

**Report of the Regional Technical Consultation on Management  
of Fishing Capacity and Human Resource Development in  
Support of Fisheries Management in Southeast Asia  
19-22 September 2006**



**Southeast Asian Fisheries Development Center  
The Secretariat**

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## **Abstract**

This document contains the report of the Regional Technical Consultation to review progress and promote the management of fishing capacity and HRD activities in support of the implementation of the Regionalization of the Code of Conduct for Responsible Fisheries in Southeast Asian Region. The Consultation was held, from 19-22 September 2006 in Phuket Thailand, by SEAFDEC Secretariat in collaboration with SEAFDEC Member Countries under ASEAN-SEAFDEC Fisheries Consultative Group Mechanism. The Consultation was organized with the aim to develop common approaches to address key areas to be considered in relation to fisheries management as well as a set of recommendations for management of fishing capacity.

The major thrust of the Consultation focused on fishing capacity both in management terms and with reference to HRD needs. In terms of HRD on fisheries management recommendations in summary urged for better sharing of expertise, sharing of experiences (model areas/pilot activities), to make use of and build upon existing training materials, networking and increase cooperation to make use of regional and national initiatives/projects as input/factor to facilitate national planning and activities for HRD.

For the management of fishing capacity in Southeast Asia, the Consultation provided recommendations for priority issues and suggested actions to be considered by the ASEAN-SEAFDEC Member Countries. This included the need to implement National Plans of Action; recommendations on HRD to support management of fishing capacity at various levels and target groups; and recommendations on regional and bi-lateral cooperation and collaborative arrangements in sub-regional sea areas in order to provide guidance for Member Countries in managing fishing capacity. In relation to the work of SEAFDEC and other regional initiatives strong recommendations for regional cooperation were highlighted and brought forward in the concluding part of the Consultation as priority elements to be considered in planning for future programs and activities.

The Consultation saw a “breakthrough” when the ASEAN-SEAFDEC Member Countries for the first time recommended the major long term policy issue or area for collaboration to aim towards the establishment of a “Regional and Sub-regional Fisheries Management Body”. To be able to work along this line, the Consultation recommended that programs to be developed should allow Member Countries to work out solutions on common issues, jointly and/or in sub-groups, and hence in various way gradually build common understandings and trust among Member Countries to pave the way for the legal framework needed to establish a regional fisheries management body.



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**Regional Technical Consultation on Management of Fishing Capacity and Human Resource Development in Support of Fisheries Management in Southeast Asia  
19-22 September 2006, Phuket, Thailand**

Keyword: Code of Conduct for Responsible Fisheries, Co-Management and Rights-Based Fisheries Management, Fisheries Management, Fisheries Refugia, Habitat Management, Human Resource Development, International Plan of Action, National Plan of Action, Management of Fishing Capacity

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**I. Introduction**

1. The Regional Technical Consultation on Management of Fishing Capacity and Human Resource Development in Support of Fisheries Management in Southeast Asia was held in Phuket, Thailand from 19-22 September 2006. The Consultation was organized under the ASEAN-SEAFDEC Fisheries Consultative Group Mechanism in the category of the program on Regionalization of the Code of Conduct for Responsible Fisheries Management. More specifically under the project, with financial support from Sida, entitled “HRD on the Support to the Implementation of the Code of Conduct for Responsible Fisheries in the ASEAN Region (2003-2006).

**Management of Fishing Capacity and HRD for Fisheries Management in Southeast Asia**

2. In relation to management of fishing capacity and HRD for fisheries management in the Southeast Asia, five major consultation/meetings had been organized by SEAFDEC, and the last four by the Project, prior to the RTC: Regional Workshop on Management of Fishing Capacity in November 2000 in Malaysia; Regional Workshop on HRD in Fisheries Management in February 2004 in Malaysia; Regional Technical Consultation in June 2004 in Cambodia; Expert Meeting in September 2004 in Thailand; and Expert Meeting in July 2006 in Cambodia.

3. The focus of the first Workshop in 2000 was to introduce International Plan of Action (IPOA) on Management of Fishing Capacity initiated under FAO and to identify possible actions to be taken for management of fishing capacity and reduction of fishing capacity in the region. As the immediate follow up action by countries in the region, it was strongly recommended, that steps needed to be identified to effectively close/limit access to fisheries, and the process address legal, economic and social implications.

4. The Regional Workshop in 2004 was co-organized by SEAFDEC Marine Fisheries Research and Development Department and SEAFDEC-Sida Project, with the aim to enhance human resource capacity and awareness building with respect to the priorities contained in Article 7 of Fisheries Management of the Code of Conduct for Responsible Fisheries, and to promote various HRD activities related to fisheries

management. Major outcome of the workshop was the development of a “strategy for HRD in Fisheries in the ASEAN Region” document. The “Strategy” was considered as vital to clarify the role of human resource development (HRD) to effectively implement the Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region adopted at the ASEAN-SEAFDEC Conference on Sustainable Fisheries for Food Security in the New Millennium: “Fish for the People” held in 2001.

5. The Technical Consultation in 2004 was held with the priority given to discuss on the practical steps towards development and promotion of HRD activities for management of fishing capacity in the region, and to clarify priority requirements and HRD plan/activities towards development and implementation of HRD for fisheries management. The “Plan and Framework for HRD in Fisheries Management” was developed through the group works on the following thematic thrusts:

- ❖ Management of Fishing Capacity
- ❖ Strengthening of Local Fisheries Management
- ❖ Integration of Fisheries Management into Habitat Management.

The Consultation in 2004 recommended the SEAFDEC-Sida Project to implement a pilot study/process in the representative set of countries (Cambodia, Indonesia, Thailand and Vietnam). The process included an aim to promote the sharing of experiences at the regional level by extracting experiences from past/ongoing national and regional initiatives. The Consultation also recommended that management of fishing capacity and promotion of HRD related activities should be addressed within the context of fisheries management, thereby avoiding an isolated process that would not be optimal in terms of identifying options for management of fishing capacity.

6. The discussion at the Expert Meetings in 2004 and 2006 focused on the identification of problem areas, possibilities and target groups for various HRD interventions to alleviate problems caused by excess fishing capacity and also what kind of HRD activities to be implemented in the representative set of countries. The Expert Meeting confirmed the importance and relevance of the identifications/elaborations done during the previous events with regards to the key project thematic thrusts.

7. At the invitation of the SEAFDEC Secretariat, the Technical Consultation in Phuket saw participation from the National Coordinators/representatives/experts from ASEAN and SEAFDEC Member Countries, namely Brunei Darussalam, Cambodia, Indonesia, Japan, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam. The Deputy Director of Department of Fisheries Thailand, SEAFDEC Secretary-General, Deputy Secretary-General, Chief of SEAFDEC Aquaculture Department, and SEAFDEC Training Department attended together with relevant experts from the Secretariat. Representatives from Coastal Resources Institute (CORIN), Thailand, Coastal Habitat and Resources Management (CHARM), Thailand, Bureau of Fisheries and Aquatic Resources Department of Agriculture (BFAR), The Philippines, The World Convention Union (IUCN) – Vietnam, WorldFish Center, Swedish Board of Fisheries (SBF), Department of Marine and Coastal Resources, UNEP/GEF South China Sea Project, and

Department of Fisheries Management Kasetsart University did also attend the Consultation. The list of participants appears as **Annex 1**.

8. The Consultation had the following tasks:

- ❖ To develop common approaches to implement the issues related to fisheries management as included in the “Regional Guidelines for Responsible Fisheries in Southeast Asia: Fisheries Management” through appropriate HRD activities;
- ❖ To develop a set of recommendations for management of fishing capacity in the region;
- ❖ To develop recommendations for the better planning and implementation of HRD for fisheries management and management of fishing capacity in the region by mobilizing lessons learned from the SEAFDEC-Sida Project, relevant SEAFDEC Projects and other initiatives; and
- ❖ To identify future required support for fisheries management and management of fishing capacity through capacity building activities.

9. The specific objectives of the Consultation were:

- ❖ To review and conclude major outputs from the SEAFDEC-Sida project implementation from 2004 to 2006;
- ❖ To review other relevant initiatives together with the experiences and lessons learned for coastal fisheries/resources management and management of fishing capacity in Southeast Asia; and
- ❖ To identify future direction, works and support from SEAFDEC and other relevant initiatives in managing fisheries, particularly the fishing capacity in the region.

## **II. Opening of the Consultation**

10. Dr. Magnus Torell, SEAFDEC Senior Advisor, welcomed the resource persons and participants of the Consultation. He emphasized the importance of the Consultation in identifying the various options to alleviate the problems caused by the excessive level of fishing capacity and at the same time promote various HRD activities on fisheries management to achieve sustainable development of fisheries.

11. The Secretary-General of SEAFDEC, Dr. Siri Ekmaharaj, welcomed the participants to the Consultation and underlined the importance of the management of fishing capacity and the promotion of various HRD activities to ensure sustainable management and development of fisheries in ASEAN-SEAFDEC Member Countries. He expressed gratitude to the support from Sweden and other institutions in close cooperation with SEAFDEC regarding the promotion and implementation of the Regionalization of the Code of Conduct for Responsible Fisheries and for management of fishing capacity in the region. His opening address appears as **Annex 2**.



### **III. Adoption of the Agenda and Arrangement**

12. Dr. Worawit Wanchana introduced the agenda (**Annex 3**), discussion documents and other reference documents for the Consultation (**Annex 4**). He followed with a presentation on overview of achievements and outputs of SEAFDEC-Sida Project from 2004 until today date (**Annex 5.1**). Having adopted the agenda and arrangements for the Consultation the participants was informed about “key lessons learned”, “concrete steps towards outputs/results orientation”, and “way forwards and key challenges” of the SEAFDEC-Sida project initiative.

### **IV. Synthesis of Experience and Lessons Learned from several Initiatives: Management of Fishing Capacity**

13. Overview of the key findings and major achievements of the selected regional/national initiatives, SEAFDEC and non-SEAFDEC initiatives, in relation to management of fishing capacity in Southeast Asia were presented as follow:

- ❖ SEAFDEC-Sida Project “Human Resource Development activities on the issues on Fishing Capacity” by Dr. Worawit Wanchana, SEAFDEC-Sida Project Manager (**Annex 5.2**)
- ❖ Management of Fishing Capacity in Southeast Asia “Current Situation and Future Challenge and HRD Needs” by Mr. Suriyan Vichitlekarn, Policy and Program Coordinator of SEAFDEC Secretariat (**Annex 6**)
- ❖ Freezing the Fishing Fleets by Mr. Suriyan Vichitlekarn, Policy and Program Coordinator of the SEAFDEC Secretariat (**Annex 7**)
- ❖ Managing Conflicts between Small-scale and Large-scale Fisheries and Policy Brief for Steps towards Managing Conflict by Mr. Len Garces, Researcher of WorldFish Center (**Annex 8**)
- ❖ Fishing Capacity Direction of Trawl and Push Net in the Gulf of Thailand by Dr. Mala Supongpan, Senior Fisheries Expert, Department of Fisheries Thailand (**Annex 9**)

14. Several efforts have been initiated in the region on the management of fishing capacity. The experience and lessons learned from several initiatives mentioned above can be concluded as follow:

#### **Guiding Considerations for Management of Fishing Capacity in Southeast Asia**

- ❖ FAO IPOA-Capacity
- ❖ Multi-gear/species of fisheries
- ❖ Emphasis on small-scale fisheries both inland and marine waters
- ❖ Integration social, economic, environmental, legal and political factors
- ❖ Priority and practicability

## **Major findings from some Initiatives Related to Management of Fishing Capacity**

- ❖ No aggregated data on fishing capacity at national/regional level, however, the information is available in more site-specific and projects related forms than statistical information.
- ❖ The uniqueness of fisheries in the region requires relevant management approaches and tools, and the establishment and development of the national plan of actions for management of fishing capacity is a process and not an end product.
- ❖ Overcapacity of fisheries was found to be a primary cause of the major problems within fishery sector, e.g. IUU fishing, degradation of ecosystem and habitats, conflicts among/between fishers/ other stakeholders, declining catches and changing in catch composition toward low value or immature fish.
- ❖ National policy and plan exist for management of fishing capacity. However, among them there is a different degree of readiness, in most countries there is not any proper management system in place.
- ❖ Improvement of fishery management could not be done without addressing the issue of management of fishing capacity.
- ❖ Issues related to conflicts among/between stakeholders/fishers
  - The Conflicts have varying underlying or root causes.
  - Each conflict has corresponding threats or impacts.
  - Need for review and updating the existing laws and regulation
  - Exists strategies need to be designed with stakeholders and not only be based on the technical solutions

## **Available information and useful materials related to management of fishing capacity**

- ❖ Identification of the problem areas and target groups of the HRD activities on fishing capacity in the region.

## **Identified key issues in managing fishing capacity (see its details in Annex 5)**

- ❖ Policy related issues
- ❖ Institutional related issues
- ❖ Socio-economic issues
- ❖ Research issues
- ❖ Regional level issues

## **Suggested approaches and direction towards management of excess fishing capacity**

- ❖ Understand the issues and analysis of status and trend of fisheries
- ❖ Persistent issues and/or measures to be developed to encourage the stakeholders in managing of fishing capacity:
  - Packaging policy and technical advice into guidelines for future reference and in calling for greater attention and support for needed management efforts.

- Introduce/Replace open-access with limited access regime of fisheries
  - Control/regulate fishing capacity. Current number of fishing fleets should be frozen to its current level before proceeding with further management measures based on reliable information.
  - Promote co-management and rights-based fisheries. Registration of fishers and fishing boats as the basis for rights-based fisheries management (access rights and licensing)
  - Strengthening local institutions through delegation of management function
  - Integration of fisheries and habitats management
  - Freezing and control number of fishing vessels as the basis for reduction strategies.
  - Set maximum limit of catch, limit number of fishers and/or limit amount of allocated fishing days per unit.
  - Establish non-fishing season (closed season).
  - Develop supplementary/alternative livelihoods for coastal communities.
  - Balance of inter-relationship between small-scale and large-scale fisheries (commercial/subsistence, urban/rural)
  - Capacity also for groups beyond “managers” and “fishers”
  - Pilot areas/cases for further national-wide implementation
  - Mobility of fishing capacity (migratory workforce and mobility in terms of vessels) including considerations of available resources as well as social and economic dimensions
  - Establish trans-boundary collaborative arrangement (ecological areas extending beyond geo-political boundaries)
  - Ban use of certain gears
- ❖ Further measures and aspects to consider to support management of fishing capacity:
- Need clearer national policy with regards to: reduction of user conflicts; increase fish productions; measures to safeguard employment and incomes; resource sustainability; expansion of aquaculture and offshore operations; export promotion.
  - Management of fishing capacity in high seas (fishing outside of EEZ’s) → consider links to the remit of specific regional fisheries management organizations.
  - Development of national plan of actions for management of fishing capacity, which need the support of national policy and planning (within geo-political boundaries)
  - Strengthening management of fishing capacity → adoption of management areas (within ecological boundaries and within and across political boundaries).
  - Information exchange and sharing experiences through policy dialogues, networking and partnership.
  - Maintain/support institutional partnership in research and development.
  - Building “non-fishery” human capacity to reduce the fishing capacity.

- Promote and harmonize action plans through good governance.
- Advocate management intervention and politicize security threat.
- Develop mechanism for implementing co-operation in the midst of conflicts and impending security threats to fishing livelihoods food security, and fishery habitats and stocks.
- Revision of fishery laws/regulations/measures (fishery fee, zoning, MCS, etc).
- Buy back program.

### **Priority target groups for HRD in support management of fishing capacity**

- ❖ Government authorities.
- ❖ Stakeholder and consumers of fish and fishery product

### **Roles of International/Regional Organizations in managing fishing capacity in Southeast Asia**

- ❖ Provide regional forum to share experience among the countries and identify priority issues
- ❖ Promote policy dialogue to higher policy level
- ❖ Develop and promote regional supporting programs

### **Future regional collaboration by sub-regional management areas**

- ❖ Gulf of Thailand
- ❖ Malacca Strait and Andaman Sea
- ❖ South China Sea
- ❖ Sulu Sea or Celebes Sea
- ❖ Mekong River

## **V. Synthesis of Experience and Lessons Learned from several Initiatives: HRD in Support of Fisheries Management in Southeast Asia**

15. As a basis for sharing experience and discussion on the issues of HRD to support fisheries management in Southeast Asia, the following projects/initiatives were presented at the Consultation:

- ❖ SEAFDEC-Sida Project: HRD in Support of Fisheries Management in Southeast Asia by Dr. Worawit Wanchana, SEAFDEC Secretariat (**Annex 10**)
- ❖ Capacity Building for Coastal Fisheries Co-Management by Dr. Kamonpan Awaiwanont, Coastal Habitat and Resource Management Project (CHARM) (**Annex 11**)
- ❖ Role of the Government Local/Community Institutions in Managing Fisheries Resources: Experience and Lessons Learned in the Philippines by Ms. Jessica Munoz, BFAR (**Annex 12**)

- ❖ Marine Protected Areas Network by Mr. Bernard O' Callaghan, IUCN-Vietnam (**Annex 13**)
- ❖ Establishment of National/Regional Refugia by Mr. Christopher Paterson, UNEP/GEF South China Sea Project (**Annex 14**)

16. From meetings, reports and other indications highlighted during the implementation of the pilot process of the SEAFDEC-Sida Project, it could be said that the major issues with regards to fisheries management relates to the management of fishing capacity and the need to reduce overcapacity. Key findings from various initiatives could be concluded as followed:

### **Major Issues in Fisheries Management**

- ❖ In this region, the major issues (with regards to fisheries management) relate to the management of fishing capacity and reduction of the over-capacity.
- ❖ Empowering community and strengthening local institutions should be key elements of capacity building for sustainable coastal resource management.
- ❖ The major long-term policy issue or area for collaboration is to aim towards the establishment of a “regional and sub-regional fisheries management/development body”, that would allow the countries in the region jointly to work out solutions to common issues.

### **Major problems to be addressed**

- ❖ Current situation: illegal and/or destructive fishing practices particularly push netters and trawlers in coastal areas.
- ❖ Four limitations in effectively addressing the management of fishing capacity:
  - Limited capacity to provide alternative/supplementary livelihoods
  - Limited coordination among agencies concerned
  - Limited participation of resource users and local administrative organizations in development and management of coastal resources
  - Limited budget and knowledge and human capacity among local administrative organizations
- ❖ Unclear, unorganized, weak, and ineffective structures for implementation and enforcement
  - Unclear institutional arrangement and weak institutional capability for coastal fisheries management particularly at the local level
  - Unorganized policy for development and management of coastal resources utilization including weak translation of the policy into action
  - Ineffective implementation of existing management measures and law enforcement

### **Recommendations for Improvement and/or Development of Policy, Legal and Institutional Framework**

- ❖ Policy framework for sustainable coastal fisheries development and management should be developed as a basis for actions to be taken at the provincial and local levels as well as for outside project assistance and funding support.
- ❖ Where excessive fishing capacity exists, exit scheme from the fisheries sector may be considered but only when due consideration is given to social and economic consideration.
- ❖ Alternative and supplementary livelihoods should aim at diversifying occupations and sources of income and be identified considering potentials and capacity of community in the broader coastal area development and management.

### **Recommendations for Sustainable Development and Management of Coastal Resources**

- ❖ Fisheries should be integrated into sustainable development and management of coastal areas, which can be considered as a long-term process. It is important that the development balances three important objectives – social, economic, and environment/ ecological.
- ❖ The major roles of Department of Fisheries at the central and local levels are to ensure sustainable fisheries resource utilization as well as management and conservation of critical coastal habitats.
- ❖ Management and conservation of coastal resources including endangered species should be incorporated into the overall coastal development and management plan.
- ❖ Recognition were made on the benefits of traditional systems (e.g. traditional management practices of Awig Awig in Lombok) and district models to be developed should incorporate those were available. HRD should also include training in understanding of the traditional systems and their relevance for the implementation of the CCRF.

### **Recommendation for Cooperation and Networking of Agencies and Projects and Initiatives**

- ❖ Inter-agency coordination mechanism and dialogue among line agencies concerned regarding coastal development are strongly encouraged. As a result, an overarching policy framework for sustainable coastal development including institutional arrangement and demarcation of responsibilities could be developed to facilitate actions to be taken by respective agencies.
- ❖ In the context of management and conservation of habitat and transboundary resources, dialogues among neighboring areas/countries should be initiated and supported by collaborative mechanism for sharing information and expertise.
- ❖ Networking of national centers in coastal resource management at the regional level could facilitate sharing of information and experience.
- ❖ Target goal and strategies for management of coastal resources of the agencies concerned should be linked and streamlined.

- ❖ Coordinator needs to have characteristics of: leadership, flexible, transparent, and high level of acceptance among the villagers/communities. These could lead to the success and improvement of the effectiveness of the coordination.
- ❖ Strengthen capacity for group of villagers/communities for being a center of cooperation for effective continuation of collaboration among all agencies concerned.

### **Human Capacity Building for Establishment of Fisheries Refugia in the Region**

17. The Consultation took note on the presentation made and provided recommendations based on the results of the pilot activities of SEAFDEC-Sida Project with regards to future HRD in supporting the future establishment of fisheries refugia in the region as follow:

- ❖ Recommended process for establishment of fisheries refugia
  - Criteria for selection / establishment of fisheries refugia
  - Motivations/incentives to establish fisheries refugia
  - Management of fisheries refugia
- ❖ Activities for future cooperation among neighboring countries to establish and manage fisheries refugia
  - Cooperation between Cambodia-Thailand (Koh Kong and Trad Province)
  - Cooperation between Cambodia-Vietnam (Kampot and Kien Giang Province)
- ❖ Mechanisms for the process of establishment of fisheries refugia between neighboring provinces
  - Provincial working group establishment
  - Technical working group establishment
- ❖ Capacity building needs and activities for establishment of fisheries refugia

### **VI. Major Recommendation and Conclusion: Management of Fishing Capacity in the Asian Region**

18. With the view to promote implementation and support of management of fishing capacity in Southeast Asia three areas were identified, through the group discussion during the Consultation. The areas are presented below together with suggested supporting actions:

#### **(1) Priority Issues and Actions for Management of Fishing Capacity by the Member Countries through Planning and Implementation of National Plan of Actions**

19. Recommendations for future actions to be undertaken by identified fisheries responsible agencies of the Member Countries included aspects of: policy development, resource sustainability, socio-economic well-being, and institution development and improved arrangements for development (results of the group work in **Annex 15.1**).

20. It was recommended that existing policies of the fisheries responsible related to management of fishing capacity should be revised and/or revisited to improve the national planning and management of fishing capacity. It was also suggested to further promote the introduction and systems to impose measures to freeze/control the fishing fleets/boats through consultation processes with the national concerned agencies. It was generally agreed that the available data should be fully used while at the same carry out revisions of the existing data collection systems in order to reduce the data gap between recorded and actual figures in support of improved management of fishing capacity.

## **(2) Regional Co-operation: Moving Towards Regional Fisheries Management Body**

21. The group recommended to implement actions and activities, and encouraged inputs from international and regional agencies, in support of the establishment of a **regional fisheries management body** and sub-regional fisheries management arrangements. The Consultation noted that the Declaration of ASEAN Ministers of Foreign Affairs for South China Sea could provide a base to clarify regional/sub-regional fisheries management arrangements. (**Annex 15.2**)

## **(3) Capacity Building and HRD to Support Management of Fishing Capacity at Various Levels and Target Groups**

22. HRD/capacity gaps (including improved fishing inventories, limited understanding on national fisheries policies, lack of knowledge on laws and regulations, limited capacity in planning for fisheries management, strengthened awareness programs, and identification of livelihoods options) and related HRD needs and target groups was identified together with recommendations on levels of HRD activities for consideration by the Member Countries. (**Annex 15.3**)

## **VII. Major Recommendations and Conclusion for HRD in the Support of Fisheries Management in the Asian Countries**

23. Based on the group discussion, recommendations for HRD activities in support to management of fisheries are:

### **Priority Areas for Improvement of Planning and Management of Fisheries**

- ❖ Packaging policy and technical advices to also include awareness building for policy makers/high level officials on the matters related to fisheries management including management of fishing capacity.
- ❖ Community organization and empowerment to improve livelihood and capacity building towards coastal resources management.
- ❖ Establishment of model areas and networking to support capacity building.
- ❖ Sustainability of initiatives and results that go beyond the end of project.
- ❖ Mainstreaming practice and build up of enabling institutional environment.
- ❖ Establishment of a regional network for HRD in fisheries management.



- ❖ Skill enhanced and knowledge development with the aim to make use of capacities that has been built.
- ❖ Capacity building: resource users' rights.
- ❖ Make use of regional initiatives/projects (by e.g. SEAFDEC, WorldFish Center, UNEP/GEF/SCS, etc.) as the external factors to facilitate national planning/activities for HRD.

### **Development of HRD Supporting Materials/Packages and Proposed Establishment of a Sharing System**

24. Suggestions and considerations for establishing regional sharing mechanisms for HRD and training materials are:

- ❖ Make use of and strengthen SEAFDEC's publications and units such as "Fish for the People" and Training Department of SEAFDEC.
- ❖ There are many ongoing HRD and capacity building efforts within the SEAFDEC member countries. Philippines and Malaysia for instance have various training modules and visual training aids which could be shared with other countries.
- ❖ Often language might be a constraining factor in sharing material, as it may have been produced in the respective local language.
- ❖ Strengths and weaknesses of web-based sharing systems such as Regional Inventory, Database and Network for Information Collection Program (RIDNIC Program initiated by SEAFDEC) should be explored and efforts be made to strengthen RIDNIC on HRD in Fisheries in the ASEAN Countries.
- ❖ Current attempts of establishing such sharing systems demonstrate that even with the provision of a sharing platform and a sharing facilitator, the active participation of and contribution from the participating countries is necessary.
- ❖ Countries need to establish/appoint a national facilitator or coordinator for such sharing system, which should be based on a position, not a specific person. These should be responsible to collect what material there is available and in what format. Each country needs a system for how to provide the materials.

### **Requirements for Future Support to Management of Fisheries and HRD Activities: Actions to be made by ASEAN-SEAFDEC Member Countries**

25. Preliminary actions by Member Countries, which require further prioritization and grouping, are:

- ❖ Request to response to the questionnaires sent by MFRDMD on the needs and requirements for support from SEAFDEC in fisheries management as a basis for future Japanese Trust Fund Programs.
- ❖ Capacity building for fisheries management should give focus on both national and local levels.
- ❖ Apply model areas and best practices for capacity building/HRD.
- ❖ Establishment of a regional fisheries management network should be formalized by each Member Country to obtain support for the activities of the network.

- ❖ Address “management of fishing capacity” as a major part in improvement of fisheries management and supporting HRD programs.
- ❖ Priority should be given to HRD supporting habitat management and resource enhancement programs.
- ❖ To support improvement of MCS, capacity building should be conducted for fishery examiners/inspectors.
- ❖ Continue efforts for alternative livelihoods programs e.g. resource enhancement as part of fisheries management programs.
- ❖ Exchange expertise and experience in reducing fishing capacity.
- ❖ Malaysia offers assistance for fisheries management HRD activities through Malaysia Technical Cooperation Program (MTCP).
- ❖ Japanese Trust Fund Programs currently support activities on transboundary management and capacity building for coastal fisheries management.
- ❖ Japan, through JICA, offers support for training for coastal fisheries management.
- ❖ Capacity building should be developed considering target group and level specific. The role of facilitators to capacity building is important.
- ❖ Study on impacts of fishing gear i.e. trawl and push net fisheries to fisheries resources/fish species.
- ❖ Involvement of stakeholders in planning and adjustment of HRD programs contributes to their effectiveness and success.
- ❖ Brunei Darussalam specifies priority needs for capacity building particularly on socio-economic studies.
- ❖ Capacity building on alternative/supplementary livelihoods is needed.

### **Future Potential Collaboration Arrangement among SEAFDEC and non-SEAFDEC Projects/Initiatives**

26. For future collaboration between institutions, projects and different initiatives with regards to the improvement of HRD activities in support to management of fisheries in the region, recommendations made at the Consultation are:

#### **Possible Actions by SEAFDEC**

- ❖ Revisit effective regional sharing mechanism for capacity building and HRD materials/packages.
- ❖ Strengthen SEAFDEC Training Department in delivery of HRD or capacity building in support of coastal fisheries management.
- ❖ Request is made for due consideration for new Member Countries whose capacity and facilities for fisheries management still lacks behind.
- ❖ Capacity and facilities to support fisheries management in each country should be identified and mobilized under the regional fisheries management network.
- ❖ Package police and technical advice as a basis for production of HRD materials for dissemination at the national level.
- ❖ A program to support the Member Countries in the formulation and implementation of NPOA-Capacity. The program is composed of activities ranging from data and information, capacity building, research and studies,

identification of management tools and measures, etc. The NPOAs could be regarded different sets of guidelines on how management of fishing capacity can be developed. The experiences in developing these sets can be shared among the Member Countries.

### **Interests and Potential Collaboration by non-SEAFDEC Projects/Initiatives**

- ❖ APFIC communicated its interests to collaboration on the issues related to management of fishing capacity considering its linkages to IUU fishing under APFIC biennium plan (2007-2008).
- ❖ WFC in the context of small-scale fisheries would be willing to cooperate on issues of improvement of management of fishing capacity.
- ❖ UNEP/GEF/SCS wishes to cooperate on coastal resource and habitat management with emphasis given to regional systems of fisheries refugia and transboundary collaborative arrangements. In a broader perspective, UNEP/GEF/SCS also wishes to cooperate in the implementation of regional guidelines for fisheries management in Southeast Asia. Specific planned future activities include training for local officials on establishment and management of fisheries refugia and training on identification of fish larvae to assist the study on life cycle of fisheries resources to complement to management of habitats.
- ❖ IUCN and NOAA wishes to cooperate on activities supporting the work in Vietnam including training programs for establishment of MPAs and their supporting network in the country.
- ❖ Swedmar and Swedish Board of Fisheries see the linkages of activities on Swedish support to SEAFDEC and tsunami rehabilitation activities in Indonesia.
- ❖ CHARM is willing to offer sharing HRD materials and packages related to co-management and management of coastal resources.
- ❖ CORIN wishes to share experience from academic perspectives related to practical coastal zone management. In terms of HRD, CORIN has area specific experience at the local level. CORIN as a part of Wetland Alliance Program (WAP) is formulating activities to strengthen capacity of local change agents in wetlands management towards improvement of livelihoods. SEAFDEC is invited to cooperate on issues related to transboundary collaborative arrangement for coastal resources and habitat management.
- ❖ SEAFDEC – Aquaculture Department has experience on CRM particularly looking on socio-economic and legal aspects. Stock enhancement to support coastal resource management is an area for possible collaboration.
- ❖ SEAFDEC – Marine Fisheries Resources Development and Management Department reiterated the request to response to the questionnaire asking for areas of needs and requirements for fisheries management.
- ❖ SEAFDEC – Training Department is in the process of re-engineering of the Department where coastal fisheries management will be strengthened. The program supported by Japanese Thrust Fund on capacity building for coastal fisheries management could be shared. The new coastal fisheries management division looks forward to collaborating with SEAFDEC-Sida project in future phase of activities particularly on issues related to coastal resources management.

## **VIII. Closing**

27. Dr. Magnus Torell expressed his appreciation to all participants and resource persons for their active participations and contribution, which enable the Consultation to come up with fruitful outcomes and recommendations and declared that the Consultation had come to its end.

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**Opening Address  
by Dr. Siri Ekmaharaj SEAFDEC Secretary-General**

**Regional Technical Consultation on Management of Fishing Capacity and Human  
Resource Development in Support of Fisheries Management**

Your Excellency Dr Somying Piumsombun, Deputy General, Department of Fisheries Thailand, and Alternate Council Director for Thailand

Drs. Magnus Torell and Yasuhisa Kato, SEAFDEC Senior Advisor

Mr. Peter, Representative from Swedish Board of Fisheries

Distinguished delegates from ASEAN and SEAFDEC Member Countries,

Resource persons and representatives from coordinating projects CHARM, WorldFish Center, IUCN-Vietnam, UNEP/GEF South China Sea Program, FISH Project, Chief of SEAFDEC Aquaculture Department

Ladies and gentlemen,

Good morning and welcome all of you to the Regional Technical Consultation on Management of Fishing Capacity and Human Resource Development in Support of Fisheries Management.

On behalf of SEAFDEC, I would like to extend my warm welcome and sincere appreciation to all of you and my heartfelt thanks to the delegates from SEAFDEC member countries, Swedish Board of Fisheries and SEAFDEC Secretariat and special thanks to Dr. Magnus Torell, SEAFDEC Senior Advisor, for contributing many efforts and support in close cooperation with the secretariat, department and other institutions concerned to assist in moving forward to promote HRD activities for sustainable fisheries management and development in Southeast Asia.

I wish also thanks to all distinguished delegates by giving us your valuable time to attend this consultation. This consultation is organized as the project-end meeting of the first phase of the support from Sweden which implementing under ASEAN-SEAFDEC Fisheries Collaborative Framework and Program by supporting HRD activities to promote and implement the Regionalization of the Code of Conduct for Responsible Fisheries Management in Southeast Asia, and assist member countries and other national/regional institutions in managing fishing capacity.

It is indeed a great pleasure and honor for me and my colleagues to have served and worked together with all of you to make this consultation happened in Phuket, Thailand.

Starting from 1998, SEAFDEC has conducted a program on Regionalization of the Code of Conduct for Responsible Fisheries, or RCCRF, in close collaboration with ASEAN Member Countries. The program emphasized on regionalization of the FAO Code of Conduct and assisting Member Countries in the implementation of the Code.

With the support from the Sida through the Swedish Board of Fisheries, SEAFDEC has been expanding the RCCRF Program to cover the promotion of human resource development to support 'Fisheries Management' as stated in the Article 7 of the Code of Conduct for Responsible Fisheries.

In connection to these, this Regional Technical Consultation would further discuss on major outputs and achievements from the project implementation since the year 2004 to date with the aim to share such experience and lessons learned and to further discuss on how to improve and having a better planning for future promotion of HRD activities to support sustainable management and development of fisheries and management of fishing capacity, among and within SEAFDEC and non-SEAFDEC relevant initiatives and projects.

I am certain that with active participation and invaluable contribution from all of you, this Consultation would come up with a productive outcome. It is believed that outcomes from this Consultation will provide a strong basis for Member Countries for further implementation of activities to strengthen human resource to support fisheries management in our Southeast Asian region.

Now, ladies and gentlemen, may I request your utmost concentration to make this meeting a partway to even grater success in the year ahead of us. There is much to discuss and our time together is short so I shall waste no more time and declare this meeting open.

Thank you.

**Agenda of the Consultation**

1. Opening and Introduction of RTC
2. Overview of Achievements and Outputs of SEAFDEC-Sida project
3. Management of Fishing Capacity in Southeast Asia
  - 3.1 Introduction on the Issues and Discussion Documents
  - 3.2 Other Presentations by Resource Persons
    - 3.2.1 Managing Fishing Capacity in Southeast Asia: Current Situation, Future Challenge and HRD Needs to Support Sustainable Fisheries Management
    - 3.2.2 Freezing the Fishing Fleets
    - 3.2.3 Policy Brief for Steps Towards Managing Conflict
    - 3.2.4 Reduction of Trawlers and Push Netters in the Gulf of Thailand
  - 3.3 Group Discussion on Management of Fishing Capacity in Southeast Asia
  - 3.4 Plenary Discussion on the Management of Fishing Capacity in Southeast Asia
4. HRD in Support of Fisheries Management in Southeast Asia
  - 4.1 Introduction on the Issues and Discussion Documents
  - 4.2 Other presentations by resource persons
    - 4.2.1 Fisheries Co-management Policy Brief
    - 4.2.2 Capacity Building for Coastal Fisheries Co-management
    - 4.2.3 Role of the Government and Local Community/Institutions in Managing Fisheries Resources based on experience and lessons learned in the Philippines
    - 4.2.4 Integrated Fisheries Management in the Philippines
    - 4.2.5 Marine Protected Areas Network, establishment of MPAs network in Vietnam
    - 4.2.6 Establishment of National/Regional Fisheries Refugia
  - 4.3 Plenary discussion on better planning and implementation of HRD activities to support fisheries management and management of fishing capacity
  - 4.4 Plenary discussion on development of HRD supporting materials/packages and proposed establishment of the sharing system
5. Requirements for future support to management of fisheries and the HRD activities
  - 5.1 Identifications of actions to be made by ASEAN-SEAFDEC Member Countries, and other organizations
  - 5.2 Future potential collaborative arrangement among SEAFDEC and non-SEAFDEC project/initiatives
6. Other Matters
7. Conclusion and recommendation
8. Closing

## List of Documents

### Information Documents

INF01	Provisional Prospectus
INF02	Provisional List of Documents
INF03	Provisional List of Participants (to be distributed later)
INF04	Information Note for Participants

### Working Documents

WP01	Provisional Agenda
WP02	Provisional Agenda and Timetable
WP03	Provisional Annotated Agenda
WP04	Overview of Achievements and Outputs of SEAFDEC-Sida Project
WP05	SEAFDEC-Sida Project Initiatives: Management of Fishing Capacity in Southeast Asian Region.
WP06	Current Situation and Future Challenge including HRD Needs to Support Sustainable Fisheries Management in Southeast Asia
WP07	Freezing the Fishing Fleets
WP08	Policy Brief for Steps toward Managing Conflict: Small VS Large-scale Fisheries
WP09	Reduction of Trawlers and Push Netters in the Gulf of Thailand: Summary of the Results of the Project GCP/RAS/199/SWE “Strengthening the Capacity in Fisheries Information Gathering for Management”
WP10	SEAFDEC-Sida Project Initiatives: HRD in Support of Fisheries Management in Southeast Asia
WP11	Fisheries Co-Management Policy Brief
WP12	Capacity Building for Coastal Fisheries Co-management
WP13	Role of Local Institutions in Managing Coastal Fisheries Resources: Experience and Lessons Learned in the Philippines
WP14	Integrated Fisheries Management in the Philippines
WP15	Marine Protected Areas Network
WP16	Establishment of National/Regional Fisheries Refugia

### References

REF01	Report of the ASEAN-SEAFDEC Regional Technical Consultation on Human Resource Development in Fisheries Management, 3-6 June 2004, Phnom Penh, Cambodia
REF02	Minutes of the Planning Meeting for SEAFDEC-Sida Project in Cambodia on HRD for Fisheries, 17 March 2005, Phnom Penh, Cambodia
REF03	Report of the Preparatory Expert Meeting on Fishing Capacity and Related HRD Needs in the ASEAN Region, 14-16 September 2004, Bangkok, Thailand

- REF04 Report of the On-site Training and Workshop on Development of Community-based Fisheries Management in Coastal Areas of Cambodia, 20-23 September 2005, Kampot Province, Cambodia
- REF05 Report of the On-site Training and National Workshop on Capacity Building for the Establishment of Refugia and Coastal Resources Management, 27-31 March 2006, Koh Kong Province, Cambodia
- REF06 Minutes of the Planning Meeting for SEAFDEC-Sida Project in Indonesia on HRD for Fisheries, 28 June 2005, Jakarta, Indonesia
- REF07 Report of the National Workshop for Human Resource Development in Supporting the Implementation of the Code of Conduct for Responsible Fisheries, 28-29 September 2005, Jakarta, Indonesia
- REF08 Minutes of the Planning Meeting for SEAFDEC-Sida Project in Thailand on HRD for Fisheries, 30 June 2005, Bangkok, Thailand
- REF09 Report of the National Workshop on Human Resource Development for Coastal Fisheries Management “Issues, Strategies, and Future Directions” in Thailand, 2-4 August 2005, Trad Province, Thailand
- REF10 Report of the On-site Training and National Workshop on Capacity Building for Coastal Resources Management, 14-16 March 2006, Trang Province, Thailand
- REF11 Report of the On-site Training and National Workshop on Human Resource Development for Responsible Coastal Resources Management, 27-30 June 2006, Satun Province, Thailand
- REF12 Minutes of the Planning Meeting for SEAFDEC-Sida Project in Vietnam on HRD for Fisheries Management, 13 July 2006, Hanoi, Vietnam
- REF13 Report of the National Workshop on Human Resource Development in Vietnam, 5-6 October 2005, Hai Phong, Vietnam
- REF14 Report of the On-site Training and National Workshop on Capacity Building for the Establishment of “Fisheries Refugia” and Coastal Resources Management, 14-16 June 2006, Phu Quoc, Vietnam (draft)
- REF15 Report of the On-site Training and National Workshop on Capacity Building for Resources Management and Establishment of Marine Fisheries Resources Protection Areas in Vietnam, 2-4 August 2006, Quang Binh, Vietnam (draft)
- REF16 Meeting Summary of the Preparatory Expert Meeting on Development of the National and Regional Training Materials for Human Resource Development in Fisheries Management, 4-7 July 2006, Hua-Hin, Thailand
- REF17 Major Outputs of the Expert Meeting on Management of Fishing Capacity in Southeast Asia, 27-29 July 2006, Sihanouk Ville, Cambodia

**Overview of Achievements and Outputs of SEAFDEC-Sida Project****I. Introduction**

There is no doubt that formulation of the Code of Conduct for Responsible Fisheries (CCRF) was a coherent and important step toward the world sustainable fisheries and provided comprehensive framework and principles to guide the countries for their consideration and appropriate actions harmonizing fisheries with aquatic environment. However, as the consequences of the process to develop CCRF that was greatly involved by developed countries, the condition and context of CCRF were mainly based on the concerns and situation of fisheries of these countries, less consideration for the issues of developing countries were provided. This process has given, to some extent, the negative effect on the internalization by these developing countries on their use of CCRF.

The developing countries that may have less technical and financial capabilities including general poverty situation prevailing especially in rural areas make them difficult to take appropriate action, even though they wish to do so. In addition to these general situations, the following three factors will have to be accommodated into CCRF, when the fisheries situation in the developing countries are reviewed and if it is considered that CCRF is effectively implemented in these developing countries.

- 1) Fisheries Structure: The main fishing industries in developing countries are categorized as small scale/ coastal nature (In case of ASEAN Countries, 95 % of fishers are involved in this sub-sector). The management of such sub-sector should be differentiated with these of large scale/industry type of fisheries.
- 2) Ecological Situation: The fisheries resources are more multi-species natures. For example, there is no clear definition and understanding on the by-catch issue, since the most of fishers are depending on the harvest from these multi-species for their livelihood not on particular target species. In addition, such ecological factors as fecundity, replenishment, migration and productivity of these species are different with these of temperate water. Furthermore, the tropical climate and topographical condition are unique and provide the basis of the above ecological specificity. These factors will also differentiate the management measures and methodologies to assess the aquatic resources in these developing countries.
- 3) Socio-Economic and Cultural factors: It is apparent that the most of the developing countries, especially in these in ASEAN region have traditionally developed their own culture on the fish for food, as seen in the great diversification of local fisheries products. In addition, socio-economic integration of fisheries with local community, especially if these small scale/coastal fisheries are considered, is another specificity to be considered if appropriate management mechanisms will be implemented in these countries.

In this connection, Swedish International Development Cooperation Agency (Sida) supports the ASEAN member countries in facilitating programs/activities related to fisheries management to work towards the achievement of sustainable fisheries. The

support is channeled through the Swedish Board of Fisheries (SBF) in collaboration with the regional fisheries development body, the Southeast Asian Fisheries Development Center (SEAFDEC), project title “Sida-SEAFDEC Collaborative Project”.

The Project is dealing with Human Resource Development (HRD) with a focus on awareness building and training activities at national and regional levels, to be implemented during the period 2003-2006 and coordinated by staff at SEAFDEC Secretariat Office in Bangkok, Thailand, in full collaboration with relevant SEAFDEC Departments and ASEAN-SEAFDEC Member Countries. The activities of the project are implemented under the ASEAN-SEAFDEC Fisheries Consultative Group (FCG) Mechanism and specifically under the program known as the Regionalization of the Code of Conduct for Responsible Fisheries Management (RCCRF), implemented by SEAFDEC since the year 2002.

The project envisages various activities including the preparation of training materials using the RCCRF, organizing Regional Technical Consultations related to fisheries human resource development and management of fishing capacity, organizing National on-site training/workshop on the fisheries management in ASEAN member countries, translation of training text books on fisheries management related to the RCCRF to national languages, and collecting regional information on the fisheries management and management of fishing capacity.

## **II. Project Objectives, Components and Outputs**

Overall objectives of the project is to facilitate the national implementation of the issues related to fisheries management contained in the CCRF through appropriate human resource development (HRD) activities including awareness building and training activities. In addition to the overall objectives, it has the following detailed objectives:

- 1) To enhance awareness of the necessity of appropriate fisheries management to achieve sustainable fisheries
- 2) To advise the stakeholders on the mechanisms of the innovative fisheries management system
- 3) To promote various HRD activities on fisheries management with identified target groups
- 4) To identify the various options to alleviate the problems caused by the excessive levels of fishing capacity.

Under above objectives, formulation of the project detailed objectives as outputs for the achievement of the overall objectives would imply:

*Output 1: Awareness enhanced of the necessity of appropriate fisheries management to achieve sustainable development (central and local)*

*Output 2: Stakeholders advised on the mechanism of innovative fisheries management system*

*Output 3: HRD activities promoted on fisheries management with identified target groups*

*Output 4: Various options identified to alleviate the problems caused by excessive levels of fishing capacity*

In order to meet the above objectives, the following two project components are programmed in the proposed project.

**Component 1:** HRD activities with respect to the priority issues contained in the Regional Guidelines for the Fisheries Management (RCCRF)

**Component 2:** HRD activities on the issues related to the reduction of “Fishing Capacity” that can be a key to achieve sustainable fisheries in the region.

### **III. Project Procedure**

#### **1) Consensus building among the recipient countries.**

In order to systematically and effectively implement the proposed activities, consensus building exercise among the recipient countries will be sought. In this connection, at least, the regional technical consultation meetings will be organized once a year. The project activities including context of training materials, organization of national training courses, and identification of target group of the project activities will be consulted with ASEAN Member Countries.

#### **2) ASEAN/SEAFDEC Collaborative Program**

In accordance with the establish mechanism, the proposed project will be considered as one of the ASEAN/SEAFDEC Collaborative Project. Therefore, in addition to above technical consultation, the project performance will be reviewed by the established collaborative mechanism: ASEAN/SEAFDEC Fisheries Consultative Group Meeting (FCG), in March every year in order to establish ownership of the project by ASEAN Member Countries:

#### **3) Close collaboration with the ASEAN Member Countries.**

In order to ensure the sustainable implementation of the project, some activities, especially conducted at national level such as on-site trainings will be conducted along line with national priority program and in cost share basis at practical level. Such arrangement will firstly enhance the ownerships of the project by the respective ASEAN Member Countries; secondly maximize the use of project resources. Furthermore, in conjunction with above policies, the project will continuously discuss with the ASEAN Member Countries and find the way that the activities initiated by the project will be accommodated into the national human resource development program on the implementation of RCCRF in the long run.



#### IV. Project Activities

Under the components mentioned above, the project has conducted the following activities in step-by-step basis. Their linkage with the project components are also shown in the table below:

Activities	Project Component	
	1 HRD for Fisheries Management	2 Fishing Capacity
1. Preparation and publication of training materials using the regional guidelines of the fisheries management of the Code of Conduct for Responsible Fisheries (RCCRF)	*	*
2. Translation and publication of the training materials on the fisheries management of RCCRF to national languages	*	
3. Organization of the Regional Consultation Meetings	*	*
4. Organization of the Regional Technical Consultation for Fishing Capacity	*	*
5. Organization of on-site trainings on fisheries management at selected venues in the ASEAN Member Countries	*	*
6. Collection of the information on the fishing capacity (number of boats/vessels and fishers with main fishing gear at the districts level of the countries) in collaboration with ASEAN Member Countries		*
7. Identification of the problem areas and target groups of the human resource development activities on fishing capacity based on the compilation and analysis of the collected data on fishing capacity		*
8. Preparation and publication of the required training materials (specific and detailed training materials) on the mitigation of fishing capacity		*
9. Organization of on-site training on the fishing capacity at the selected venues in the ASEAN Member Countries		*

## V. Achievements and Outputs until August 2006

Based on the Outputs mentioned above, completed and on-going activities are shown in the following table<sup>1</sup> together with their interlink components.

Completed and On-going Project Activities	Component		Output			
	1	2	1	2	3	4
Co-organized ASEAN-SEAFDEC Regional Workshop on HRD in Fisheries, Kuala Lumpur, Malaysia, 2004	*	*	✓	✓		
Organized ASEAN-SEAFDEC RTC on HRD in Fisheries Management, Phnom Penh, Cambodia, 2004	*	*	✓	✓		✓
Organized Preparatory Experts Meeting on Fishing Capacity and Related HRD Needs in the ASEAN Region, Bangkok, Thailand, 2004	*	*	✓	✓	✓	✓
Implementing Pilot Process in Representative Set of Countries <sup>2</sup> , since 2004	*	*	✓	✓	✓	✓
- Organized Planning Meetings (completed 3 meetings)	*	*	✓	✓		✓
- Organized National Workshop and On-site Training and National Workshop (completed 4 Workshops, 5 Trainings, and on-going 1-2 Trainings)	*	*	✓	✓	✓	✓
Collecting information on Regional Inventory, Database and Network for HRD in Fisheries (on-going)	*				✓	✓
Developing Supporting HRD Training Materials (on-going)	*		✓	✓	✓	
Preparation and publication of the required training materials (specific and detailed training materials) on the mitigation of fishing capacity (on-going)		*	✓	✓		✓
Organizing RTC on Management of Fishing Capacity and HRD in Support of Fisheries Management	*	*	✓	✓	✓	✓

<sup>1</sup> Interlinks between the activities, component and outputs shown in the table were specified based on the Logical Framework of the SEAFDEC-Sida Project, referred to "Sida-SEAFDEC Project: 2003 Annual Report and Activities Plan for 2004.

<sup>2</sup> Cambodia, Indonesia, Thailand and Vietnam by organizing the sequence of events including (a) Planning Meeting and Consulting for the Pilot Process, (b) Organization of the National Workshop for HRD, and (c) Organization of On-site Training and National Workshop for HRD Fisheries Management.

in Southeast Asia (1 <sup>st</sup> Phase: Sharing of Lessons Learned and Wrap-up Meeting, on-going)						
Participation of Project Staff to Other Relevant/ Coordinating Works Work	*	*	*	✓	✓	✓

## VI. Key Lessons Learned

Followings are some of the main lessons that have been learned by the project from its activities to date:

- **Technical issues are not sufficient.** HRD in fisheries management should be developed at all levels considering:
  - **Legislation, Law and regulations** – implication of international initiatives and conventions, structure/rules of local management, co-management approaches, functions of rights-based fisheries and rights of resource users, institutional role and responsibility.
  - **Social and economics** – implications of limiting access, reducing and managing fishing capacity, facilitating exist from fisheries, supplementary/alternative livelihoods, co-management concepts, survey/research techniques including consultation and participations; and
  - **Environment** – habitats and reproduction areas, migratory routes and interconnectivity, supplementary/alternative livelihoods
- **Learning from “Pilot Process” to enhance awareness and alleviate the problems caused by excessive fishing capacity.** A practical approach to develop and promote HRD and management of excess fishing capacity is to conduct pilot process in the set of representative countries in the region as a basis for sharing lesson learned and experiences at the regional level and further nation-wide management of fishing capacity.
- **Learning from experiences and good practices of other organizations.** Existing experiences in the region related to fisheries management should be taken into consideration. For this reason, benefits to the project from participation of the project staff to other related projects/initiatives<sup>3</sup> have been seen in opportunities to convey experiences and results directly into other dialogues, and also benefits in terms of facilitation and promotion of collaborative working with other relevant agencies on the issues related to fisheries management and management of fishing capacity.
- **Avoiding an “isolated” process in developing human resources for management of fishing capacity.** HRD for fisheries management of fishing capacity should be incorporated within the context of fishery management as such, thereby avoiding “isolated” process that would not be optimal in use of project funds in reaching

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<sup>3</sup> See more details of the projects/initiatives in [Appendix 1](#).

results related to project objectives/aims. Seen from the point of fisheries management you cannot really address fisheries management without addressing fishing capacity.

- **Enhancing awareness through HRD programs by developing training materials.** Translation of CCRF and RCCRF, to national languages to support awareness building at national and local level should consider conveying the message and implication of the guidelines to the audience, not direct translation. Detailed clarification of implementation of the national guidelines based on the regional guidelines should be developed particularly in the aspects of assessment and management of excess fishing capacity and there is also a need to develop HRD supporting (training) materials, i.e. guidelines for fishery managers, promotional/awareness building materials, etc.

## **VII. Concrete Steps Toward Outputs/Results Orientation**

Based on the discussion above, and to summarize, the concrete steps and major achievements in implementing project activities to date have been:

- **Creating a HRD strategy for fisheries:** the project formulated and ASEAN-SEAFDEC Member Countries adopted their Strategy for HRD in Fisheries in the ASEAN Region in 2004. The “Strategy” is considered vital to clarify the role of HRD to effectively implementation of the Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region and in line with that of scope and framework in supporting the promotion and implementation of the CCRF.
- **Creating plans and framework for HRD in fisheries management:** the project developed the plans and framework for HRD in fisheries management in 2004, through the ASEAN-SEAFDEC regional consultation process focusing on three thematic issues:
  - Management of Over Fishing Capacity
  - Strengthening of Local Fisheries Management
  - Integrating Fisheries Management into Habitat Management
- **Integrating social, environmental and legal aspects in the HRD process:** through the ASEAN-SEAFDEC regional consultation process, the project developed a key set of thematic indicators on ‘integration of social, environmental, and legal aspects’ in the process of awareness building and human resource development. This provides a basis for further consideration for promotion of effective integration of habitat management and fishery management including ecosystem approach to fisheries management, habitat rehabilitation, resources evaluation, and preparation of local fishery management plans.
- **Assisting Member Countries in managing fishing capacity:** the project has actively supported the member countries in managing the fishing capacity and particularly provided technical assistance for formulating the practical steps to be taken towards

development of their HRD plan of programs/activities for management of fishing capacity. It was also stressed that management of fishing capacity and related HRD should be addressed within the context of fisheries management, thereby avoiding an “isolated” process that would be optimal in terms of identifying options for management of fishing capacity at all levels.

- **Establishing a regional fisheries management information collection mechanism:** the project could be able to establish the national focal point for each SEAFDEC Member Countries in dealing with information collection on national/regional HRD programs/initiatives related to fisheries management. This could allow sharing their resources in developing human resources for all levels to support the promotion of the CCRF/RCCRF and also with the attempt indirectly to know the progress in each country on the issues related to their plan and framework for the issues related to management of fishing capacity.
- **Establishing a collaborative work among institutions concerned:** during the course of project implementation, active participation of the project staff in SEAFDEC and non-SEAFDEC relevant events/activities was carried out to maintain the dialogue with the countries and collaborative projects/initiatives on the issue related to fisheries management (more in coastal small-scale issues) and management of fishing capacity.
- **Implementing and developing national and regional HRD training materials:** through the implementation of the pilot work (pilot process), the project has initiated national events (workshop and on-site training) with the aim to assist ASEAN countries in preparing and publishing national training materials using the regional guidelines of the fisheries management, and including also translation of the training materials on the fisheries management of RCCRF to national languages for future formulation of the regional HRD training package for fisheries management.

The steps taken by the project toward results orientation, as described above, evolve into a coherent system for management of fisheries resources. While there are several initiatives toward improving of such management through implementation of various HRD programs/initiatives, the project has also been gradually introducing better fishery management tools for fishery resources management by mobilizing experiences learnt from relevance initiatives.

Below table shows the steps mentioned above with their connection to the project components.

Concrete Steps Towards the Outputs Orientation	Project Component	
	1	2
Adopting a HRD strategy for fisheries	*	
Creating plan and framework for HRD in fisheries Management	*	*
Integrating social, environmental, and legal aspects in HRD process	*	*
Assisting Member Countries in managing fishing capacity	*	*
Establishing a regional fisheries management information collection mechanism	*	*
Establishing a collaborative work among institution concerned	*	*
Implementing and developing national and regional HRD training materials	*	*

### VIII. Assessment of Future Works Needed

It could be seen that efforts initiated by the project together with some other related organizations (not only fisheries related agencies but also environmental concerned agencies to develop human resources in supporting implementation of sustainable fisheries management in line with CCRF/RCCRF and to alleviate the problems caused by the excessive level of fishing capacity) are already in place at both regional and national level. While the project is taking a gradual “learning-by-doing” approach to address these issues, there is also a need to upgrade awareness both within SEAFDEC related programs and non-SEAFDEC programs as discussed earlier. In doing so, the project in full collaboration with SEAFDEC related programs and other non-SEAFDEC programs/initiatives are addressing the following aspects:

- Capacity building in coastal resources management at various levels (policy makers, provincial/central and community levels) should be more systematic taking consideration in streamlining and simplifying the other efforts of the existing initiatives.
- Integration of fishery resource management into habitat management needs to be better defined and followed-up. In addition, in the context of management and conservation of habitat and transboundary resources, dialogues among neighboring areas/countries will be initiated and supported by the project with close collaborative mechanism for sharing information and expertise.
- To strengthen local fisheries management capacity and to promote community-based coastal fisheries, efforts to increase the focus on legal, economic and social aspects should be taken into consideration. In doing so, there is a need to develop a package of HRD training material to for best practices for sustainable coastal development.
- To rehabilitate and enhance coastal resources in close collaboration with coastal resource users, schemes to manage fisheries capacity should include schemes to facilitate the exit from the fisheries and to establish fishery refugia.

## **IX. Way Forward and Key Challenges**

Going forward, the key challenges for the project for 2006 can be assessed as follow:

- Integrating fishery management into sustainable development and management of coastal resource areas, which can be considered as a long-term process. It is important that the development balances three important aspects – social, economic and environment/ecological.
- Encouraging inter-agency coordination mechanism and dialogue among agencies concerned for coastal development are needed. The project should challenge in improving better dialogue with other related initiatives to ensure that national plan and their operation for fisheries and habitat management are fine-tuned.
- Mobilizing local knowledge, expertise, initiatives and networking of agencies concerned to facilitate sharing information and experiences, which could be used as a basis for HRD programs planning, monitoring and evaluation for the impact of such initiatives.
- Assisting the member countries to identify/develop strategy and operation plan to alleviate problems caused by excessive level of fishing capacity, i.e. by generating alternative and supplementary livelihoods for people in coastal areas.

### *Appendix 1 of Annex 5.1*

#### ***Coordinating Programs/Initiatives of SEAFDEC***

- 1) Regionalization of the Code of Conduct for Responsible Fisheries (The Secretariat in collaboration with all Departments)
- 2) Toward Decentralized Management for Sustainable Fisheries in the ASEAN Region (Secretariat)
- 3) Improvement of Fishery Statistical Systems and Mechanisms (Secretariat)
- 4) Fish Trade and Environment (Secretariat)
- 5) Resource Enhancement (Training Department)
- 6) Capacity Building for Human Resources and Participation in Integrated Coastal Resources Management (Training Department)
- 7) Etc.

#### ***Coordinating Programs/Initiatives of non-SEAFDEC with the Project***

- 1) Working Group Meetings of Fisheries Component of the UNEP/GEF South China Sea Project
- 2) Workshops organized under FAO-Sida Project on Strengthening the Capacity in Fisheries Information Gathering for Management
- 3) Sessions of the Asia Pacific Fishery Commission
- 4) Technical Working Group Meetings of UNEP/COBSEA
- 5) FAO-DOF (Thailand) National Meetings on reduction and management of fishing capacity
- 6) Workshops organized by WorldFish Center; project on Fish Flights over Fish Rights
- 7) Etc.

## **SEAFDEC-Sida Project Initiatives Management of Fishing Capacity in Southeast Asian Region**

### **I. Introduction**

As resulted from the sequence of activities organized during the course of project implementation; meetings, national workshop, trainings, etc.; it is clear that in the Southeast Asian Region the major issue with regards to the fisheries management related to the management of fishing capacity and to reduce over-capacity – be it large scale or small-scale, seasonal or the whole year, site specific or more general.

The project identifies four “specific objectives” formulated as outputs, these objectives would imply:

- 1) Awareness enhanced of the necessity of appropriate fisheries management to achieve sustainable development (central and local)
- 2) Stakeholders advised on the mechanisms of innovative fisheries management system
- 3) Human resource development activities promoted on fisheries management with identified target groups
- 4) Various options identified to alleviate the problems caused by excessive levels of fishing capacity

In the project document, activities were not developed for each of the Outputs but rather being more general in terms of included/suggested activities being able to contribute to more than one output. The project document mentioned nine activities<sup>4</sup> that were implemented “step by step”. Furthermore, it is obvious that activities implemented to achieve outputs 2), 3) and 4) would include elements that will be part of achieving output 1). For example, to promote HRD on fisheries management there is a need to increase the awareness on the necessity of appropriate fisheries management or to identify options to alleviate problems caused by excessive fishing capacity you need to increase the awareness on the problem and the necessity to address that with regards to appropriate fisheries management.

### **II. Project Tasks: Management of Fishing Capacity in SEA**

The Project has addressed management of fishing capacity through the promotion and support of HRD activities at various levels. The outputs that related to the issue of management of fishing capacity, roles and task<sup>5</sup> of the project can be defined as follow:

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<sup>4</sup> As referred to page 3 of the WP04, “Overview of Achievements and Outputs of SEAFDEC-Sida Project”.

<sup>5</sup> Also with reference, as combined here, to the activities 6, 7, 8 and 9 on the page 3 of WP04.



- Information collection on excess capacity in small-scale and commercial fisheries
- Initiation of, or participation in, the process to identify of the problem areas and target groups of the HRD activities on fishing capacity based on the complication and analysis of the collected data on fishing capacity with the aim to identify various options to alleviate problems caused by excessive levels of fishing capacity
- Initiation of, or participation in, the Meeting/Consultation to make use of such information collected, and future preparation and publication on the required training materials on the mitigation of fishing capacity
- Organization of on-site training on the fishing capacity or initiates specific training course for local participation in fisheries management (as the option to alleviate excess fishing capacity).
- Etc.

### **III. Activities Implementation**

Following activities were carried out within the scope/framework of project roles/tasks concerning the Output of the issues related to management of fishing capacity, especially to assist SEA in identifying various options to alleviate problems caused by excessive levels of fishing capacity:

1. Organization of the Regional Technical Consultation on HRD in Fisheries Management, Phnom Penh, June 2004.
2. Organization of the Preparatory Expert Meeting on Fishing Capacity and Related HRD Needs in the ASEAN Region, Bangkok, September 2004.
3. Organization/implementation of the “pilot process” in the representative set of countries (as and based on the key recommendations from event 1. above), during the year 2005 – 2006.
4. Consultations with experts and involvement from various projects, during 2004 to 2006
5. Organization of the Expert Meeting on Management of Fishing Capacity in Southeast Asia, July 2006.

### **IV. Major Findings from the Project Implementation and Coordination Works**

Another important message provided through the RTC and the Expert Consultation in 2004 is that there are no aggregated data on fishing capacity at national or regional level. Available information is more site-specific and relates to projects rather than statistical information. The process of “identification of the problem areas and target groups of the human resource development activities on fishing capacity based on the compilation and analysis of the collected data on fishing capacity” (Activity 7<sup>6</sup> of the Project Implementation) is done through consultations with experts and involvement from various projects as the aggregated data on fishing capacity is not available.

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<sup>6</sup> Referred to page number 4 of WP04, “Overview of Achievements and Outputs of SEAFDEC-Sida Project”

A critical problem is the lack of “statistics” with respect to fishing capacity especially at the smaller scale. For the purpose of looking into aspects of “collection of the information on the fishing capacity (Numbers of boats/vessels and fishers with main fishing gears at the districts level of the countries) in collaboration with ASEAN Member Countries” (Activity 6 of the Project Implementation) the Project have been following the work within other projects on fisheries statistics and fishing capacity to be able to address the issue in the pilot processes in Cambodia, Indonesia, Thailand and Vietnam in the context of fishing capacity during on-site-training events (Activity 9<sup>7</sup> of the Project Implementation).

## **V. Key Recommendations: Experiences and Lessons Learned to be shared for Management of Fishing Capacity in Southeast Asia (SEA)**

### **Recommendation 1 Guiding Principles for Management of Fishing Capacity in SEA**

Within the current situation of SEA, followings guiding principles can be used as a basis for future development/formulation of national/regional directions/plan towards management of fishing capacity:

- FAO IPOA-Capacity
- Multi-gear/species of fisheries
- Emphasis on small-scale fisheries both inland and marine waters
- Integration social, economic, environmental, legal and political consideration
- Priority and practicability

### **Recommendation 2 Key Issues in Managing Fishing Capacity**

Through the consultations with experts, the following key issues with the set of recommendation were identified:

#### **1. Policy related issues**

Understanding fishing capacity related issues and building awareness at the policy maker level – revisiting policies to ensure they are not ambiguous and that they go into a direction supporting a reduction of fishing capacity –spread these policies down the levels to the fishermen (province level, local government, fishing communities and institutions, schools):

- Addressing closing/regulating access to fisheries/freezing the numbers = violating the constitution or against established policies, no political will to do so
- No policy for wrong subsidies/incentives (such as fuel subsidies or lack of tax)

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<sup>7</sup> Referred also page number 4 of WP04.

- No lenient political intervention for illegal fishing (whether SSF or LSF) – strict enforcement of laws and severe fines
- Setting-up buy back schemes, finding financial support, mechanisms to do so
- Addressing conflicts and ambiguities between Departments
- Addressing conflict between fisheries and other sectors (e.g. tourism) for coastal resources

## 2. Institution related issues

- Lack of budget and resources
- Weak MCS (need to involve the local fishermen?) to stop IUU fishing and enforce regulations

## 3. Socio-economic issues

- Lack of job opportunities for fishers to exit fisheries
- Need for fisheries a safety net for the vulnerable/poor

## 4. Research issues (technical)

- Finding a balance between SSF and LSF
- Boundary between demarcated areas for small-scale and large-scale fisheries respectively not always clear or easy to implement/monitor
- Understanding the real numbers behind SSF and LSF (number of vessels, total production)
- Implications of fuel costs on different types of boats
- How do we respond to natural disaster – need to have reliable info on fisheries before to ensure rehabilitation is sustainable
- Identifying key fleets (types of boats/gear) contributing to the problem of overcapacity (e.g. trawlers, push-netters)
- Assessment of changes in catch composition and volume
- Role of MPAs/refugia in ensuring sustainable fisheries

## 5. Regional level issues

- Managing fisheries across borders: how to bring countries to manage these together (Malacca Straits, Gulf of Thailand)
- Safety at sea: setup of standards (remotely linked with FC)
- Increasing demand for fish (direct consumption and processing/export)

### **Recommendation 3      Directions towards management of excess fishing capacity**

Through consultations with experts, the major issues of management of (excess) fishing capacity were identified as follow:

1. To *understand status and trend of fisheries* in terms of fishing boats, gear, fishers and resources. In connection to this, indicators

are regarded as a useful tool.

2. To ***replace open-access with limited access*** regime of fisheries. It is generally noted that licensing is appropriate for commercial fisheries while right-based fisheries systems is more appropriate for small-scale fisheries.
3. To ***control/regulate fishing capacity***. This can be done through freezing number of fishing boats and gear as a first measure.
4. To ***promote co-management*** approaches in fisheries management. This will facilitate consensus building among government authorities and stakeholders in managing fishing capacity. This includes identification of management actions to reduce fishing capacity (particularly in destructive fishing) and supplementary/alternative livelihoods (aquaculture, tourism, agribusiness, etc.)

#### **Recommendation 4      Points to bear in mind for the Southeast Asian Countries in Managing Fishing Capacity**

To further provide options for managing excess level of fishing capacity, the following critical points to bear in mind for the countries in the region:

1. In developing and promoting right-based fisheries systems, supporting legal provision and fishing seasons (fishers migrate according to monsoon seasons) should be taken into account.
2. To raise awareness, ensure political will and clarify practical approaches and steps in the management of excess fishing capacity at the national level, national consultation can be conducted as an initial process.
3. As a long-term process, there may be a need for restructuring or realignment of government structure and policy related to fishery management in response to fisheries situation.
4. As a measure during transitional period when reducing excess fishing capacity, HRD to support supplementary/alternative livelihoods should be developed.
5. As a practical approach to develop/promote management of excess fishing capacity is to conduct pilot projects in selected countries in the region as a basis for sharing experience at the regional level and further nation-wide management of fishing capacity.
6. Consumer awareness building or education on preference on fish and fishery products from sustainable/responsible fisheries should be developed (could linked to some scheme for eco-labelling).
7. When developing supplementary/alternative livelihoods, it is important to make sure that requirements arise from the target beneficiaries to avoid other groups taking advantages from the government promotional work.

**Recommendation 5      Priority Target Groups for HRD in Support Management of Fishing Capacity**

Through the consultations/meetings, there exist two main target groups for HRD in relation to management of excess fishing capacity: One is *government authority*. Another *stakeholders and consumers* of fish and fishery products. In addition, HRD should also focus at three different levels – **national/central, provincial/state, and local/community**.

**Recommendation 6      Priority Areas of HRD Requirements**

By focusing on knowledge and skills aspects, the priority areas of HRD in support management of fishing capacity in SEA should include:

1. Criteria for ‘fishing capacity’, indicators, rights-based fisheries systems
2. Policy, social, economic, environmental and legal aspects
3. Extension/consultation/coordination, not only on technical/technology aspects but also awareness building and facilitation to enhance ownership, higher degree of compliance and cooperation from stakeholders.

**Recommendation 7      Roles of International/Regional Organizations in Managing Fishing Capacity in SEA**

International/regional organizations like SEAFDEC could/should act as a trigger or external factor for change to support the Member Countries at the national level, by:

1. Providing regional forum to share experience among the countries and identify priority issues
2. Promoting policy dialogue to higher policy level; and
3. Developing and promoting regional supporting programs.

**Recommendation 8      Future Regional Collaboration by Sub-regional Management Areas**

Based on the major outputs from the expert consultation in 2006, *regional collaboration by Sub-regional Management Areas* should be carried out in the following areas:

1. Gulf of Thailand (Cambodia, Malaysia, Thailand, and Vietnam)
2. Malacca Strait (Indonesia, Malaysia, and Thailand) and Andaman Sea (Indonesia, Malaysia, Myanmar, and Thailand)
3. South China Sea
4. Sulu Sea or Celebes Sea (Indonesia, Malaysia, and Philippines)

Through consultations, *steps for regional collaboration by sub-regional management areas* are recommended as follow:

1. Support development and implementation of NPOAs in countries involved
2. Provide a platform for discussion on management of fishing capacity among countries and institutions involved
3. Develop concept for management of sub-regional management of areas among countries mentioned
4. Develop collaborative framework.

Recommended *steps for establishment of sub-regional management areas*

1. Develop and implement an action plan including
  - a. Capacity building
  - b. Information gathering
  - c. Collaborative research
  - d. Plan for management actions – responsible agencies, actions and scheduling
2. Mobilizing existing mechanism of UNEP/GEF/SCS and SEAFDEC and other relevant projects/initiatives.

**Management of Fishing Capacity in Southeast Asia: Current Situation, Future Challenge and HRD Needs**

**Management of Fishing Capacity (MFC)  
in Southeast Asia: Current Situation,  
Future Challenge and HRD Needs**

**Suriyan Vichitlekarn**  
**SEAFDEC Secretariat**

Regional Technical Consultation on Management of Fishing Capacity and HRD in  
Support of Fisheries Management in Southeast Asia  
19-22 September 2006, Phuket, Thailand

1

**Introduction & Outline**

- Bases of presentation
  - SEAFDEC-Sida pilot process in CITV
  - Review of outcomes of relevant regional gatherings
  - Expert Meeting on MFC in Sihanouk Ville, 27-29 July '06
- Outline of presentation
  - Background
  - MFC in Southeast Asia
  - Future Challenges

2

## Background (1)

- Why overcapacity?
  - "Open access" regime without effective regulatory and MCS system
  - Increasing demand for fish (i.e. direct consumption and processing & canneries)
  - Migration of population to coastal areas
  - Seasonality of fishing
  - Introduction of modern fishing techniques and technology

3

## Background (2)

- Overcapacity → a fundamental cause of problems in the fisheries sector
  - "Capital stuffing"
  - Race for fish → fishing down the food chain
  - IUU and destructive fishing
  - Degradation of resources and habitats
  - Conflicts

4



### **Background (3)**

- 1999 IPOA-Capacity to support implementation of CCRF
- IPOA specifies 3 urgent actions phases
  - Assessment and monitoring of fishing capacity
  - Preparation and implementation of national plans
    - Reduce and progressively eliminate factors contributing to overcapacity
    - Cooperate through RFMOs to ensure effective MFC
  - International consideration and immediate actions for major international fisheries requiring urgent attention.

5

### **Background (4)**

- Fishing capacity - the ability of a fleet of vessels to catch fish, which is based on:
  - The number of fishing vessels in the fleet;
  - The size of each vessel;
  - The technical efficiency of each vessel
  - The time spent fishing.

6

## **MFC in SEA (1)**

- 2000 SEAFDEC Workshop on MFC
  - Unclear understanding on FC and its assessment
  - Uniqueness of fisheries in the region required relevant management approaches and tools
  - NPOA is a process not an end product
- Fish catches are declining and catch composition is changing toward low value or immature fish

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## **MFC in SEA (2)**

- Persistent and widespread poverty among coastal communities
- Degradation of critical coastal ecosystems and habitats
- Effect of overcapacity is more in countries without proper management system in place
- MFC is a "national" issue
- Close link between MFC and improvement of fisheries management in general

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### **MFC in SEA (3)**

- Some forms of national policy and plan exist
- Different degree of readiness and management capacity among countries
- Improving fisheries management can not do without addressing "MFC"

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### **MFC in SEA (4)**

- While noting that MFC is contextual, common approaches to MFC are:
  - Better understanding of status and trends of fisheries
  - Promotion of co-management and rights-based fisheries
  - Strengthening local institutions through delegation of management functions

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## **MFC in SEA (5)**

- Strengthening communities through better organization and participation
- Habitat management and stock enhancement
- Freezing and control number of fishing vessels
- Development of supplementary/alternative livelihoods for coastal communities

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## **Future Challenges (1)**

- MFC on the high seas → competent RFMOs
- NPOA-MFC → national policy and planning (for geo-political boundaries)
- Strengthening MFC through adoption of management areas → harmonization of frameworks and actions in management areas (for ecological boundaries)
- Exchanging information/experience through policy dialogues, networking and partnership

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## **Future Challenges (2)**

- Multi-dimensional effects of NPOA-MFC
  - Defining status, issues and priority
  - As a process for refinement of policy and planning for management towards common goals
  - Clarifying required resources and supporting activities
  - As an output for implementation and review
  - Facilitating inter-agency coordination
  - Help interface external support and cooperation

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## **Future Challenges (3)**

- Priority Issues and Actions
  - Introducing "regulatory" system in "open access" regime
  - Registration of fishers and fishing boats as a basis for right-based fisheries (i.e. access rights, licensing)
  - Understanding "fishing capacity"
  - "Freeze" the current no. of fishing fleets as a basis for reduction strategies

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## **Future Challenges (4)**

- Balance of and inter-relationship between SSF and LSF (commercial/subsistence, urban/rural)
- "Mobility" of FC considering resource, social and economic dimensions
- Diversifying means of livelihoods
- Total boats/gear vs. active boats/gear
- Capacity building beyond "managers" and "fishers"
- Pilot areas/cases → a nation wide implementation

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## **Future Challenges (5)**

- Packaging policy and technical advice into guidelines for future reference and calling for greater attention and support
- Capacity building and technical supports to complement national efforts in NPOA implementation and sharing of experience
- Regional supply of fish workers/migratory workforce

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## **Future Challenges (6)**

- Transboundary collaborative arrangement (ecological areas beyond geo-political boundaries) to complement management actions by States
  - Local and national roles
  - Information gathering and harmonization
  - Networking and dialogues
  - Capacity building and technical supports

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## Freezing the Fishing Fleets

by Mr. Suriyan Vichitlekarn, Program and Policy Coordinator of SEAFDEC Secretariat



### Freezing the Fishing Fleets?

Regional Technical Consultation on Management of Fishing Capacity and HRD in Support of Fisheries Management in Southeast Asia  
19-22 September 2006  
Phuket, Thailand

Policy directions for managing fishing capacity in Southeast Asia

Olivier Delahaye Gamucci, SEAFDEC Secretariat

## Introduction

- Management of fishing capacity = implementation of a range of policies and technical measures to ensure a balance between fishing inputs and production.
- The IPOA-Capacity is to be considered as the overarching framework under which NPOAs will be developed, which will require the adoption of a sector-wide policy framework, thus its integration into the existing fisheries management framework



## Policy considerations for freezing fishing capacity

### Objective:

- Develop a broad framework including approaches that could potentially freeze/reduce overcapacity in Southeast Asian fisheries, especially for small-scale fisheries

## Need for clearer Policy Goals



- Reduction of user conflicts
- Increase fish production
- Safeguarding employment and incomes
- Resource sustainability
- Expansion of aquaculture and offshore operations
- Export promotion


Multiple objectives framework of management policies at the national level, and even sometime at the regional level can often be contradictory




Recognize that the fisheries situation in the Southeast Asian region is in a general state of **“overcapacity”**



- Accept that fisheries resources which are not fully regulated are likely to be overexploited as a basis for future actions.
- There lies the assumption that the current number of fishing boats in the region should be frozen to its current level before proceeding with further management based on reliable information.
- It is important that the scientific basis and facts that support policy for the reduction of fishing capacity are explained to the stakeholders for their compliance, especially to the political stakeholders.

- 
- Yet, the lack of such information should not hinder the building of a regional recognition that something must be done and that it makes little sense to continue to build fishing capacity in the current context of declining catches and degrading environment.
  - Registration of fishing boats and fishermen
  - Strategies and mechanism to “freeze”/control number of fishing boats
  - Political and policy drives!!!

### **Freezing the fishing fleets – mission possible?**

- 
- Fishermen may actually agree with the concept of not allowing any additional fishing boat to enter the local fisheries as many are concerned that the ever increasing numbers of fishermen and boats will eventually reduce their portion of catch, or the collapse of the fisheries.
  - If true, the concept of freezing the number of fishing boats would be relatively well accepted and countries should start to discuss with their fishermen on how to freeze the numbers of boats and/or fishers
  - Learning of experiences in the region

**Policy Brief for Steps toward Managing Conflict: Small-scale VS Large-scale Fisheries**

by Mr. Len Garces, WorldFish Centre

people • science • environment • partners

**“Fish Fights over Fish Rights” in Southeast Asia:  
Managing Conflicts between Small- and Large-scale Fisheries**




L. Garces

SEAFDEC – Regional Consultation on Management of Fishing Capacity in SEA, 19-22 September, Phuket, Thailand

people • science • environment • partners

**Presentation Outline**



- Small- (SSF) vs Large-scale (LSF) Fisheries
- Fisheries Conflicts between SSF and LSF based on a Case Studies in SEA
- Strategies for Managing Conflicts and Fishing Capacity
- Policy Recommendations & Future Research

## SSF vs LSF

(Source: SEAFDEC Fisheries Bulletin)










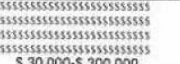





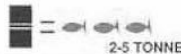




Country	Small-scale fishery	Large-scale fishery
Brunei Darussalam	Artisanal; boats up to 60 ft (18.3 m) LOA (<3nm)	
Indonesia	Small-scale: vessels <5 GT/10 HP engine (0–3 nm); & <25 GT/50 HP engine (3-7 nm)	Industrial: vessels <100 GT/200HP engine (7–12 nm); & vessels >100GT/200HP engine (>12 nm to EEZ)
Malaysia	Inshore or traditional: boats <10 GT (within 3 nm)	Modern gear (Trawl & purse seine): boats >10 GT (>3nm)
Philippines	'Municipal' boats < 3 GT (<15 km, ~8 nm)	'Commercial' boats >3 GT (>15 km)
Thailand	<12 nm mainly gillnets	>12 nm using trawl, purse seines, mackerel gillnet

## Existing Fishing Zones

(Source: Silvestre et al. 2003)

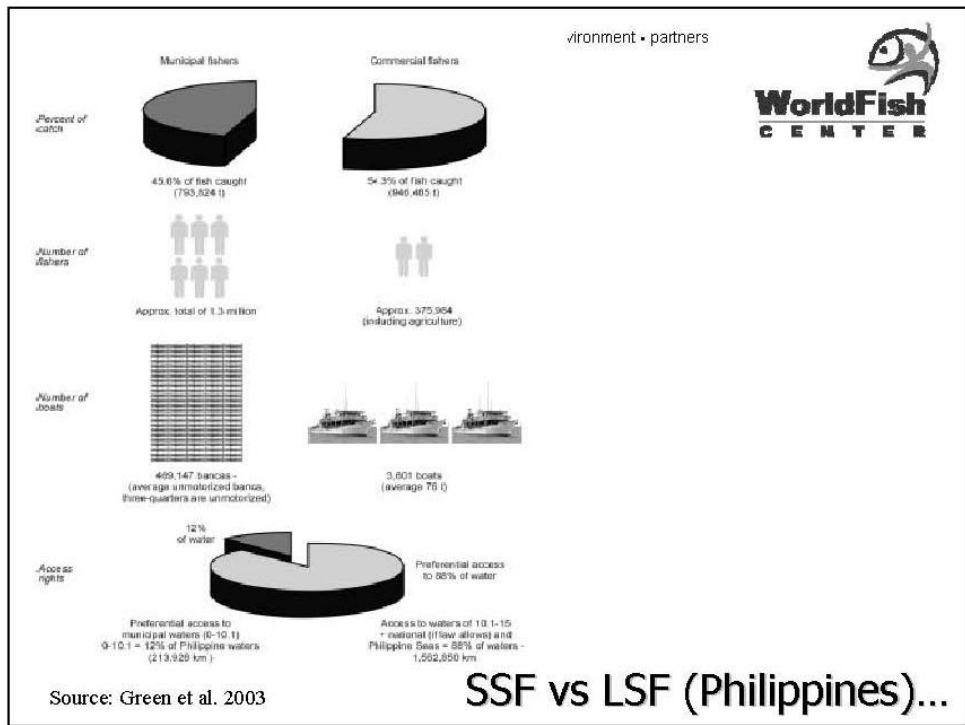


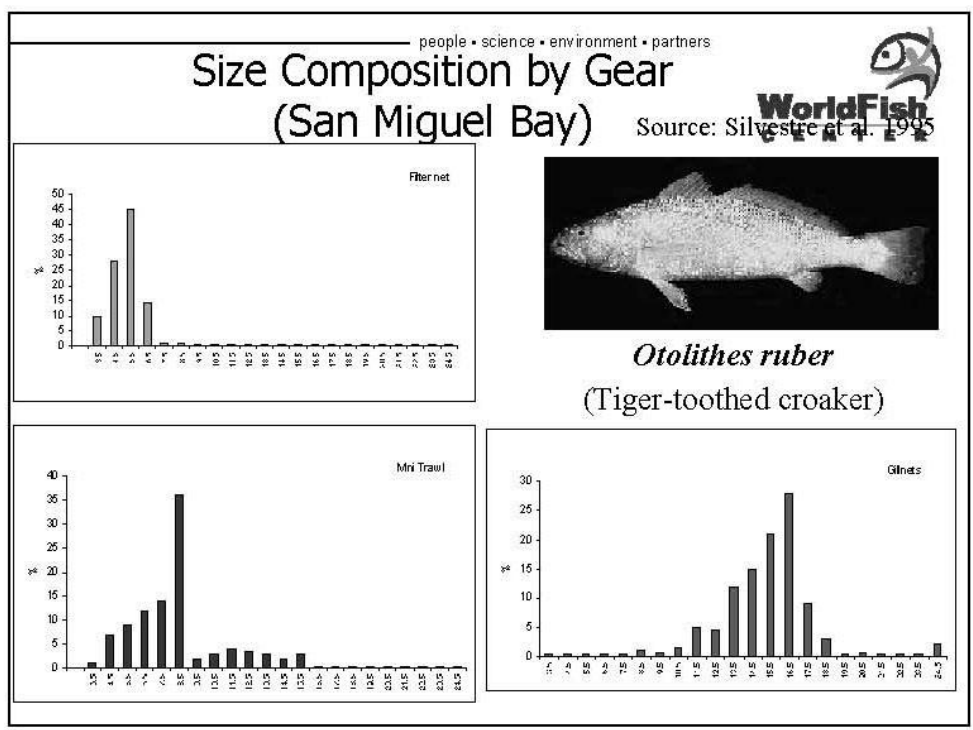
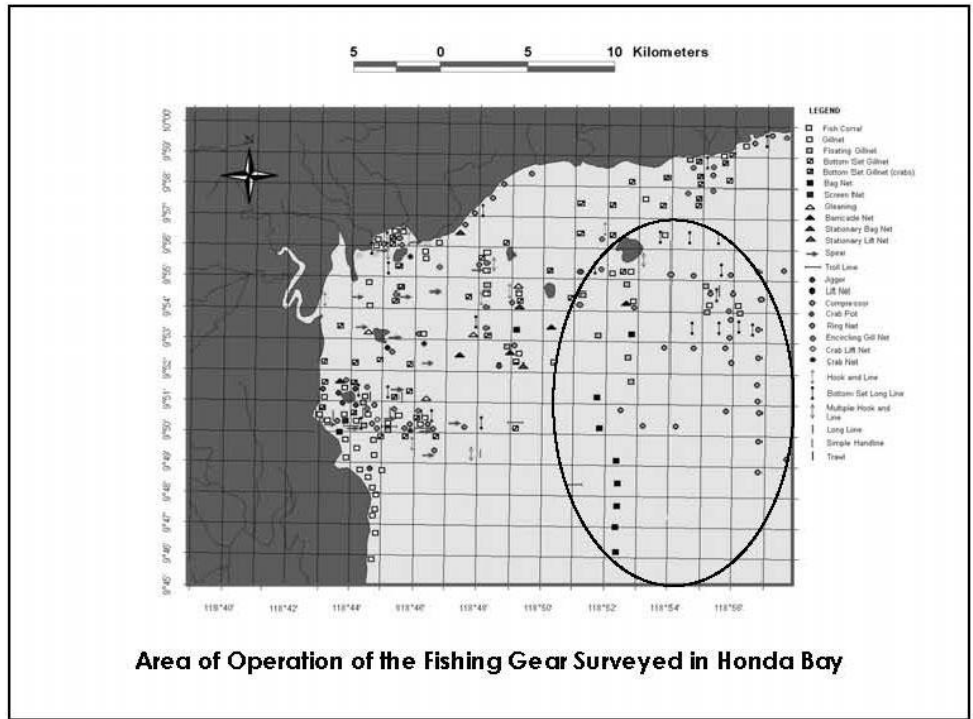
Countries	Fishing Zone I	Fishing Zone II	Fishing Zone III	Fishing Zone IV
<b>Reference Point: Distance from shoreline</b>				
<b>BRUNEI DARUSSALAM</b>	3nm (Small-scale/ Artisanal fisheries)	3nm to 20nm (Small-scale/ Artisanal fisheries /Industrial fisheries)	20nm to 45nm (Small-scale/ Artisanal fisheries /Industrial fisheries)	45nm to EEZ limit (Small-scale/ Artisanal fisheries /Industrial fisheries)
<b>INDONESIA</b>	3nm (Small-scale fisheries)	7nm (Small-scale fisheries)	12nm (Industrial fisheries)	>12nm (Industrial fisheries)
<b>MALAYSIA</b>	5nm (Traditional Fisheries)	5nm to 12nm (Commercial Fisheries)	12nm to 30nm (Commercial Fisheries)	30nm to EEZ (Commercial Fisheries)
<b>PHILIPPINES</b>	15km (~8nm) (Municipal fisheries)	15km (~8nm) to EEZ limit (Commercial fisheries)		
<b>THAILAND</b>	12nm (Small-scale fisheries)	12nm to EEZ limit (Large-scale fisheries)		
<b>VIET NAM</b>	0 to 30m depth in Northern and Southern areas, to 50m depth in Central area (Small-scale fisheries)	30 to 50m depth to the EEZ limit (Large-scale fisheries)		

	LARGE SCALE 	SMALL SCALE 	 <b>WorldFish</b> <b>CENTER</b>
Number of fishermen employed	 AROUND 500,000	 OVER 12,000,000	
Annual catch of marine fish for human consumption	 AROUND 29 MILLION TONNES	 AROUND 24 MILLION TONNES	
Capital cost of each job on fishing vessels	 \$ 30,000-\$ 300,000	 \$ 250-2,500	
Annual catch of marine fish for industrial reduction to meal and oil, etc.	 AROUND 22 MILLION TONNES	 ALMOST NONE	
Annual fuel oil consumption	 14-19 MILLION TONNES	 1-2.5 MILLION TONNES	
Fish caught per tonne of fuel consumed	 2-5 TONNES	 10-20 TONNES	
Fishermen employed for each \$ 1 million invested in fishing vessels	 5-30	 500-4,000	
Fish destroyed at sea each year as by-catch in shrimp fisheries	 6-16 MILLION TONNES	NONE	

Source: Thompson & FAO 1988

SSF vs LSF (global)...







**WorldFish  
CENTER**

## Why “Fish Fights over Fish Rights”?

The study is about Fights (*disputes*) over fishing ‘Rights’ (*a legal, equitable, or moral title or claim to the possession of property or authority, the enjoyment of privileges or immunities that which justly accrues or falls to any one*).



“Fish Fights over Fish Rights”

is about

**conflicts in fisheries**

Source: Bennett (2000)



**WorldFish  
CENTER**

## Methods

- Identify fisheries conflicts and origins in Cambodia, the Philippines and Thailand
- Surveys and case studies in three sites per country
- National and regional consolidation workshops
- Develop framework for managing conflicts arising from excess fishing capacity while securing food, livelihoods and fishing environment and stocks

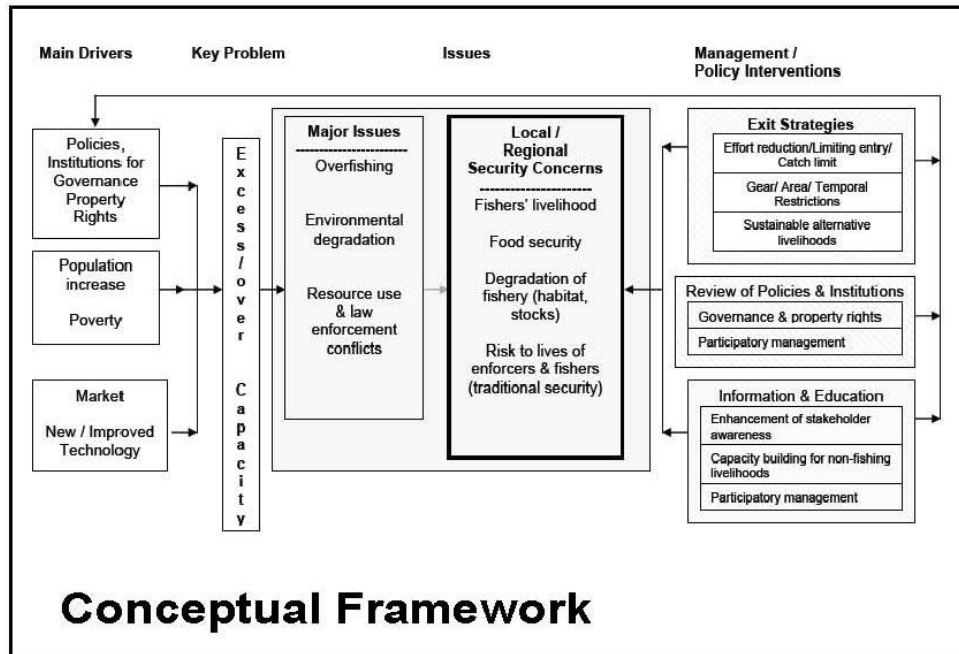






## Study Sites & Methods

Country / case study sites	Fishing ground	Methodology & sampling
<u>Cambodia:</u>		
Pursat province	Tonle Sap Lake	household survey (n=45) & focus group discussions (FGD)
Kandal province	Mekong River tributary	household survey (n=45) & FGD
Kampot province	Gulf of Thailand	household survey (n=45) & FGD
<u>Philippines:</u>		
Concepcion, Iloilo	Visayan Sea	Key informant interview (KII) (n=54 commercial; n=54 municipal fishers) & FGD
Escalante, Negros	Visayan Sea	KII (n=38 commercial; n=54 municipal fishers) & FGD
Bantayan, Cebu	Visayan Sea	KII (n=54 commercial; n=54 municipal fishers) & FGD
<u>Thailand:</u>		
Bo Daeng, Songkhla province	Gulf of Thailand	Rapid appraisal & stakeholder analysis
Nathap, Songkhla province	Gulf of Thailand	Rapid appraisal & stakeholder analysis





## Typology of Conflicts

Type	Description of conflicts	Examples
I	Conflicts on who controls the fishery	Access issue - who among fishers can fish (e.g. ownership between concessionaires & fishermen)
II	Conflicts on how the fisheries is controlled	Enforcement issues - how management systems are implemented (quota / allocation, fishing seasons)
III	Conflicts between the fishery users	User-group-related issues (small vs large-scale fishers; ethic, religious groups)
IV	Conflicts between fishers and other resource users	Conflicts arising from multiple use of resources (farming vs tourism vs conservation vs industrial development)
V	Conflicts between fishers and non-fishery issues	Conflict external to but affecting fisheries (corruption, politics, elite groups, environmental concerns, and economic change)

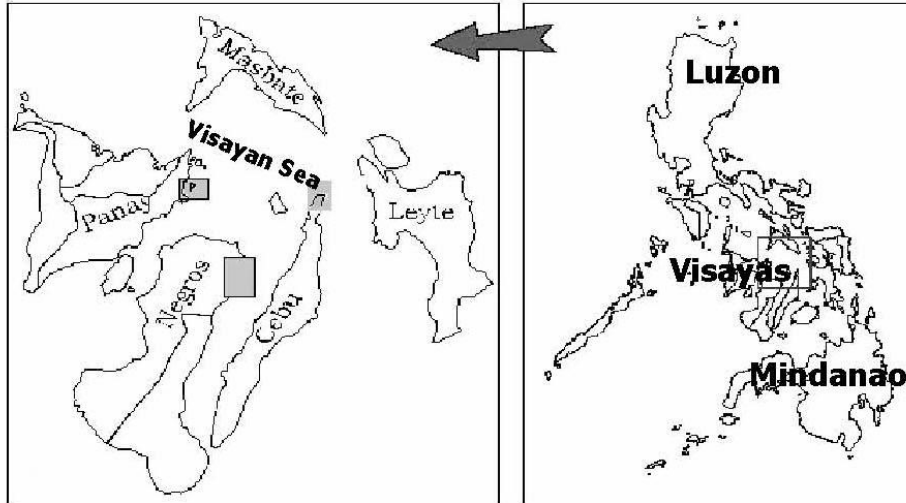
Source: Bennett et al. 2001



## Conflict Cases and Study Sites

Cambodia	Allocation of fishing rights	Pursat in Tonle Sap Lake; Kandal in Mekong River; Kampot in the Gulf of Thailand
Philippines (Visayan Sea)	Small- vs. large-scale fisheries	Iloilo, Negros & Cebu provinces in the Visayan Sea (3 municipalities)
Thailand (Gulf of Thailand)	Anchovy fishery and small-scale operators	Songkhla province in the Gulf of Thailand (Natub SD in Chana & Bo Daeng SD in Sating Pra)

## Study area



## Visayan Sea, Philippines

- More than 20 LGUs (4 provinces)
- LGUs manage coastal zones up to 15-km from the shore (Local Government Code – 1991; Fisheries Act – 1998)
- Area = 5,184 km<sup>2</sup>; Depth ~ 20 fathoms
- Fisheries catch contribute to >10% of total (national) fish production (~200 thousand t)
- Declining catch rates (~25% bet. 1990 – 1995)
- Visayan Sea Coastal Resources and Fisheries Management Project (funded by GTZ)

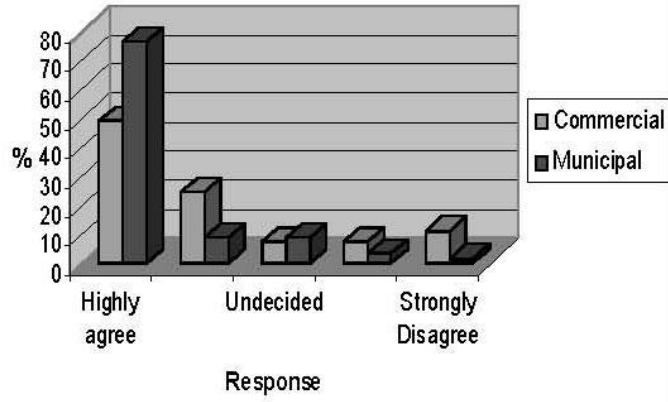
## **Typologies of Conflicts: Visayan Sea**

- Municipal (small) vs. commercial (large) sector (15-km)
- Among municipal fishers (within 15-km)
- Access given by local governments to commercial fisheries to operate between 10-15 km)
- Gear ban (trawl within 15 km)

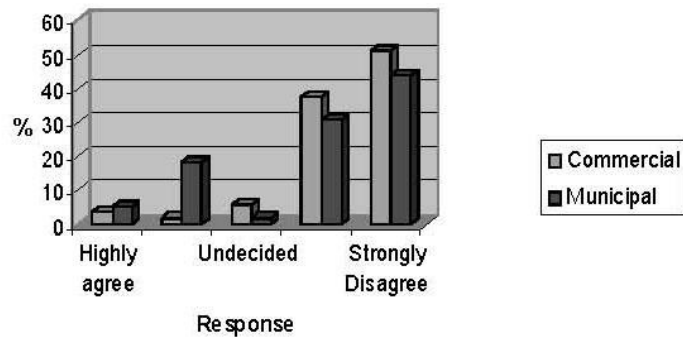




### Ban Use of Some Gears

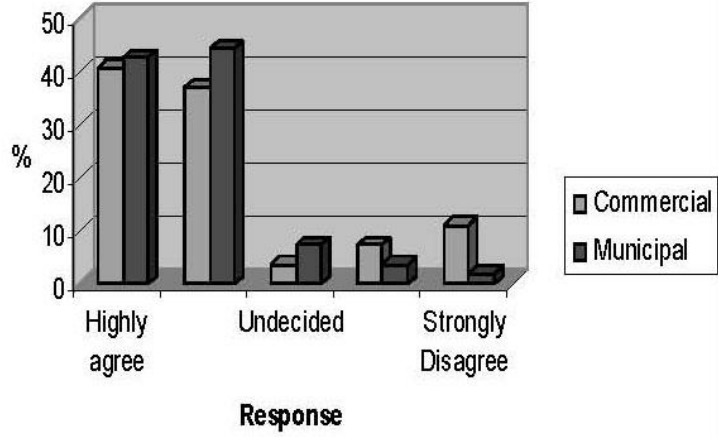


### Catch Limit

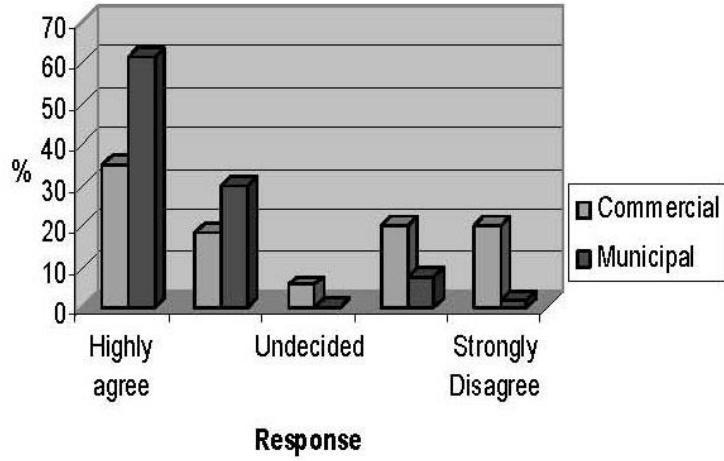




### Alternative Job

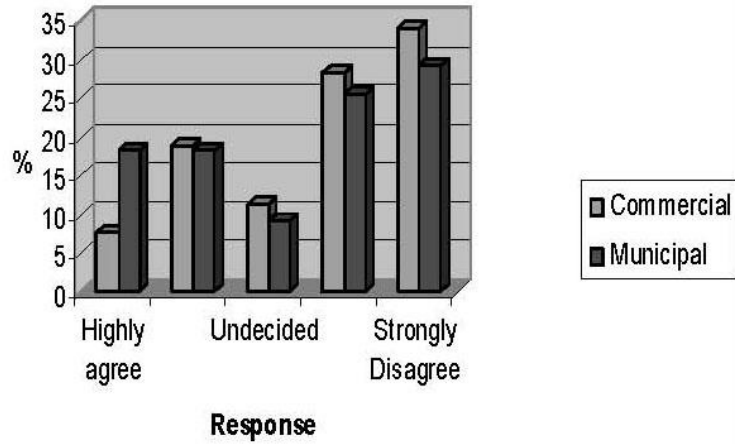


### Establishment of MPAs





### Limit Number of Fishers



## Strategies for Managing Fishing Capacity

- ✓ Ban use of some gears
- ❖ Set maximum limit of catch
- ❖ Set non-fishing season ("closed season")
- ✓ Establish "Protected Areas"
- ❖ Limit number of fishers
- ✓ Alternative livelihood



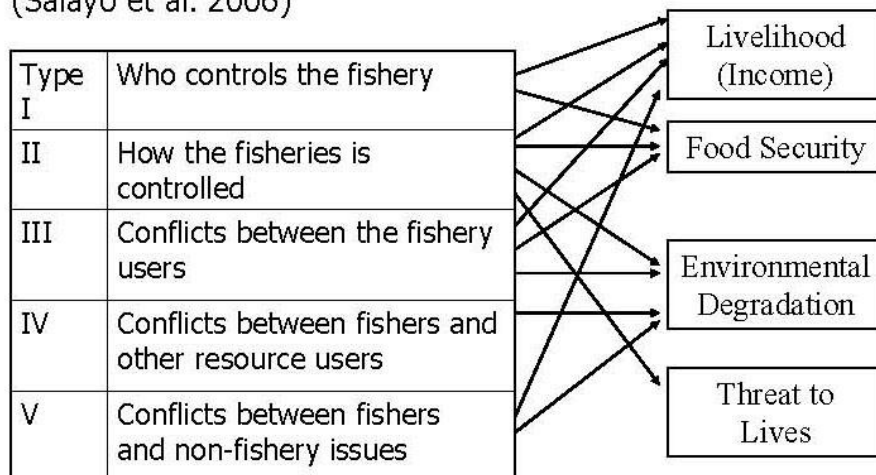
## Reactions of respondents to exit strategies

Exit strategy	Cambodia	Philippines	Thailand
<b>1. Effort reduction</b>			
<input checked="" type="checkbox"/> Catch limitation	Disagreed	Disagreed	n/a
<input checked="" type="checkbox"/> Limiting the number of fishers	Disagreed	Disagreed	n/a
<b>2. Gear / area / temporal restrictions</b>			
<input checked="" type="checkbox"/> Banning the use of some gears	Agreed	Agreed	Recommended
<input checked="" type="checkbox"/> Closed season / non-fishing seasons	Disagreed	Ambivalent	n/a
<input checked="" type="checkbox"/> Establishment of protected areas	n/a	Agreed	Recommended
<b>3. Sustainable alternative livelihoods</b>	Agreed	Agreed	Recommended



## Typology of Conflicts & Security Concerns

(Salayo et al. 2006)





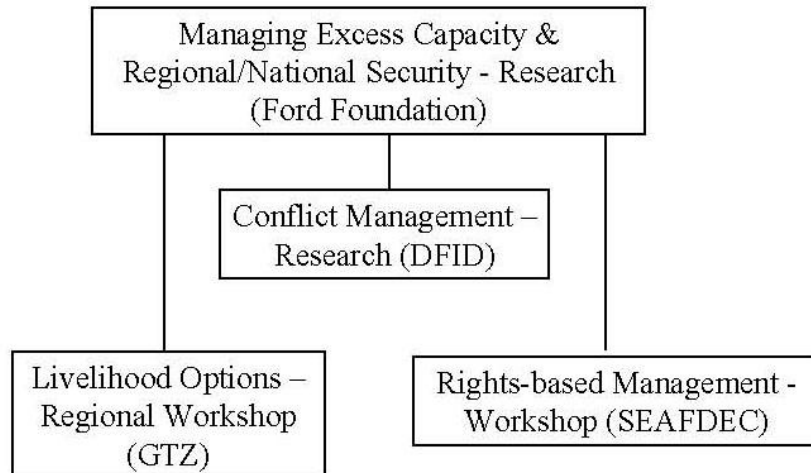


## Key Lessons....

- All conflicts have varying underlying or root causes
- Each conflict has corresponding threats or impacts
- Conflicts may produce some losers and winners
- Conflicts have security implications (livelihoods, food security, habitats and fish stocks)
  
- Need for review & updating of existing laws & regulations
- Improved implementation strategies
- Exit strategies need to be designed with stakeholders, not all technical solutions are acceptable



## Links to other Initiatives





## Regional Consolidation Workshop on Fish Fights over Fish Rights: Policy Recommendations



Regional Consolidation Workshop on Fish Fights over Fish Rights:  
Managing Conflicts and Exit from the Fisheries and  
Security Implications for South and Southeast Asia

17 - 20 May 2005  
International Rice Research Institute Complex (IRRI)  
Los Baños, Laguna, Philippines

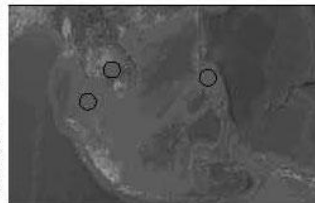


## Management of Fishing Capacity and Resource Use Conflicts in Southeast Asia: A Policy Brief



### MANAGEMENT OF FISHING CAPACITY AND RESOURCE USE CONFLICTS IN SOUTHEAST ASIA: A Policy Brief

Muhammad Ahmad, Noraidi D. Tahir,  
K. Viswanathan, Len R. Garces, Michael D. Pido



The WorldFish Center, Maldives  
In collaboration with:  
Department of Fisheries (Cambodia)  
University of the Philippines - Visayas (Philippines)  
Southern Marine Fisheries Development Center and  
Coastal Resources Institute (Thailand)  
University of Cape Town (South Africa)  
Ford Foundation (USA)  
Deutscher Gesellschaft für Technische Zusammenarbeit (GTZ Germany)

M. Ahmed  
N.D. Salayo  
K. Viswanathan  
L.R. Garces  
M.D. Pido





## Policy Recommendations

### 1. Uphold institutional partnership in R & D

- Undertake relevant R&D programs
- Provide scientific/ technical advice and other relevant information
- Enhance institutional networking



## Policy Recommendations

### 2. Building non-fishery human capacity to reduce fishing capacity (HRD needs)

- Build capacity of institutions in all levels of governance (e.g., formulate & implement plan of action)
- Develop coordination and partnerships among stakeholders (national/local levels)
- Facilitate community organizing and development
- Develop key partners in sustainable resource management
- Participate actively in action programs at the local level
- Secure access to resources for sustainable livelihood



## Policy Recommendations

### 3. Promote and harmonize action plans through good governance

- Formulate and implement a national plan of action for addressing over-capacity and resource use conflicts in fisheries
- Harmonize relevant plan of action at international / regional level
- Promote collaboration in implementing international / regional action programs



## Policy Recommendations

### 4. Advocate management interventions and politicize security threat

- Promote a conducive policy climate
- Promote effective natural resource management
- Support fisheries and resource management



## Policy Recommendations

- Premised on institutional partnerships and crucial roles:
  - academic/research institutions,
  - national/local governments,
  - NGOs/people's organizations (POs)
  - international/regional organizations,
  - donors/investors,
  - private sector, and
  - primary stakeholders



## Future Directions....

- Development of mechanisms for implementing co-operation in the midst of conflicts and impending security threats to fishing livelihoods, food security, and fishery habitat and stocks.
- Research involving cross-border conflicts in various 'fishery hot spots' in Southeast Asia that was not covered in this study could be developed
- Action research and field trials of proposed policy recommendations for managing conflicts and excess capacity could be pursued



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## Future Directions....

- Strategies for managing fishing capacity (Stobutzki et al, 2006):
  - Country- and Fishery-specific
  - Effective access and property rights (compliance to regulations)
  - Balance between small-scale and industrial scale
  - Use of group-user rights (SEAFDEC)



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Marine Research 7 (2006) 108–110



Key issues in coastal fisheries in South and Southeast Asia, outcomes of a regional initiative

Brona C. Stobutzki<sup>a</sup>, Germaine T. Silvestre<sup>b</sup>, Len R. Garcia

<sup>a</sup>WorldFish Center, P.O. Box 107, 3707 Penang, Malaysia

### Abstract

Asia is an important region in terms of fish catch supplying nearly half of global fish production. The region's coastal fisheries offer a critical role in ensuring food security and providing livelihoods, particularly for poorer sections of the community. This paper introduces a regional initiative on which eight Asian countries (Bangladesh, India, Indonesia, Malaysia, the Philippines, Sri Lanka, Thailand and Vietnam) conducted systematic, interdisciplinary assessments of their coastal fisheries. The scope of the initiative are presented in the next two pages of the volume of Fisheries Research. The assessments have highlighted two disturbing regional trends: coastal fisheries resources are severely depleted, biological and economic sustainability is eroding throughout the region. There are symptoms of the lack of effective management of fishing capacity in the region.

This overview paper highlights the urgent need to reduce fishing capacity in the region. Only through such capacity reduction strategies can fish stocks be rebuilt to more productive and sustainable levels as the present resources and social benefits from fisheries can be sustained. Strategies need to be country- and fishery-specific and should focus on the development of effective access and property rights regimes. The authors' conclusions need to explicitly allow for rights between small-scale and industrial fisheries, where resources are shared. This will require an understanding of the overlap between the sectors as a means of assessing how and also the economic, economic and social benefits from each sector.

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Keywords: Asia; Coastal fisheries; Management; Small-scale fisheries; Fisheries management



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## FAO/WorldFish SSF Project Ideas

- Framework & methods: *assessment & tools, sustainability indicators* (2006 -2007)
- Synthesis and awareness raising: *information system, data analysis, dissemination of results (policy brief)* (2007-2008)
- Field testing and case studies: *S&SE Asia, SS Africa, W Africa & Latin America* (2008-2009)
- Capacity Building: *training, guide book, networking* (2010)



## Thank You

We hope to reverse the situation to...

### **“Fish Rights over Fish Fights”**

#### **Research Teams**

##### ***Fish Fights over Fish Rights***

- Cambodia: Department of Fisheries (IFReDI)
- Philippines: University of the Philippines in the Visayas (UPV) & GTZ/BFAR - Visayan Sea (VisSea) Project
- Thailand: Department of Fisheries (DOF) & Prince of Songkhla University (CORIN)
  - University of Cape Town, South Africa
  - The WorldFish Center

##### ***Enabling Better Management of Fisheries Conflict***

- Fisheries Action Coalition Team (FACT), Cambodia
  - WorldFish-Bangladesh Regional Office
    - MitraniKETAN, India
  - University of Reading, U.K.
    - The WorldFish Center

**Fishing Capacity Reduction of Trawl and Push Net Fisheries in the Gulf of Thailand  
by Dr. Mala Supongpan, Department of Fisheries Thailand**

**Fishing Capacity Reduction of Trawl and Push Net  
Fisheries in the Gulf of Thailand**

**(FAO/GCP/RAS/199/SWE)**

Mala Supongpan

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The Project Objective and focus

*Overall objective*

“to manage excess fishing capacity”

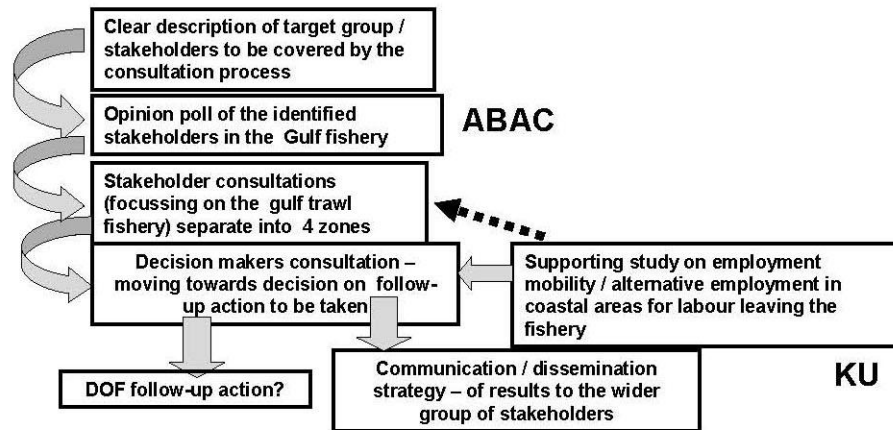
*Project focus:*

“Reduction of capacity in the trawl and push  
net Fisheries in the Gulf of Thailand”

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## Consultation process for capacity reduction

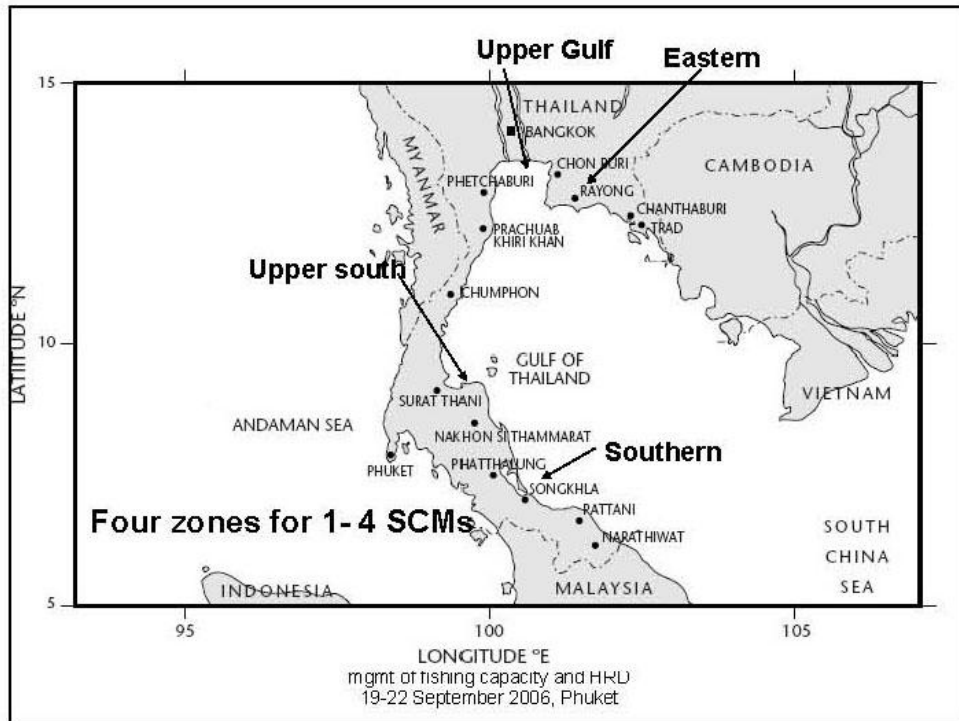


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Trawl and push net fisheries were considered as a first priority to reduce the fishing capacity due to its nature of fishing activities and the overexploited resources. The four zones to be held the Stakeholder Consultation Meetings (SCMs) were categorized by province and responsible area of the research centers and HSCM as the following.

- 1<sup>st</sup> Stakeholder Consultation Meeting (Upper gulf zone)
  - 2<sup>nd</sup> Stakeholder Consultation Meeting (Eastern zone)
  - 3<sup>rd</sup> Stakeholder Consultation Meeting (Upper south zone)
  - 4<sup>th</sup> Stakeholder Consultation Meeting (Southern zone)
- High Senior Consultation Meeting (Bangkok)

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## Results from four SCMs

The first Stakeholder Consultation Meeting had been held at Petchaburi province during 21-23 August 2005 the area covered the upper Gulf zone (Chonburi, Samuth Prakarn, Samuth Sakorn, Samuth Songklam and Petchaburi provinces)

The second Stakeholder Consultation Meeting had been held Rayong province during 23-25 November 2005 the area covered the eastern Gulf zone (Trad, Chantaburi and Rayong provinces).

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The third Stakeholder Consultation Meeting had been held at Surat Thani province during 11-13 January 2006 the area covered the upper south zone (Prachuab Kiri Khan, Chumphon and Surat Thani provinces)

The fourth Stakeholder Consultation Meeting had been held at Songkhla province during 26-28 April 2006 the area covered the southern Gulf zone (Nakorn Sri Thammarat, Songkhla and Pattani provinces)

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## Conclusion of the results of the four SCMs

### **First SCM for trawlers (prioritization)**

1. No new wooden fishing boat building
2. Reopen registration for existing fishing boats
3. Strongly monitor and enforce for illegal fishing
4. Reform existing law and regulation through stakeholder participatory approach
5. Buy back scheme
6. Suggestion to set a board for issuing license
7. Training course for alternative jobs
8. Change the boat yard to repair the boat not building new boat

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### **Second SCM for trawlers**

1. Buy back should consider by size of boat
2. Limitation of the fishing gear designs e.g. mesh size
3. Fishery by zone (consult to the public)
4. More artificial reefs both in shallow and deep water
5. Buy trawl boats to make artificial reefs for tourism
6. Introduce non destructive gear, and introduce for fishing in international waters, tourism and aquaculture
7. Government should license the coastal areas for aquaculture
8. Government should support financially the fishing fleets for fishing in foreign waters
9. No new boat building for 5 years (size more than 14 m) and no enlarge the size of boat less than 14m
10. More area and season closure through participation app.

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### **Third SCM for trawlers**

1. Fisheries Development Fund funding support by 1% of export value from exporter volunteer
2. Reconsider for Ministry of Agriculture and Cooperatives Notification 1999
2. Switching for anchovy to trawler or vice versa
2. Fishing by zone
5. Alternative jobs and secure the new career
6. More area and season closure through participation app.
6. Extend reserve area from 3 km to 5 km
8. Promote large sized boat to fish outside Thai waters
9. More artificial reef

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#### **Fourth SCM for trawlers**

1. Buy back program
2. Strong monitoring and enforce
3. Gear and license should be the same
4. Promote community-based fishery management
5. Enlarge mesh size
6. More artificial reef (boat hull)
7. More area and season closure
8. Alternative job and training
9. Quota system
10. NGV or bio-diesel
11. Mechanism or system for control of boat numbers
12. etc.

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#### **Push netters**

##### **First SCM**

1. Reopen for PN registration
2. Limit number of boats and provide buy back program
3. Problem solve by geographic area
4. PN- frame work and strategy of province
5. Community-based fishery management
6. Voluntary quit from push net fishery and to sell their boats
7. Alternative jobs
8. Awareness in resource conservation and rehabilitation
9. Local species aquaculture, processing products and ecotourism
10. Revolving fund to establish central market for community.

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## Push netter

### Second SCM

1. Survey and registration of the number
2. Alternative jobs
3. Control the number of push nets, no new fishing boats within 5 years
4. Research for suitable number
5. Public awareness to make understanding on the issue of capacity reduction of push net
6. Strictly control and reinforce
7. Artificial reefs and releasing of young fish
8. Enlargement of mesh size

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## Push netter

### Third SCM

1. Surveys on numbers of push net fishing boat and gear
2. Reduce boat numbers
3. alternative jobs
4. Artificial reefs
5. Strictly enforced
6. Regulation of efficiency and horse powers – not more than 300 hp
7. Provide capital support for efficiency modification and horse power for push net gear.
8. Proofing of the same boat owners who really got license yearly from the DOF

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## **Push netter**

### **Fourth SCM**

1. Fishing by zone and fishing at the place where the boat has licensed
2. Enlarge mesh size
3. Limit number
3. Public awareness on resource conservation
5. Resource enhancement and artificial reef
6. Strong monitoring and enforce
7. Provide low price fuel
8. Buying-back
9. Alternative jobs
10. Any Notification issued should be through participation approached
11. Catch quota
12. Price assurance of trash fish not less than 5 baht/kg

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The High Senior Consultation Meeting was held during 24-25 August 2006, Bangkok, Thailand. All results from 4 SCMs have been consulted in this meeting to find out the policy and plan of action to implement for the fishing capacity reduction for trawl and pushnet fisheries in the Gulf of Thailand. The meeting concluded:

### **Issues and Plan of Action**

1. Alternative Occupation
2. Institution and Management
3. Resource Enhancement and Habitat Restoration /Protection
4. Reduce Fishing Cost
5. Research Works and Activities Collaboration

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## **1. Alternative Occupation**

### **1.1 Incentive Provision**

- Promote alternative jobs and provide training program, budgetary support and promote fair market for new jobs
- Promote alternative jobs that are harmonized to livelihood e.g. ecotourism, cultural tourism
- Introduce less destructive gear for changing/switching to other fishery career
- Provide non destructive fishing gear or more selective gear

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September 2006, Phuket

- Buy back gear or boat to compensate for the one who volunteers to quit
- Extend for local species or requested species in coastal aquaculture
- Establish fishery museum, fish processing center (more choice for new job)

### **1.2 Fishery Fees Revision**

- Increase license fees for the one who remains fishing
- More payment of license fees for more effective gear

### **1.3 Buy Back Program**

- Plan and blue print for buy back program (boat, gear or both)

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### **1.4 Outside Thai Waters Fisheries Promotion**

- Extend for large scale fishing fleet to fish in the high sea e.g. purse seine and long line for tuna fishery
- Establish Oversea Fisheries Organization (under government)

### **1.5 Fishery Fund Establishment**

- Control, protect, extend and develop fishery activities
- Use to buy back boat and gear with low rate of interest
- Provide reward for arresting illegal fishing
- Promote and extend central fish market for fair fish price

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## **2. Institution and Management**

### **2.1 Fishery Laws and Regulation Revision**

- Revise fishery law and regulation to meet the present situation (method of fishing, fishing area, fishing zone, effective fishing gear, destructive gear, new fishing gear)
- Increase reserved areas (extend from existing 3,000 to 5,000 m) and area-season closures/MPA (Marine Protected Area: permanently closed area)
- Revise fishing license for small scale fishing gear
- No boat building (wooden, fiber or else) with the LOA more than 14 m to fish in Thai EEZ

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## **2.1 Fishery Laws and Regulation Revision**

- Registration for fishing gear should be opened all year round and the one year round paying license fee to continue registration should be ended at the date before the next year round
- Control number of boat registration by community participation in registration process, monitoring and control
- Establishing mechanism to control number of boat and new boat building that should be approved by provincial governor and local concerned authorities

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## **2.1 Fishery Laws and Regulation Revision**

- Decentralize authorities to local level and increase participation approached
- Reopen for illegal fishing gear (trawl-push net) to re-register to have a real figure that will be used for management measures within a certain period and clearly objectives should be publicly announced
- Limit efficiency, fishing power and enlarge mesh size

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## **2.2 Fishing by Zone**

- Establish fishing zone by type of fishing gear, method of fishing and size of boat:
- No fishing by mechanized boat within 3 nm; no fishing at depth less than 20 m except fishing by hook (manual)
- Empower to the governor to prohibit certain fishing gear and regulation
- Decentralize some authorities to the governor/local authorities to set their own fishing zones

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## **2.3 Monitoring, Control and Enforcement**

- Strong monitoring, control and enforce
- Decentralize some authorities to other concerned local authorities to monitor, control and enforce
- Promote local community/volunteer young generation to inform illegal fishing and participation in monitoring, control and enforce

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## **2.4 Data Based Management**

- Survey and registration for illegal fishing boat by community participation
- Update data based
- Manage data based for fully utilization

## **2.5 Conservation Awareness and Resource Rehabilitation**

- Awareness building in resource protection and conservation
- Promote participation in protection and conservation to local community

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## **2.6 Participation approached in Fishery Resource Management**

- Promote local community in coastal resource management
- Promote fishery co-management or community-based coastal resource management

## **2.7 Management Council Establishment**

- Reform the fishery societies to be a Legally Management Council

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### **3. Resource Enhancement and Habitat Restoration/Protection**

#### **3.1 Resource Enhancement**

- Seed fry releasing program
- Artificial reef installation with clear objectives

#### **3.2 Restore/Protect Habitats (mangrove, sea grass, coral)**

- Identify critical habitats associated with important life cycle of commercially and endanger species
- Promote community involvement in habitat protection and utilization of the resources
- Develop management measure to protect habitat and resource utilization
- Promote mangrove plantation activities to communities and school children

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#### **3.3 Land based Pollution**

- Reduce pollution from land based activities (waste water, solid waste, heavy metal contamination etc) by strictly monitoring, control and enforce

### **4. Reduce Fishing Cost**

#### **4.1 Alternative Energy Source**

- Experiment to use NGV/Bio-diesel to substitute diesel for reducing fishing cost
- Fuel subsidize

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## **5. Research Works and Activities**

### **5.1 Research Works and DOF Meeting Activities**

- Research works should be collaborated with other agencies
- DOF should distribute/announce the fishery activities, and results of all meetings to public especially to the Fishery Association, Provincial Fishery Society, NGO, fishers etc. to know

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### **Next Step**

1. Prepare easy to read documents
2. Submit to the Director-General of the DOF and the DG precedes to the Permanent Secretary for approval and implementation
3. Disseminate the result plan of action through mass media/hard copies/CD/brochure/leaflets to the provincial officials, provincial fishery societies, Fisheries Society of Thailand, Oversea Fisheries Society, Fish Processor Association, leaders of fisher groups and leaders of small scale fisher groups, educational institutes and libraries.
4. Submit to FAO in English version

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**End of the Project**

**December 2006**

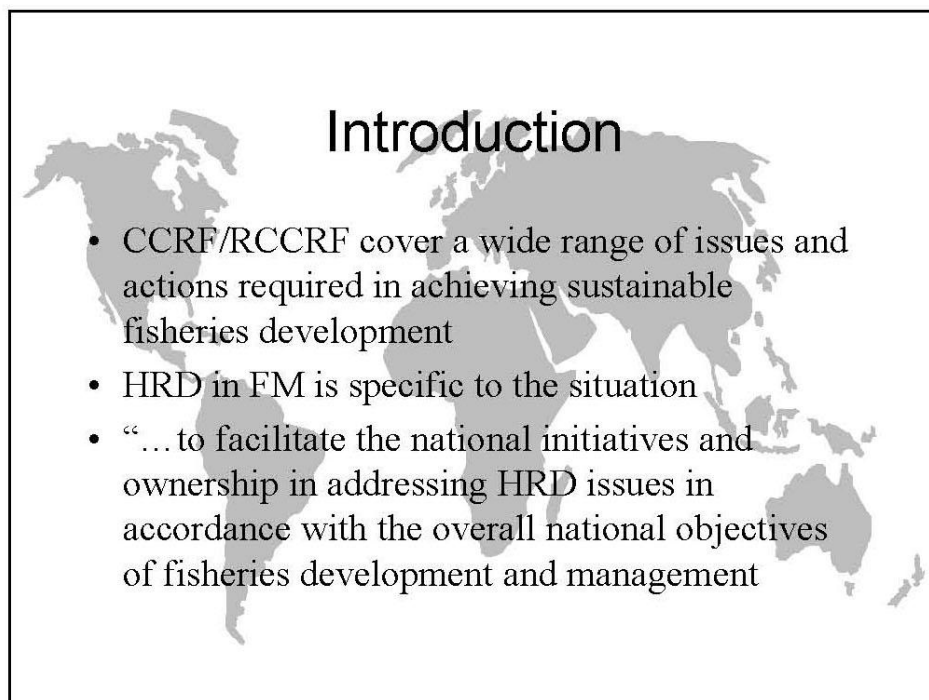
*Thank you for your attention.*

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**SEAFDEC-Sida Project: HRD in Support of Fisheries Management in Southeast Asia by Mr. Worawit Wanchana, SEAFDEC Secretariat**







## Overall Objective

- To facilitate the national implementation of the issues related to FM contained in CCRF through appropriate HRD activities including awareness building and training activities



## Project Outputs

1. Awareness enhanced of the necessity of appropriate FM to achieve sustainable development
2. Stakeholders advised on the mechanisms of innovative FM systems
3. HRD activities promoted on FM with identified target groups
4. Various options identified to alleviate the problems caused by excessive levels of fishing capacity

## Project Tasks: HRD for FM

Organization of workshop/training:

- Promote HRD activities
- Identify stakeholders' profiles: FM, overcapacity, information needs, etc.
- Identify and collect information on mechanism for innovative FM systems for SSF and LSF
- Collect information: FM policy

Develop/modify FM policy and management plan through HRD activities:

- Consultations with key stakeholders and consensus building to facilitate development of strategies for further awareness of necessity of appropriate FM

## Activities Implementation (1)

Co-organization and Organization of:

- R/W on HRD in Fisheries, KL, 2004
- RTC on HRD in Fisheries Management, PP, 2004
- Expert Meeting on FC and Related HRD Needs in the ASEAN Region, BK, 2004
- RTC on MFC and FM, Phuket, 2006

→ Strategy for HRD in Fisheries

→ Thematic Issues for Project Implementation:

1. Management of over fishing capacity
2. Strengthening local fisheries management capacity
3. Integrating fisheries management into habitat management

## Activities Implementation (2)



- “Pilot Process” in the representative set of countries with the overall objective is to share experiences – with specific focus to promote HRD in fisheries management – at the regional level on the lessons learned from the pilot process/study in the set of representative countries.
- Planning Meeting with Countries and in-country initiatives/project → National Workshop → On-site Training → RTC

## Major Findings: Key Recommendations



- Priority HRD needs and directions for various stakeholders at various levels
- Issues and problems encountered in management of coastal fisheries
- Fisheries in the development and management of coastal resources
- Policy, legal and institutional framework
- Capacity building and supporting resources
- Research and development
- Cooperation and networking of agencies and projects/initiatives
- Improvement of future planning and implementation of HRD activities

## Supporting Materials for HRD Programs/Activities

Description on implemented approaches to three representative types of management situations including:

- **Development of local organisations and fisheries management in three areas:**
  - Lombok Timur, Indonesia and the Awig-Awig system
  - Satun, Thailand and the fisheries organisation in La-Nguu District
  - Koh Kong, Cambodia and the fisheries/mangrove management in Peam Krasop Wildlife Sanctuary
- **Management of anchovy fishery in two locations:**
  - Satun and Trang Province in Thailand
  - Phu Quoc/Kien Giang, Vietnam
- **Marine fisheries resources protection areas (Vietnam) in three provinces:**
  - Haiphong
  - Quang Binh
  - Phu Quoc/Kien Giang

## Human Capacity Building: Fisheries Refugia

- Process for the establishment of fisheries refugia
  - Criteria for selection/establishment of fisheries refugia
  - Motivation to establish fisheries refugia
  - Establishing of fisheries refugia
  - Management of fisheries refugia
- Activities for future cooperation among neighboring countries to establish and manage fisheries refugia
  - Cooperation between Cambodia-Thailand (Koh Kong and Trad Provinces)
  - Cooperation between Cambodia-Vietnam (Kampot and Kien Giang Provinces)
- Mechanisms of neighboring provinces for the process of establishment of fisheries refugia
  - Provincial working group establishment
  - Technical working group establishment
- Capacity building needs and activities for establishment of fisheries refugia



## Coordination with Projects/Initiatives

- During the course of project implementation, active participation of the project staff in SEAFDEC and non-SEAFDEC relevant events/activities was carried out to maintain the dialogue with the countries and collaborative projects/initiatives on the issue related to fisheries management (more in coastal small-scale issues) and management of fishing capacity.
- This cooperation and involvement in related activities has made it possible to invite good resource persons with relevant experiences to workshops and on-site-training organized by the project while at the same time “enhance awareness of the necessity of appropriate fisheries management to achieve sustainable development” (project output 1).



## RIDNID-HRD

- The program “*Regional Inventory, Database and Network for Information Collection on Human Resource Development in Fisheries*” (RIDNIC-HRD), initiated by SEAFDEC, aims to promote human capacity building and providing a basis for network of HRD in fisheries that contain essential and useable information from fisheries related agencies and HRD programs operated by relevant institutions.

**Capacity Building for Coastal Fisheries Co-management by Dr. Kamonpan  
Awaiwanont, Coastal Habitat and Resources Management Project**

**Capacity Building for Coastal Fisheries  
Co-management**

**Support of the project to sustainable coastal  
resource management**

**Kamonpan Awaiwanont  
Training Coordinator**

**Coastal Habitats and Resources Management (CHARM)**

**Department of Fisheries, Thailand**

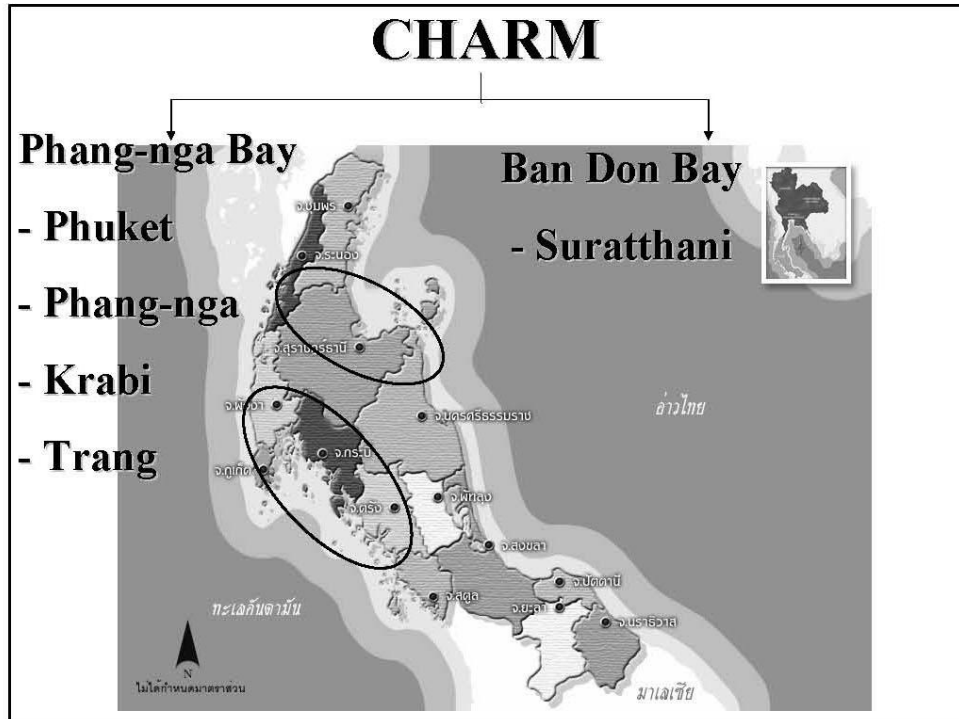
**Background**

**CHARM means Coastal Habitats and Resources Management, is  
a 5 year project (Dec.2002-Nov.2007) of the Royal  
Thai Government co-funded by the European Union.**

**Project objective:**

**To promoting a co-management approach at the national,  
provincial and Local levels among Government, Private sector and  
Local communities.**

**Project areas :**



## **CHARM EXIT STRATEGY**

### **Overall Outputs (Overall objective)**

- Improved conditions of coastal habitats and resources
- Legal and Institutional development promoted
- Socio-economic development promoted

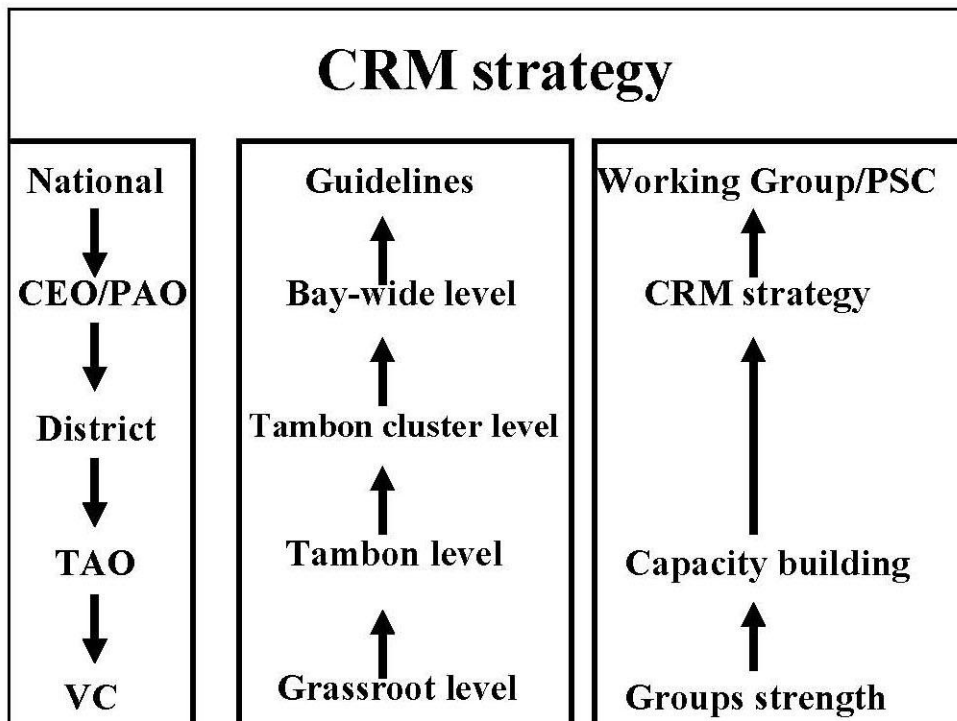
### **Specific Outputs (Project purpose)**

**Coastal habitats and resources co-management framework with established and replicated procedures.**

## FIVE KEY ATTRIBUTES of CHARM

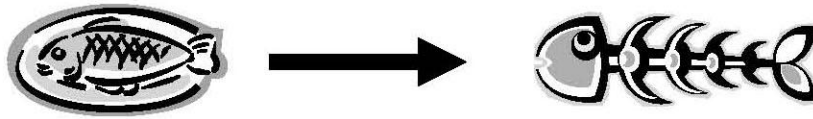
### Co-management approach;

- Participation
- Partnerships
- Integrated approaches and methods
  - Integration of science with policies*
  - Combination of bottom-up and top-down approaches to resource management;*
  - Integration between large - and small-scale management*
  - Integration among sectors and disciplines*
- Learning and adaptation
- Building capacity



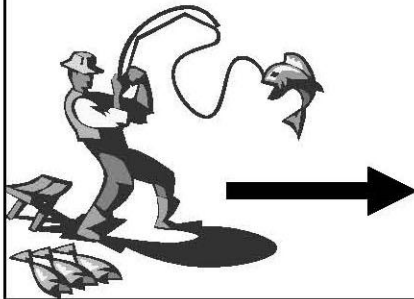


*“Give a person a fish you have fed them for today”*



*“Teach them how to fish*

*you have fed them  
for a lifetime”*



**Capacity Building**

## **Capacity Building Definition**

**Capacity building** might be a dedication to the strengthening of governments, private sector and communities for their skills and capabilities in order to build them effectiveness and sustainability.

Capacity building is facilitated through the provision of technical support activities through Meeting, Workshop and Training (Study Tour).

## **FIVE CHARM project components;**

- Policy and Legal framework
- Participatory management
- Human capacity
- Information and Communication
- Monitoring and Evaluation

## **Human capacity**

### **1. Assess annual training needs (TNA)**

- To ensure that training courses are based on their need.
- Preparation of training modules and curricula will be more precisely guided by a formal TNA in close collaboration with academic and training institutions.
- The success of a particular training course will be evaluated against a set of achievement indicators measured in terms of the impact of the training programs as related to changes in knowledge, attitude and practices of the trained project officers and beneficiaries.



## **2. Select and support candidates for long and short term course training in ICRM and related specialized courses**

- Potential candidates will be chosen preferably among coastal practitioners on-the-ground and in touch with everyday coastal management issues, including those currently managing or supervising aspects of coastal resources management projects.

- Training areas will depend on the TNA but should be of cross-cutting nature related non-exclusively to ecosystem-based approaches, integration of sectors, communication or community participation.



## **3. Strengthen organization and develop training**

### **• - Project staff**

Training courses identified as core training for the project staff are indicatively, although the list is non-exhaustive: co-management, participatory assessment, planning and project formulation, integrated planning, participatory monitoring & evaluation, computer training, training of trainers, communication and extension, institutional arrangements and legal frameworks, media use, study tours.



- - **Training of community committee members and other beneficiaries**
- **The indicative list of training courses for communities and beneficiaries can be divided in;**
  - - **Livelihood activities**
  - - **Awareness and conservation of resources activities.**



- - **Training of community committee members and other beneficiaries**

**Supplementary training inputs will be provided for project staff and community committee members through study tours to different places in Thailand where community-based management has made significant progress, in the Southeast Asian region for specific topic like MCS (Malaysia), and in Europe for the overall organization/legislation of fisheries.**



- - **Train trainers for management of community organizations**

With a view to prepare a group of trainers from amongst the field level staff and beneficiaries of the project, training of trainers courses will be conducted for selected officers from the main departments concerned



- - **Train in survey and monitoring techniques for habitats**

The aim of this activity is to select and/or develop a set of simple but significant habitat quality indicators and provide adequate training for local communities assisted by field officers and NGOs. This will help in achieving that community members, assisted by field officers, are able to monitor coastal habitats.



- - **Assist in improved monitoring and management systems**

**Trained operators (field officers assisted by local communities and NGOs) will be assisted in developing regular monitoring activities. Some key indicators will be selected for monitoring by the villagers themselves. These are likely to include indicators for each site demonstration project in the form of habitat/resources and financial improvements and community development process tracking. The results will have to be stored at the site level in a way which remains to be examined with the community, in order to enable further analysis and comparison between communities by field officers.**



- - **Train tourism operators and guides in respect of habitats conservation**

**With fisheries and aquaculture, tourism is a major coastal activity with the fastest growing rate. Healthy coastal habitats represent one of the main tourism assets and condition its future development. The training offered to tourism operators and guides will not be carried out in isolation but in association with the programming of communities training, keeping in mind the issues at stake regarding tourism development in these areas.**



### **Number of Building capacity**

<b>Activities</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
<b>Workshop</b>	<b>1</b>	<b>12</b>	<b>7</b>	<b>11</b>	<b>5</b>	
<b>Training</b>	<b>-</b>	<b>4</b>	<b>12</b>	<b>32</b>	<b>7</b>	
<b>Meeting</b>	<b>-</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>3</b>	
<b>Total</b>	<b>1</b>	<b>20</b>	<b>24</b>	<b>49</b>	<b>15</b>	

### **Stakeholder involved for training**

- Project staffs**
- Government officer**
- Private sector**
- Local communities**

## Training Activities

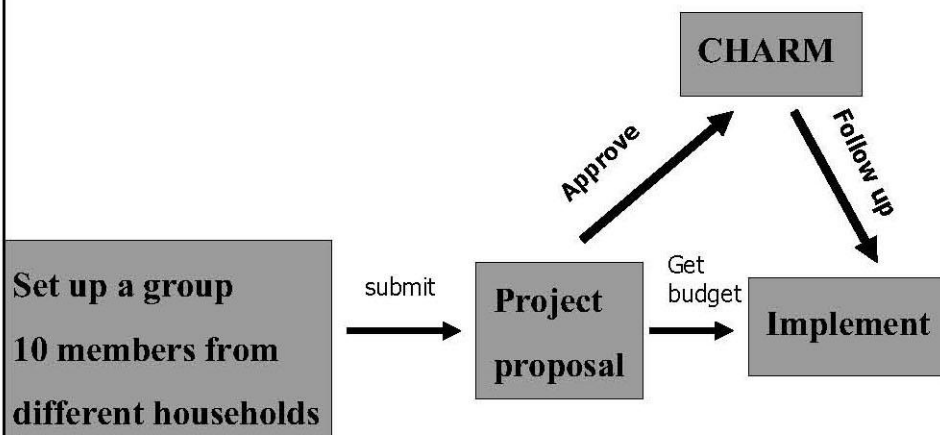
Livelihood development

Awareness and conservation of  
resources

### Some training subject

- Cage culture
- Fish culture
- Accounting
- Marketing
- Guide and website
- Study tour
- Co-management
- Group organization
- Risk Assessment
- Civic participation in local Governance
- Community Base Tourism
- Log Frame for Project Implementation and Monitoring
- Study tour

## Training with equipment





## **Some training materials issued**

- **Co-management manual**
- **Manual of vulnerability mapping both Ban Don bay and Phang-nga bay**
- **Fund model package handbook: micro-business development for coastal community**
- **A manual for assessing progress in coastal management**
- **Monitoring Control and Surveillance manual (MCS)**
- **Regional guidelines for Co-management using group user rights for small-scale fisheries in Southeast Asia**

**Thank you for your time  
and considerations**



**Role of Government Local/Community Institutions in Managing Fisheries Resources: Experience and Lessons Learned in the Philippines**  
by Ms. Jessica Munoz, BFAR

**The Roles of the Government and the Local/Community Institutions in Managing Fisheries Resources**

Jessica C. Munoz  
Project Director  
Fisheries Resource Management Project  
Bureau of Fisheries and Aquatic Resources  
Department of Agriculture

Regional Technical Consultation on Management of Fishing Capacity and Human Resources Development in Support of Fisheries Management in Southeast Asia  
19-22 September 2006  
Phuket, Thailand

**Policies Related to Fisheries Management**

- Local Government Code of 1991
- Fisheries Code of 1998
- Executive Order 533 – Adopting Integrated Coastal Management as a National Strategy

## Some Feature of the Policies Important to Fisheries Management

- ✓ Devolution of regulatory functions to local government units
- ✓ Municipal waters delineated from 0 to 15 km towards sea
- ✓ Municipal waters are under local government jurisdiction
- ✓ Creation of fisheries and aquatic resource management councils (FARMCS)



# Fisheries Resource Management Project



## **R**ATIONALE

Address the two critical issues of

- fisheries resource depletion and
- persistent poverty among municipal fisherfolk

### **L**ONG-TERM GOALS

Sustainable development  
Poverty reduction

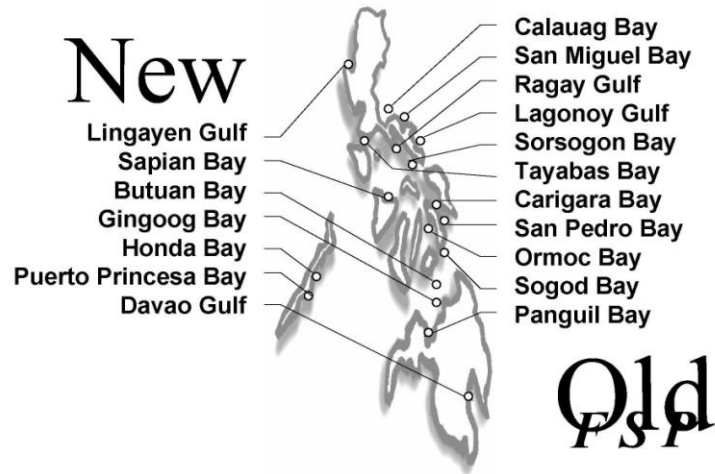
### **P**RIMARY

Reverse fisheries resource depletion

### **S**ECONDARY

Promote alternative employment

# SCOPE



# PROJECT COMPONENTS

**Fisheries Resource  
one Management**

**PHILFIS & GIS**

**Resource and Social  
Assessment (RSA)**

**two Income  
Diversification**

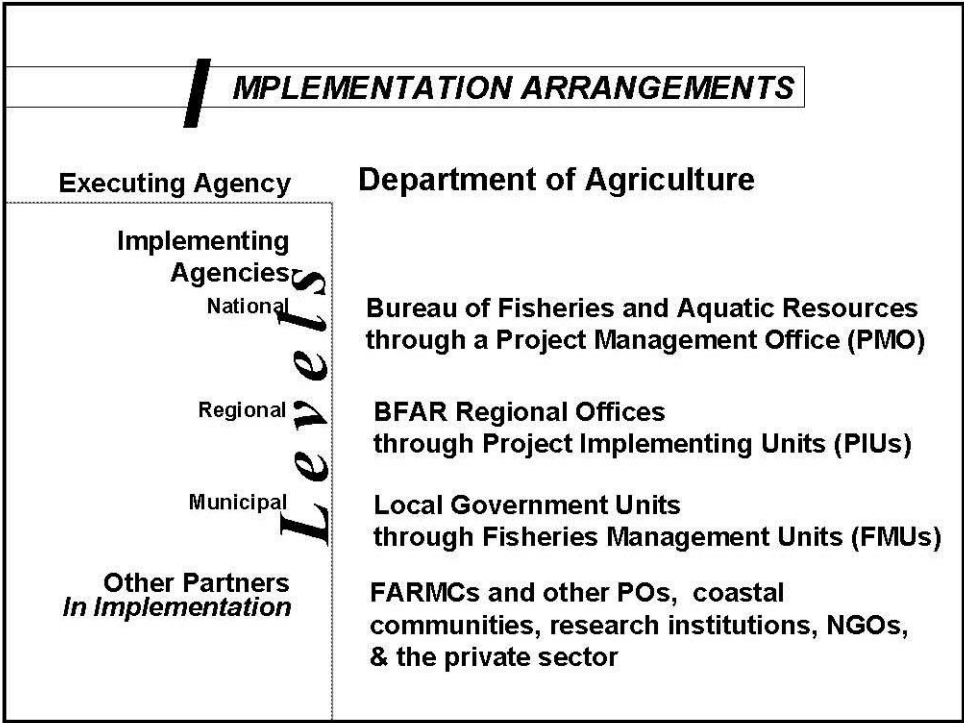
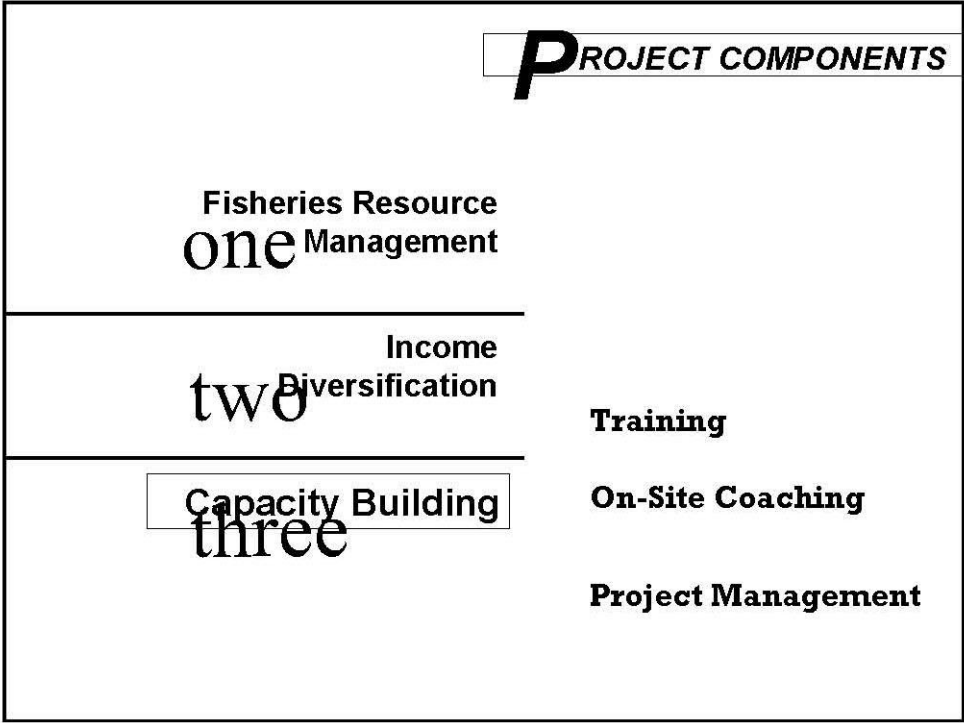
**Information, Education  
and Communication  
(IEC)**

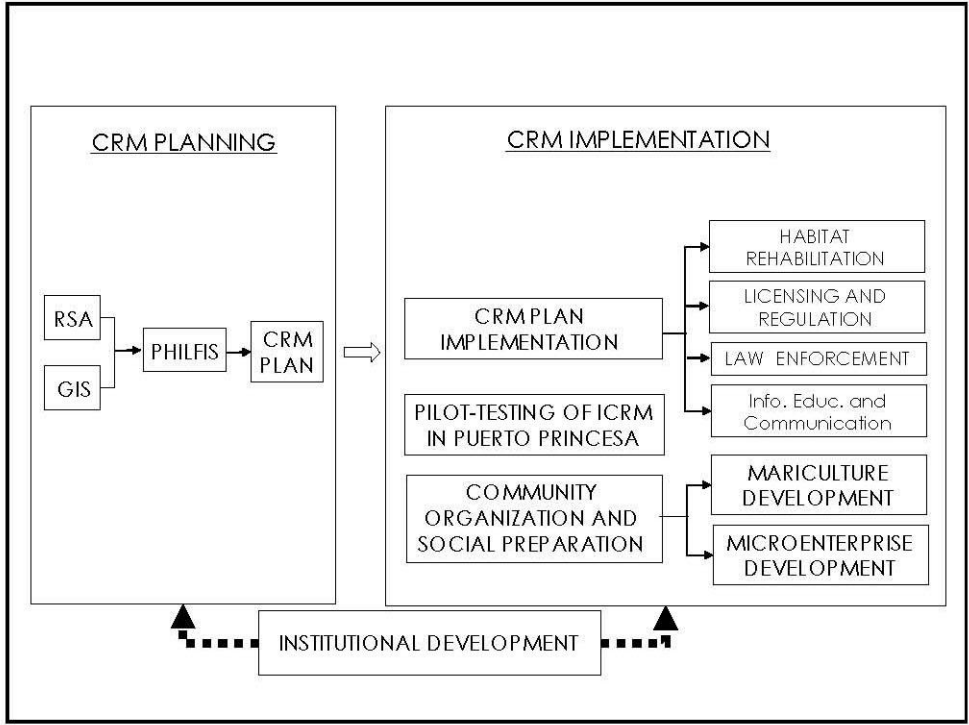
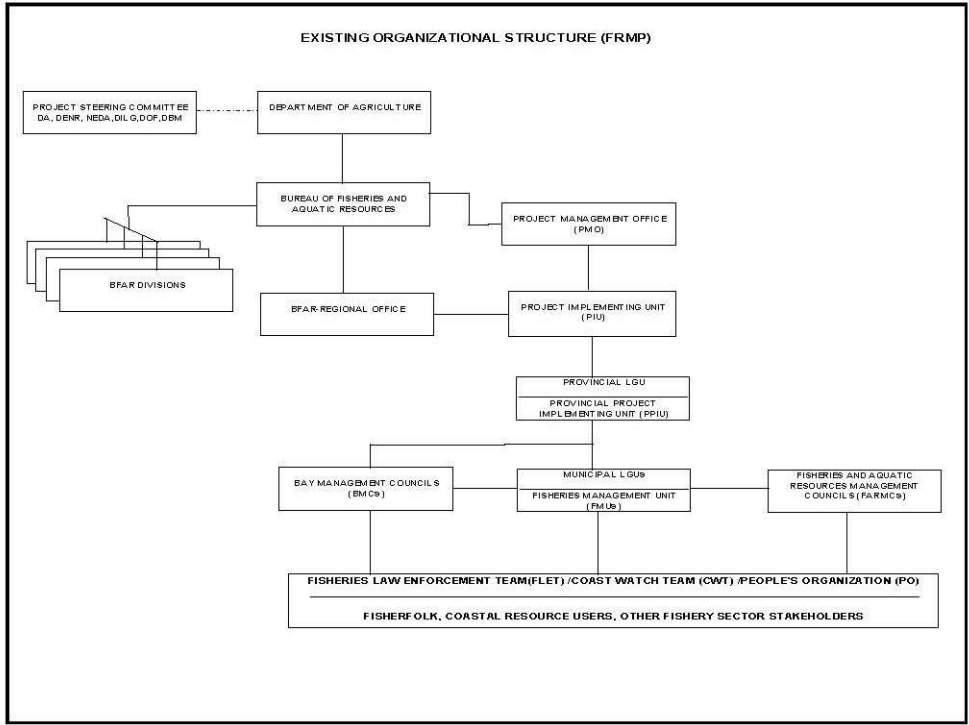
**three Capability-building**

**Coastal Resource  
Management (CRM)  
Planning and  
Implementation**

<b>P</b> ROJECT COMPONENTS	
<b>Fisheries Resource Management</b> <b>one</b>	<b>Integrated CRM in Puerto Princesa</b>
<b>Income Diversification</b> <b>two</b>	<b>Fisheries Legislation and Regulation</b> <b>Community-Based Law Enforcement</b>
<b>Capacity-building</b> <b>three</b>	<b>Regional Coordination Through MCS Centers</b>

<b>P</b> ROJECT COMPONENTS	
<b>Fisheries Resource Management</b> <b>one</b>	<b>Community Organizing</b>
<b>Income Diversification</b> <b>two</b>	<b>Promotion of Microenterprises</b>
<b>Capacity-building</b> <b>three</b>	<b>Mariculture Development</b>









## **R** *esource and Social Assessment*

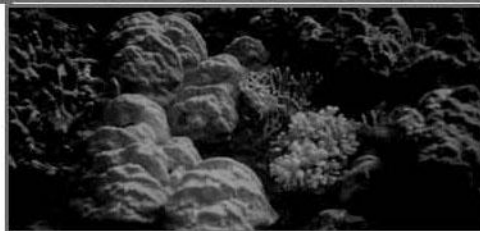
- RSA Studies conducted to collect baseline information on the status of the ecosystems and their resources for CRM Planning and Project monitoring
- Development of fisheries and coastal resource management plans

## **CRM** *Planning and Implementation*

### RESOURCE ENHANCEMENT PROJECTS (REPs)

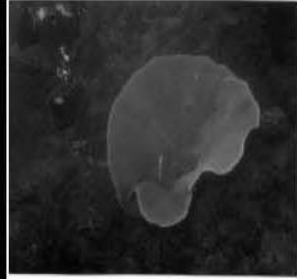


- Resource Rehabilitation Projects (REPs) established/maintained.

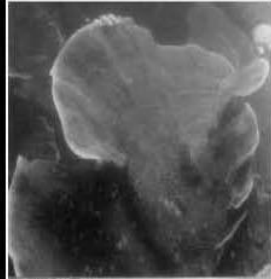


# REPs

## Pasacao Fish Sanctuary and Marine Reserve



Year: 1994  
Measurement: 45 cm.



Year: 2001  
Measurement: 105 cm.

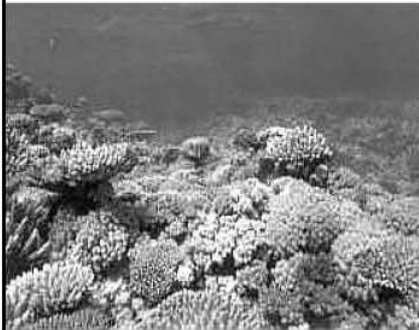


Year: 2003  
Measurement: 122 cm.

Growth improvement of Elephant Ear Coral (*Montipora* sp.) from 45 cm. to 122 cm. in a span of 9 years with an average annual growth rate of 8.5 cm.

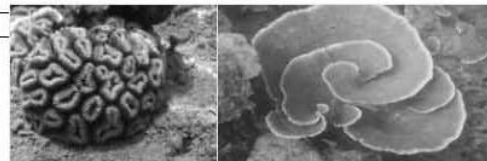
*Underwater Photos taken by F. Orban and T. Paylado*

**R**esource  
**E**nhancement



- *Stock enhancement of top shell (an endangered species) a fish sanctuary, times more than outside areas proving the FS is successful in protecting and restoring populations of the top shell*

- *2004 survey show that the fish sanctuary in Binduyan, Honda Bay increased catch per unit effort by at least 27% for handline, three years after FS establishment*



**BEFORE (February 26, 2005)**

**AFTER (April 26, 2005)**

- RAGAY GLF
- Panaytayan, Ragay, Camarines Sur

**PILOT RIVERBANK BIOENGINEERING PROJECT**  
 ILO ILO LOS KO YAMING PALMASAN ALAGAN NATIN ITO  
 (Project details table)

- GINGOOG BAY
- Kibungsod, Magsaysay, Misamis Oriental
- Conducted on April 12-14, 2005

*Riverbank Bio-Engineering Projects*

**WELCOME GUESTS & PARTICIPANTS  
 NIIG KALIKASAN  
 3<sup>rd</sup> LOVE AFFAIR WITH NATURE**

PPC Mayor Hagedorn planting Mangrove seedling

Mangrove seedlings used for the REP

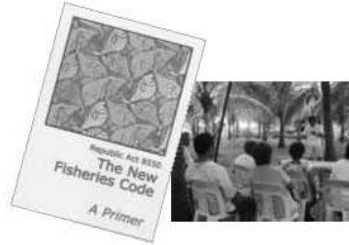
Palawan Youth Sector actively participates in the Mangrove Rehabilitation Project

**LOVE AFFAIR WITH NATURE** Implemented by FRMP and Puerto Princesa LGU on February 2005

Information, Education and  
Communication (IEC)

## IEC Campaign

- Various print materials e.g. newsletters, posters, brochures, localized primers on REPs and livelihood produced at the regional level
- Special advocacy activities such as School on the Air, fish sanctuary launching, CRM Youth camps conducted



Information, Education and  
Communication (IEC)

## IEC Campaign

- Regular support provided to special CRM activities at the community level. Continued advocacy has resulted in heightened awareness and participation on resource management and protection
- Networking with media (local newspapers and TV/radio stations e.g. ABS-CBN, GMA), NGOs and NGAs (DepEd, DENR) strengthened



## **L**egislation & Regulation

- **Enactment of Municipal Fisheries Ordinances (MFO) that enable local government to implement policy reforms on regulating fishing efforts**
- **Establishment of municipal licensing system**



*Fisheries Law Enforcement*

- *Dynamite fishing has stopped completely in Ivisan municipality (Sapian Bay) as reported by the LGUs in 2004*
- *Additional budget of P50,000/year given by LGU to protect the fish sanctuary*



- *Sariaya (Tayabas Bay) has purchased 3 additional patrol boats worth 300,000 to support the FRMP boat*

## **C**ommunity Organizing

- **To establish and strengthen community groups capable of carrying out CRM activities and income diversification on a long-time basis**



**I**ncome  
**D**iversification



Fish Deboning (Lingayen Gulf)



Fish Paste Making (Tayabas Bay)



- *Womenfolk have become income earners after joining POs and participating in livelihood projects such as fish trading, bagoong making, and milkfish processing. Income is estimated at P75-150/person/day*



Fish Smoking (Calauag Bay)

**I**ncome  
**D**iversification



- *Linkage between Region 4A Peoples Organizations and Cooperatives and corporations such as San Miguel and Nestle Philippines has been established for the large-scale production of cassava, peanut, corn and coffee*

- *In Batan, Sapien Bay, the retail store put up by FRMP and the NGO now earn P1500-P2000/day and provides daily wages to its workers*



# Fish Processing (Milkfish Deboning)



- Location : Aporao, Bani, Pangasinan
- Date Started : September 9, 2003
- PO/Coop : KALIPI (Aporao Chapter)
- Beneficiaries : 12
- Project Cost : 79,968.00
- 1st Cycle Operation (1-day)  
Production : 85 packs of deboned fish (51kgs)
- Total Revenue : 4,335.00
- Total Cost : 3,160.30
- Status : Still on-going
- **Net Income : Php1,058.55**

# Fish Drying

Region 4A  
SAMAHAN NG MALILIT NA MANGINGISDA NG SABANG 1  
Sabang 1, Calauag, Quezon

Fish Drying

**Income Statement**  
( January 03, 2003 - July 03, 2003 )

Total Sales	Php148,900.00
Total Revenue	Php148,900.00
Less Expenses	
1. Cost of fresh fish (anchovy)	Php110,163.50
2. Permit/ License	Php420.00
3. Materials and transportation cost	Php6,628.00
4. Depreciation	Php2,500.00
Total Expenses	Php120,711.50
<b>NET INCOME</b>	<b>Php21,389.00</b>



- Location : Sabang 1, Calauag, Quezon
- Date Started : Nov. 9, 2002
- PO/Coop : Samahan ng Maliliit na Mangingisda ng Sabang (SMMS1)
- Beneficiaries : 15
- Project Cost : Php123,900.00



# Bottled Sardines

**ARBISMEN SIPAG TIYAGA MULTI-PURPOSE COOPERATIVE**  
Brgy. Arbismen, Guinayangan

**Fish Processing (Bottled Sardines)**  
**Income Statement**  
(June 2003 -- August 2003)

Sales	1,443 bottled bangus & 48 bottled tunsoy	Php24,550.00
<b>Total Sales</b>		<b>Php24,550.00</b>
Less Expenses	<b>443 bottles</b>	
1. Operating expenses (labor, material, etc.)		Php20,828.22
<b>NET INCOME : Php 3,721.78</b>		
NET INCOME		Php3,721.78



- Location : Arbismen, Guinayangan, Quezon
- Date Started : Jan. 16, 2003
- PO/Coop : Arbismen Sipag at Tiyaga Multi-Purpose Cooperative
- Beneficiaries : 35
- Project Cost : Php55,587.00
- Status : On-going

# Cage Culture of Milkfish

**PRODUCTION REPORT OF**  
**CHRISTIAN MUSLIM ASSOCIATION (CHRIMULAS)**  
Lawa, Bato, Sta. Cruz, DDeI Sur  
1<sup>st</sup> CROPPING MAY 17 – SEPTEMBER 10, 2002

No. of beneficiaries	16
Date harvested	September 9-10, 2002
No. of cage units	2 units of 6m x 6m x 4m
No. of stocks	10,000 pcs ganungan
Initial body weight	60 grams
Mortality	0.09%
No. of pieces recovered	9,841 pcs
No. of stocks for recovery	359 pcs
Total no. of kilos harvested	4,255.0 kilos
Size range upon harvest	21.5, 2, 3.1, 4.1
Total kilos for representation	140 kilos
Total no. of kilos sold	3,994.45 kilos
Total no. of bags feeds used	383 bags/ 9,205 kilos
Feeds used	TATEBIB-MBEG
FCR	2.2
Gross Sales	Php 220,900.00
Less:	
Feeds	
Starter 74 @ 144.00 =	25,500.40
Grower 104 @ 408.00 =	42,432.00
Finisher 154 @ 413.00 =	63,582.00
70 @ 400.00 =	28,000.00
<b>total</b>	<b>151,687.40</b>
<b>NET INCOME :</b>	
Financing:	
10,000 @ 6.00 =	60,000.00
<b>Php 24,187.40</b>	<b>211,687.40</b>
Net Income	21,687.40
Other source of income:	
Danggit 44.2 lbs.	2,500.00
Net Income	Php 24,187.40



- Location : Lawis, Bato, Sta. Cruz, DDeI Sur
- Date Started : May 17, 2002
- PO/Coop : CHRIMULAS
- Beneficiaries : 16
- Project Cost : Php 325,000.00

# SEAWEED CULTURE

Region 4A  
Bay/Gulf: Tayabas Bay

LAKAS BISIG MANGINGISDA NG SALVACION (LBMS)  
Borogay Salvacion, Agdangan, Quezon Province

Seaweed Culture  
Income Statement  
March 4, 2005 to May 2005  
(target harvest date)

Sales	1. 2,500 kg fresh seaweed @ P13/kg (projected harvest) --	Php30,000.00
Total Revenue		Php30,000.00
Less Expenses	<b>2,500 kg. Fresh Seaweeds</b>	
	1. Planting material - 534 kg @ P7p/10kg	Php3,738.00
	2. Depreciated**	Php1,208.84
	3. Transportation/handling	Php140.00
	4. Labor (PO counterpart)**	
Total Expenses		Php7,086.84

NET INCOME

**NET INCOME : Php 22,193.16**

Assumptions:

• 250kg fresh seaweed seedlings cultured will grow to 2,500kg in 2-12 months (cultured seaweed stock as of 13 April 2005, weighed 1,500 kg)  
• Better performance of fresh (wet) seaweed will give PO Php 25,000 total income (final figure in demand of fresh seaweed for cultivation project)

Depreciated Materials\*

Nylon rope #8: 13 X P1p 260ml = P1p 4,940.00 x 2.5 mos = P1p 514.58  
Nylon rope #10: 1 X P1p 800ml = P1p 600.00 x 2.5 mos = P1p 62.50  
Nylon rope #12: 2 X P1p 700ml = P1p 1,000.00 x 2.5 mos = P1p 150.00  
Shawl salt water: 8 X P1p 150ml = P1p 1,200.00 x 2.5 mos = P1p 500  
Shawl Roster: 1 sack = P1p 500.00 x 2 mos = P1p 32.00  
Empty galvanized container Roster: 12pcs X P1p 30p = P1p 360.00 x 2.5 mos = P1p 7.50  
Empty 1.5 liter container Roster: 5kg X P1p 70p = P1p 350.00 x 2.5 mos = P1p 7.28  
Sack: 5pc X P1p 400p = P1p 2,000.00 x 2.5 mos = P1p 25.00  
\*\* Labor: Considered as non-cash expense and PO counterpart.



## TAYABAS BAY

- Location : Salvacion, Agdangan, Quezon
- Date of Operation : March 2005 – May 2005
- PO/Coop : Lakas Bisig Mangingisda ng Salvacion
- Beneficiaries : 25
- Project Cost : Php103,950.00

## APPROACHES FOR CAPACITY-BUILDING IN FISHERIES MANAGEMENT

- ▶ Training
  - formal
  - informal
  
- ▶ On-site coaching
  - guidance on fisheries management
  - hands-on assistance to stakeholders' activities

**C**apability  
**B**uilding



- *Two BFAR regular employees completed their Masters Program at the Asian Institute of Management and Australia while one LGU (from Reg 13) finished his Degree Course at the AIM*



- *LGU trained by FRMP regularly serve as resource persons in short-term training courses such as the FLET and COASTWATCH*

**Implementation**

- **Training courses on fish visual census provided to BFAR and LGU staff**



- **Community-based habitat assessment training given to PIUs, LGUs, POs, FARMCs to enable them to regularly monitor REPs**



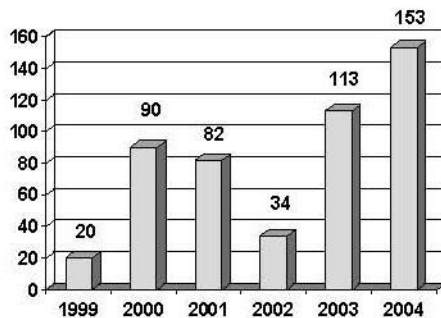


**Consultations and trainings for Fisheries Law Enforcement and Coastwatch involves the use of radio and patrol boats for effective monitoring and surveillance**

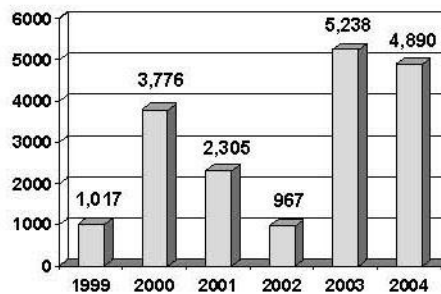
**National Level Training Program**

- A total of 120 persons availed of the FRMP scholarships**
- 89 for the Domestic Management Short-Term Training
  - 19 for the Domestic CBRM Training
  - 8 for the Master of Science Degree Program
  - 4 for the Overseas Short-Term Training

**492 Short-Term Training Courses Conducted**



**18,193 Total Participants**



## **General Classification of Trainings**

- ← **CRM Planning and Implementation**
  - CRM/FRM Framework and Concepts
  - Participatory Coastal Resource Assessment
  - CRM/FRM Planning
  - Coastal Habitat Assessment Training (coral and mangroves)
  - Information, Education and Communication
  - Law Enforcement, Legislation, Regulation and Licensing
  - Resource and Social Assessment

- ← **Capacity-Building**
  - Monitoring and Evaluation
  - Financial Management
  - Procurement
  - Project Development and Management
  
- ← **Income Diversification**
  - Community organizing
  - Micro-enterprise development
  - Mariculture Development

## **Some Training Courses Conducted**

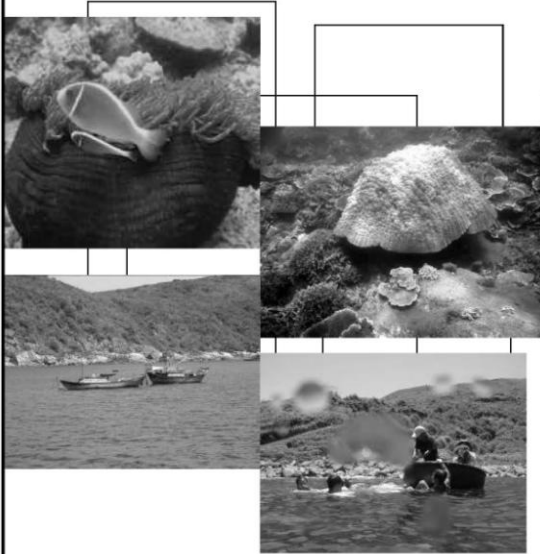
- **Broad-based Coastal Management Training Program – Philippines**
- **Training on Integrated Coastal Management - Philippines**
- **Facilitating Integrated Coastal Management - Vietnam**
- **Module Developers' Workshop and Training of Trainers – Vietnam and Indonesia**

- **Pelatihan Pengelolaan Wilayah Pesisir Terpadu Tingkat Kecamatan – Indonesia**
- **Training for *Bantay Baybay* (Coastawatch) System**
- **Training on Participatory Coastal Resource Assessment (PCRA)**
- **Mangrove Management Training**
- **Capacity-Building on Fishery Enforcement**
- **Training on Sustainable Fisheries Management in the Context of the Code of Conduct for Responsible Fisheries (CCRF)**

- Training on Fisheries Technology and Livelihood
- Training on Fisheries Data Management
- Training on Basic Communication (IEC)
- Training on Solid Waste Management
- Community-based Coastal Habitat Assessment
- Coral Reef Monitoring
- SCUBA
- Fish Sanctuary Management Training
- Regional Training Course on Marine Protected Areas


- Computer Literacy
- Enterprise Development and Business Planning
- Remote Sensing in Coastal and Marine Applications
- Community-based Fishery Law Enforcement
- IEC Process Documentation Training
- IEC Training on Materials Preparation
- Training on Mangrove Ecosystem Management
- Training on Fisheries Licensing Information System
- Training on River Management
- National Training on Stock Enhancement of Marine Species

**Marine Protected Areas Network  
by Mr. Bernard O' Callaghan, IUCN-Vietnam**



**Development of  
Marine Protected  
Area System  
- case study  
from Viet Nam**

Bernard O'Callaghan  
IUCN Viet Nam



## Presentation Overview

1. Potential Benefits of MPAs
2. Description of MPA system in Vietnam
3. Case study of Nha Trang Bay MPA
4. Establishment of MPA Professionals Network between China, Vietnam and Cambodia





## **What is a Marine Protected Area?**

- Area of marine environment that is reserved in law to protect part or all of the enclosed environment
- Generic term – many variations and types, including REFUGIA
- Focus primarily on biological conservation / fisheries benefits

## **MPAs – Why Do We Need Them?**

- Coastal marine fisheries are declining globally
- Marine biodiversity is declining, often dramatically
- A “TOOL” for fisheries managers
- Threats:
  - Over-fishing (and destructive fishing)
  - Habitat loss
  - Pollution
  - Continuing pressures from development

## Aims of Marine Protected Areas

- Ensure long-term health of marine habitats and species diversity (i.e substantial areas)
- Protect depleted, threatened, rare or endangered species, **and their habitats**, e.g.
  - Humphead Wrasse
  - Sea turtles
  - Coral reef and seagrass species

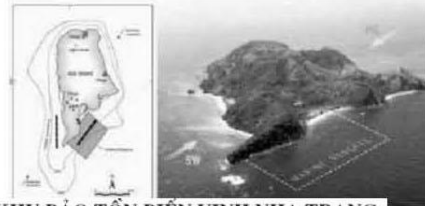


## Specific MPA Objectives (examples)

- Restore fish populations for future exploitation
- Minimize over-exploitation of local fisheries
- Maintain overall ecosystem integrity
- Increase population of endangered species

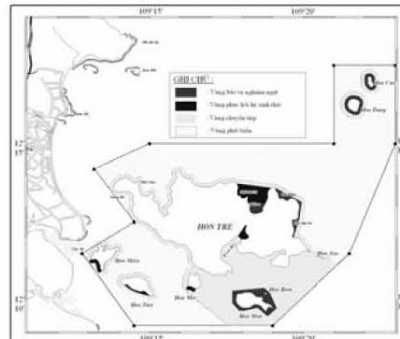
## A Range of MPA Types

- Strictly protected (no take) reserves, e.g. sanctuaries

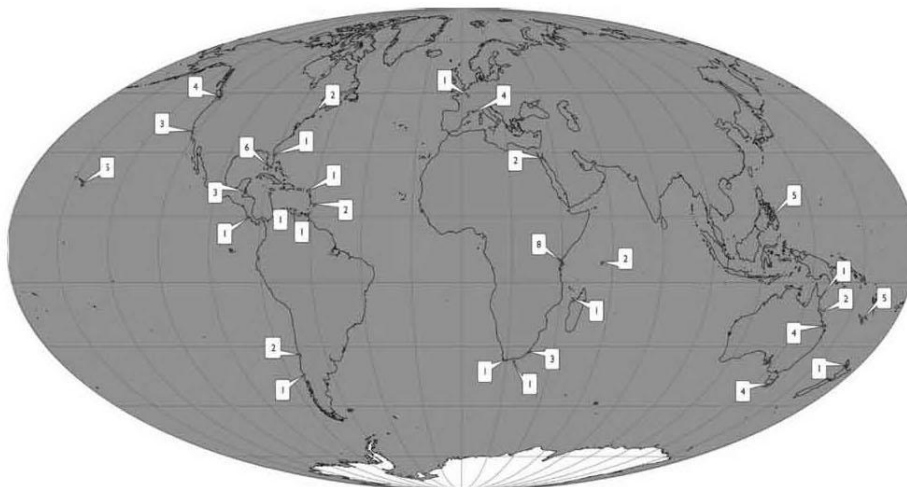


KHU BẢO TỒN BIỂN VỊNH NHA TRANG

- Multiple use, zoned MPAs

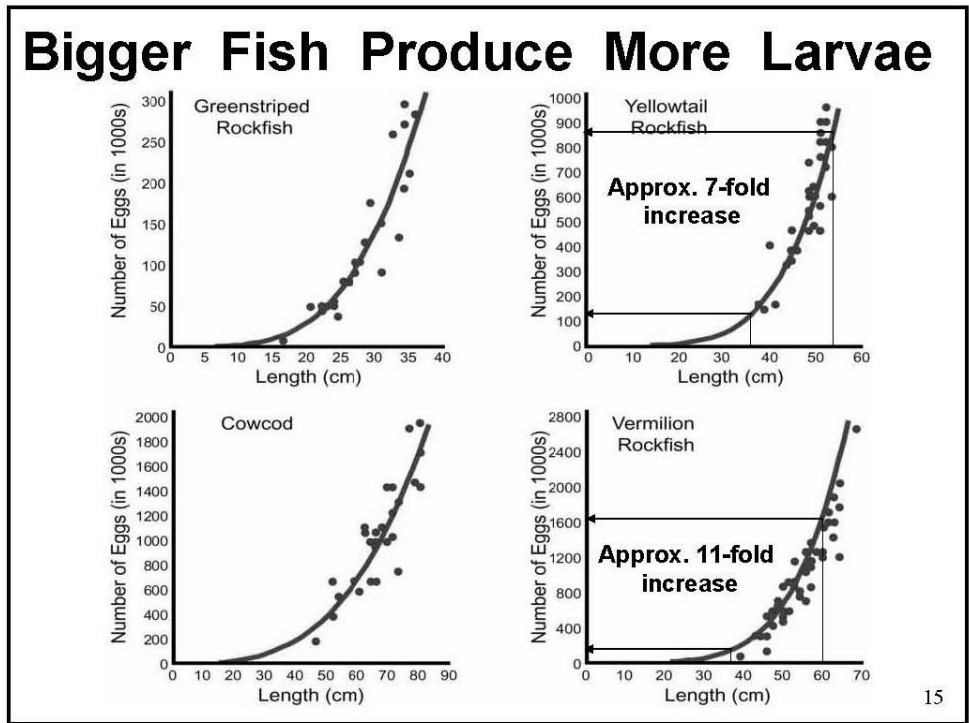
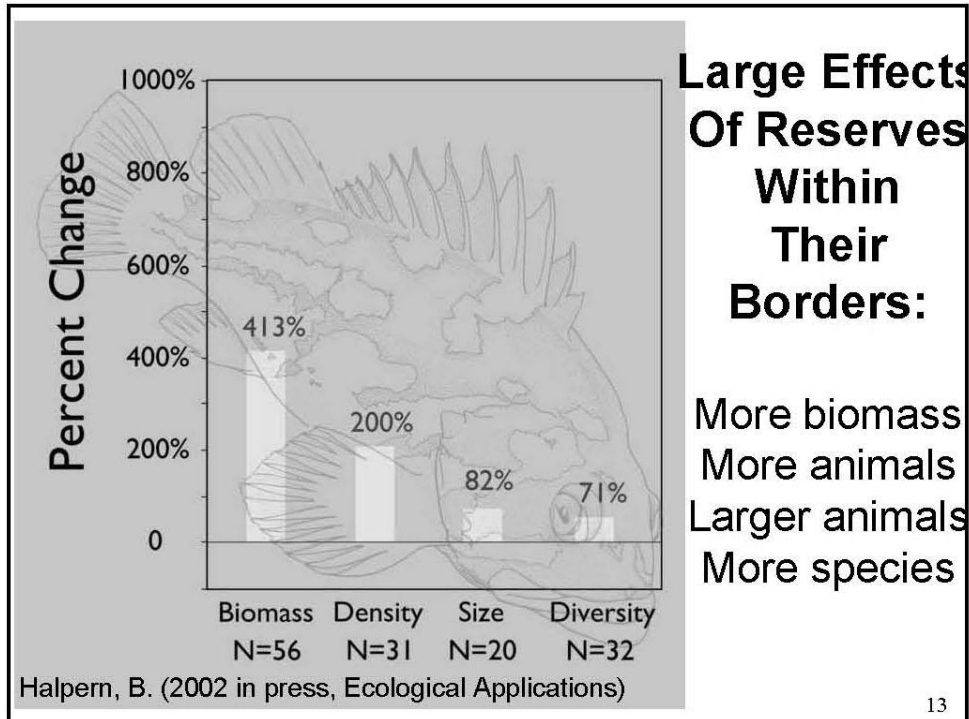


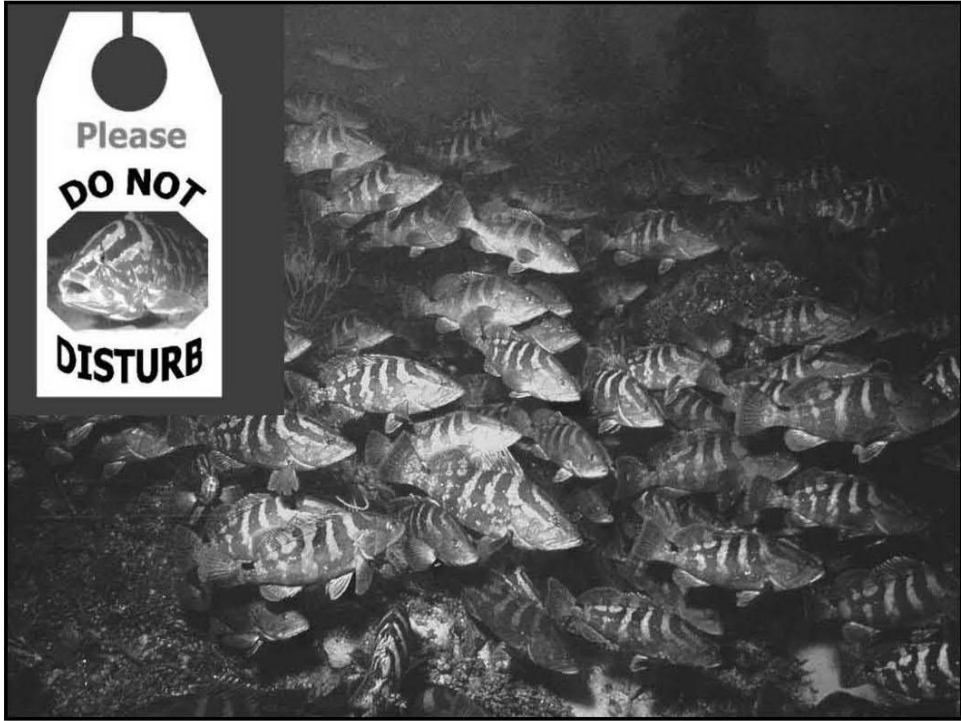
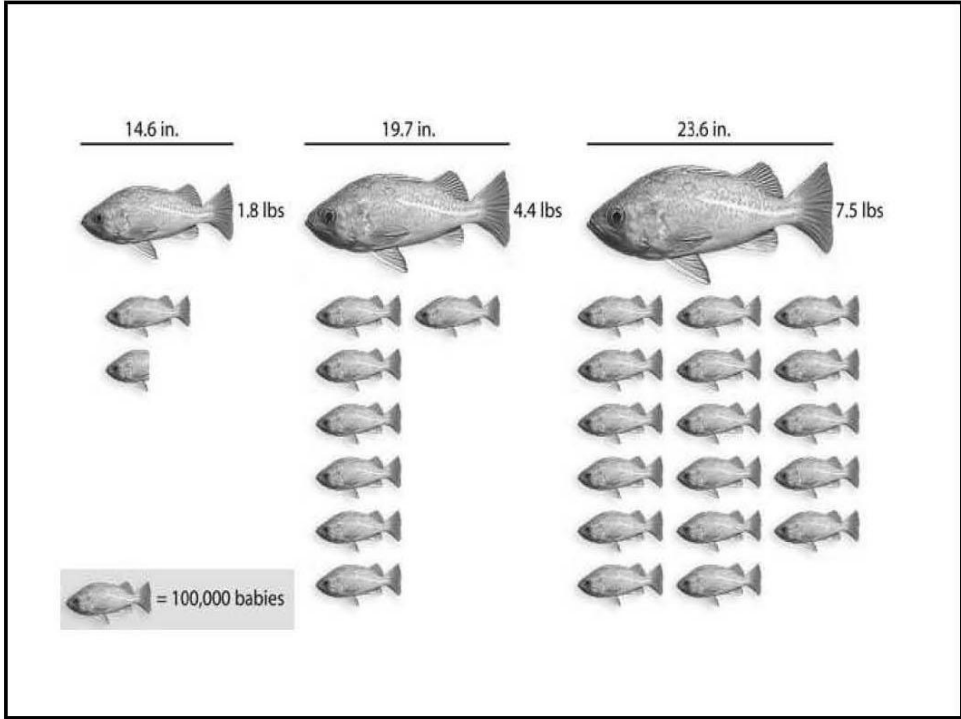
## 80 Marine Reserves with Peer Reviewed Scientific Studies

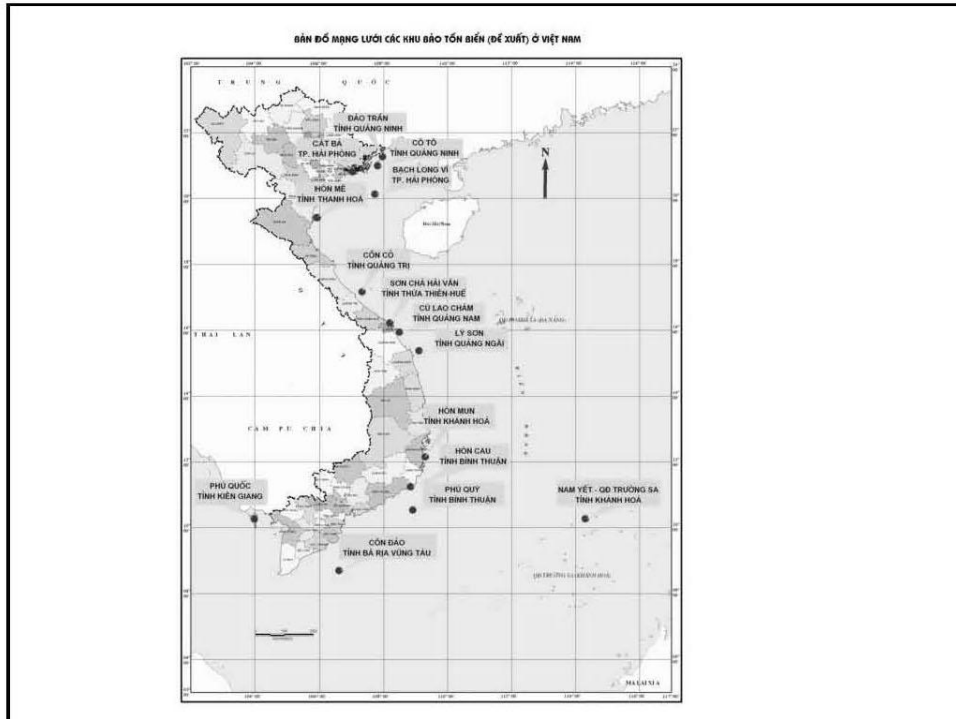


Range in size from less than 1 square mile to 400 square miles

12







## MPAs in Vietnam

- 1999-2003 – MPA candidates identified by MoFi, NIO, others
- 2003 – Govt approved Ministry of Fisheries to be responsible for marine and coastal protected areas
- Goal: 15 new MPAs established by 2015
- MPA Plan and Regulations concurrently being developed



- Pilot MPAs at Hon Mun and Cu Lao Cham to develop regulatory and management framework
- National MPA Steering Committee
- 2005-2010: DANIDA Phase II Support to Ministry of Fisheries on MPAs and Livelihoods component

## **MPA Plan and Regulations**

- MPA Regulations completed and approval expected soon
- MPA Plan still under review
- National Guidelines on:
  - 1) MPA Establishment and
  - 2) MPA Site Selection completed and operational

- 1). Con Dao National Park – Ba Ria-Vung Tau
- 2). Cat Ba National Park – Hai Phong
- 3). Hon Mun MPA – Khanh Hoa
- 4). Hon Cau (a.k.a Cu Lao Cau) – Binh Thuan
- 5). Cu Lao Cham – Quang Nam
- 6). Phu Qui – Binh Thuan
- 7). Bach Long Vi – Hai Phong
- 8). Co To – Quang Ninh
- 9). Ly Son – Quang Ngai
- 10). Hai Van-Son Tra (mainland) – Thua Thien Hue
- 11). Truong Sa – (Khanh Hoa)
- 12). Con Co – Quang Tri
- 13). Dao Tran – Quang Ninh
- 14). Hon Me – Thanh Hoa
- 15). Phu Quoc – Kien Giang



## MPAs in Vietnam: Ongoing Issues and Challenges

- Ensuring economic benefits, not increased hardship to communities
- Functional, effective management structure
- Management capacity
- Community participation and support
- Evaluation (monitoring results)
- Compliance and enforcement



## **Creation of network**

- Common approach
- Common training activities
- Systematic approach
- Will need to review in the future

## **Livelihoods and MPAs**

- “Pro poor” MPA management – recognize poverty alleviation and MPA management effectiveness are intimately linked
- Critical management elements:
  - Alternative Income Generation (e.g. nature-based tourism, sustainable aquaculture, MPA management etc.)
  - Credit schemes and trust funds
  - Sustainable financing
  - Evaluation!



# Hon Mun Marine Protected Area Pilot Project

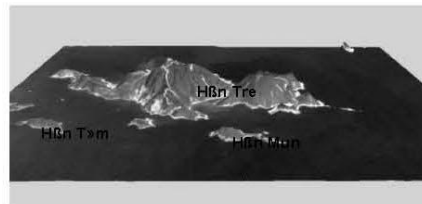
## Project Partners:

- Ministry of Fisheries
- Khanh Hoa PC
- IUCN
- Supported by
- WB/GEF
- DANIDA, Government of Denmark
- Government of Vietnam



## Hon Mun (Nha Trang Bay)

- First official MPA under new planning scheme
- World Bank/DANIDA/IUCN
- Project phase completed – MPA Management Authority operational
- Some Results:
  - AIG successes (livelihoods)
  - Functional zoning
  - Sustainable financing





## Reef fishes



**Abundances of small reef fishes - Surgeonfishes & Angelfishes - have increased.**

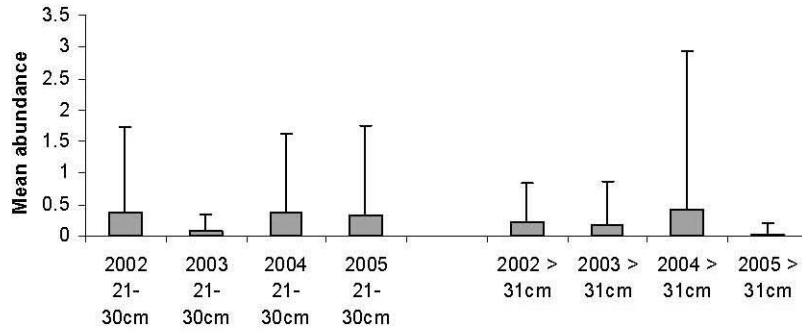
**Observations and anecdotal evidence suggest that some target fish groups, such as groupers, are increasing in Core Zone of Hon Mun.**



## Reef fishes Monitoring

Abundances and sizes of target reef fishes – groupers, snappers, emperors – remain low in MPA overall & little change in abundance of larger fishes

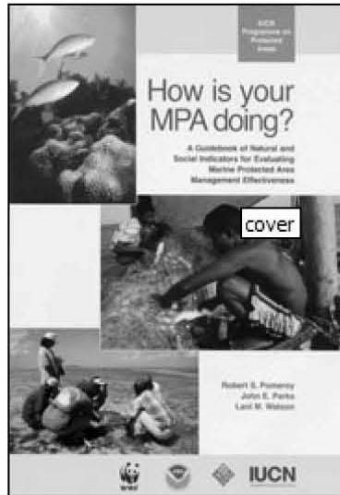
Abundance (+ sd) of larger reef fishes, Nha Trang Bay MPA 2002-05



## Economic impact on households

	2001 Before MPA	2004 After MPA	Adjustment CPI (2001)
average income/ person /year	5.738.900 VND <b>\$380-00</b>	8.378.200 VND <b>\$ 558-00</b>	6.569.892 VND <b>\$438-00</b>
expenditur e / year/ person	3.678.500 VND	4.334.500 VND <b>\$288-00</b>	4.211.146 VND <b>\$280-00</b>

# “How is Your MPA Doing?” Guidebook



## BUILDING MARINE PROTECTED AREA NETWORKS

## **MPA NETWORKS**

### **Call for action ?**

#### **DURBAN ACCORD**

“ . . . is calling on the international community to establish by 2012 a global system of effectively managed, representative networks of marine and coastal protected areas”, “. . . MPAs are to be extensive and include strictly protected areas that amount to at least 20-30% of each habitat.” (Sept. 2003)

## **MPA NETWORKS**

### *Working Definition*

**An MPA network is a system of individual marine protected areas:**

- defined by connectivity;
- operating at various spatial scales;
- with a range of protection levels;
- that fulfill biodiversity /fisheries goals and objectives more effectively than individual sites could alone.

<b>MPA</b> MANAGEMENT CAPACITY TRAINING	<h2 style="margin: 0;">MPA Management Capacity Building Training Course</h2>  <p style="font-size: 1.2em; font-weight: bold; margin: 10px 0;">           14 days                      30 participants            3 countries                December 2005            MoFi / NOAA / IUCN         </p> 
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<b>MPA</b> MANAGEMENT CAPACITY TRAINING	<h2 style="margin: 0;">Topics in training course 14 days</h2> <ul style="list-style-type: none"> <li>■ <i>An Overview of MPAs</i></li> <li>■ <i>Zonal Management</i></li> <li>■ <i>Community-based Management</i></li> <li>■ <i>MPA Management Planning (3 days)</i></li> <li>■ <i>MPAs and Enforcement (2 days with field site)</i></li> <li>■ <i>MPAs and Fisheries in SE Asia</i></li> <li>■ <i>Sustainable Tourism</i></li> <li>■ <i>Media and Communications (2 days)</i></li> <li>■ <i>Closing Session</i></li> </ul>
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## **MPA Professional Network**

**There is now an informal network :**

- Cambodia, Vietnam, China
- Support individual support to professionals
- Share management experiences

## **MPA NETWORKS**

*Types of Networks*

### **MANAGEMENT-BASED NETWORKS:**

- Increased efficiency, consistency and coordination to improve management effectiveness
- Build collective management capacity within network



**This meeting is an important  
step in building the MPA  
networks for the region**

**Thank you**

**Establishment of National/Regional Fisheries Refugia  
by Mr. Christopher Paterson, UNEP/GEF South China Sea Project**



**INTEGRATING FISHERIES AND HABITAT MANAGEMENT:  
ESTABLISHING A REGIONAL SYSTEM OF FISHERIES  
REFUGIA**

**Integrating Fisheries and Habitat Management**

**Establishing a Regional System of Fisheries *Refugia* in the  
Gulf of Thailand and South China Sea**

**Regional Working Group on Fisheries  
UNEP/GEF South China Sea Project**



**INTEGRATING FISHERIES AND HABITAT MANAGEMENT:  
ESTABLISHING A REGIONAL SYSTEM OF FISHERIES  
REFUGIA**

**PARTICIPATING COUNTRIES**

**CAMBODIA, CHINA, INDONESIA, MALAYSIA, PHILIPPINES, THAILAND,  
VIET NAM**

**FOCAL MINISTRIES ARE MINISTRIES OF ENVIRONMENT**

**12 GOVERNMENT DEPARTMENTS, 14 UNIVERSITIES AND RESEARCH  
INSTITUTES AND ONE NGO ENGAGED AS SPECIALISED EXECUTING  
AGENCIES**

**MORE THAN 100 ORGANISATIONS DIRECTLY INVOLVED IN PROJECT  
IMPLEMENTATION, MORE THAN 400 INDIRECTLY INVOLVED**



INTEGRATING FISHERIES AND HABITAT MANAGEMENT:  
ESTABLISHING A REGIONAL SYSTEM OF FISHERIES  
*REFUGIA*

**SOUTH CHINA SEA PROJECT COMPONENTS**

- HABITAT DEGRADATION AND LOSS (Mangrove, Coral Reefs, Seagrass, Coastal Wetlands)
- OVER-EXPLOITATION OF FISHERIES IN THE GULF OF THAILAND
- LAND-BASED POLLUTION
- REGIONAL CO-ORDINATION

• **OVERALL GOAL:**

*“to create an environment at the regional level, in which collaboration and partnership in addressing environmental problems of the South China Sea, between all stakeholders, and at all levels is fostered and encouraged; and to enhance the capacity of the participating governments to integrate environmental considerations into national development planning”*



INTEGRATING FISHERIES AND HABITAT MANAGEMENT:  
ESTABLISHING A REGIONAL SYSTEM OF FISHERIES  
*REFUGIA*

**Background**

- Emerging need to manage fisheries and aquaculture in the context of coastal habitats and broader initiatives for marine management
- Several global initiatives have been promoted as mechanisms for integrating fisheries and habitat management
- A wide gulf continues to exist between fisheries and environment sectors in Asia
- Environment initiatives have been promoted in terms of achieving the state of fisheries, but have often not involved mechanisms to ensure the effective integration of fisheries considerations
- Fisheries ministries and departments are focused on improving the fishery situation in face of over-capacity issues, and high community dependence and participation in small-scale fisheries
- Need for the development of regional experience in building partnerships and enhancing communication between fisheries and environment sectors



INTEGRATING FISHERIES AND HABITAT MANAGEMENT:  
ESTABLISHING A REGIONAL SYSTEM OF FISHERIES  
*REFUGIA*

**Developing a Mechanism for Integrating Fisheries and Habitat Management: the Fisheries *Refugia* Approach**

The UNEP/GEF Regional Working Group on Fisheries considered that the concepts used to develop any mechanism should:

- Focus on fish life-cycle and critical habitat linkages,
- Be easy for fishing communities, local government officials, and fisheries managers to relate to, and
- Provide a suitable platform for the fisheries sector in best representing fisheries issues in fora relating to multiple-use marine management.

**Regional Working Group on Fisheries' Definition of Fisheries *Refugia*:**

"A spatially and geographically defined, marine or coastal area in which specific management measures are applied to sustain important species [fisheries resources] during **critical stages of their lifecycle**, for their sustainable use."



INTEGRATING FISHERIES AND HABITAT MANAGEMENT:  
ESTABLISHING A REGIONAL SYSTEM OF FISHERIES  
*REFUGIA*

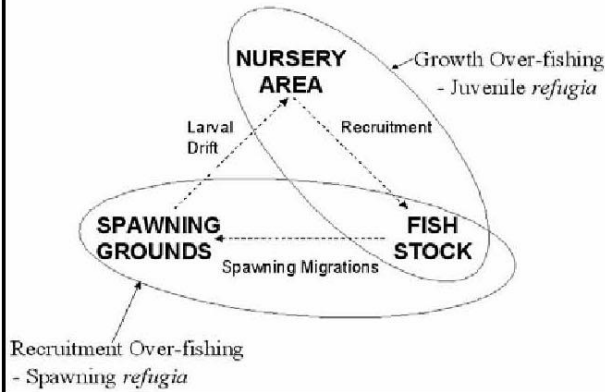
**The Fisheries "*Refugia*" Concept**

**Fisheries *Refugia* – Explanatory Notes**

- ❖ Should **NOT** be "no take zones".
- ❖ Have the objective of sustainable use for the benefit of present and future generations.
- ❖ Some areas within *refugia* might be permanently closed due to their critical importance [essential contribution] to the life cycle of a species or group of species.
- ❖ Critical areas of importance in the life cycle include spawning, and nursery grounds, or areas of habitat required for the maintenance of broodstock.
- ❖ *Refugia* will have different characteristics according to their purpose and the species or species groups for which they are established and within which different management measures will apply.
- ❖ *Refugia* may be sub-divided reflecting the differing importance of sub-areas to the species or species group. A management plan for the *refugia* will reflect different measures for the subdivisions.



INTEGRATING FISHERIES AND HABITAT MANAGEMENT:  
ESTABLISHING A REGIONAL SYSTEM OF FISHERIES  
*REFUGIA*



**Need for:**

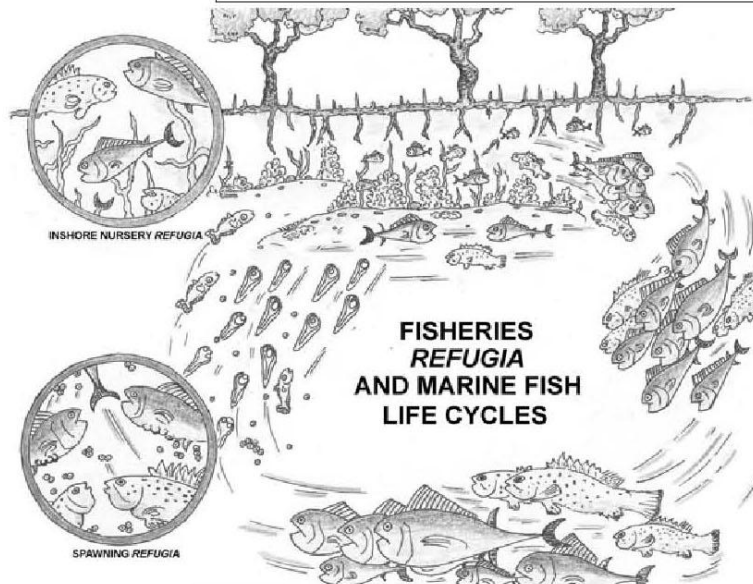
**Juvenile refugia**  
**(safeguard against growth over-fishing)**

**Spawning refugia**  
**(safeguard against recruitment over-fishing)**

**Generalised life-history triangle and the potential role of spawning *refugia* and juvenile *refugia* in preventing over-fishing**



INTEGRATING FISHERIES AND HABITAT MANAGEMENT:  
ESTABLISHING A REGIONAL SYSTEM OF FISHERIES  
*REFUGIA*





INTEGRATING FISHERIES AND HABITAT MANAGEMENT:  
ESTABLISHING A REGIONAL SYSTEM OF FISHERIES  
*REFUGIA*

**Outputs and Outcomes to Date**

- Regional Guidelines on the Use of Fisheries *Refugia* in Capture Fisheries Management – contained in the SEAFDEC Supplementary Guidelines,
- Regionally Agreed Goals, Objectives and Programme of Actions for a Regional System of Fisheries *Refugia*,
- Regionally agreed criteria for identification of fisheries *refugia*,
- Preliminary list of specific locations in the South China Sea and Gulf of Thailand that may qualify as fisheries *refugia*,
- A series of community consultations on the identification and establishment of fisheries *refugia*, and
- An on-going programme of technical consultations, working group meetings, and training workshops aimed at (a) developing a regional common understanding of the *refugia* concept, (b) identification of important nursery and spawning areas, and migratory routes, and (c) developing regional capacity in fish early life-history science.

**Development of Fisheries *Refugia* in  
Thailand**

Mr. Pirochana Saikliang

Thailand's National Fishery Focal Point,  
UNEP/GEF/SCS

**1<sup>st</sup> Fisheries Act was initiated in 1901 under the Department of Revenue, Ministry of Finance**

- 1. For controlling the fisheries of the county.**
- 2. The Acts did not include regulations for the management and conservation of the aquatic resources.**
- 3. To promote the development of the fishing industry.**

**1<sup>st</sup> Fisheries Acts of 1901 was revised in 1947.**

**➤ 1<sup>st</sup> Notification was issue on August 25, 1953**

- To setup spawning season and area
- To prohibit some kind of fishing gear
- To control Indo-Pacific mackerel fisheries in the Gulf of Thailand
- Indo-Pacific mackerel still reduced
- **DOF setup the 1<sup>st</sup> research teams in 1957**

**Indo-Pacific mackerel --->**

**Economical fish species (1973)**

1<sup>st</sup> February - 31<sup>st</sup> March = Spawning period

**(All kind of trawler with engine and purse seine with purse line were prohibited)**

1<sup>st</sup> June - 31<sup>st</sup> July = Nursery period for juvenile

**4 month→2 month, entry to force in the 1974**

**6<sup>th</sup> Notification was issue on November 28, 1984 (This issue was developed from 29<sup>th</sup> August 1983)**

• 15<sup>th</sup> February - 31<sup>st</sup> March

=Spawning period and larvae conservation

• 1<sup>st</sup> April - 15 May

=Nursery period

Trawl, Beam trawl (day time) and purse seine are prohibited



**Notification of the Ministry of Agriculture and  
Cooperatives**

**Re: Prohibition of Certain Kinds of Fishing  
Appliances in Spawning and Breeding seasons in the  
Locality of Pracuap Kiri Khan, Chumphon and  
Surat Thani Provinces**

**Given on September 24, B.E. 2542**

**Issue:**

**Area for closed**

**Covered 26,400 sq.km<sup>2</sup> (Pracuap Khiri Khan,  
Chumphon and Surat Thani)**

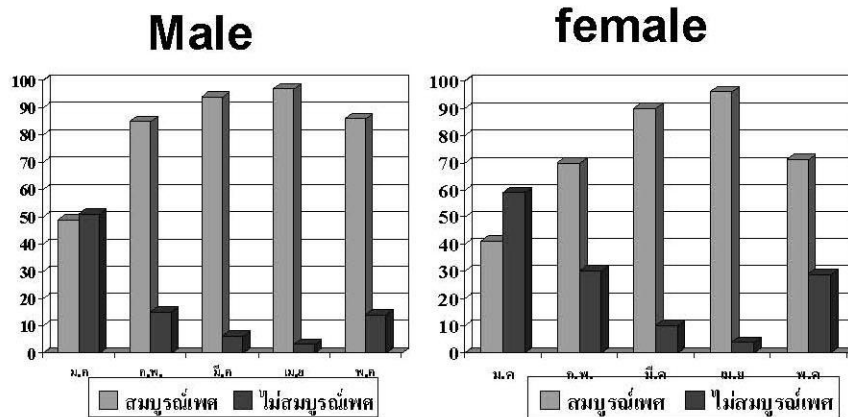
**Periods:**

**15 February - 15 May**

## Kinds of Gear Prohibited:

1. All kind of trawls used with motor vessels except trawls used with only one motor vessel of which the length is not more than 16 meters and fishing only night time
2. Gill nets and entangling nets used with a motor vessel in fishing by method of entangling for catching mackerel or by other similar method
3. All kind of surrounding nets used with motor vessels
4. Falling nets or lift nets used with an electricity generator (or dynamo) in fishing of anchovies
5. Push nets used with a motor vessel of more than 16 meters in length

## Percent maturity of Indo-Pacific mackerel (January – May 2005)





**Long tail gill net fishing  
vessel**



**Medium size gill net  
fishing vessel**





**Large gill net fishing  
vessel**



**Recommendations for Priority Issues and Actions for Management of Fishing Capacity by the Member Countries through  
Planning and Implementation of the National Plan of Actions**

Priority/key Issues	Actions/activities	Concerned agencies of the Member Countries	Potential supporting int'l/regional agencies and their inputs
<b>A. Policy related issues</b>			
1. Conflicting policies objectives; - At national (central) and local (state) levels. - Sustainable exploitation vs. increase production/revenue. - Sustainable exploitation vs. promotion of aquaculture. - Sustainable exploitation vs. 'bad' subsidy. - Sustainable exploitation vs. promotion of shifting from coastal to offshore fishing	1. Revisit/revise existing policy to address the issue of fishing capacity/management of fishing capacity	Fisheries responsible agencies - Ministry of Fisheries. - Ministry of Agriculture & Agro-based Industry. - Ministry of Marine Affairs & Fisheries. - Department of Fisheries - Directorate General of Capture Fisheries. - Bureau of Fisheries & Aquatic Resources.	
2. Open Access	1. Introduce/promote rights based regime 2. Impose freezing and control of fishing vessel.		
3. NPOA	- Review of project/initiatives related to the MFC - consultation with concerned agencies - identify/prioritize project activities for proper MFC - prepare NPOA in accordance with the concerned agencies		

<b>B. Resource sustainability issues</b>			
<p>1. Data availability for:</p> <ul style="list-style-type: none"> <li>- Stock assessment</li> <li>- Determination of FC level</li> <li>- Socio-economic status</li> </ul>	<ol style="list-style-type: none"> <li>1. Fully used of available data</li> <li>2. Identify data gaps for management of FC</li> <li>3. Revise the existing data collection system to include those data gaps for management of fishing capacity</li> </ol>	<p>Fisheries responsible Agencies:</p> <ul style="list-style-type: none"> <li>- Department of Fisheries</li> <li>- Directorate General of Capture Fisheries.</li> <li>- Bureau of Fisheries &amp; Aquatic Resources.</li> <li>- National Fisheries Research and Development Institute</li> <li>- Department of livestock and fisheries</li> </ul>	<ul style="list-style-type: none"> <li>- WFC, FAO, SIDA, DANIDA etc.</li> </ul>
<p>2. Overfishing</p>	<ol style="list-style-type: none"> <li>1. Implement stock/resource enhancement through restocking.</li> <li>2. Moratorium on issuance of new license.</li> <li>3. Eliminate illegal fishing vessel (IUU)</li> <li>4. Redeploy of fishing vessels to under-exploited resources</li> </ol>	<ul style="list-style-type: none"> <li>- BFAR/NFRDI</li> <li>- Fisheries Agency</li> <li>- Academe</li> </ul>	
<p>3. Use of destructive and less selective fishing gears &amp; methods</p>	<ol style="list-style-type: none"> <li>1.Undertake relevant R&amp;D programs for gear improvement.</li> <li>2.Strictly enforce mesh size regulation</li> <li>3.Improvement of Catch Selectivity &amp; promote the use</li> </ol>	<ul style="list-style-type: none"> <li>- NFRDI</li> <li>- BFAR</li> <li>- Maritime policy</li> <li>- Navy</li> </ul>	

	<p>of JTED, TED and selective fishing method</p> <p>4.Design educational programs to instill the right attitude in responsible fishing practices</p>		
4. Habitat degradation	<p>1. Rehabilitate the degraded habitat in coastal waters</p> <p>2. Deploy and monitor the effectiveness of artificial reefs</p> <p>3. Encourage integrated management approach</p> <p>4. Establish fish refugia</p>	<p>- Ministry of Natural Resources</p> <p>- BFAR</p> <p>- NFRDI</p>	
5. Multi-species & Multi-gear	<p>1. Use holistic approach in stock and fishing effort assessments.</p> <p>2. Give priority on critical fish stocks and dominant/major fishing gears.</p> <p>3. Identify effective indicators for sustainable exploitation.</p>		
6. Post-harvest losses	<p>1. Improve fish handling and processing.</p>	<p>- BFAR</p>	
<b>C. Socio-economic related issues</b>			
1. Low educational level (limited opportunities, difficulties in providing alternative jobs)	<p>1. Provide Training on alternate livelihood.</p>		

2. Lack of access to credit facilities (expose to individual ‘money lender’ trap)	<ol style="list-style-type: none"> <li>1. Provide credit facility for sustainable fisheries.</li> <li>2. Facilitate community organizing and development</li> </ol>		
3. Lack of bargaining power – market chain (in terms of fish pricing) - need for fishers to work as a group (cooperatives)	<ol style="list-style-type: none"> <li>1. Encourage formation of fishers cooperative.</li> <li>2. Develop coordination and partnerships among stakeholders</li> <li>3. Capacity building of institutions in all levels of governance.</li> </ol>		
4. Number of fishers –too many fisheries chasing few fish” (Small-scale)	<ol style="list-style-type: none"> <li>1. Encourage fishers to exit for sustainable alternative livelihoods – ‘Exit Plan’</li> <li>2. Transform individual operators into consortium-based fishers through buy-back scheme conditions.</li> </ol>		
5. Migrant fishers (social issues, imported labor) - Seasonal mobility of fishers.	<ol style="list-style-type: none"> <li>1. Impose fishers registration</li> </ol>		
6. Lack of economic incentives			
7. Consumer preference targeting young aquatic species - Market access			



<b>D. Institutional &amp; Implementation arrangements</b>			
<p>1. Lack of coordination among the agencies related to MCS:</p> <ul style="list-style-type: none"> <li>- Central &amp; Local agencies</li> <li>- Vessel registration &amp; fishing licensing agencies.</li> <li>- Various enforcement agencies</li> </ul>	<p>1. Establish various levels coordinating mechanism.</p>	<ul style="list-style-type: none"> <li>- National Enforcement Agencies.</li> <li>- Marine Department</li> <li>- Coast Guard</li> <li>- Department of Fisheries</li> <li>- Ministry of Transportation</li> </ul>	
<p>2. Existing legal instrument does not directly support management of fishing capacity / community-based management</p>	<p>1. Revise the legal instrument to include management of fishing capacity.</p>		
<p>3. Institutionalization / implementation of rights-based fisheries system (e.g. community fishery- Cambodia, local level management).</p> <ul style="list-style-type: none"> <li>- Not effective community organization</li> </ul>	<p>1. Establish appropriate community organization / arrangement.</p>		
<p>4. Inadequate resources (budget, manpower and skill)</p>	<ol style="list-style-type: none"> <li>1. Allocate adequate asset and financial resources</li> <li>2. Enhance skill, capability and competence.</li> <li>3. Establish effective mechanism to coordinate</li> </ol>		

	among agencies		
5. Lack of political will	<ol style="list-style-type: none"> <li>1. Conduct regular briefing on the status of fisheries issues to politicians (Local &amp; Federal).</li> <li>2. Organizes frequent dialogue sessions.</li> </ol>		

**Recommendations with Regional Cooperation and Collaborative Arrangements for Sub-region Sea Areas to Support/complement Countries in Management Fishing Capacity**

Issues/ areas for collaborations	Actions and Activities	Concerned countries agencies	Potential supporting int'l / regional agencies and their inputs
<p>Regional and Sub-regional fisheries management body (How to establish?)</p> <p><u>Time line</u></p> <ol style="list-style-type: none"> <li>1. activities</li> <li>2. arrangements</li> <li>3. legal framework</li> </ol>	<ul style="list-style-type: none"> <li>➤ Regional expert consultation / discussion</li> <li>➤ Mitigate regional conflicts/mitigation of overcapacity</li> <li>➤ MCS – establishment, experience &amp; lesson learned</li> <li>➤ Harmonization of national policies</li> <li>➤ Analysis of national, regionally compiled data (old problems)</li> <li>➤ Identify common fisheries management issues (new option)</li> <li>➤ Critical habitats, MPAs , fisheries reserves, Refugia</li> <li>➤ Review the existing mechanisms</li> <li>➤ Establish/ reinforce partnerships existing mechanism (SEAFDEC, UNEP, Worldfish Center, FAO, etc.)</li> <li>➤ Promote collaboration/ cooperation in habitat and fisheries Management</li> </ul>	<ol style="list-style-type: none"> <li>1. Fisheries responsible agency ( DOF, MOF or other)</li> <li>2. Responsible agency for habitat</li> <li>3. Foreign Affair</li> </ol>	<p align="center"><u>Multilateral and bilateral Donors</u> ASEAN</p>

Reference – Declaration of ASEAN Ministers of Foreign Affairs for South China Sea could provide a basis for reviews to clarify regional/sub-regional fisheries management arrangements.

**Recommendations for capacity building/HRD to support management of fishing capacity at various levels and target groups**

*1- Criteria for fishing capacity indicators rights based fisheries, 2- Policy, social, economic environment, legal, and 3- Extension, consultation and coordination*

HRD/capacity building gaps	HRD/capacity building needs	Target groups and levels	Means/systems of Delivery	Delivering agencies
<b><u>1- Fishing inventory:</u></b>	- <b><u>Improving the quality of data/information gathering</u></b>	<b><u>At all levels:</u></b> (National, sub national, and local )		
	+ Data collection & Analysis (through community cooperation)	<b><u>Local levels:</u></b> - Community committees - Local authority committees - Local fisheries officers	Training/workshop/or ientation	Academic Institutions
	+ <b><u>Carrying capacity</u></b> - CPUE (Catch per Unit Effort) - Size of fish - Number of boats, gears, and fishers			
	+ Data processing	<b><u>Sub National level:</u></b> - provincial/municipal fishery statistics officers	Training/workshop	

		<b><u>National level:</u></b> - Fishery statistics officers - Fishery policy officers		
<b><u>2- Limited understanding on national fisheries policies, laws, regulation</u></b>	+ Information/ dissemination (capacity and skills)	<b><u>National level:</u></b> - Fishery statistics officers - Fishery policy officers <b><u>Sub National level:</u></b> - provincial/municipal fishery statistics officers	Training/workshop	Academic Institutions
	+ Communication/ negotiation skills	<b><u>Local:</u></b> - Community committees - Local authority committees - Local fisheries officers	Training/workshop	
<b><u>3- Fisheries Management Planning</u></b>	+ Situation Analysis	<b><u>All levels:</u></b>		
	+ Objective Formulation for Fisheries Management	<b><u>All levels:</u></b>		
	+ Fisheries Management Action	<b><u>All levels:</u></b>		
	+ Risk Assessment	<b><u>All levels:</u></b>		
<b><u>4- Awareness Program</u></b>		<b><u>All levels:</u></b> - school children - school master to set the school curriculum		
<b><u>Identify the viable livelihood options</u></b>				