about result of activities in 2017</p>	<p>VN- Directorate of Fisheries &amp; Local fisheries departments</p> <p>C- central FiA &amp; in provinces</p> <p>SEAFDEC</p>	<p>Head of working team from each country</p>	<p>SEAFDEC &amp; in kind from national resource</p> <p>*check availability of funding of other sectors</p> <p>*link to group 1&amp;2</p>	

	about results of activities		eventually come up with joint-managements  *To improve knowledge and effect positive changes in the attitude and practices of fishermen					
Safety at sea	*Training courses on safety at sea -TOT  -fishing vessel operators/ fishermen  *produce leaflets, ...	Cambodia -H/ Vietnam -H Cambodia -H/ Vietnam -H  Cambodia -H/ Vietnam -H	*Reduce loss of life and property  *Improve knowledge of safety at sea	*Training courses of safety for TOT in 2016 *Training courses for fishing vessel operators/ fishermen in 2016 *Produce leaflets in 2017	VN- Directorate of Fisheries & Local fisheries departments  C- central FiA & in provinces  SEAFDEC	Head of working team from each country	SEAFDEC & in kind from national resource *check availability of funding of other sectors	
*Other activities	*Meeting to review progress  *Meeting to monitor implementation of activities			*Review progress in 2016 *Annual meetings, 4 <sup>th</sup> Q	VN- Directorate of Fisheries & Local fisheries departments  C- central FiA & in provinces  SEAFDEC	Head of working team from each country	SEAFDEC & in kind from national resource	
	<b>15 activities in 4 years</b>							

## Combined activities

Prioritized activities	List Prioritized issues	Component	Priority level of activities (Low, Medium, High)		Objectives/Why we do this action	Period	Responsible agencies	Focal points	Financial resources	Remarks
			CM	VN						
1. Comparative Cam-Vie study of selected laws and regulation on fisheries and related aspects	To share and disseminate information between Cam and Vie on laws and regulations of relevance to fisheries and habitat management	1	High	High	To raise awareness among fishers on rules and regulations relevant to fisheries and habitat management in each country	2 months (Jun - Jul 2014)	CM: FiA VN: DFISH	CM: Mr. Ing Try VN: Ms. Nhung	National inputs (in-kind), SEAFDE C-Sweden	Meeting and network among legal advisors of both countries
2. Translation of selected laws and regulation into Cam-Vie languages (and English?)	Links to 4, 7, 9, 19, 23 and 26 that include needs to compare laws and regulations	1	High	High	To raise awareness among fishers and concerned authorities on rules and regulations relevant to fisheries and habitat management	6 months (Aug 2014 - Feb 2015)	CM: FiA VN: DFISH	CM: Mr. Ing Try VN: Ms. Nhung	SEAFDE C-Sweden and national inputs (existing trans.)	Take long process starting from the financial, administration etc.
3. Production of information materials		1	High	High	To raise awareness among fishers on rules and regulations relevant to fisheries and habitat management	2 months (Mar – Apr 2015)	CM: FiA VN: DFISH	CM: Mr. Ing Try VN: Ms. Nhung	SEAFDE C-Sweden and national (existing mtrl.)	User-friendly materials from 1) and 2)
4. Training workshops for central/local authorities and leader of com fisheries groups in each country	To have one or more workshops organized in each of the	1	High	High	To raise awareness among authorities and relevant stakeholders on rules and regulations relevant to fisheries and habitat management	2 month (May – Jun 2015)	CM: FiAh VN: DFISH	CM: Mr. Ing Try VN: Ms. Nhung	National inputs (in-kind), SEAFDE C-Sweden	Two workshops participated by the representatives from both countries

5. Joint training workshops for fisherfolk and local authorities in border provinces on laws and regulations relevant to fisheries and habitat management areas of common interest	countries  In Cam reach out to 15 communities.  In Vie reach out to 15 districts  Have fisheries officers from CM-VN part in joint meeting	1	High	High	To raise awareness and cross border understanding among authorities and relevant stakeholders on rules and regulations relevant to fisheries and habitat management	2 months (Jul-Aug 2015)	CM: FiA VN: DFISH	CM: Mr. Ing Try VN: Ms. Nhung	National inputs (in-kind), SEAFDE C-Sweden	CM and VN:  Organize a series of local and follow-up with joint events
6. Exchange program of enforcement officers between CM-VN to observe enforcement and inspection practices in both countries  Link to 1 and 4	Target group to include:  Kampot Fisheries Administration Kantonment  Kien Giang Agriculture and Rural Dev. Department	1	Med	Med	To increase the effectiveness of the law enforcement  Kampot Fisheries Administration Kantonment  Kien Giang Agriculture and Rural Development Department	1 year (after a financial resource is secured)	CM: FiA and VN: DFISH	CM: Mr. Ing Try VN: Ms. Nhung	National inputs (in-kind), SEAFDE C-Sweden?	Target: 6 exchanges per country during the year  Link to 1 and 4
7. Establish a joint working group for the development of common fisheries and habitat regulations based on national legislation in fishing areas of common	Harmonization of the application of laws and regulations  Links to 19 and 23 on “zoning”	1	Med	Med	To increase the effectiveness of the law enforcement by common framework for the applications of rules, including zones for fishing and non-fishing	Third Q 2014 and onwards as needed	CM: FiA VN: DFISH	CM: Mr. Ing Try VN: Ms. Nhung	National inputs (in-kind), SEAFDE C-Sweden	Link to 1 network of legal advisors  Links to 19 and 23 on “zoning” Links to 1,



interest	Links to 1, study on laws.									study on laws.
<b>“More enforcement”</b> (18 in old matrix) and <b>“Sharing of MCS”</b> experiences (28 in old matrix)	There is a general need to strengthen enforcement and to improve monitoring				To protect critical habitats and to conserve fish stocks by minimizing illegal activities					A call to share information on enforcement practices
8. More enforcement of rules to protect critical habitats From 18 in the old document	Continued degradation of critical habitat Lack of compliance with regulations	2	Med	Med	To minimize the illegal activities and reduce destructive fishing	2014 and to continue onwards	CM: FiA VN: DFISH	CM: Mr. Ing Try VN: Ms. Nhung	National inputs (in-kind), SEAFDE C-Sweden	Action not specified. Activities need to be linked to other points
9. Sharing of information on MCS practices between Cam and Vie  From 28 in the old document	Illegal fishing activities and use of illegal and destructive fishing gear  Link to 7 and 26 including applications of national laws	3	High	High	To assess the effectiveness of law enforcement activities to improve, adjust regulations  To share lessons learned with an aim to improve current practices”	MCS sharing in 2015 and onwards	CM: FiA VN: DFISH	CM: Mr. Ing Try VN: Ms. Nhung	National inputs (in-kind), SEAFDE C-Sweden	Action not specified. Activities need to be linked to other points Link to 7 and 26 applications of national laws
10. Conduct a survey on the effectiveness of law enforcement in the area of common interest From 27 in the old document	Limited enforcement of rules to reduce illegal fishing and the use of destructive fishing methods/gear	3	Med	Med	To generate knowledge on the present level of enforcement with an aim to effect positive changes in the attitude and practices of fishermen	Survey on law enforcement in 2015 or 2016	CM: FiA VN: DFISH	CM: Mr. Ing Try VN: Ms. Nhung	National inputs (in-kind), SEAFDE C-Swedenm	Information should also provide for changes in enforcement practices
11. Set up the procedure on 24hr hotline for authorities and agencies between CM and VN to share information on relevant issues in	Increase compliance with legal framework and safety at sea  Kampot	1	Med	Med	To increase the effectiveness of the law enforcement and to improve safety at sea measures	6 months (after a financial resource is secured)	CM: FiA VN: DFISH	CM: Mr. Ing Try VN: Ms. Nhung	CM: ? VN: ?	VN has already the 24hr hotline with China and Philippines

fishing activities such as accident of fishing vessel, illegal activities, lost direction, etc.	Fisheries Administration Kantonment  Kien Giang Agriculture and Rural Dev. Department									
<b>12. Data collection of commercial species by:</b> - Landing surveys - Joint-Acoustic survey -egg &larvae survey  In fishing areas of common interest to both countries  In the process review local knowledge	Insufficient data for the management of fishing on trans-boundary species, - Anchovy (1), - Mackerel (2) - blue swimming crab(C-4, V-3), - Blood cockle (C-3, V-5) - Neritic tuna (C- 5, V-4)	2	High	High	To improve assessment of stock status, biological parameters, lifecycle and migration data of priority species for establishment of the fisheries resources conservation areas to conserve trans-boundary species	2014-2016, Ongoing and to continue  Aim for a cruise in 2015	<b>CM:</b> FiA <b>VN:</b> DFISH	<b>CM:</b> Mr. Ing Try <b>VN:</b> Ms. Nhung	National inputs (in-kind), SEAFDE C-Sweden  Identify other partners to support data collection	Should link to and build upon national routine data collection systems
<b>13. Capacity building:</b> - Improve fishery research capacity - Transfer of technology to produce swimming crab fingerlings	Lack of human resources in areas of fishery research and with regards to the use of new technologies	2	Med	Med	Upgrading skill and expertise of involved researchers and staff involved in applications of new (and old/local) technologies	-Oct 2014, and  -Feb 2015	<b>CM:</b> FiA <b>VN:</b> DFISH	<b>CM:</b> Mr. Ing Try <b>VN:</b> Ms. Nhung	National inputs (in-kind), SEAFDE C-Sweden	Identify other partners to support capacity building
<b>14. Restocking</b> - Crab fingerling releasing in Vietnam - Improve Restocking practice of Cambodia	Declining stocks: Blue swimming crab	2	Med	Med	To increase the population of Blue swimming crab	2-3 time/year from March 2015	<b>CM:</b> FiA <b>VN:</b> DFISH	<b>CM:</b> Mr. Ing Try <b>VN:</b> Ms. Nhung	National programs, CORIN-Asia Others?	Restocking and to include crab banks?

15. Organize a Workshop to initiate a process for compiling <b>habitat data and data on endangered species</b> including information sharing between Cam and Vie	Status and level of degradation of critical habitat and Insufficient data of endangered species (Dugong, sea turtle, Dolphin)	2	High	High	To compile existing data/info	Dec 2014	CM: FiA VN: DFISH	CM: Mr. Ing Try VN: Ms. Nhung	National programs, SEAFDE C-Sweden	Links between habitats and endangered species
16. <b>Data collection of endangered species by</b> <ul style="list-style-type: none"> <li>Survey local knowledge</li> <li>Observation and monitoring of endangered species in protected areas</li> <li>Scientific survey</li> </ul>	Insufficient data of endangered species (Dugong, sea turtle, Dolphin)	2	High	High	To obtain more comprehensive data for appropriate management measures and to increase the population of endangered species	2015-2016	CM: FiA VN: DFISH	CM: Mr. Ing Try VN: Ms. Nhung	National programs, SEAFDE C-Sweden, IUCN, WWF, WAR CORIN-Asia	Include efforts to strengthen organization and capacity at local level
17. Conduct a joint study/survey to improve <b>habitat data and data on endangered species</b> in areas of common interest to Cam and Vie	Status and level of degradation of critical habitat and Insufficient data of endangered species (Dugong, sea turtle, Dolphin)	2	Med	Med	To obtain comprehensive data / information for appropriate management of critical habitat and for the protection of endangered species	Mar-May 2015	CM: FiA VN: DFISH	CM: Mr. Ing Try VN: Ms. Nhung	National inputs (in-kind), SEAFDE C-Sweden Any others?	
18. <b>Awareness-raising</b> program for local people: <ul style="list-style-type: none"> <li>On protection of endangered species</li> <li>On protection and rehabilitation of critical habitats</li> </ul>	Decreasing number of endangered species.  Degradation of critical habitats	2	Med	Med	To increase awareness and exchanging information on management needs and measures to protect endangered species  To increase public awareness on the	2014-2015	CM: FiA VN: DFISH	CM: Mr. Ing Try VN: Ms. Nhung	National inputs (in-kind), SEAFDE C-Sweden CORIN-Asia IUCN WWF	Include efforts to strengthen local organization and capacity

Include group discussions, and locally based tourism  <i>This one combined with old 20</i>					importance of critical habitat				WAR	
19. Identification and demarcation of critical habitats to be protected, including markers to show the boundary	Degradation of critical habitats  Links to 7, 23 and 26 on demarcation and zoning with consultations	2	Med	Med	To identify critical habitats and reverse degradation through the demarcation (zoning) of habitats including markers to show the specific boundary of the protected area	2014-2015	CM: FiA VN: DFISH	CM: Mr. Ing Try VN: Ms. Nhung	National inputs (in-kind), SEAFDE C-Sweden WWF, IUCN, Tourism	Ensure that identified zones are mapped and information made public  Links to 7, 23 and 26
20. Protection of Breeding/nesting area for sea turtle	Decreasing population of endangered species, such as sea turtles	2	Med	Med	Increase the population of the sea turtle in the area	2014 and to continue onwards	CM: FiA VN: DFISH	CM: Mr. Ing Try VN: Ms. Nhung	National inputs (in-kind), IUCN	Linked to the protection of habitats 19
21. Rehabilitation of damaged and degraded habitats (sea grass, mangroves and coral reefs)	Degradation of critical habitat	2	Med	Med	To restore/enhance important habitats and associated resources	2015-2016	CM: FiA VN: DFISH	CM: Mr. Ing Try VN: Ms. Nhung	National inputs (in-kind), SEAFDE C-Sweden WWF, IUCN, Tourism	Link to the protection of habitats 19
22. Sharing of information and experiences on registration and licensing process between Cam and Vie - Joint workshops, - Cross-site visits (moved from old 22)	Systems for vessel registration and fishing licenses vary between Cam and Vie as well as the set-up of records	3	High High	High High	Lessons learned from each countries in order to improve current practices and to improve or synergize practices  Compare advantages & disadvantages of single agency or multiple	Joint reg/lic event in 2014 incl. visits  Joint inter-minister	CM: FiA VN: DFISH	CM: Mr. Ing Try VN: Ms. Nhung	National inputs (in-kind), SEAFDE C-Sweden Check with JTF	Check with TD, FAO and other – link to efforts to compare laws  Link to 1, 7 and 26 comparing

- Inter-ministerial meetings (Joint Cam-Vie) – moved from old 23 Link to 1, 7 and 26 comparing laws and consultation	Involve local and provincial fisheries departments		Med	Med	agency responsibility (23)  Link to 1, 7 and 26 comparing laws and consultation	meeting in 2014				laws and consultation
23. Identification and demarcation of zones that are to be subject to restrictions in fishing activities Support the implementation of zoning regulation through marking Links to 7. 19 and 26 on demarcation and zoning + consultation	Over fishing in near-shore areas in combination with illegal (encroaching) and destructive fishing  Involve local and provincial fisheries departments in Cam and Vie	3	High	High	To protect fisheries resources through restrictions in areas and types of fishing activities  Strengthen the involvement of local and provincial departments in Cam and Vie	*Information dissemination through seminars, radio, posters, leaflets, ... in 2015	<b>CM:</b> FiA <b>VN:</b> DFISH	<b>CM:</b> Mr. Ing Try <b>VN:</b> Ms. Nhung	National inputs (in-kind), SEAFDE C-Sweden	Ensure that identified zones are mapped and information made public  Links to 7. 19 and 26 on demarcation and zoning + consultation
24. Information dissemination and awareness-raising through seminars, radio, posters, leaflets,  Old 25 and 26 combined as the same media will be used	Effects of over fishing in near-shore areas  Effects of Illegal fishing and destructive fishing practices/gear  Need to inform districts and provinces	3	High	High	To inform on illegal and destructive fishing and to trigger positive changes in the attitude and practices of fisher-folk To protect fisheries resources  To inform on zoning, rules and regulations  To increase awareness at district and provincial offices	2015 and onwards	<b>CM:</b> FiA <b>VN:</b> DFISH	<b>CM:</b> Mr. Ing Try <b>VN:</b> Ms. Nhung	National inputs (in-kind), SEAFDE C-Sweden Check with JTF	Link to other actions to inform and create awareness in components 1 and 2
25. Seminar to share information and discuss and define areas of conflict within fisheries with groups of	Conflict in fishing areas common to Cam and Vie - Conflicts	3	High	High	To create a common understanding between small-large scale fishermen on problems to be solved	Seminar to be held in 2016	<b>CM:</b> FiA <b>VN:</b> DFISH	<b>CM:</b> Mr. Ing Try <b>VN:</b> Ms. Nhung		Link to other actions to inform and create awareness in

fishermen	between small and large fishing vessels - Encroachment of vessels between Cam and Vie				To come up with action plans to reduce tension among people engaged in fishing					components 1 and 2
26. Consultative workshop between fisheries and related agencies in Cam and Vie to formulate plans for joint management	See above point 25	3	Med	Med	To understand each country's laws & regulations  To start to, eventually, come up with joint-management plans for the area	Event planned for 2017	<b>CM:</b> FiA <b>VN:</b> DFISH	<b>CM:</b> Mr. Ing Try <b>VN:</b> Ms. Nhung		Links to work to understand laws and regulations of the two countries (points 1, 4, 7, 9, 19 and 23)
27. Organize training courses on safety at sea measures for; -Training of Trainers (TOT) - fishing vessel operators, and for fishermen  Produce leaflets for information on safety at sea	Increased efforts to improve safety at sea for people engaged in fishing	3	High	High	To Reduce loss of life and property  Increase knowledge on measure to improve safety at sea (including working conditions)	TOT in 2016  Crew and fishers in 2016  Leaflets in 2017	<b>CM:</b> FiA <b>VN:</b> DFISH	<b>CM:</b> Mr. Ing Try <b>VN:</b> Ms. Nhung	National inputs (in-kind), SEAFDE C-Sweden Check with JTF	
28. Disseminate information on results achieved through cooperative activities between Cam and Vie	Responses needed to reduce conflicts in fishing areas and reduce illegal and destructive fishing. - Conflicts between small and large fishing vessels	3	Med	Med	To improve knowledge on cooperative action between Cam and Viet  To generate positive changes in the attitude and practices of fishermen by building upon results achieved	Spread results of activities from 2016 and onwards	<b>CM:</b> FiA <b>VN:</b> DFISH	<b>CM:</b> Mr. Ing Try <b>VN:</b> Ms. Nhung	National inputs (in-kind), SEAFDE C-Sweden	Include options to add new partners

	- Encroachment of vessels between Cam and Vie									
29. Meeting to review progress (Annual)	To agree on progress and way forward				To review progress and recommend action for the coming year(s)	Review progress in 2016  Annual meeting, 4 <sup>th</sup> Q	<b>CM:</b> FiA <b>VN:</b> DFISH	<b>CM</b> Mr.Ing Try <b>VN</b> Ms. Nhung	National inputs (in-kind), SEAFDE C-Sweden	Include options to add new partners