

**Report of Expert Meeting on  
Management of Fishing Capacity in Southeast Asia  
27-29 July 2006, Sihanouk Ville, Cambodia**



**Southeast Asian Fisheries Development Center  
The Secretariat**

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of the Code of Conduct for Responsible Fisheries Management

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

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## **BIBLIOGRAPHIC CITATION**

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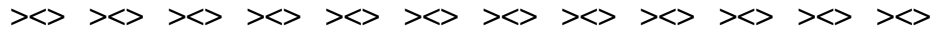
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**Expert Meeting on Management of Fishing Capacity in Southeast Asia  
24-27 July 2006, Sihanouk Ville, Cambodia**

Keywords: Co-management, Code of Conduct for Responsible Fisheries, Fishing Capacity, Indicators, Overcapacity, Plan of Actions, Regional and sub-regional Management Area, Regional Fisheries Management Body, Responsible Fisheries Management, Rights-based Fisheries Management



**I. Introduction**

1. The Expert Meeting on Management of Fishing Capacity in Southeast Asia was held in Sihanouk Ville, Cambodia during 24 to 27 July 2006. The Meeting was organized under the SEAFDEC-Sida Collaborative Project on HRD on the Support to the Implementation of the Code of Conduct for Responsible Fisheries in the ASEAN Region (2003-2006).

2. The first Expert Meeting was held in Bangkok 14 to 16 September 2004 where particular attention given to discuss directions towards management of excess fishing capacity in the region. Experts from SEAFDEC Secretariat, Training Department, SEAFDEC Marine Fisheries Resource Development and Management Department, Regional Office for Asia and the Pacific of the FAO, Asian Institute of Technology, Coastal Habitat and Resource Management Project (CHARM), Thailand, Faculty of Fisheries Kasetsart University, Department of Fishery Management, Thailand, Fisheries Improved for Sustainable Harvest Project (FISH), the Philippines, participated in the first Meeting.

3. At the Regional Technical Consultation on HRD for Fisheries Management held in Phnom Penh June 2004, the issues of overcapacity were raised through a specific group discussion. The outcomes mostly confirmed that alleviating issues of excess fishing capacity in the region could be achieved through the three main following approaches:

- To gradually introduce rights-based fisheries management regimes;
- To understand the state and trends of fisheries using indicators, and
- To control the number of fishing boats

4. At the invitation of the SEAFDEC Secretariat, the Meeting was participated by regional and national Experts in field related to Management of Fishing Capacity and HRD in fisheries management, namely Department of Fisheries Cambodia, Ministry of Marine Affaires and Fisheries Indonesia, Department of Fisheries Malaysia, Bureau of Fisheries and Aquatic Resources the Philippines, Department of Fisheries Thailand, Ministry of Fisheries Vietnam, WorldFish Center, SEAFDEC Secretariat, SEAFDEC

Marine Fisheries Resources Development and Management Department, and SEAFDEC Training Department. The list of experts and participants appears as **Annex 1**.

5. The Meeting had the following main tasks:

- To review existing initiatives for Management of Fishing Capacity;
- To clarify the role of local communities and other relevant agencies in managing fishing capacity in the region;
- To identify capacity building needs and future activities to support sustainable Management of Fishing Capacity; and
- To discuss potential collaborative mechanisms within a country and between countries to manage fishing capacity.

## **II. Opening of the Meeting**

6. H.E. Nao Thouk, Director General of Department of Fisheries Ministry of Agriculture, Forestry and Fisheries Cambodia, Dr. Somying Piumsombun, Deputy Director General of Department of Fisheries Thailand, and Mr. Parlin Tambunan, Director General of Capture Fisheries Department of Marine Affairs and Fisheries Indonesia, made a keynote statement. They emphasized that all countries wish to define the practical steps and approach to measure and manage their fishing capacity, aiming to tackle the overcapacity in the commercial fishing sector while at the same time to provide enabling environment to help sustain livelihoods and alleviate problems caused by excessive level of fishing capacity through protection, restoration and management of coastal resources.

7. Dr. Magnus Torell, SEAFDEC Senior Advisor/Expert, welcomed experts and participants to the Meeting. He noted that the fisheries sector is important for most developed and developing countries. Obstacles to a sustainable development and management of the fisheries sectors were mainly the competition for access to resources among different users and overexploitation in most fisheries. He stressed the need for better management of the fishing capacity through strengthening/establishing collaborative mechanism of regional and national initiatives.

## **III. Adoption of Agenda**

8. The Agenda and the documents of the Meeting were adopted and which appeared as **Annex 2**.

## **IV. Experience and Lessons Learned from International, Regional, National and Other various Initiatives in Management of Fishing Capacity**

9. Overview of International Plan of Action – Capacity, experience and lessons learned from several regional/national initiatives in managing fishing capacity were presented, and can be summarized as follow:

## **International Plan of Action – Capacity (IPOA-Capacity)**

10. It was noted that the IPOA (**Annex 3**) specified a number of urgent actions to be taken: (a) assessment of monitoring of fishing capacity; (b) preparation and implementation of national plans; and (c) international consideration and immediate actions for major international fisheries requiring urgent attention. In addition, the IPOA recommended taking immediate steps to address the Management of Fishing Capacity, and to individually/multilaterally expand their effort in reducing fishing fleet/capacity.

11. It was observed that the IPOA and related sections of the Code of Conduct for Responsible Fisheries showed the importance given by the international community to the Management of Fishing Capacity. However, it provided less information on how to implement that many provisions that they contain, especially as regards to the Management of Fishing Capacity.

### **National Initiatives**

12. National policy and planning for Management of Fishing Capacity in the set of representative countries, namely Cambodia, Indonesia, Thailand and Vietnam (**Annex 4**), were presented. The key lessons learned from their initiatives with regards to the Management of Fishing Capacity can be concluded as follow:

- Need to reduce number of fishing boats and/or fishing capacity
- Need a strong legal framework and enforcement to regulate destructive fishing gear and practices;
- Need more participation and involvement of local fishers and communities together with promotion of rights-based and co-management approaches;
- Need to strengthen collaboration among key stakeholders (fishers, governmental authorities, etc);
- Need HRD activities to support establishment of protection/conservation of important/critical habitat sites (spawning/feeding) of commercially important species;
- Restructuring marine/coastal fishing activities – such as establish/relocation of fishing zones, fishing seasons, fishing gear regulation, utilization of catch, technology to reduce unwanted catch, total allowable catch, etc. – towards responsible manner and sustainable development; and
- Fisheries/resources management plans have to link with poverty alleviation and at the same time to improve livelihood of poor fishers.

### **Regional Initiatives**

13. The Meeting recognized that several initiatives related to Management of Fishing Capacity were implemented in the region both at national and regional level. The representatives from relevant initiatives presented the review of the progress and their major achievements/findings as follow:

FAO/Sida Project: On Work in Thailand to look at Directions and Challenges in Reducing Capacity of Trawlers and Push Netters in the Gulf of Thailand (Annex 5)

- The stakeholders were found generally to be committed to reduce their capacity including fishing efforts (reduce number of fishing days, reduction of fishing areas, increasing of closed season for specific fishing gear and practices, reduce engine capacity, etc) both for trawlers and push netters. One reason behind this was because that also to them the decline of the fisheries resources in the Gulf of Thailand was obvious.
- Set of recommendations specific to each study area were given through the stakeholders' consultation process. And these recommendations will be used as basis to update national policy including plan of action that can practically implemented for Management of Fishing Capacity in Thailand.

Suggested Policy Directions for Management of Fishing Capacity in Southeast Asia (SEAFDEC Project on Rights-based Fisheries) (Annex 6)

- In international for a, such as FAO, it had been recognized that the nature of fisheries is so diversified in various regions of the world that more should be expected from regional fisheries management organizations and the countries. To work with the issues related to resources and fisheries in EEZ or for transboundary fish stocks, practical approaches should be left to more local authorities such countries or the RFMOs.
- Southeast Asian fisheries are characterized by a domination of small-scale multi-gear and multi-species. In this context, key values like the maximum biological productivity could not be simply applied.
- Policy directions for Management of Fishing Capacity
  - Fishery management agency introduced appropriate registration of all large- and small-scale fishing boats as well as fishers;
  - Co-management approach is promoted in communities to raise awareness and a sense of responsibility amongst local stakeholders, together with definition of enclosed areas;
  - Completely stop any new registration after a certain period of time;
  - Fishers should be encouraged to collaborate with existing enforcing authorities in reporting illegal practices;
  - Using indicators, government and communities measure the level of exploitation of fisheries case by case, and adapt fishing capacity further on this basis; and
  - Simple but enforceable condition to access fishing rights at the community level are established, compliance can be left over for the community to manage with proper support from the government.

SEAFDEC Project on Promoting the Use of Indicators for Sustainable Development and Management of Capture Fisheries in the ASEAN Region: Issues and Challenges (Annex 7)

- The regional guidelines on the use of “indicators” for sustainable development and management of capture fisheries in Southeast Asia has been developed and adopted by ASEAN-SEAFDEC Member Countries, providing a common understanding of indicators, importance and roles of the use of indicators, and how to develop national indicators.
- It was noted that appropriate steps to promote the use of the guidelines and gain further support will be achieved by rising up this issue to high-level authority to demonstrate the applicability and benefits in using this approach to improve management of fisheries towards sustainable development.

WorldFish Centre: “Fish Fights over Fish Rights” (FFFR) in Southeast Asia: Implications for Managing Overcapacity in Fisheries (Annex 8)

- In general, regulations or measures to resolve fisheries conflicts that are most arising from overcapacity in the fisheries were found to be in place. However, compliance and proper enforcement including political support in implementation of legislated regulations are the key concerns;
- There is a need to address the problem of overcapacity in a more holistic manner; and
- In reporting on the impact of the excess fishing capacity this is often, for some fisheries in Southeast Asia done with reference to changes in biomass, including recommendations on mitigation measures. Even though various options also were defined for Management of Fishing Capacity, the approaches for implementing and handling such options are not clear in most countries in the region.

**V. Future Capacity Building Requirements for Sustainable Management of Fishing Capacity (Annex 9)**

14. Mr. Suriyan Vichitlekarn, SEAFDEC Secretariat Policy and Program Coordinator, presented a draft review on Management of Fishing Capacity in Southeast Asia. The presentation was made based on the experiences and lessons learned in implementation of various international/regional/national initiatives as well as SEAFDEC and non-SEFADEC, can be summarized as follow:

- Current regional fisheries status:
  - Overcapacity causes various problems in the fishery sectors. National policy and plan exists for Management of Fishing Capacity in some countries in the region. However, among them there is a different degree of readiness, in most countries there is not any proper management system in place.
- Two major vital needs for Management of Fishing Capacity in the region should be:
  - To avoid conditions of open access that invariable leads to increasing vulnerability of small-scale fishers, when faced with very limited alternative employment; and
  - To balance the interest between small-scale and commercial fisheries



- Common approaches to Management of Fishing Capacity 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
  - Strengthening communities through a better organization and participation
  - Freezing and controlling number of fishing vessels
  - Develop supplementary/alternative livelihoods for coastal communities
  - Habitat management and stock enhancement
  
- Issues to be address for Management of Fishing Capacity in the region:
  - Introducing a “regulatory” system in the “open access” regime
  - Registration of fishers and fishing boats as a basis for rights-based fisheries (e.g. access rights, licensing)
  - Understanding the concept of “fishing capacity”
  - Freeze current number of fishing boats as a basis for reduction strategies
  - Balance of inter-relationship between small-scale and large-scale fisheries (commercial/subsistence, urban/rural)
  - “Mobility” of fishing capacity considering resource, social, and economic dimensions
  - Diversify means of livelihoods
  - Knowledge of total number of boats/gears VS active boats/gears
  - Build up capacity beyond “managers” and “fishers”
  - Pilot areas/cases → a nation wide implementation
  - Packaging policy and technical advice into guidelines for future reference
  
- Suggested Management of Fishing Capacity through management areas:
  - Ecological areas beyond geo-political boundaries
  - Facilitation of transboundary arrangement
    - Local and national roles
    - Information gathering and harmonization
    - Networking and dialogues
    - Capacity building and technical supports
    - Regulate/ensure status of regionally mobile supply of fish workers/migratory workforce

## **VI. Recommendations and Conclusion on Next Steps in Supporting SEAFDEC Member Countries in Management of Fishing Capacity (Annex 10)**

15. The Meeting recognized that Management of Fishing Capacity played a major role in sustainable management and development of fishery in the region. In this regards, the Meeting clarified and recommended the key elements in managing fishing capacity which related to policy, institutions and research issues. The Meeting also suggested to follow-up on actions that are coupled with HRD needs for Management of Fishing Capacity both at national and regional levels.

16. The Meeting also recommended the major long-term policy issue for collaboration to establish a “Regional and Sub-regional Fisheries Management Body”, and (b) set up regional collaboration by sub-regional management areas

- Establish “Regional and Sub-regional Fisheries Management Body”, and
- Set up Regional Collaboration by Sub-regional Management areas, including:
  - Gulf of Thailand (Cambodia, Malaysia, Thailand, and Vietnam)
  - Malacca Strait (Indonesia, Malaysia, and Thailand and Andaman Sea (Indonesia, Malaysia, Myanmar, and Thailand)
  - South China Sea
  - Sulu Sea and Sulawesi Seas

17. The Meeting also suggested continuous effort on the support of the regional collaboration by sub-regional management areas as follow:

- Support the development and implementation of NPOAs in the countries involved
- Provide a platform for discussion on Management of Fishing Capacity among the countries and institutions involved
- Develop concept for management of sub-regional management areas among countries
- Develop a collaborative framework

## **VII. Closing**

18. Mr. Ing Try, Deputy Director of Department of Fisheries Cambodia, and Dr. Magnus Torell thanked the experts of the Meeting and delegations of SEAFDEC and its Departments, and then declared the Meeting closed.

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**Agenda of the Meeting**

1. Opening and adoption of the agenda
2. Lessons learned from international, regional, national and other various initiatives in managing fishing capacity in the Southeast Asian Countries
  - 2.1 Overview of the FAO International Plan of Action – Fishing Capacity and SEAFDEC initiatives related to management of fishing capacity
  - 2.2 National initiatives
    - 2.2.1 National policy and planning for management of fishing capacity in:
      - 2.2.1.1 Cambodia
      - 2.2.1.2 Indonesia
      - 2.2.1.3 Thailand
      - 2.2.1.4 Vietnam
    - 2.2.2 Directions and challenges in reducing capacity of trawlers and push netters in the Gulf of Thailand: FAO/Sida/DOF Thailand
  - 2.3 Regional initiatives
    - 2.3.1 Policy directions for freezing fishing fleets: SEAFDEC Secretariat
    - 2.3.2 Use of indicators and its sustainability implications
    - 2.3.3 Managing exist in fisheries and reducing fisheries conflicts
    - 2.3.4 Others regional initiatives
  - 2.4 Synthesis of the lessons learned from national, regional and international initiatives “experiences, directions and challenges”.
3. Discussion on future capacity building requirements to sustainable management of fishing capacity
4. Wrap-up session
5. Next step for SEAFDEC-Sida support in managing fishing capacity in Southeast Asia
  - 5.1 Introduction and discussion of the background and important issues for preparation of the organization of the “Regional Technical Consultation on Management of Fishing Capacity and Human Resource Development in Support of Fisheries Management in Southeast Asia” scheduled in 19-22 September 2006.
  - 5.2 Clarification of the next step for SEAFDEC-Sida HRD program in supporting SEAFDEC Member Countries to manage fishing capacity.
6. Closing



## Documents of the Meeting

### Information Documents

INF 01	Provisional Prospectus
INF 02	List of Documents
INF 03	List of Experts and Participants

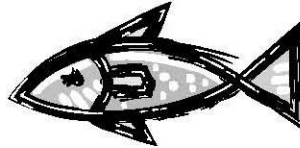
### Working Documents

WP 01	Provisional Agenda
WP 02	Provisional Agenda and Timetable
WP 03	Provisional Annotated Agenda
WP 04-a	National Policy and Planning for Management of Fishing Capacity: Cambodia
WP 04-b	National Policy and Planning for Management of Fishing Capacity: Indonesia
WP 04-c	National Policy and Planning for Management of Fishing Capacity: Thailand
WP 04-d	National Policy and Planning for Management of Fishing Capacity: Vietnam
WP 04-e	Directions and Challenges in Reducing Capacity of Trawlers and Push Netters in the Gulf of Thailand
WP 05	Policy Directions for Freezing Fishing Fleets
WP 06	Use of Indicators and its Sustainability Implications
WP 07	Managing Exist in Fisheries and Reducing Fisheries Conflicts
WP 08	Synthesis of the lessons learned from national, regional and international initiatives “experiences, directions and challenges”

### Referred Documents

REF 01	FAO International Plan of Action – Fishing Capacity <a href="http://www.fao.org/figis/servlet/static?dom=org&amp;xml=ipoa_capacity.xml">http://www.fao.org/figis/servlet/static?dom=org&amp;xml=ipoa_capacity.xml</a>
REF 02	Freezing fishing fleet, Fish for the People, Vol.2, November 2004; p11-18.

Overview of FAO International Plan of Action – Fishing Capacity



## Overview of the IPOA-Capacity

International Plan of Action for the Management of Fishing Capacity

*Olivier Delahaye Gamucci  
SEAFDEC Secretariat, August 2006*

### **IPOA-Capacity**

- Is a voluntary instrument based on a number of major principles of the Code of Conduct as well as on complementary principles
- Its implementation is envisaged in three phases:
  1. assessment and diagnosis;
  2. adoption of preliminary management measures;
  3. a system of periodic reviews and adjustments;
- Priority is given to managing fishing capacity first where it results in clear overfishing.

## **Holistic approach**

- Such an approach is recommended so that consideration be given to all factors affecting capacity in national and international waters, while properly accounting for fleet mobility and evolving technologies.

## **Objective**

“States and regional fishery organizations, in the framework of their respective competencies and consistent with international law will achieve worldwide preferably by 2003 but no later than 2005, an efficient, equitable and transparent management of fishing capacity.”

States and RFMOs, when confronted with an overcapacity problem undermining the achievement of long-term sustainability outcomes, should attempt to limit fishing capacity to existing levels and progressively reduce the capacity applied to the affected fisheries.

## **IPOA specifies three urgent actions to be taken:**

1. Assessment and monitoring of fishing capacity;
2. Preparation and implementation of national plans;
3. International consideration and immediate actions for major international fisheries requiring urgent attention.

### **1. Assessment and monitoring of fishing capacity**

- Proceed with preliminary assessment of fishing capacity and with the systematic identification of fisheries requiring urgent attention at national, regional and, in collaboration with FAO, at the global level; and
- Develop appropriate records of fishing vessels and support the establishment by FAO of an international record of vessels operating in the high seas.

## **2. Preparation and implementation of national plans**

- Develop and implement a national plan of action to manage fishing capacity, accounting for the effect of different management systems on fishing capacity, and, if required, for the need to reduce capacity in some fisheries;
- Adapt such a plan of action regularly on the basis of periodic assessment and for increased effectiveness;
- Reduce and progressively eliminate all factors, including subsidies and economic incentives, contributing directly or indirectly to the build-up of excessive capacity;
- Cooperate through RFMOs to ensure the effective management of fishing capacity.

## **3. International consideration and immediate actions for major international fisheries requiring urgent attention.**

- Consider participating in international agreements that relate to the management of fishing capacity;
- Take steps to manage the fishing capacity of their vessels involved in high seas fisheries and cooperate as appropriate with other States in reducing the fishing capacity applied to overfished fisheries;
- Recognize the need to deal with the problem of those States which do not fulfil their responsibilities under international law as Flag States with respect to their fishing vessels;
- Support multilateral cooperation to ensure that these Flag States contribute to regional efforts to manage fishing capacity; and
- Avoid approving the transfer of vessels carrying their flag to high seas areas where such transfers are inconsistent with responsible fishing under the Code of Conduct.

### **Or, in short...**

- The IPOA calls for States to take immediate steps to address the management of fishing capacity applied to major international fisheries, with priority given to transboundary, straddling and highly migratory stocks which are significantly overfished.
- It urges States to act individually or multilaterally to substantially reduce the fleet capacity applied to these resources as part of management strategies to restore overfished stocks to sustainable levels.

### **Conclusion**

- The adoption of the IPOA on the Management of Fishing Capacity shows the importance given by the international community to the management of fishing capacity;
- It also highlight the strong linkages that exist between these issues and the management of fisheries in general;
- It has resulted in increased attention being paid to the issue of subsidies and their impact on sustainability and trade.
- They are overall highly theoretical, technical and not much applicable for the ASEAN region.



## **SEAFDEC Initiatives related to the Management of Fishing Capacity**

A quick review

*Olivier Delahaye Gamucci*  
*SEAFDEC Secretariat, August 2006*

### **Southeast Asia, like small-scale fisheries**

- The fisheries sector in almost all ASEAN countries is dominated by small-scale, coastal fishing operations, with more than 75% of the total fish catch attributed to these fisheries.
- Fishing provides important economic and social occupation in coastal regions. The catches from small-scale fisheries are regarded to be underreported in many cases and the overall impact of their fishing activities is not always appreciated.
- Small-scale in this case is usually characterised by labour-intensive fishing activities, often carried out as one of several income-generating activities, compared to capital-intensive commercial fishing. Hence, managing these small-scale coastal fisheries need to account for social, economic and cultural considerations, in addition to the roles of biophysical and ecological factors.

## **Issues that currently dominate the debate are:**

- Fish catches are declining or catch composition is changing toward low value or immature fish
- Persistent and widespread poverty among coastal communities
- Degradation of critical coastal ecosystems and habitats

The major causes of these problems are open access, overfishing and the use of illegal and destructive fishing gear. Considering the current levels of degradation in aquatic environments it is projected that productivity of fisheries and contribution to local food security will decline.

## **Managing small-scale fisheries**

- **Two major areas require attention by fisheries authorities:**
  1. The interest of small-scale and commercial fisheries need to be balanced, especially if they interact
  2. There is a need to avoid conditions of open access that invariably leads to increasing vulnerability of small-scale fishermen, when faced with very limited alternative employment
- **A first step of ASEAN authorities would be to strengthen the organisation of small-scale fishermen, to thereafter design possible management schemes in close cooperation with these organisations**
- **Several pilot studies have been carried-out throughout the region, although rarely did one try to learn from them and mainstream the local experience to a national context where they could impact on policy and the legal framework.**



## **Acknowledging the need in the region**

- The need for capacity management in ASEAN fisheries has been acknowledged by the region with the adoption of IPOA-Capacity in 1999.
- A follow-up regional workshop on fishing capacity in 2000 in Penang, Malaysia, was seen as the next step in the practical implementation of the IPOA-Capacity guidelines for managing capacity.
- However, the general impression from ASEAN countries and regional organisations is that the guidelines (and indeed the FAO Code of Conduct for Responsible Fisheries) are too theoretical, technical and non-applicable for the ASEAN region, generally characterised by small-scale, multispecies and multigear fisheries.

## **A general apprehension to proceed with the IPOA-Capacity ?**

- Further clarification and assistance from external technical expertise was judged needed to go ahead with the implementation of the IPOA.
- Steps have been taken to tackle the overcapacity in the commercial fishing sector, where in many situations the number of commercial trawlers has been frozen. Yet, effective registration, licensing and enforcement will be required before such initiatives will bear fruit.

## **Fundamental issues first**

- Some of the more fundamental issues of fisheries management need to be addressed before meaningful achievements can be made with regards to fishing capacity management:
  - The combination of open access, increasing demand for fish, relocation of populations to coastal regions, and introduction of modern fishing technologies has led to widespread overfishing and excess capacity.
  - Many countries have established licensing systems, but in effect any license application is accepted, while the weaknesses in monitoring, control and surveillance (largely due to lack of budgetary commitments and training) have resulted in open access conditions prevailing in most fisheries.

## **Regionalization of the Code of Conduct for Responsible Fisheries**

- Since the adoption of the Code of Conduct for Responsible Fisheries (CCRF) in 1995, SEAFDEC has extended its supports to the member countries in the implementation of the CCRF through a project that has attempted to regionalize the Code taking into account regional specificities.

## **Workshop on the management of fishing capacity**

- At the invitation of SEAFDEC MFRDMD and FAO, a Regional Workshop on the Management of Fishing Capacity was held in Penang, Malaysia in November 2000.
- Taking into consideration the IPOA-Capacity, it attempted to identify related opportunities and constraints as well as actions required for the management of fishing capacity in Southeast Asia
- Several initial guidelines and action steps for consideration by ASEAN countries. These guidelines and action steps, after slight modification, were adopted as part of the Regional Guidelines for Responsible Fisheries in Southeast Asia, and have been applied in regional initiatives.

## **ASEAN-SEAFDEC Millennium Conference**

- The Millennium Conference on Fish for the People held in 2001 highlighted the socio-economic/cultural importance of the effective management of fisheries for regional food security from the point of view of the regions long-term objective for food and livelihood security.
- The Resolution and Plan of Action on Contribution of Sustainable Fisheries for Food Security for the ASEAN Region adopted at the Millennium Conference provide a policy framework and priority action to investigate two issues:
  1. Decentralisation of management authority to the institutions which are physically close to the resources users
  2. Terminate the current "open access" regime for alleviating local conflicts and effective implementation of coastal fisheries management, by providing the appropriate kinds of "fishing right" to the appropriate institutions.

## **Towards rights-based regimes**

- There is now widespread realisation in the region that the open access nature must be changed and replaced with appropriate rights-based regimes to limit the number of fishermen and vessels.
- ASEAN member countries have committed themselves to gradually introduce rights-based fisheries management systems for regulating access to coastal and marine resources. This process is supposed to go hand-in-hand with the decentralisation of fisheries management authority and functions to sub-national administrative levels.

## **Why rights-based regimes?**

- The closer the small-scale coastal fisheries management authorities are to resource users, the better they can accommodate specific socio-economic, political and ecological local characteristics into their particular management systems.
- Fisheries regulation and conflicts among resource users are usually locally based problems, with a need for timelier implementation of management measures and actions: as such the decentralisation of selected functions and responsibilities to appropriate local institutions will help.

## **Use of indicators for fisheries management**

- The utility of fisheries statistics has been limited mainly due to problems associated with the collection and analysis of fisheries data.
- This has hampered the development of appropriate policies and clear management objectives, and
- The existing regional collaboration to identify and use indicators may prove beneficial in this process.
- Under the 5-year programme initiative to support the Resolutions and Plan of Action, a MFRDMD project looked into the use of indicators for the sustainable development and management of capture fisheries, as an integral part in the establishment of more appropriate management regimes, and dealing with issues such as fishing capacity in the process.

## **Some indicators for fishing capacity**

- The use of vessel numbers as a substitute for fishing capacity is viewed as a first step toward the control of fishing effort
- Labour intensity was identified as another possible indicator of capacity, since small-scale fisheries so much depend on it: the malleability of labour will help determine the evolution in capacity under different economic conditions in the fishery, and indeed the status of the national economy.

## **Regional Technical Consultation on Human Resource Development for Fisheries Management**

- This RTC was held in Phnom Penh in June 2004, during which clarification were sought on what policy change was required to achieve sustainable fisheries, especially in the light of possible human resource development needs.
- In this context, the issues of overcapacity were raised through a specific group discussion and stressed out that issues of excess fishing capacity could be addressed in the region through three main tracks:
  1. To gradually introduce rights-based fisheries management regimes,
  2. To understand the state and trends of fisheries using indicators, and
  3. To control the number of fishing boats.

## **Prep. Expert Meeting on Fishing Capacity and Related HRD Needs in the ASEAN Region**

- The meeting was organized in September 2004 in Bangkok to identify problem areas, possibilities and target groups for various HRD interventions to alleviate problems caused by excess fishing capacity and its reduction.
- Through the meeting, experiences learned from various existing projects such as CHARM, FISH, Trawl Base and some of those implemented by SEAFDEC in the region was shared.

- The meeting recognized the applicability of an approach that promotes “learning by doing”. The need to identify government “service delivery system” and its link and support to local authorities was also seen as central in order to define applications of local management systems and responsibilities.
- The meeting emphasized on the necessity to look at :
  - related HRD needs and to explore the whole line of delivery down to the local level.
  - HRD initiatives for the management of fishing capacity bearing in mind that it should not be developed in “isolation” but on a holistic basis, including legal, environmental and social aspects.



National Policy and Planning Activities for Management of Fishing Capacity



# National Policy and Planning Activities for Management Fishing Capacity in the Coastal Line of Cambodia

Prepared by: Chun Sophat



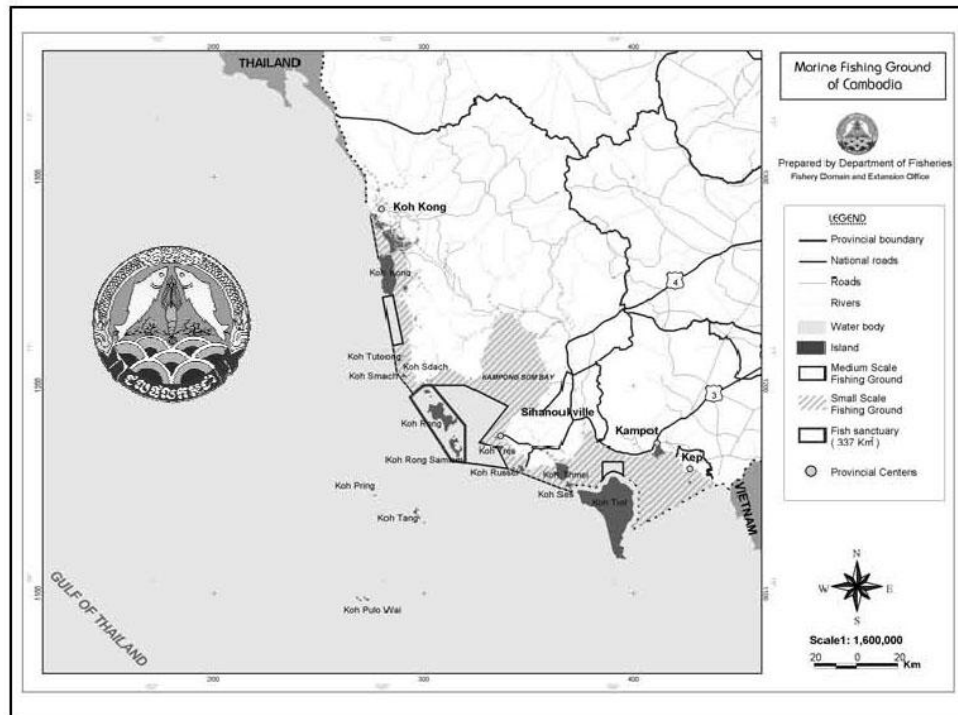
## Introduction:

- Coastal line of Cambodia extents between 8-12° of the northern latitude, and 101-104° of the Eastern longitude of the gulf;
- It has 440 Km in length, along Koh Kong, Sihanouk Ville, Kampot and Kep;
- Coastal resource are very vital to the livelihood of Cambodia;
- The total annual catch is estimated around 60,000 tons/2005 (this maybe underestimate of the actual statistics, needs more data collection improvement)
- To conserve sustainably the marine fisheries resource, the DoF set up its major fisheries policy to manage the fishing capacity.



# Vision of Fisheries Sector in Cambodia

“Management, conservation and development of sustainable fisheries resources to contribute to ensuring people’s food security and to socioeconomic development in order to enhance people’s livelihood and the nation’s prosperity”.





## Classification of Marine Fishing Domains in Cambodia

- Marine fishing areas: 55,600 Km<sup>2</sup>
- Inshore fishing zone: 0-20 m in depth
- Offshore fishing zone: more than 20 m in depth
- Overlapping zones: Cambodia-Thailand and Cambodia-Viet Nam
- Marine Fisheries Reserve: Coral Reef and Seagrass
- Mangrove Forest Areas:



## 1 – Marine Fishing Capacity Management and Development

- Issues:
  - Lack of strategic direction from DoF to effectively manage the marine capture fishery resources
  - Increase in fishing efforts
  - Unlimited harvest is leading to over fishing
  - Lack of defined access rights for fishers and other stakeholders
  - Lack of assessment data
  - Damage to the marine environment from trawling methods
  - Illegal fishing activities
  - Lack of adequate law enforcement
  - Ghost fishing
  - Lack of community based management to address capture fisheries resource management issues.



## 1- Marine Fishing Capacity Management and Development (cont.)

### • **Policy:**

- To ensure the management and utilization of marine fisheries resource sustainably in order to enhance food safety and food security for the people, and to contribute to poverty reduction
- Promote and encourage the fishing activities in the Exclusive Economic Zone (EEZ) and in the international fishing grounds by strictly implementing the regional code of conduct for responsible fisheries and the laws of the Kingdom of Cambodia.



## 1- Marine Fishing Capacity Management and Development (cont.)

### • **Action Plan.:**

- Formulation of the fisheries management plan
- Prohibit strictly the seriously destructive gears: dynamited and poisonous methods
- Allocation of equitable and sustainable access rights to the fisheries resource
- Create a reliable record of fish catches to strengthen Government's ability to effectively manage the marine fisheries resource
- Stop illegal fishing practices and the use of destructive fishing methods



## 1- Marine Fishing Capacity Management and Development (cont.)

### • **Action Plan - cont.:**

- Eliminate corruption
- Reducing the loss of ghost fishing gears
- Establish and develop the CFs to Co-management
- Collaborate with the fishermen in order to assess and evaluate the fisheries resource trend
- Cooperate with the concerned agencies, fishermen and CFs in order to manage the fishing operation.



## 2- Marine Aquaculture Management and Development

### • **Issues:**

- Non sustainable aquaculture practice
- Lack of research and extension services to aquaculturists
- Lack of hatcheries and reliable seed supplies
- disease and high mortalities rates
- lack of availability of affordable feed
- Lack of quality control of product
- Introduction of exotic species to the environment
- Marine stock decline
- Aquatic animal health protection



## 2- Marine Aquaculture Management and Development (cont.)

### • **Policy:**

- Recognize the importance of aquaculture for maintaining constant food security, poverty reduction and more alternate sustainable livelihood;
- Promote further development of marine aquaculture to support alternative livelihood options for fishers.



## 2-Marine Aquaculture Management and Development (cont.)

### • **Action Plan:**

- Commitment to creating a sustainable aquaculture sector;
- Provide adequate technical and scientific support to aquaculturists
- Supporting research to establish commercial hatcheries within communities and establish a reliable seed supply
- To prevent and control diseases, and reduce mortality rates
- Provide affordable aquaculture feed;
- Provide quality control of product
- Set control for farming exotic species;
- Controlling the introduction of genetically modified organisms and transgenic materials
- Marine stock enhancement
- Provide farmed aquatic animal species with health protection.



### 3- Marine Fishing Supporting Livelihood

- **Issues:**

- Lack of social and economic knowledge relating to the marine fishing activities
- Declining livelihood options and increasing reliance on the fishery resource
- Product waste and spoiling due to poor storage and transportation
- Landlessness and migration
- Lack of functioning community fisheries committee
- Lack of community participation in decision making processes



### 3- Marine Fishing Supporting Livelihood (cont.)

- **Policy:**

- **Assist the people to develop sustainable and secure livelihood options that offer social, economic and nutritional benefits;**
- **Prioritize projects to assist in poverty reduction;**
- **Promote and establish CFs throughout the coastal areas with the Co-management system.**



### **3- Marine Fishing Supporting Livelihood (cont.)**

- **Action Plan:**

- Develop a better understanding of social and economic developments in the mgt. of the fisheries resource;
- Create alternative livelihood options;
- Educating fishers about the importance of consuming safe products;
- Promote and assist CF development
- Improve the quality of mgt. decisions by involving communities in decision making processes.



### **4- Conservation of Marine Fisheries Resource**

- **Issues:**

- Destruction of marine habitat
- Destruction of marine habitat form trawling methods
- Destruction to marine habitat from cyanide and dynamite fishing
- Protection measures for threatened aquatic species
- Lack of scientific data and research
- Lack of education and extension
- Urban coastal development and pollution
- Potential offshore oil and gas developments
- Lack of control over ballast
- Water released and anti fouling paint use
- Lack of capacity of community fisheries.



## 4- Conservation of Marine Fisheries Resource (cont.)

### • **Policy:**

- Revise and disseminate regulations for law enforcement and crackdown all illegal activities and preserve the inundated forest and mangrove;
- Increase awareness of people in community fisheries and general fishermen of importance of conservation of fisheries resource and ensuring maximum participation from local communities with respect to fisheries management and conservation;
- Protect the important natural habitats and biodiversity; in order to reduce the potential negative impact on fisheries resource as a result of development in the other sectors;
- Strengthen and increase the conservation of sustainable fisheries resources through increasing cooperation among stakeholders.



## 4- Conservation of Marine Fisheries Resource (cont.)

### • **Action Plan:**

- Provide protection for important marine habitat sites
- Reduce the impact of trawlers on the marine environment
- Stop cyanide and dynamite fishing
- Manage threatened aquatic species
- Educate communities about conservation issues





## 4– Conservation of Marine Fisheries Resource (cont.)

### • **Action Plan:**

- Improve monitoring of biological and ecological interactions in the marine fishery
- Urban coastal development and pollution
- Work with the Ministry of Industry, Mining and Energy to ensure that potential oil and gas development are sustainable and they will not significantly reduce the access rights of commercial fishers
- Control the release of ballast water
- Establish functioning CF to Co-management the marine fishery resources.

## 5– Institutional Structure and Development



### • **Issues:**

- Lack of responsibility
- Lack of appeal options for fishers and aquaculturists
- Lack of staff and office management within provincial and local fisheries offices
- Lack of capacity within DoF and local fisheries staff
- Role of DoF staff is not focused on client service
- Overlapping responsibilities between MAFF and other Government Ministries
- Budgetary restraints
- Lack of regional fisheries management in the Gulf of Thailand.

## 5- Institutional Structure and Development (cont.)



### • Policy:

- Promote human resource development within the fisheries sector to ensure quality service within fisheries in order to improve socioeconomic development;
- Provide training courses on fisheries and fisheries related laws to ensure awareness of all regulations and fisheries management processes;
- Encourage and promote fisheries research programme.

## 5- Institutional Structure and Development (cont.)



### • Action Plan:

- Remove opportunities for corrupt activities
- Improve transparency of DoF
- Improve the complaint reviewing process
- Define the role of DoF staff in managing Cambodia's marine fishery resources
- Provide capacity building to design a smarter, more accessible Organization

## **5- Institutional Structure and Development (cont.)**



### **• Action Plan:**

- Moving the focus of DoF field staff from disciplinary to provide better services
- Classifying Ministerial jurisdiction
- Seek for adequate funds to manage the resource
- Promote regional management and research of marine fisheries

## **6- Finance and Infrastructure**



### **• Issues:**

- Lack of budgets
- The marine areas of Cambodia are not viewed as attractive business locations
- Lack of investment controls
- Lack of control over marketing and trade
- Lack of infrastructure to support fishing activities
- Lack of processing activities

## 6- Finance and Infrastructure



### • Policy:

- Promote investment in the fisheries sector and develop the fisheries infrastructure to increase the competitive market position of the fisheries sector
- Provide support through researching and implementing affordable microfinance programme by increasing market and trade competition.

## 6- Finance and Infrastructure



### • Action Plan:

- Assist fishers and aquaculturists to develop affordable microfinance options
- Provide an ideal environment for business investment
- Conduct surveys of the fishing activities to advise investors of it's status

## 6- Finance and Infrastructure



### • Action Plan (cont.):

- Promote and controlling markets and trade
- Improve infrastructure to assist the fishing activities
- Promote the establishment of processing facilities in communities.



Thanks!

**NATIONAL POLICY AND PLANNING  
FOR MANAGEMENT OF FISHING CAPACITY  
IN INDONESIA**

Presented by:  
PARLIN TAMBUNAN  
Director of Fisheries Resources



Directorate General of Capture Fisheries  
Ministry of Marine Affairs and Fisheries

**OUTLINE**

1. Legal Aspects
2. Defining Potency of Fisheries Resources
3. Regulating Utilization of Fisheries Resources
4. Development of MCS Programs
5. Others

# 1. Legal Aspects for Management of Fishing Capacity

➤ Article No. 33, Indonesian Mother Law in 1945

➤ Fisheries Law (UU Perikanan) No. 31/2004

➤ Autonomy Law (UU Pemerintah Daerah) No. 32/2004

➤ Other Supporting Regulations, and

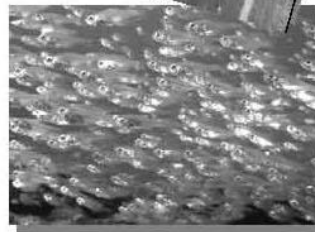
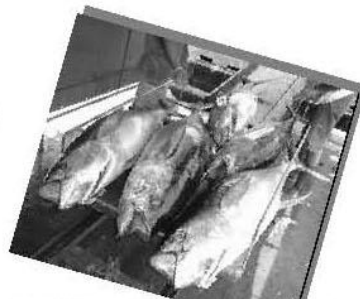
➤ International Fisheries Management Norms (UNCLOS 1982, CCRF 1995, IPOAs and others)



# 1. Legal Aspects (cont'd)

( Article 6. UU, NO. 31 TAHUN 2004 )

1. Fisheries Management within the fisheries management areas of the Republic of Indonesia is carried out to achieve the optimum and sustainable benefit, while guaranteeing the sustainability of fisheries resources
2. Fisheries Management for Capture fisheries and fish-culture should take into account adat law (custom) and indigenous knowledge, including community participation



Direktorat Jenderal Perikanan Tangkap

Departemen Kelautan dan Perikanan

# 1. Legal Aspect (cont'd)

( Article No. 7, UU NO. 31 TAHUN 2004 )

1. Fisheries Management Plan
2. Defining the potentials & allocation of fisheries resources in each fisheries management area
3. Defining Total Allowable Catch (TAC)
4. Defining types, quantity & size of fishing gears
5. Defining types, quantity, size & position of supporting fishing gear
6. Regulating areas, zones & period or seasons for fishing
7. Defining requirements or standard operational procedure for capture fisheries
8. Defining fishing vessel monitoring system
9. Prevention of pollution & degradation of fishery resources & its environment
10. Regulating size or minimum weight of fish species allowed to be caught



Direktorat Jenderal Perikanan Tangkap  
Departemen Kelautan dan Perikanan

# 1. Legal Aspect (cont'd)

- Article 65, UU No. 31/2004: Delegation of function, authority and supporting mandates from the Government to the regional government & further regulated by Government Regulation, PP No. 54/2002 concerning Fisheries Business (under revision)
- Article 18, UU No. 32/2004: Delegation Authorities to regional government on management of marine and fisheries in certain areas



Direktorat Jenderal Perikanan Tangkap  
Departemen Kelautan dan Perikanan



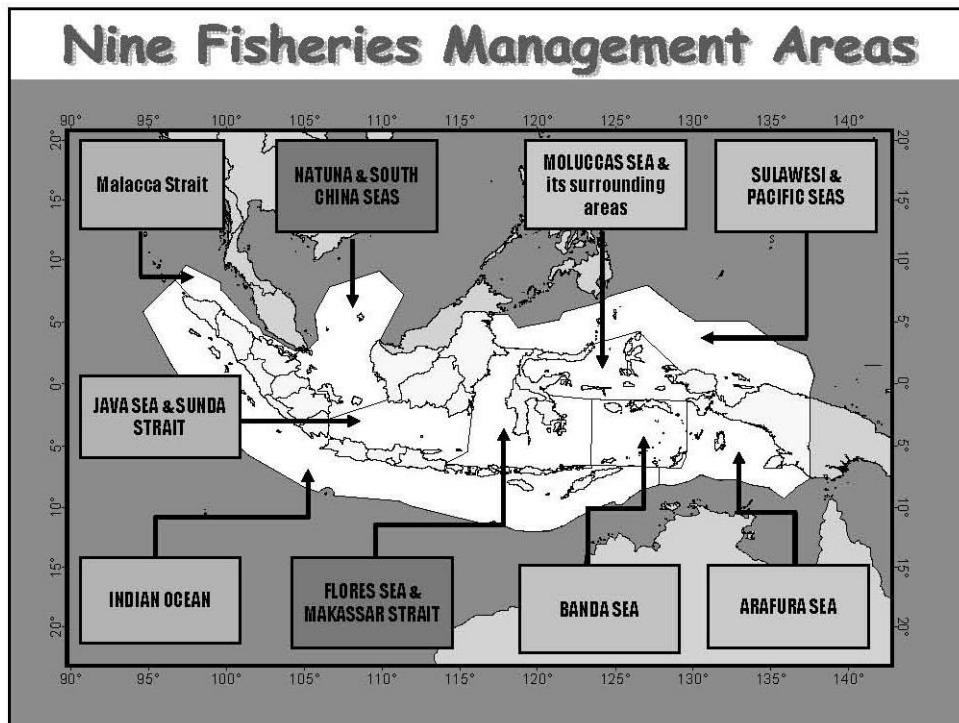
## 2. Potency of Fisheries Resources

### 1. Defining The Potency of Fisheries Resources

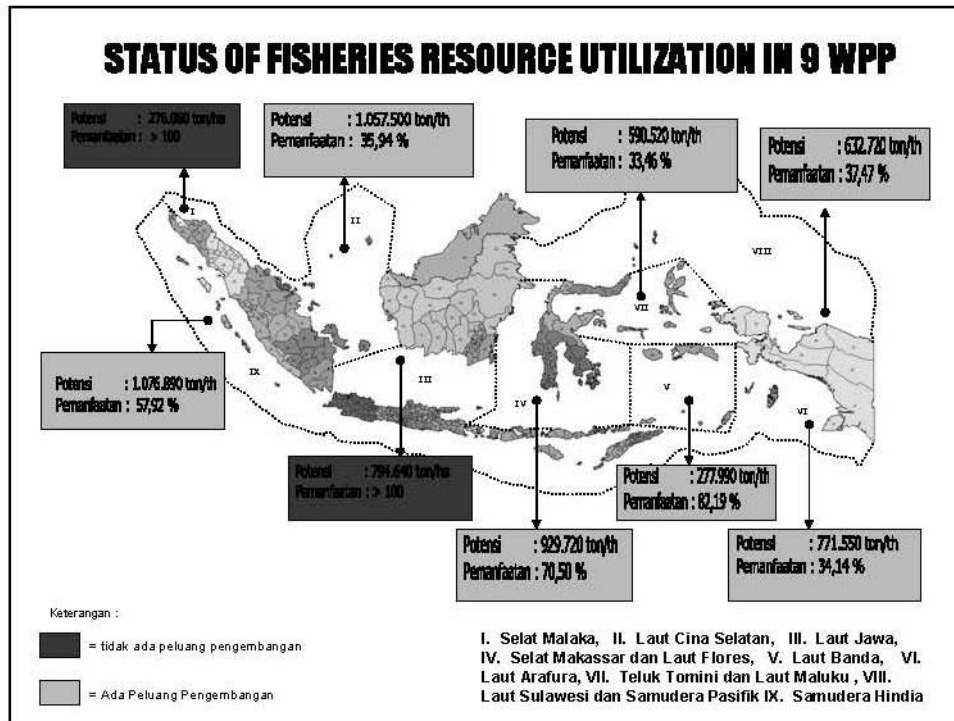
- Establishing the National Committee for Fisheries Stock Assessment
- Determining MSY thru methods of scientific researches, which also including consideration of socio-economic aspects
- Validation through FKPPS (communication forum)

### 2. Defining Total Allowable Catch (TAC)

- TAC is 80% of MSY (pre-cautionary)



## STATUS OF FISHERIES RESOURCE UTILIZATION IN 9 WPP



## POTENCY, PRODUCTION & LEVEL OF FISHERIES RESOURCES UTILIZATION IN EACH WPP

KELOMPOK SUMBER DAYA	WILAYAH PENGELOLAAN PERIKANAN								
	Malaka	Cina Sit	Jawa	L.Flores	Banda	Seram	Pasifik	Arafura	Hindia
<b>Ikan Pelagis Besar</b>									
- Potensi (10 <sup>3</sup> ton/th)	27.7	66.1	55.0	193.6	104.1	106.5	175.3	50.9	366.3
- JTB	22.1	52.9	44.0	154.9	83.3	85.2	140.2	40.7	293.0
- Produksi (10 <sup>3</sup> ton/th)	36.3	35.2	137.8	85.1	29.1	37.5	153.4	34.6	188.3
- Pemanfaatan	OE	UE	OE	UE	UE	UE	OE	UE	UE
<b>Ikan Pelagis Kecil</b>									
- Potensi (10 <sup>3</sup> ton/th)	147.3	621.5	340.0	605.4	132.0	379.4	384.8	468.7	526.6
- JTB	117.8	497.2	272.0	484.4	105.6	303.6	307.8	374.9	421.3
- Produksi (10 <sup>3</sup> ton/th)	132.7	205.5	507.5	333.4	146.5	119.4	62.5	12.3	26.6
- Pemanfaatan	OE	UE	OE	UE	OE	UE	UE	UE	UE
<b>Ikan Demersal</b>									
- Potensi (10 <sup>3</sup> ton/th)	82.4	334.8	375.2	87.2	9.3	88.8	54.9	202.3	135.1
- JTB	65.9	267.8	300.2	69.8	7.5	71.1	43.9	161.9	108.1
- Produksi (10 <sup>3</sup> ton/th)	146.3	54.7	334.9	167.4	43.2	32.1	15.3	156.6	134.8
- Pemanfaatan	OE	UE	OE	OE	OE	UE	UE	FE	OE

## POTENCY, PRODUCTION & LEVEL OF FISHERIES RESOURCES UTILIZATION IN EACH WPP

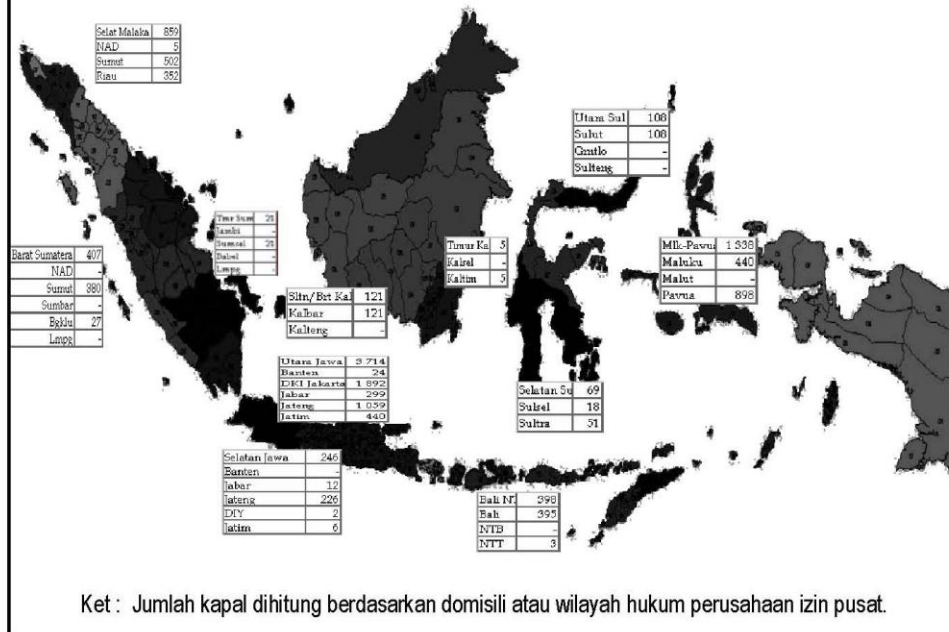
KELOMPOK SUMBER DAYA	WILAYAH PENGELOLAAN PERIKANAN								
	Malaka	Cina Sit	Jawa	L.Flores	Banda	Seram	Pasifik	Arafura	Hindia
<b>Udang Penaeid</b>									
- Potensi (10 <sup>3</sup> ton/th)	11.4	10.0	11.4	4.8	-	0.9	2.5	43.1	10.7
- JTB	9.1	8.0	9.1	3.8	-	0.7	2.0	34.5	8.6
- Produksi (10 <sup>3</sup> ton/th)	49.5	70.5	52.8	36.9	-	1.1	2.2	36.7	10.2
- Pemanfaatan	OE	OE	OE	OE		OE	OE	OE	OE
<b>Ikan Karang Konsumsi</b>									
- Potensi (10 <sup>3</sup> ton/th)	5.0	21.6	9.5	34.1	32.1	12.5	14.5	3.1	12.9
- JTB	4.0	17.3	7.6	27.3	25.7	10.0	11.6	2.5	10.3
- Produksi (10 <sup>3</sup> ton/th)	21.6	7.9	48.2	24.1	6.2	4.6	2.2	22.6	19.4
- Pemanfaatan	OE	UE	OE	FE	UE	UE	UE	OE	OE
<b>Lobster</b>									
- Potensi (10 <sup>3</sup> ton/th)	0.4	0.4	0.5	0.7	0.4	0.3	0.4	0.1	1.6
- JTB	0.3	0.3	0.4	0.6	0.3	0.2	0.3	0.1	1.3
- Produksi (10 <sup>3</sup> ton/th)	0.9	1.2	0.9	0.7	0.0	0.0	0.0	0.2	0.2
- Pemanfaatan	OE	OE	OE	OE	UE	UE	UE	OE	UE
<b>Cumi-cumi</b>									
- Potensi (10 <sup>3</sup> ton/th)	1.9	2.7	5.0	3.9	0.1	7.1	0.5	3.4	3.8
- JTB	1.5	2.2	4.0	3.1	0.0	5.7	0.4	2.7	3.0
- Produksi (10 <sup>3</sup> ton/th)	3.2	4.9	12.1	8.0	3.5	2.9	1.5	0.3	6.3
- Pemanfaatan	OE	OE	OE	OE	OE	UE	OE	UE	OE

### 3. Regulating Utilization of Fisheries Resources

#### 1. Defining Fisheries Allocation for each WPP

- Data of potency for each WPP as determined previously
- Effort data (vessel and fishing gears per WPP)
- Determine allocation for each WPP
- Production data used for comparison and finding out the status of the resources in each WPP (next figure...)

## NUMBER OF FISHING VESSEL > 30 GT ACCORDING TO COASTAL WATERS & PROVINCES



## NUMBER OF FISHING VESSEL > 30 GT ACCORDING TO COASTAL WATERS & PROVINCES

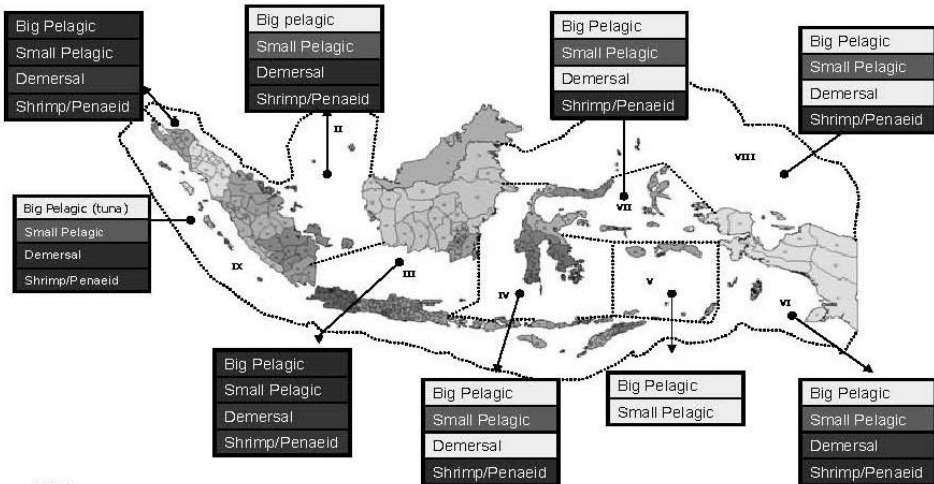
Perairan Pantai	Perairan Pantai/ Provinsi	JUMLAH (Unit)	Perairan Pantai	Perairan Pantai/ Provinsi	JUMLAH (Unit)	
Barat Sumatera	Jumlah	407	Bali-Nusatenggara	Jumlah	398	
	NAD	-		Bali	395	
	Sumut	380		NTB	-	
	Sumbang	-		NTT	3	
	Bengkulu	27		Selatan/Barat Kalimantan	Jumlah	121
Lampung	-	Kalbar	121			
Selatan Jawa	Jumlah	246	Kalteng		-	
	Banten	-	Jumlah		5	
	Jabar	12	Timur Kalimantan		Kalsel	-
	Jateng	226	Kaltim	5		
	DIY	2	Selatan Sulawesi	Jumlah	69	
Jatim	6	Sulsel		18		
Selat Malaka	Jumlah	859		Sultra	51	
	NAD	5		Utara Sulawesi	Jumlah	108
	Sumut	502			Sulut	108
	Riau	352	Gntlo		-	
	Timur Sumatera	Jumlah	21		Sulteng	-
Jambi		-	Maluku - Papua		Jumlah	1 338
Sumsel		21		Maluku	440	
Babel		-		Malut	-	
Lmpg		-		Papua	898	
Utara Jawa	Jumlah	3 714		TOTAL		7 286
	Banten	24	Ket : Jumlah perahu/kapal dihitung berdasarkan domisili atau wilayah hukum perusahaan izin pusat.			
	DKI Jakarta	1 892				
	Jabar	299				
	Jateng	1 059				
Jatim	440					

### NUMBER OF FISHING VESSEL > 30 GT ACCORDING TO FISHING GEAR

JENIS ALAT TANGKAP	Selat Malaka	Laut Cina Selatan dan Laut Natuna	Laut Jawa dan Sebagian Selat Sunda	Selat Makasar dan Laut Flores	Laut Banda	Laut Seram dan Teluk Tomini	Laut Arafura	Laut Sulawesi dan Samudera Pasifik	Samudera Hindia	Total Per Alat Tangkap
<b>Kapal Lampu</b>										<b>118</b>
PURSE SEINE PELAGIS BESAR	0	0	0	0	0	4	0	91	14	109
PURSE SEINE PELAGIS KECIL	1	0	0	0	1	3	0	5	0	9
<b>Kapal Pengangkap</b>										<b>5.395</b>
BACAN APUNG	0	2	0	0	0	0	0	0	2	4
BUBU	0	2	18	33	0	12	6	0	32	103
HAND LINE	0	0	0	0	0	3	0	1	0	4
HUHATE	0	0	0	6	10	45	3	30	7	101
PANCING CUMI	0	1	0	2	0	0	15	1	0	18
PANCING PRAWAI DASAR	0	13	8	21	2	16	48	3	41	151
PAYANG	0	16	0	0	0	0	0	0	0	16
PUKAT IKAN	106	181	0	0	0	0	794	4	36	1.120
PURSE SEINE PELAGIS KECIL	87	546	165	187	4	31	0	28	214	1.262
RAWAI TUNA	0	0	0	6	366	5	3	225	1.018	1.624
BOUKE AMI	0	33	10	29	1	0	20	1	3	96
JARING INSANG HANYUT DASAR	0	13	8	11	1	0	1	0	3	36
JARING INSANG HANYUT OSEANIK	0	28	0	1	1	0	214	9	10	263
JARING INSANG HANYUT PANTAI	0	66	15	19	1	8	52	1	19	181
LONG BAG SET NET	3	0	0	0	0	0	0	0	0	3
PUKAT UDANG	0	0	0	0	0	0	203	101	0	304
PURSE SEINE PELAGIS BESAR	0	11	0	0	0	2	1	82	13	109
<b>Kapal Pengangkut</b>										<b>872</b>
PENGANGKUT/PENGUMPUL	0	0	0	0	0	0	0	0	0	745
PENGANGKUT/PENGUMPUL GRUP	1	2	0	1	2	5	1	108	7	127
<b>TOTAL PER WPP</b>	<b>197</b>	<b>914</b>	<b>224</b>	<b>316</b>	<b>390</b>	<b>133</b>	<b>1.359</b>	<b>689</b>	<b>1.418</b>	<b>6.385</b>

Data Per Tanggal 14/02/2005

### Status of Fisheries Resource Utilization



Notes:

- = No-probability for developing (fully-exploited)
- = Warning, Strict Monitoring
- = Possible for expanded development

- I. Moluccas strait, II. South China Sea, III. North Java,
- IV. Makassar Strait & Flores Sea, V. Banda Sea, VI. Arafura Sea, VII. Tomini Bay & Maluccas Sea, VIII. Sulawesi Sea & Pacific Ocean IX. Indian Ocean

### **3. Regulating Utilization... (cont'd)**

- 2. Utilization methods shall Consider:**
  - a. Regulations on fishing lanes and allowed fishing gear in each lane (defined by Ministerial decree)**
  - b. Management Authorities (delegation of authority to the regional government based on UU 32/2004 & PP 54/2003)**
  - c. Fisheries Resource Management Plan in each WPP**
  - d. Other supporting regulations such as trawl ban, mesh size limitation and etc.**

### **3. Regulating Utilization... (cont'd)**

- 3. Several implementing Policies related with utilization of fisheries resources:**
  - a. Allocation will be given if the fisheries resources is under fishing (based on TAC)**
  - b. Fisheries resource management shall be carried out by rationale ways among others thru limitation of fishing effort, close fishing ground (DPI) & season, transformation DPI from high to less density of WPP or to WPP**
  - c. Controlling & restructuring of WPP and development of fisheries management plan in each WPP**

### **3. Regulating Utilization... (cont'd)**

- d. Optimization of fisheries resource management in waters area bordering with other countries**
- e. Strengthening FKPPS roles both in national & regional levels, minimizing violations & conflicts among users in DPI and balancing between allocation & utilization of fisheries resources**
- f. Identifying, empowering, streamlining and implementing local wisdoms into formal regulations & rules**

### **4. Developing MCS Programs**

- 1. Implementing of MCS Program**
  - Installation VMS at fishing vessel**
  - Establishing Observer Programs**
  - Establishing Inspection Group which involving community (POKWAMAS)**
  - others**
- 2. Several Policies related with MCS:**
  - Intensive monitoring of fisheries resource utilization which well planning & involving fisheries experts in its assessment**

## **4. Developing MCS... (cont'd)**

- **Government Institution shall carry out the control of fisheries which involving community participatory**
- **Evaluation on policies & implemented management measures will be conducted periodically as inputs for further policy formulation**
- **Determining joint consensus in fisheries resource utilization to avoid conflicts among fishermen**

## **5. Other Management Aspects**

**Other aspects considered for development of management for fishing capacity:**

- 1. Improving fisheries statistic, information & indicator programs**
- 2. Strengthening Co-Management Programs**
- 3. Human Resource Development: establishing HRD Center under MMAF (latest development)**
- 4. Improving fisheries facilities & infrastructure**
- 5. Stock enhancement programs**
- 6. Others: including NPOA fishing capacity that will be drafted in 2007**



TERIMA KASIH

THANK YOU

**APPENDIX**

# PROBLEMS AND CONSTRAINTS

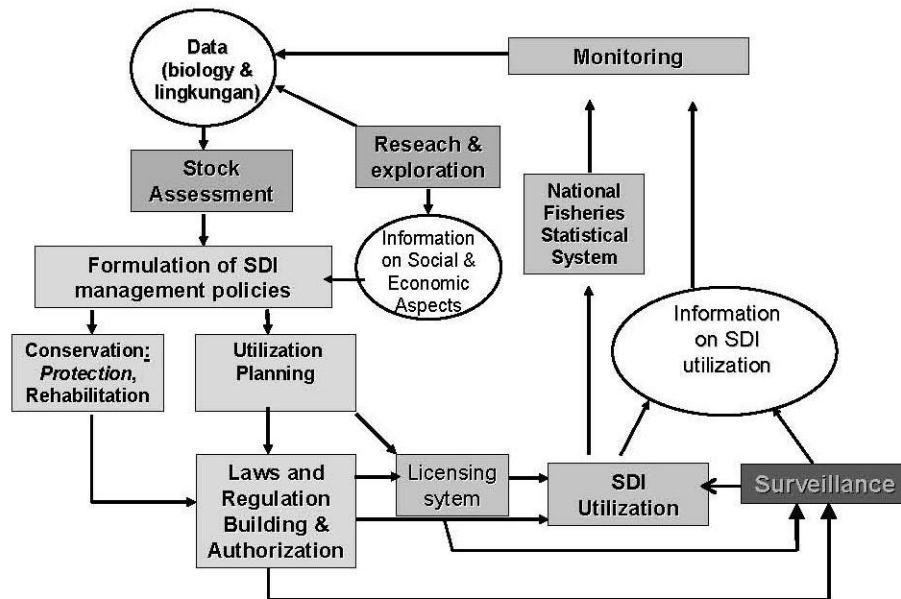
## ➤ Problems:

- Resource & Ecosystem degradations
- Different fishing technologies & structure of fishing fleets
- Un-optimized small scale fishing enterprises
- Un-optimized fishing landing facilities & its hygienic & sanitation systems
- Weakness of law enforcement & other limitations of data & information system and interpretation/implementation of policies

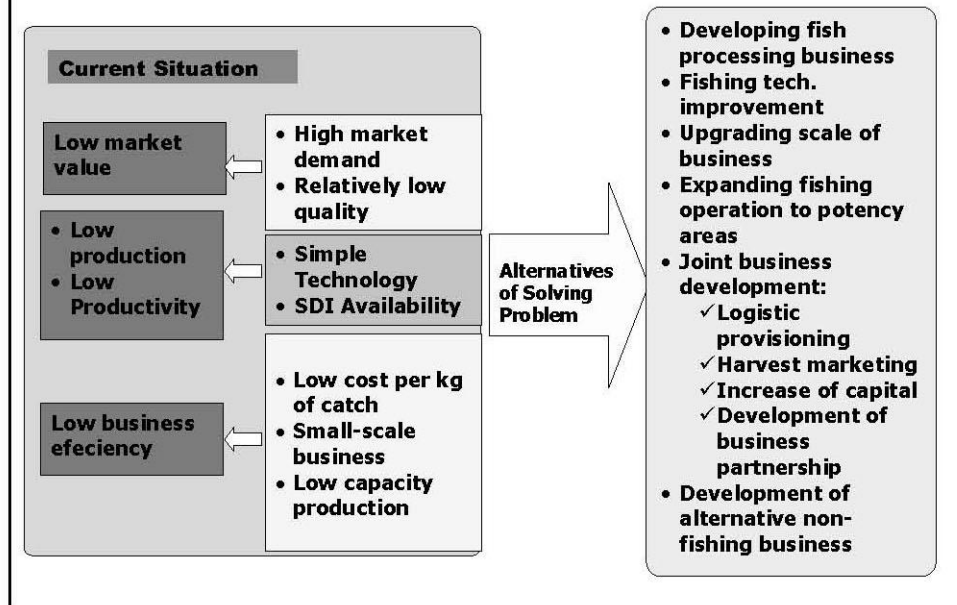
## ➤ Constraints:

- Low quality and education of human resources
- Fish seasons
- Insufficient of post-harvest processing & technology
- Other safety and security disturbances over the seas

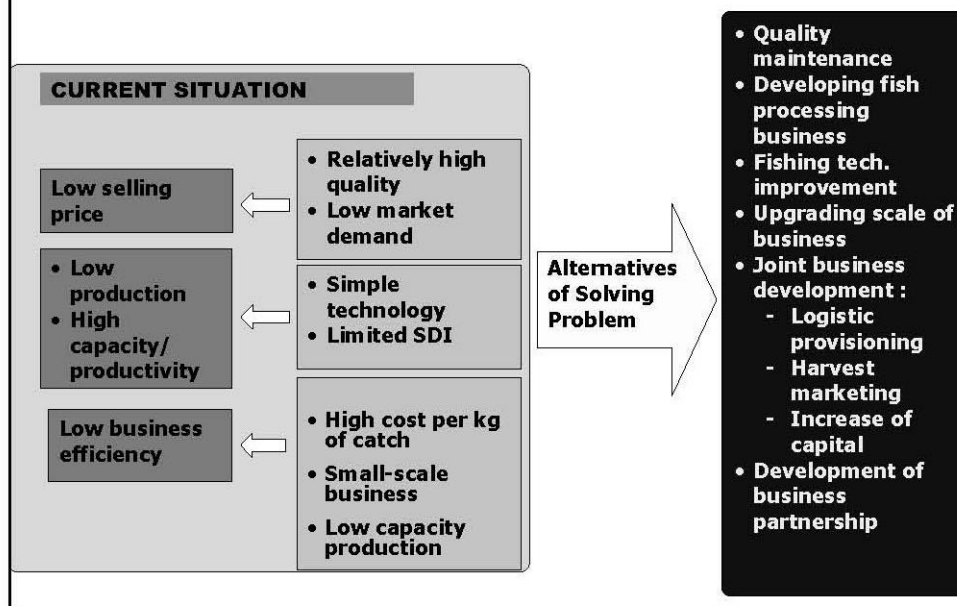
# MECHANISMS FOR FISHERIES RESOURCES (SDI) MANAGEMENT



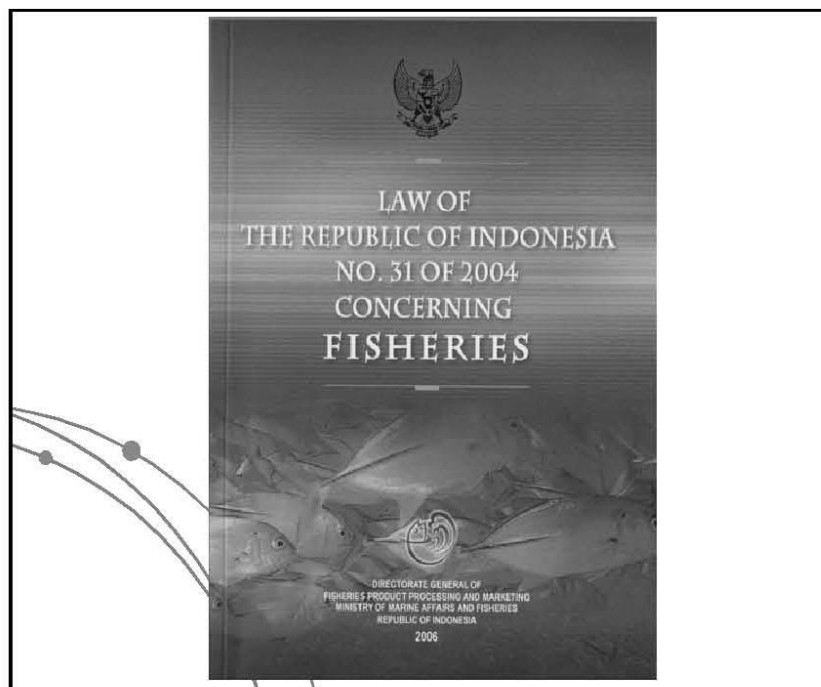
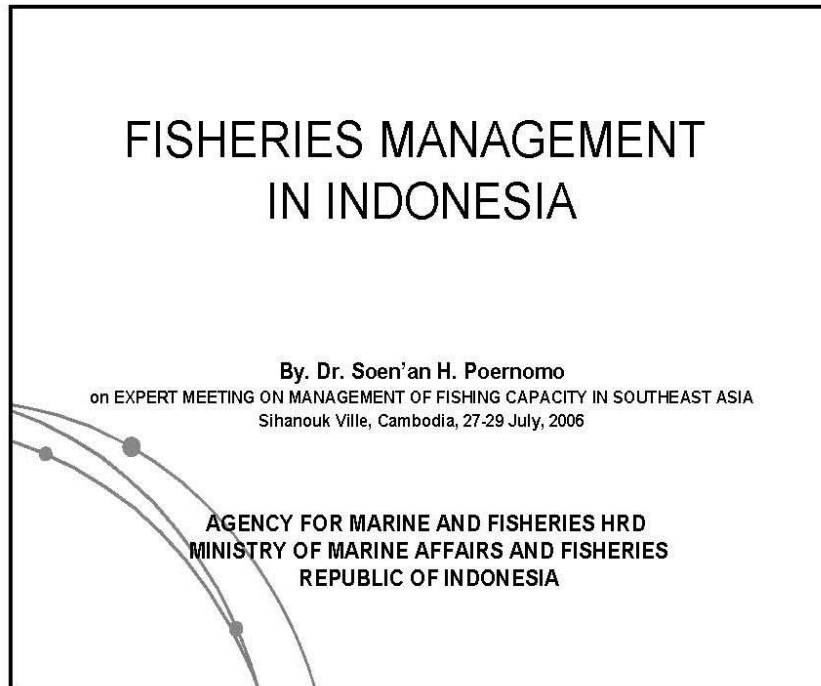
## Fishing Scheme in marketing areas of fully-exploitation



## FISHING AT REMOTE PRODUCTIVE AREA



**Fisheries Management in Indonesia**



### Substance of Law of RI No. 31 of 2004 concerning Fisheries in Supporting CCRF

1	Consideration	Philosophy of Responsible Fisheries Management and Fisheries Resource Conservation
2	Glossary	Definition of fisheries management, conservation of fisheries resources
3	Chapter 1 Article 2	Implementation of Fisheries Management ensure the preservation of fisheries resources and areas for aquaculture
4	Chapter III Article 6	Fisheries management policy -Guaranteeing the sustainability of fisheries resources -consideration of local wisdom and indigenous knowledge including community participation

### Substance of Law of RI No. 31 of 2004 concerning Fisheries in Supporting CCRF (*continue....*)

5	Chapter IV Article 8	-Prohibition using substances which could harm or endanger the sustainability of fisheries resources
6	Chapter VI	Fisheries information and statistical data system
7	Chapter VIII	Research and development of fisheries
8	Chapter IX Article 57-59	Education, Training and Fisheries Extension
9	Chapter XII	Fisheries Control
10	Chapter XIII	Fisheries Tribunal

## **NATIONAL POLICY IN SUPPORTING THE CCRF IMPLEMENTATION**

- Law No. 31/2004 concerning fisheries
- MMAF Decree No. 58 /2001 concerning community monitoring system on fisheries resources management
- MMAF Decree No. 60 /2001 concerning utilization regulatory of fishing vessel in IEEZ
- MMAF Decree No. 03/2002 concerning fishing log book and fish transportation
- MMAF Decree No. 10/2002 concerning guideline for integrated coastal management
- MMAF Decree No. 15/2004 concerning guideline for Andon Fishermen
- *Etc.....*

## **NATIONAL POLICY IN SUPPORTING THE CCRF IMPLEMENTATION (*continue...*)**

- Fisheries Tribunal has been Established in 5 area;
  1. North Jakarta
  2. Medan (North Sumatera)
  3. Pontianak (West Kalimantan)
  4. Bitung (North Sulawesi)
  5. Tual (Ambon)
- The judges of the Fisheries Tribunal shall consist of one career judge and 2 ad hoc judges
- 16 Judges still in process be selected and they follow education and training

## **NATIONAL POLICY IN SUPPORTING THE CCRF IMPLEMENTATION (*continue...*)**

- **Bilateral agreement among Indonesia and other countries in ASEAN Regional or International on utilization of the Indonesian territorial waters and IEEZ**
- **Law concerning Coastal Management (*in process*)**



**National Policy and Planning for Management of Fishing Capacity in Thailand**



**National Policy and Planning for  
Management of Fishing Capacity  
in Thailand**

By

Somying Piumsomboon, Ph.D.  
Deputy Director-General, DOF, Thailand

Presented at the Expert Meeting on Management of Fishing Capacity  
in Southeast Asian  
27-29 July 2006, Sihanouk Ville, Cambodia

**Situation & Problems**

- CPUE ↓
- Species composition ↓
- Smaller size
- Trash fish



## Policy on Fishing Capacity Reduction - 1

- Speed up the registration of all fishers
- Control fishing in accordance with availability of resources
- Provide new occupational choices in order to increase alternative work opportunities/improve income
- Motivate fishers to adjust fishing gears from non-selective towards conservation oriented

*National Policy and Planning for Management of Fishing Capacity in Thailand*

3

## Policy on Fishing Capacity Reduction - 2

- Accelerate setting up of fishing zone boundaries appropriate for harvesting marine resources
- Reduce the number of fishing boats

*National Policy and Planning for Management of Fishing Capacity in Thailand*

4

## Guidelines for the Management of Fishing Capacity - 1

- Ascertain the real no. of fishing boats and bring under control the construction of new boats
- Set up fishing boat capacity control program
- Review/identify fishing zones as a measure for controlling fishery

*National Policy and Planning for Management of Fishing Capacity in Thailand*

5

## Guidelines for the Management of Fishing Capacity - 2

- Reduce no. of fishing boats
  - Voluntary retirement
  - Create incentives
  - Rules and regulations
  - Buy back
- Database of marine resources/research
- Effective monitoring, control and surveillance
- Monitor and evaluate the program on management of fishing capacity

*National Policy and Planning for Management of Fishing Capacity in Thailand*

6

## Implementation Issues

- Purchase of inactive or low active vessels
- Re-investment/re-entry
- Capital stuffing
- Program financing

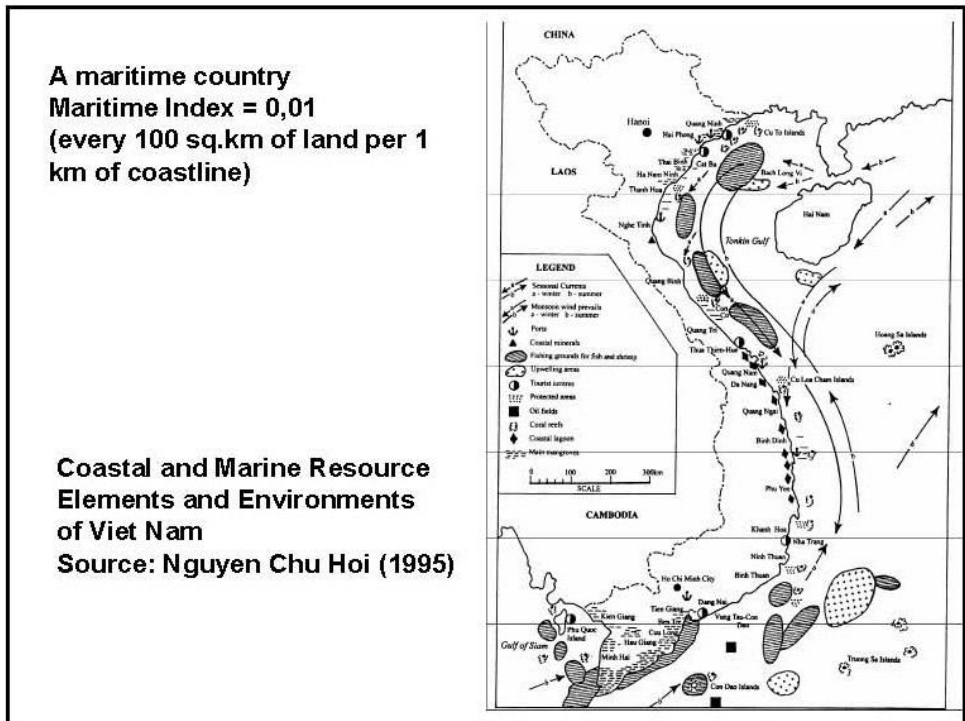
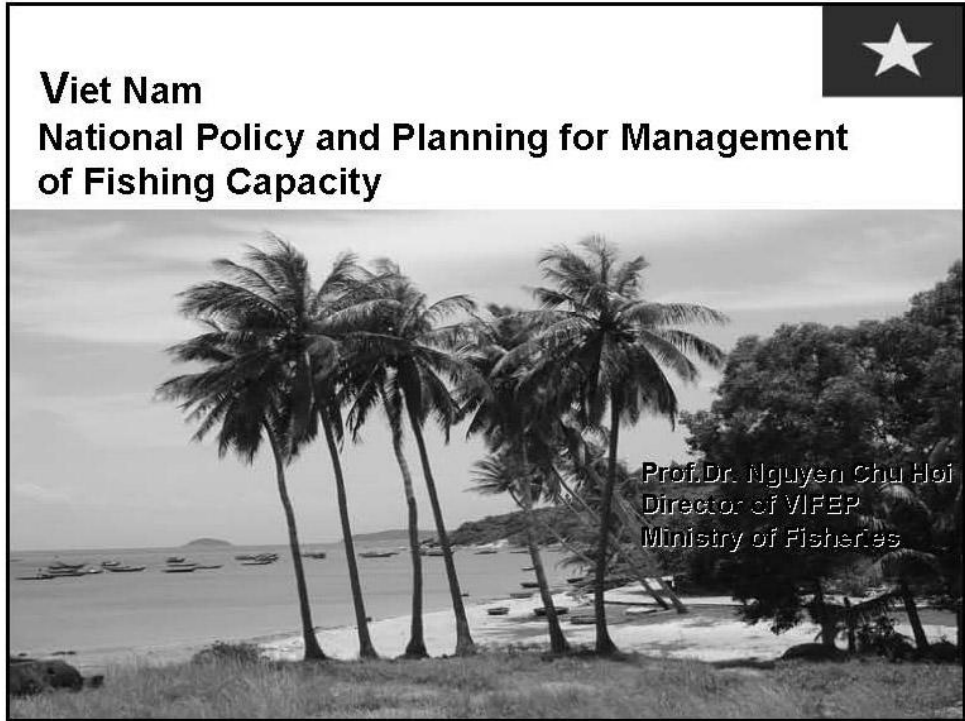
## Approaches/Possible Solutions - 1

- Avoid the re-use of decommissioned vessels
- Apply fishing license fees to extract resource rent and contribute to fisheries management costs
- Introduce right-based management system
- Attach conditions to the use of buy back funds by former vessel owners

## Approaches/Possible Solutions - 2

- Create incentives for investment into alternative livelihoods/occupational and geographic mobility

Vietnam: National Policy and Planning for Management of Fishing Capacity



## Large seas

- Land area: about 331.700 km<sup>2</sup>
- EEZ is 3 time more than land area



## ■ Long coast

- Coastline: over 3260 km (except island's coastline)

## A lot of islands



## Basic Information

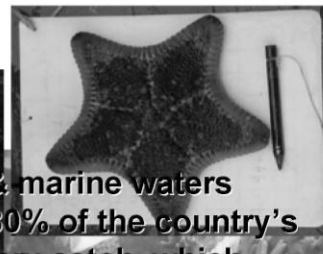
- Population in 2005:  
over 82 mill. persons
- 29 coastal provinces,  
125 coastal districts



Some 50% of major cities  
is in coastal areas with 40%  
total population.

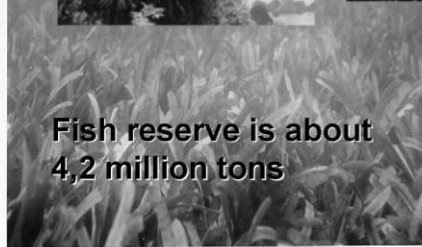
## Rich in biodiversity

- Coastal and marine habitats/ecosystems
- About 11.000 species are recorded, among 2.038  
species of marine fish.



Coastal & marine waters  
provide 80% of the country's  
total fishery catch, which  
contributes to over US\$2  
billion worth of GDP exports

Fish reserve is about  
4,2 million tons



## Fisheries in Viet Nam

- Fisheries sector is an ecosystem-based economy and essential to Vietnam's growing economy development: 2,7 bill. USD in 2005
- About 92.000 fishing boats & ships, among over 10.000 of offshore. About 85% of total boats/ships with less 90CV
- Total catch over 1,7 mill. tones per year
- A strong and sustainable fisheries sector is a highest priority of Viet Nam in the next 10 years: 4 bill. USD in year 2010



Towards a Representative MPA System in Vietnam

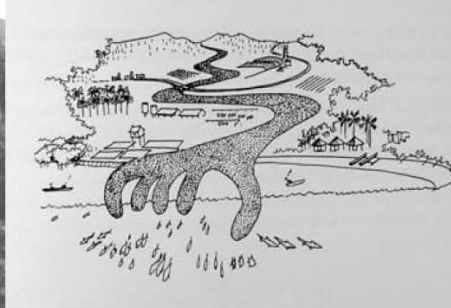
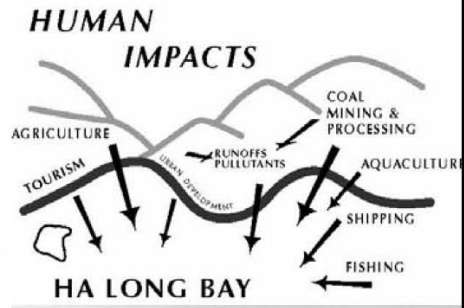
## Challenges

- Loss of biodiversity
- Degradation of marine ecosystems, coastal habitat destruction





## Land-based impacts



## Coastal disasters and oil spills



Coastal and marine pollution and red tide



**Overfishing and overcapacity  
of coastal aquaculture**

**Multi-use of coastal  
resources.**

**Sectoral focus in policy and management**

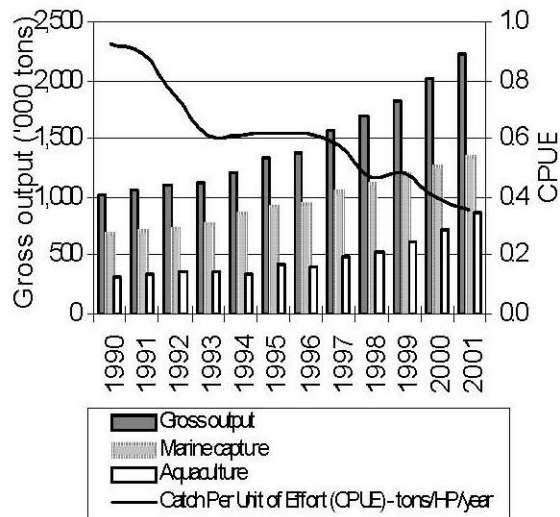


**Threats**

- Catch-per-unit-effort (CPUE) decreased sharply during the same period (0,92 in 1990 down to 0,36 in 2004).
- Extensive and growing use of destructive fishing methods have caused reduction of marine fish resources



## Key Fisheries Trend in Viet Nam in years 1990-2001



Source: Ministry of Fisheries, 2002

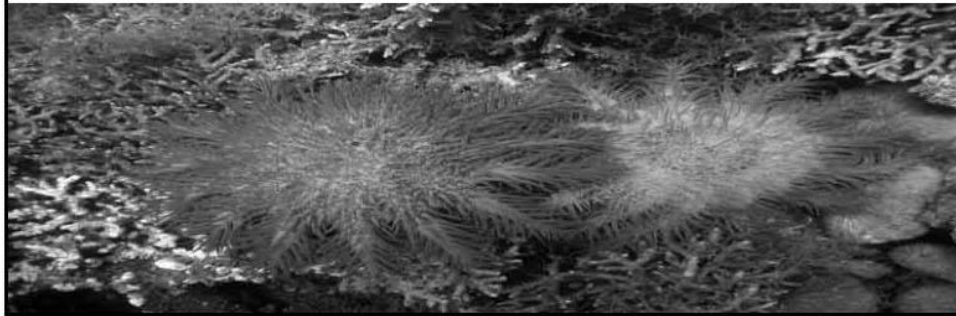
## Vietnam's fisheries policies

- The first official decree on fisheries issues was the Law of Fishing for Colony nations in 1926.
- Ordinance of fishing and aquatic resource conservation (1989). But not enforcement
- Law of Fisheries (2004) of which Chapter III focuses on fishing (include key principles, offshore fishing, inshore fishing, fishery resources survey/research, fishing zone management, fishing permit/ withdraw and relevant conditions, reporting and logbook, rights and obligations of institutions and individuals in fishing, and prevention and mitigation of natural hazard in fishing.



## Supportive Policies for Fisheries Sector

- Agenda 21 of Viet Nam on Sustainable Development (2004)
- National Biodiversity Action Plan (BAP) have been also developed and enacted by Gov. in 1995, including MPA priority.
- Regarding coastal and marine concerns, Viet Nam has adopted the key laws such as: Law of National Boundaries (2003), Law of National Security (2004 and in force 2005), Code of Navigation (1990 and amended 2005), Law of Oil and Gas (1993 and amended in 2000), Law of Environmental Protection (1993, 2005), and Order of Tourism (1999), Order of National Boundary Gards, including Coast Gards (1997) and Order of Marine Police (1998).



## National Planning for Management of Fishing Capacity

- Reducing number of fishing boats and ships into 50.000 in 2010
- Marine space zoning and recentralization into local level for fishing and management
- Keep fishing production at 1,8 mill. tons toward 2010 and beyond
- Establish & manage effectively the MPAs system
- Development of small-scale coastal fisheries co-management
- Research in changing the destructive gears into others un-destructive



A national system of 15 MPAs is established to create “spillover effect”



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## ... Management of Fishing Capacity

- National project on comprehensive resurvey of marine biodiversity and resources
- Improving national fisheries information system and warning of sea-fishmen safety with natural hazards
- Completion of national fisheries policy system to meet requirement of international fisheries/sea policies



- Improving regional, international cooperation activities in marine fisheries to undertake global commitments
- Coastal marine fisheries management in the framework of ICM and ecosystem-based
- National program on marine fisheries development toward 2015 and vision 2020

## Institutional Landmarks

- Continue administration reform in the state management for fisheries sector, focusing on management decentralization down to localities.
- A National Steering Committee of MPAs was established (2004) with intersectoral coordination mechanism.
- A MoFi Steering Committee of Agenda-21 of fisheries sector was also established (April, 2006) with inter-agency coordination mechanism.
- MoFi coordinating mechanism for the management of fishing capacity is that: RIMF (provide scientific baselines as policy inputs) – VIFEP (consultation) – MoFi leadership (policy making/ approval) and NADAREP (implementation).



## Key lessons learned

Inter-  
sectors/  
stakeholders



- Need a strong legal framework and enforcement
- Need more participation/ involvement of local fisher community
- Need right-based management
- Fisheries plans have to link with poverty reduction/ improvement for poor fishermen
- Restructuring marine fishing activities toward responsible and sustainable fisheries
- Development of human resources for marine fishing

## Some Landmarks



- Currently, only two protected areas officially protect marine and coastal ecosystems (Cat Ba and Con Dao National Parks)
- The pilot-MPA in Hon Mun and Cu Lao Cham are as formal MPAs
- Two others expected to begin soon in Phu Quoc and Con Dao islands
- All MPA sites will provide different models of management, focusing more on local community-based

**For our common benefits from fish!**





**Directions and Challenges in Reducing Capacity of Trawlers and Push Netters in the Gulf of Thailand**

**Direction and Challenges in Reducing Capacity of Trawlers and Push netters in the Gulf of Thailand**

Mala Supongpan

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The Department of Fisheries has implemented the Fishing Capacity of push netters since 1997 and will be set Policy and Plan of Action for Fishing Capacity Management (trawlers and push netters reduction) under the project FAO/GCP/RAS/199/SWE within the year 2006.

The followings are details for

1. Push netter reduction that has been implemented
2. Reduction in trawl fishery will be implemented

### 1. Push netter reduction during 1997 - 2003

Year	Province	Number Quit	Budget (Baht)	Modification
1997	Songkhla	45	39,120	Trammel net, shrimp trap
	Phuket	60	1,627,350	Shrimp GN, cockle culture, trammel net
1998	Phuket	10	879,680	Fish cage culture
	Phang-Nga	65	1,109,000	Cockle and oyster culture
	Satun	59	240,000	Trammel net, snapper GN, sand whiting GN
	Krabi	20	80,000	Trammel net
	Pattani	62	1,260,000	Trammel net and swimming crab GN
1999	Satun	53	276,620	Trammel net
	Ranong	107	2,280,000	Trammel net and fish cage culture
2000	Trang	157	1,620,000	ND

### 1. Push netter reduction (continued)

Year	Province	Number Quit	Budget (Baht)	Modification
2001	Krabi	76	815,000	Weighted fish net, Indo-Pacific GN, Trammel net, Bamboo stake trap
2002	Satun	22	493,974	Trammel net, Grouper culture,
	Ranong	58	759,010	Mussel culture (hanging type), mud crab trap, soft shell crab, white snapper culture
	Phuket	40	920,337	Bottom long line, weighted fish net, sardine FN, red snapper culture
	Trang	140	2,513,517	White snapper and grouper culture, crab GN
2003	Chumphon	30	96,400	Increase mesh size for crab trap
	Ranong	15	360,600	Fish cage culture, red snapper cage culture
	Phang-Nga	91	300,000	Increase mesh size of crab trap
	Satun	151	2,832,700	set net, red snapper cage culture, crab trap
	Trad	11	3,5000	Increase mesh size of crab trap
	Nakorn Sri Thammarat	40	420,000	Gill net
<b>Total</b>		<b>1,312</b>	<b>19,310,388</b>	

## 2. Reduction in trawl fishery

Objective and focus

*Overall objective*

“to manage excess fishing capacity”

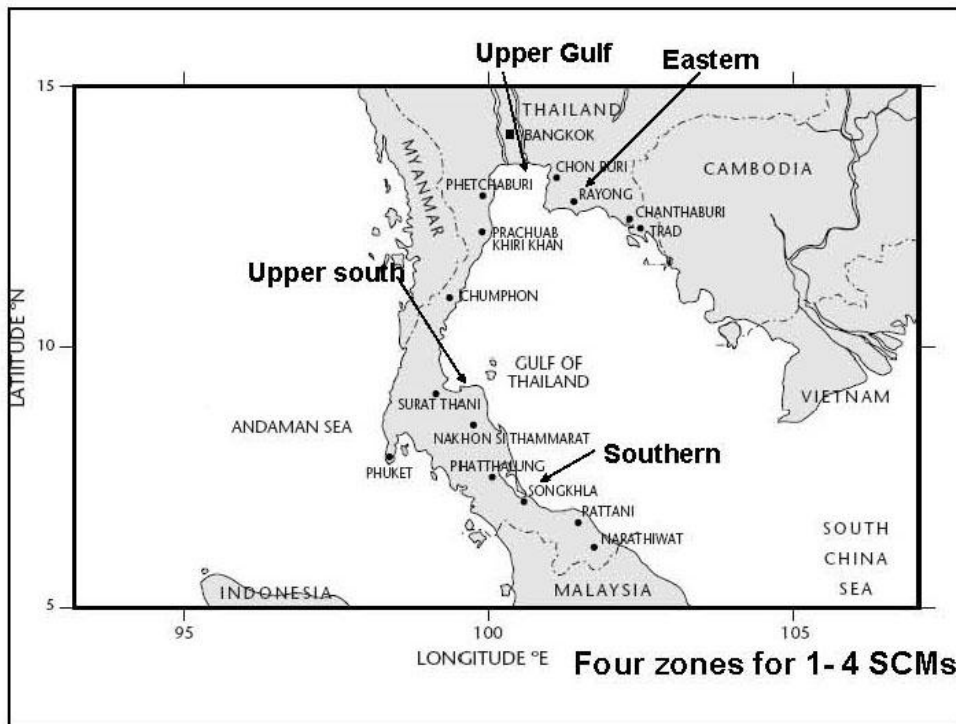
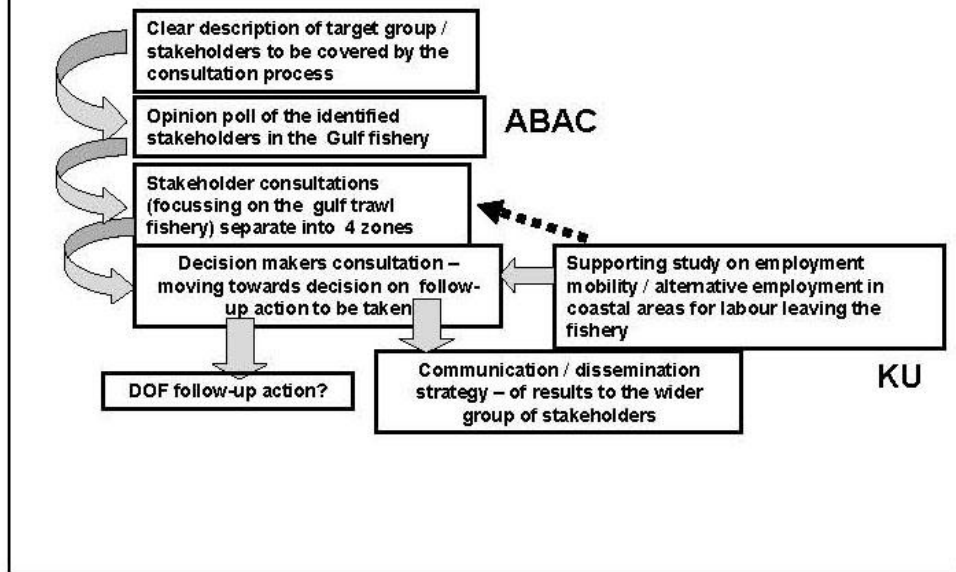
*Project focus:*

“Reduction of capacity in the trawl fishery of the Gulf of Thailand”

## How to address overcapacity?

- **Actions that will be taken in the near future.**
- **Freeze the number of vessels (including freezing capacity)**
- **Restrict specific gear**
- **Strengthen the licensing scheme.**
  
- **Strengthening information for management – info needs on possibilities for management intervention**
- **What are alternative jobs/livelihoods, labour mobility and potential impacts?**
- **What would be cost benefit of a ‘buy back’ scheme**
- **Investigate possibilities rights-based fisheries/community-based fisheries**

## Consultation process for capacity reduction



## 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).

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)

## 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

### **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 and can be 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.

### **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

### **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.

Push netters  
First SCM

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

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



Third SCM                      Push netter

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

Fourth SCM                      Push netter

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

## Next step

**The High Senior Consultation Meeting** will be held in Bangkok on 25 August 2006. The total participants will be 100 persons from private sectors and leader of fisher groups, high senior level officials and provincial fishery officials, university instructors, ABAC and KU.

**The expected output** will be the update National Policy including Plan of Action that can be implemented for excess fishing capacity reduction of trawl and push net fisheries, finally the Plan of Action is accepted by concerned stakeholders



**The Vice Governor of Songkhla province  
– Welcome Remark, 4<sup>th</sup> SCM**



Register to the 4<sup>th</sup> SCM



Trawl group

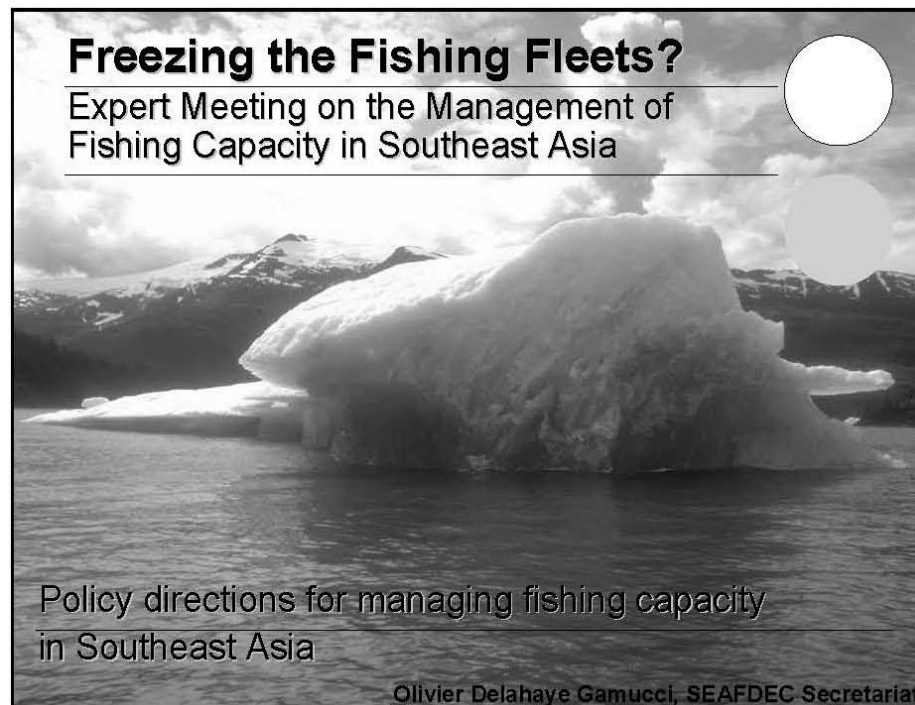


Pus net group

The End  
Thank you



**Policy Direction for Managing Fishing Capacity in Southeast Asia:  
Freezing the Fishing Fleets**



**Freezing the Fishing Fleets?**  
Expert Meeting on the Management of  
Fishing Capacity in Southeast Asia

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

## Fishing Capacity



With a Global Perspective

## The roots of overcapacity



1. Property rights – i.e. open access regime
2. Inappropriate Policies
3. Governance and institutions
4. Increasing populations
5. Technological developments

## Overcapacity, cause of...



- Overfishing and resulting decline of fisheries resources
- Rising fishery conflicts (between nations down to communities)
- Reducing food security and increasing vulnerability of the poor/coastal communities
- Eventually, the collapse of a fishery/fisheries

## **Fishing capacity:**



The ability of a fleet of vessels to catch fish, which is based on:

1. The number of fishing vessels in the fleet;
2. The size of each vessel;
3. The technical efficiency of each vessel
4. The time spent fishing.

## **International fora:**



- **FAO: IPOA Capacity** (high sea fisheries, developed countries)
- **WTO: Subsidies** (good and bad subsidies)
- **RFMO and States:** recognizing the diversity of fisheries from region to region, especially the specificities of tropical fisheries

## Managing fishing capacity:



*Not all are applicable everywhere. None of them is recognized to be successful if used single-handedly.*

- **Controlling fishing effort:**

1. Regulation on inputs:

- Limiting entry to fisheries (licensing, limited access regimes)
- Setting-up gear/area/temporal restrictions

2. Regulation on outputs

- Setting-up quota/catch limits

*• Inputs and outputs control always requires a cost-effective MCS system*

## Managing fishing capacity:



- **Working with the human factor:**

1. Enhancing awareness at all levels
2. Involvement and participation of stakeholders

- **Incentives**

1. Taxes (which correct the market signals)
2. Removing subsidies that lead to overcapitalization



## Current status and efforts (FAO):



- Large-scale fisheries are stabilizing in number (but not in terms of capacity)
- Smaller-scale fisheries, still largely unchecked, continue to expand
- Importance to *develop indicators that would help to understand the status and trend of fisheries* in the different parts of the world
- Global approach (IPOA) vs. regionalization

## Controlling capacity in the less developed regions of the world

- It does not consist in removing the poor from fishing and make way for the richer commercial vessels.
  - The poor are competing for a resource for their basic survival and livelihoods;
  - The “commercials” can make good profits with it.
- Yet, any attempt to control capacity by focusing only on the larger fishing operations is doomed to failure
  - in developing countries, mounting overcapacity is often simply caused by a growing number of small-scale fishermen rather than new technologies or capital stuffing.

# Fishing Capacity



With a Southeast Asian Perspective

## Tropical Fisheries



- Domination of small-scale multigear and multispecies fisheries
- Key values like the maximum biological productivity, MSY may not be practically calculated
- Even so, overcapacity is seen as the largest management problem threatening fisheries sustainability in the region
- With little alternative sources of employment, reducing fishing capacity is a difficult challenge

## Step 1 in managing capacity



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

## Step 1 in managing capacity



- 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.

## Issues linked with managing fishing capacity in the region:

- Alternative livelihood
- Fisheries as safety net
- Awareness building

*Yet, there is no way to start policy consideration for achieving sustainable fisheries if such arguments must be directly fully accommodated.*

## Starting to act now

- 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

## Managing Fishing Capacity in SEA: What options do we have?

*Do we have any, considering regional socio-economical, technical and financial situation?*

- Inputs control is clearly a no-no in SEA
- Outputs control has potential:
  - Limited entry is an obvious solution for commercial fisheries, but is also required for subsistence fisheries
  - Delimiting exclusive zones can work to some extent, if developed
- There is a need to enhance awareness on the issue
- Stakeholders must be involved and actively participate to the management measures

Decentralize

Need to define some kinds of rights

## Innovative approaches

- The progressive decentralization of fisheries management & introduction of rights-based fisheries = a two-fold solution for small-scale fisheries:
  - They build awareness and a sense of responsibility amongst the local stakeholders.
  - They reorient the incentives influencing fishing communities with less racing for the fish and more longer-term sustainable resource use.

## Innovative approaches



- ASEAN-SEAFDEC member countries recognize the importance of community participation when limiting access to fisheries resources (cf. Millennium Conference)
  - Some local communities have been progressively empowered to make the difficult decisions concerning fishery capacity and the sharing of incomes from coastal fisheries.
  - Where a co-management approach is to be used, fisheries authorities will have to decide precisely what rights and responsibilities are being transferred to each group, to which institution, what support it will provide, and about how the management of fishing capacity will be made effective.

SEAFDEC project on “Strengthening Small-scale Fisheries Management through the Promotion of Rights-based Fisheries and Co-management Concepts”

## 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

## Policy considerations: Where to start?



- Registration and freezing of the larger-scale commercial fishermen has been initiated
- This must be extended to all users, including small-scale fishermen that altogether catch far more fish in the region than their commercial counterparts.
- Three approaches can be considered to do so:
  1. To gradually introduce rights-based fisheries management regimes,
  2. To understand the state and trends of fisheries using indicators, and
  3. To control/freeze the number of fishing boats.

## Freezing the fishing fleets?



- 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

## Freezing the fishing fleets?



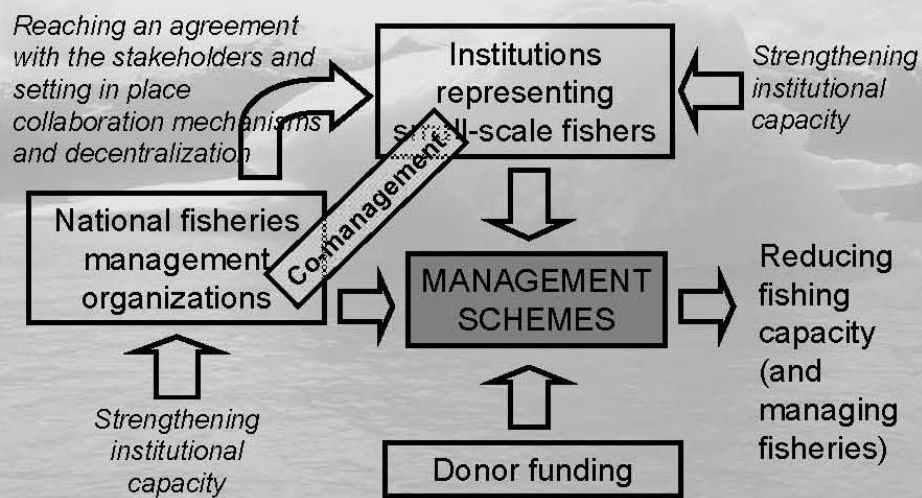
### Who has done it?

- Malaysia – has attempted to limit the number of boats of specific categories to its current level
- Thailand – has experimented with the freezing of the trawling fleet

## Addressing the issue: a Framework



Controlling capacity for small-scale dominated fisheries





## Managing Fishing Capacity in SEA

### STEP1

Each government fishery management agency introduces appropriate registration of all large-scale and small-scale fishing boats as well as fishermen (notably through 2);

### STEP2

Co-management is promoted in communities to raise awareness and a sense of responsibility amongst local stakeholders, with definition of delimited areas;

### STEP3

Complete freezing of any new registration after a certain period of time. The agency must reach an agreement with the fishermen, stating that only registered boats and fishermen can go fishing from now on;

### STEP4

Fishermen are encouraged to collaborate with existing MCS enforcing authorities in reporting illegal fishing;

### STEP4

Fishermen are encouraged to collaborate with existing MCS enforcing authorities in reporting illegal fishing;

### STEP5

Using indicators, government and communities measure the level of exploitation of fisheries case by case, and adapt fishing capacity further on this basis.

### STEP6

Simple but enforceable conditions to access fishing rights at the community level are established, compliance can be left for the community to manage, with proper support from the government.

**Promoting the use of Indicators for Sustainable Development and Management of Capture Fisheries in the ASEAN Region: Issues and Challenges**

**Promoting the Use of Indicators for Sustainable Development and Management of Capture Fisheries In The ASEAN Region: Issues and Challenges**

BY  
Rosidi Ali

SEAFDEC/MFRDMD

## INTRODUCTION

**Some definitions of Sustainable Development:**

1. "Development that meets the need of the present generation without compromising the ability of future generations to meet their own need." (WCED, 1987)
2. "The management and conservation of the natural resources base, and the orientation of the technological and institutional change in such a manner as to ensure the attainment of continued satisfaction of human needs for present and future generation. Such sustainable development conserves (land, water, plants and animals) genetic resources, is environmentally non-degradation, technologically appropriate, economically viable and socially acceptable" (FAO Council, 1988)
3. "Using, conserving, and enhancing the community's resources so that ecological process, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased" (Council of Australia Governments, ESD, 1992)

# INTRODUCTION

Issues of Sustainable Development In Fisheries:

- Fishing is an important activity throughout the world, contribute significantly to human needs and welfare
- Many fisheries are recently overfished and/or fishery resources have been depleted.
- Human induced change in ecosystems, including caused by fishing, jeopardizing the need and welfare of current and future generation.
- Thus, steps in ensuring the sustainability fisheries is crucial.

## **Conventional fisheries management**

- **Based on biological science**
- **Stock assessments based on single species**
- **“Top-down Approach”**
- **High risk of non-sustainability**

## **Indicators are support tools for Sustainable Development and Management**

- ✓ **Indicators describe the condition of fisheries at a particular time and over time**
- ✓ **Signal threats to sustainability**
- ✓ **Link objectives to management measures**

## **Promoting The Use Of Indicators in The ASEAN Region**

One of the Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region adopted at the Millennium Conference held in November 2001.

*Formulate guideline to promote the use of practical and simple indicators for multi-species fisheries as a substitute for classical fisheries management models within the national fisheries management framework, with particular regard to facilitating timely local level fisheries management decisions*

A project entitle “Identification of Indicators for Sustainable Development and Management of Capture Fisheries in ASEAN Region” has been approved.

## Project Background

- Lead Department – MFRDMD
- Lead Country – Malaysia
- Duration – 9 years (2002 – 2010)
  - Phase I: 2002 – 2005
  - Phase II: 2006 - 2010
- Main activities:
  1. Technical consultations and meetings
  2. Implementation and monitoring of pilot projects in participating countries
  3. Human capacity development
- Main Output:
  1. Regional Guidelines
  2. Proceedings, reports and related publications

## OBJECTIVES

1. To introduce the use of indicators for fisheries development and management of capture fisheries in the ASEAN region.
2. To prepare regional guideline on the use of indicators for fisheries development and management for capture fisheries in the ASEAN region.
3. To promote the use of indicators for fisheries development and management of capture fisheries in the ASEAN region.

## Achievement Of Phase I

Three RTCs, One TWGM, One Core Group Meeting and One Regional Conferences (jointly organized with ALMRV) had been successfully conducted.

Pilot Projects in 5 member countries (Brunei Darussalam, Indonesia, Malaysia, the Philippines and Thailand) had been successfully carried out.

A Regional Guideline on the Use of Indicators For Sustainable Development and Management of Capture Fisheries has been adopted

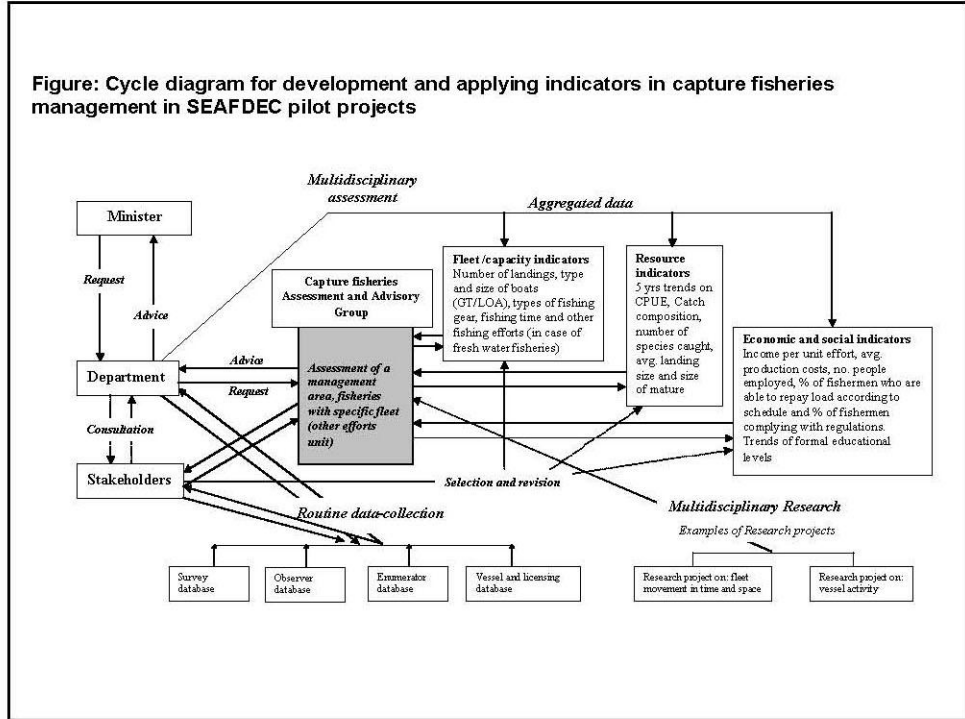


## The Contents of The Guidelines

The Guidelines elaborates the following main topics:-

- I. **Regional Common Understanding of Indicators** – this section explains how “indicators” is perceived in the ASEAN regional context – not a new definition of the terminology. The explanation also includes close linkage with fisheries policy and management.
- II. **Importance and Roles of in the Use of Indicators** – this section outlines the roles of stakeholders in the development and use of indicators as well as how the consultation and participation of stakeholders should be promoted.
- III. **Development of Indicators** – this section provides basic elements, criteria and development cycle of indicators as well as interrelationship of respective components.
- IV. **Use of Indicators** – this section elaborates on the issues and consideration that need to be taken into account when using indicators.
- V. **Development of National System to Use Indicators** – this section outlines basic elements of a national system for using indicators, system development process, and linkage between indicators and supporting data and fishery statistics.
- VI. **Follow-up Actions** – this section suggests actions to be taken by the ASEAN member countries and organizations such as SEAFDEC for future development and promotion of indicators in the ASEAN region.

**Figure: Cycle diagram for development and applying indicators in capture fisheries management in SEAFDEC pilot projects**



## FOLLOW-UP ACTIONS TO PROMOTE THE USE OF INDICATORS

- It is strongly recommended that practical implementation of 'indicators' should be further promoted to support fisheries management in the ASEAN region. Appropriate steps to incorporate the application of indicators into the national management framework should be identified and conducted including familiarization on the use of indicators for fisheries management to the stakeholders.
- Along this line, further exchange of experience and expertise in the application of indicators among countries in the region should be promoted. International/regional organizations including SEAFDEC should provide further technical support in the application of indicators as well as promote sharing of experience and raise up the issue to high-level authority to demonstrate the applicability and benefits to improve management of fisheries towards sustainable development concepts. This includes promotion on the implementation of this Guidelines and development of capacity building.

## ISSUES AND CHALLENGES

### 1. The use of “indicators” in the fisheries management in this region is not new. What is needed is repacked, not just rebranded

- The issue should be focuss on how to improve in using the indicators so that they can be more affective management tool for sustainable fisheries.
- It need clarify on a process to identify, develop and use of indicators
  - Bottom-up approaches vs. Top-down approach
- Thus it need follow the Guidelines properly on how to identify, develop and use the indicator

## ISSUES AND CHALLENGES

### 2. The participations of stakeholders need to be strengthening, as the concept is more toward bottom-up approach and sustainable indicators play an important role as a medium of communication means among the stakeholders.

- The purpose of an indicator is to enhance communication, transparency, effectiveness and accountability in fisheries management.
- The mechanism in choosing the sustainable indicators should be through the consultation of Stakeholder.
- It is important to ensure that participation in the consultations of stakeholder are representative of all interested and related parties.



## ISSUES AND CHALLENGES

3. No specific indicators for all fisheries. Each fisheries have to identify and develop their own indicators
4. The need for proper training has also been highlighted by the pilot project implementers. This should be given higher consideration in the next phase. Experts in this region, especially the implementers of pilot projects will be mobilized to produce better training module and inputs.
5. The need for member countries to give higher priority to implement this concept followed by good financial support has been recognized has the major contribution to the success of implementing the concept in this region.
6. There is a need for continuous promotion on use of this concept in this region to ensure a good understanding and awareness among the stakeholders.




## CONCLUSION

- Although the first phase of the process to introduce and use of indicators for sustainable development and management of capture fisheries in this region has been accomplished, it is not the end of the story.
- The member countries should further adopt and implement the use indicators in the national management framework to ensure the success of the next phase.
- The countries which have experience in implementing the project at pilot scales, should further implement it at larger scale, to be a model for other countries.
- SEAFDEC as the regional body for the development and management of fisheries in this region need to continuously monitor, coordinate and supervise the implementation of this concept in the region.

## “Fish Flights over Fish Rights” in Southeast Asia: Implications for Managing Overcapacity in Fisheries

people • science • environment • partners

**“Fish Fights over Fish Rights” in Southeast Asia: Implications for Managing Overcapacity in Fisheries**




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

SEAFDEC - Experts Meeting on Management of Fishing Capacity in SEA, 27-29 July 2006, Cambodia

people • science • environment • partners

**Presentation Outline**



- Background & Framework
- Fisheries Conflicts, Non Traditional Security Issues based on the 3 Case studies and Lessons Learned
- Policy Recommendations from the Regional Workshop
- Future Plans & SSF Assessment and Management

## 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*).

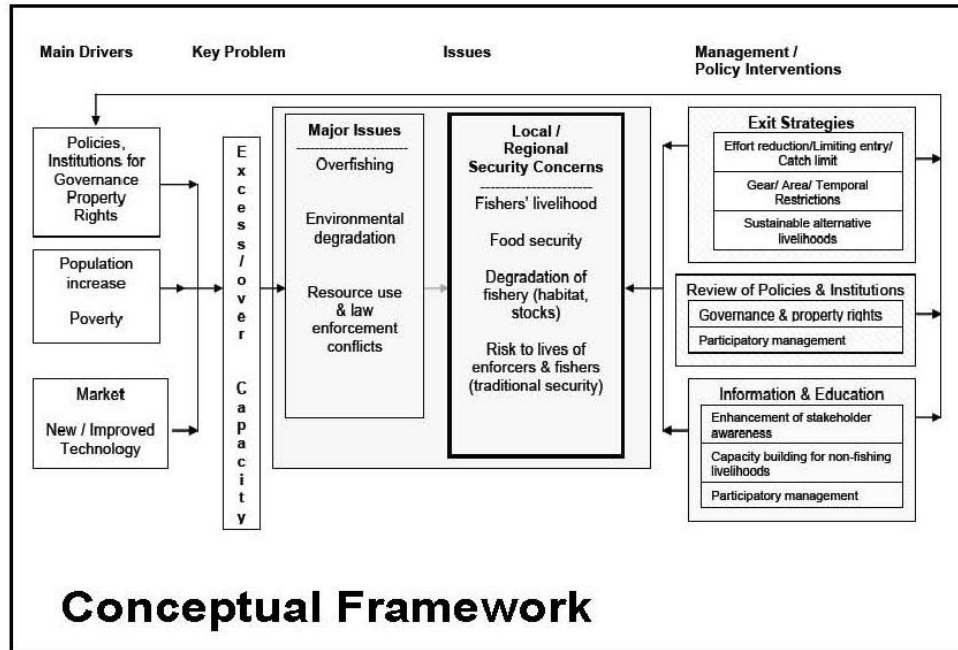
Source: Bennett (2000)




“Fish Fights over Fish Rights” is about conflicts in fisheries

## Objectives of the study

- Develop broad framework for addressing approaches for reducing overcapacity in SE Asia
- Examine where fisheries conflicts may arise
- Provide plans to ameliorate these conflicts and its role in reducing conflicts and enhancing national/regional security



people • science • environment • partners

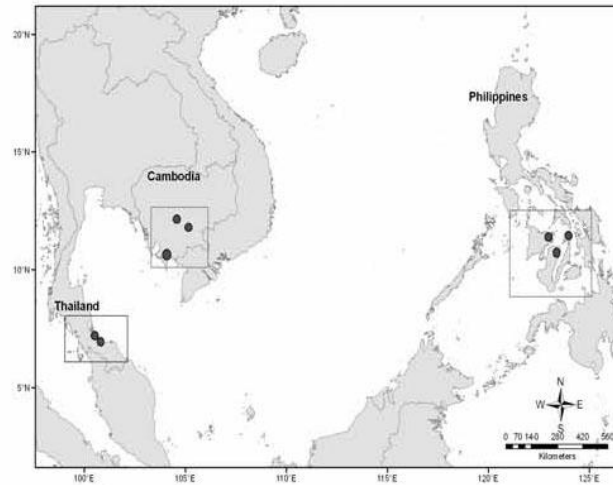


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## Methods

- Identification of prevalent fisheries conflicts and their origins in Cambodia, the Philippines and Thailand
- Surveys and case studies in 3 sites per country & national workshops
- Framework development and assessment of exit strategies
- Regional workshop & synthesis

## Location of 8 Study Sites



## 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 I	Who controls the fishery	e.g. access issue
II	How the fisheries is controlled	enforcement issues
III	Conflicts between the fishery users	small- vs large-scale fishers
IV	Conflicts between fishers and other resource users	tourism vs conservation vs industrial dev't
V	Conflicts between fishers and non-fishery issues	corruption, politics

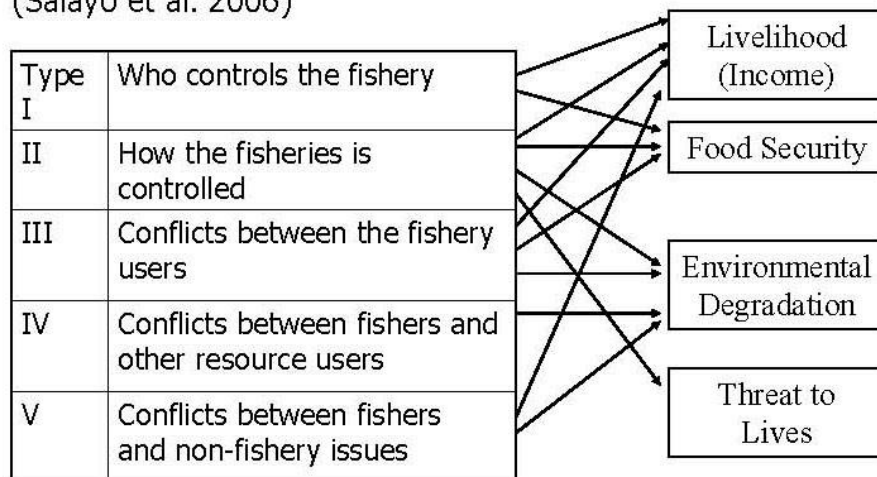
Source: Bennett et al. 2001

Based on these typologies, we have documented the conflicts in Cambodia, the Philippines and Thailand as follows...



## Typology of Conflicts & Security Concerns

(Salayo et al. 2006)





## 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)



## Indicators of overfishing and overcapacity

Attribute/Measure	Cambodia	Philippines	Thailand
Increasing number of fishers or fishing effort	<ul style="list-style-type: none"> <li>•5-6 times per week (no change but increased fishing hours)</li> </ul>	<ul style="list-style-type: none"> <li>•Relative increase in number of fishers</li> <li>•Fishing days per month (15-26 days)</li> <li>•Expected for longer time fishing to fish farther</li> </ul>	<ul style="list-style-type: none"> <li>•Fishing days per month: 20-25 days (Natub district, anchovy falling net); 10 – 15 days (Bo Daeng, mackerel gillnet)</li> </ul>
Decreasing CPUE or fisheries production	<ul style="list-style-type: none"> <li>•CPUE decreased from 20.9 kg to 3.7 kg (average catch = 17.5 kg)</li> </ul>	<ul style="list-style-type: none"> <li>•No change in CPUE</li> </ul>	<ul style="list-style-type: none"> <li>•CPUE decreased, e.g., 64 to 22 kg/trip (mackerel gillnet), 1,000 to 700 kg/boat/day (anchovy falling net)</li> </ul>
Use of more efficient or destructive gear	<ul style="list-style-type: none"> <li>•Increase length of gillnets (100-m to 500-m)</li> <li>•Fish traps from 1-2 units to 10-20 units (Kandal province)</li> </ul>	<ul style="list-style-type: none"> <li>•Use of destructive gears</li> <li>•Encroachment of commercial fishers e.g., Danish seines and purse seines in municipal fishing grounds</li> </ul>	<ul style="list-style-type: none"> <li>•Use of light during night fishing for anchovy</li> </ul>
Species composition changes (size or value)	<ul style="list-style-type: none"> <li>•Relative size of fish catch decreasing</li> </ul>	<ul style="list-style-type: none"> <li>•Decrease of high value fish species in catch</li> <li>•Relative size of fish catch decreasing</li> </ul>	<ul style="list-style-type: none"> <li>•Dominant species changes from big fish to small fish (from research trawl surveys)</li> </ul>



## Reactions of respondents to exit strategies

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



## Key Lessons....

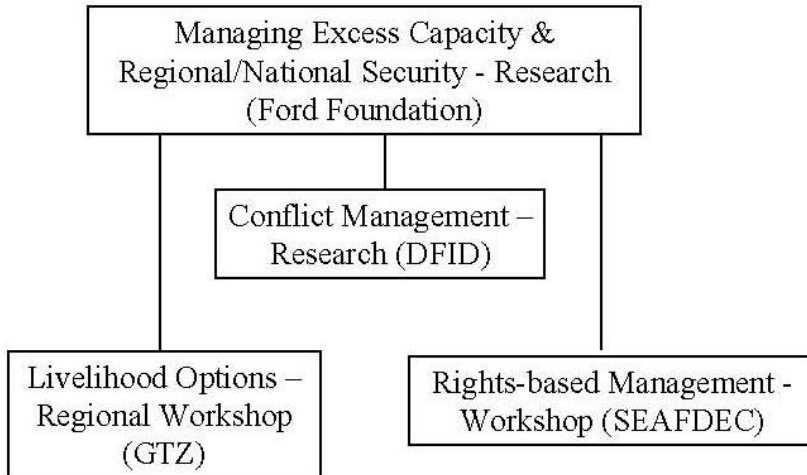
- All conflicts have varying underlying or root causes
- Each conflict has corresponding threats or impacts
- Conflicts may produce some losers and winners
- Conflicts have security implications (livelihoods, food security, habitats and fish stocks)
  
- Need for review & updating of existing laws &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





## Links to other Initiatives

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## 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





## 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

- Build capacity of institutions in all levels of governance
- Develop coordination and partnerships among stakeholders
- Facilitate community organizing and development
- Act as key partner 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 capacity reduction (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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**FISHERIES**  
**RESEARCH**

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

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**Abstract**

Asia is an important region in terms of fish trade representing nearly 50% of global fish production. The region's coastal fisheries play a critical role in ensuring food security and providing livelihoods, particularly for poorer sections of the community. This paper addresses a regional initiative to address rights issues covering Bangladesh, India, Indonesia, Malaysia, the Philippines, Sri Lanka, Thailand and Vietnam, addressing institutional, legal, regulatory components of these coastal fisheries. The outputs of this initiative are presented in the next four pages of the volume of Fisheries Research. The assessments have highlighted five outstanding regional issues: coastal fisheries resource use, security, displaced, historical and economic, livelihoods in increasing throughout the region. These are symptoms of the lack of effective management of fishing capacity in the region.

The 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 viable production and sustainable levels in that potential economic and social benefits from fisheries can be realized. Strategies aimed to be country- and fishery-specific, and should focus on the development of effective access and property rights regimes. For instance, countries need to explicitly allocate rights between small-scale and industrial fisheries, where resources are shared. This will require an understanding of the trading between the sector in terms of economic cost and also the economic, social and local benefits from each sector.

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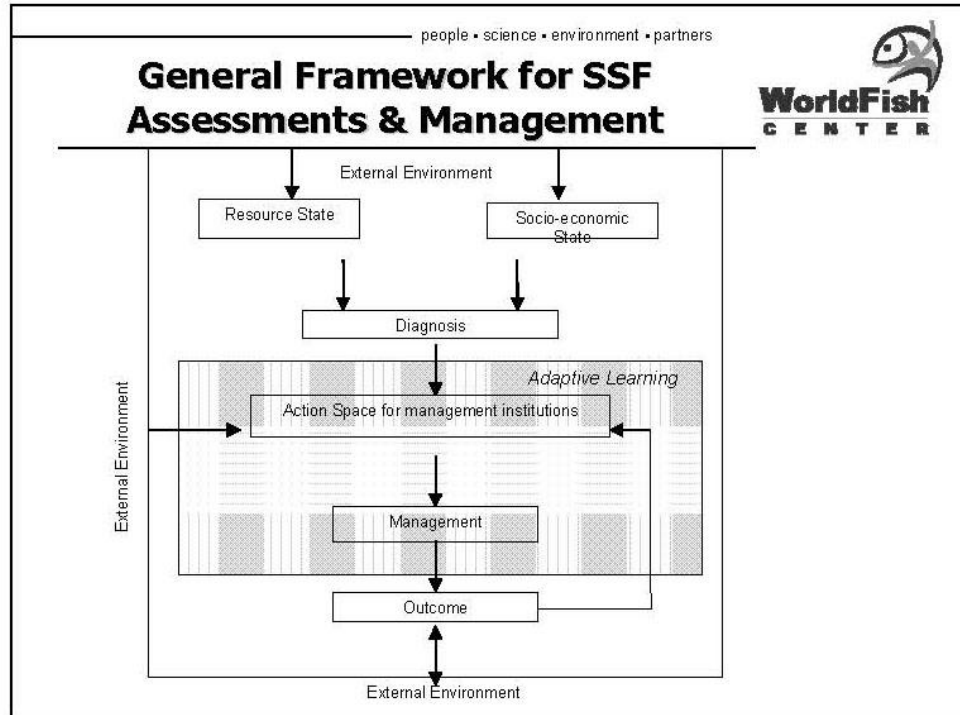
**Keywords:** Asia; Coastal fisheries; Community fisheries; Fisheries management



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## FAO/WorldFish SSF Project: Objectives

- Develop new tools for assessing sustainability
- Provide new guidelines for making the lives of people dependent on SSF more resilient
- Improve the capacity of the countries to assess and manage their fisheries



- people • science • environment • partners
- ## FAO/WorldFish SSF Project: Work Packages


- 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

Review on Management of Fishing Capacity in Southeast Asia

## Management of Fishing Capacity in Southeast Asia: “Now” & “Next”

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

Expert Meeting on Management of Fishing Capacity in Southeast Asian  
27-29 July 2006, Sihanouk Ville, Cambodia

1

### “NOW” – 1

- Why overcapacity?
  - “Open access” regime without effective regulatory and MCS system
  - Increasing demand for fish and change of fish consumption preferences (i.e. direct consumption and processing & canneries)
  - Migration of population to coastal areas
  - Introduction of modern fishing techniques and technology
  - Degradation of habitats and resources
  - Unplanned development of aquaculture

2



## “NOW” – 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

3

## “NOW” – 3

- 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
- Some forms of national policy and plan exist
- Different degree of readiness and management capacity among countries

4

## **“NOW” – 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

5

## **“NOW” – 4**

- Common approaches to MFC are:
  - Strengthening communities through better organization and participation
  - Freezing and control number of fishing vessels
  - Development of supplementary/alternative livelihoods for coastal communities
  - Habitat management and stock enhancement
- Missing link to urban-based fisheries

6

## **“NOW” – 5**

- Policy & technical advices available from projects and initiatives → need actions on the ground...but how?

7

## **“NEXT” – 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 and structures → harmonization of frameworks and actions in management areas (for ecological boundaries)
- Exchanging information/experience through policy dialogues, networking and partnership

8

## “NEXT” – 2

### NPOA-MFC

- Multi-dimensional effects of NPOA
  - 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

9

## “NEXT” – 3

### NPOA-MFC

- Issues to be addressed
  - Uniqueness and diversity of fisheries in the region
  - 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”

10

## **“NEXT” – 3**

### NPOA-MFC

- Issues to be addressed (cont'd)
  - “Freeze” the current no. of fishing fleets as a basis for reduction strategies
  - Balance of and inter-relationship between SSF and LSF (commercial/subsistence, urban/rural)
  - “Mobility” of FC considering resource, social and economic dimensions

11

## **“NEXT” – 4**

### NPOA-MFC

- Issues to be addressed (cont'd)
  - Diversifying means of livelihoods
  - Total boats/gear vs. active boats/gear
  - Capacity building beyond “managers” and “fishers”
  - Pilot areas/cases → a nation wide implementation

12

## “NEXT” – 4

### NPOA-MFC

- Issues to be addressed (cont’d)
  - Policy targets that put pressure to fisheries
  - MFC in the context of rehabilitation from natural disasters
  - Economic/market integration → affects fishing capacity
  - Use of subsidies and overcapacity

13

## “NEXT” – 5

### NPOA-MFC

- Packaging policy and technical advice into guidelines for future reference
- Capacity building and technical supports to complement national efforts in NPOA implementation and sharing of experience

14

## **“NEXT” – 6**

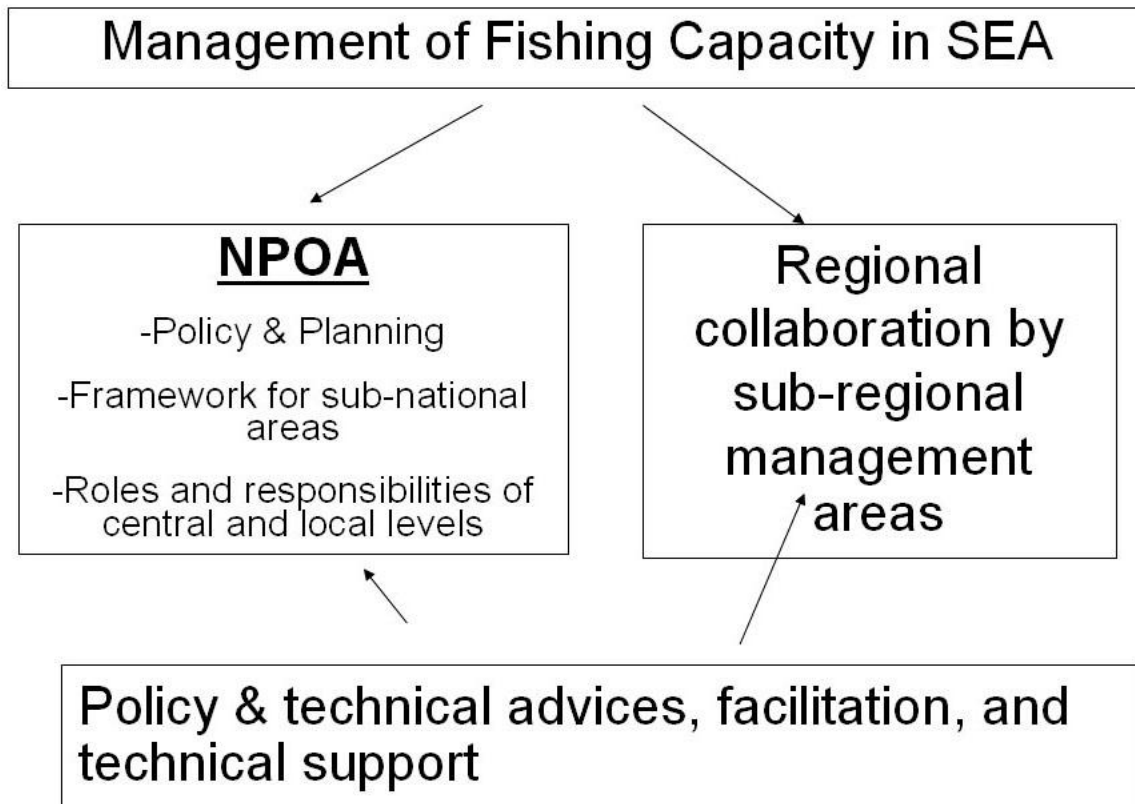
### MFC through Management Areas

- Ecological areas beyond geo-political boundaries
- Facilitation of transboundary arrangement
  - Local and national roles
  - Information gathering and harmonization
  - Networking and dialogues
  - Capacity building and technical supports
  - Regional supply of fish workers/migratory workforce

15

**Results of Discussion: Group I**  
**Regional Collaboration by Sub-Regional Management Areas**

**I. Suggested framework of regional collaboration by sub-regional management areas for management of fishing capacity in Southeast Asia**



**II. Suggested regional collaboration by sub-regional management areas**

Suggested Regional collaboration by sub-regional management areas	Institutions Involved	Existing Initiatives	Project Areas/Topics
Gulf of Thailand (Cambodia, Malaysia, Thailand, and Vietnam)	SEAFDEC, UNEP, ASEAN, FAO/RAP, NACA	SEAFDEC (Sida, Japan), ALMRV, Wetland Alliance, UNEP/GEF/SCS, WFC, IDRC, JICA, FAO (Sida, TCP), DANIDA	<ul style="list-style-type: none"> <li>• adaptive management</li> <li>• livelihoods, habitat management</li> <li>• fisheries conflicts</li> <li>• policy &amp; institutions</li> <li>• co-management and user-rights</li> <li>• information</li> </ul>



			gathering <ul style="list-style-type: none"> <li>• alternative livelihoods → with linkages to overcapacity issues</li> </ul>
<u>Malacca strait</u> (Indonesia, Malaysia, and Thailand) and Andaman Sea (Indonesia, Malaysia, Myanmar, and Thailand)	SEAFDEC, BOB-IGO, JIRCAS, ASEAN, FAO/RAP	??	??
<u>Sulu or Celebes Sea</u> (Indonesia, Malaysia, and Philippines)	??	??	??
<u>South China Sea</u>	??	??	??

### III. Suggested Steps for Regional Collaboration by Sub-regional Management Area

- Support development and implementation of NPOA-Capacity
- Provide a platform for discussion on “management of fishing capacity” among countries and institutions involved.
- Develop concept for management of sub-regional management areas among countries.
- Develop collaborative framework

### IV. Suggested Steps for Sub-regional Management Areas

- Develop and implement an action plan including
  - Capacity building
  - Information gathering
  - Collaborative research
  - Plan for management actions (responsible agencies, actions and scheduling)
- Mobilize existing mechanisms → UNEP/GEF/SCS and SEAFDEC, and other relevant projects/initiatives

**Results of Discussion: Group II**  
**Issues and its HRD Requirements to Support Management of Fishing Capacity**

Issues	Actions	HRD Needs
<b>Database available</b>	<ul style="list-style-type: none"> <li>• Stock Assessment</li> <li>• Determine unit of capacity (by country) - LOA, GT, HP, etc.</li> <li>• Socio-economics</li> <li>• Review existing measures and regulations</li> </ul>	<ul style="list-style-type: none"> <li>√ (data analysis)</li> <li>√</li> <li>√</li> </ul>
<b>Freezing and Control of fishing vessel</b>	Moratorium on new license issued	
<b>Reduce fishing capacity</b>	<ul style="list-style-type: none"> <li>• Prioritize fisheries (critical resources-demersal resources)</li> <li>• Improve Management Schemes <ul style="list-style-type: none"> <li>○ Control the use of technology that enhance capacity</li> <li>○ Prohibit transfer of license</li> <li>○ Encourage cost saving technology and eco-friendly technology</li> <li>○ Increase license fee</li> <li>○ Improve law enforcement <ul style="list-style-type: none"> <li>▪ higher penalty for fisheries offend/violations in the fisheries law</li> <li>▪ coordination of agencies involved in issuing license (importation of boat, building of new boats, licensing agency to fish)</li> </ul> </li> </ul> </li> <li>• Census on willingness of fishers to leave fisheries <ul style="list-style-type: none"> <li>○ Willingness to make trade-off to protect and restore the resource</li> <li>○ Required conditions <ul style="list-style-type: none"> <li>▪ training :fisheries related/not related</li> <li>▪ post-harvest processing (value adding)</li> <li>▪ access to other sectors</li> <li>▪ compensation</li> <li>▪ identify public's priorities</li> </ul> </li> </ul> </li> <li>• Buy-back <ul style="list-style-type: none"> <li>○ with strict conditions: transfer of fishing boats for transportation/tourism/artificial reefs for resource enhancement</li> <li>○ alternative source of funds form beneficial groups : importers, processors, remaining fishers</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> <li>√</li> <li>√</li> </ul>

	<ul style="list-style-type: none"> <li>• Alternative livelihood – mariculture park, etc.</li> <li>• Incentive: Scholarship to children</li> <li>• Increasing level of awareness of fishing capacity to all stakeholders -Primary to university level</li> <li>• Co-mgt and right-based management <ul style="list-style-type: none"> <li>○ Identify local institution/group in the area</li> <li>○ Empower the community/group</li> <li>○ Network of co-management</li> <li>○ identify customary law</li> <li>○ identify alternative job opportunity from beneficial group Regular/schedule consultations</li> <li>○ under co-management</li> </ul> </li> <li>• Establish fish refugia/Artificial Reef/Restocking program</li> <li>• Selective subsidy</li> <li>• Incentive to go to under-exploited fishing ground (non-traditional fishing grounds)</li> <li>• Set up curriculum on fisheries conservation and management for education</li> <li>• Awareness building for policy/decision makers</li> </ul>	<p style="text-align: center;">√</p> <p style="text-align: center;">√</p> <p style="text-align: center;">√</p> <p style="text-align: center;">√</p>
<p><b>4. Monitoring and Evaluation</b></p>	<ul style="list-style-type: none"> <li>• strengthened enforcement and surveillance</li> <li>• establish effective MCS (+VMS)</li> <li>• establish practical indicators <ul style="list-style-type: none"> <li>○ biological</li> <li>○ social</li> <li>○ economic</li> <li>○ technological</li> <li>○ evaluation timeframe 3-4 years interval</li> </ul> </li> </ul>	<p style="text-align: center;">√</p> <p style="text-align: center;">√</p>

## **Results of Discussion: Group III Key Issues in Managing Fishing Capacity**

### **I. 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)
- 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

### **II. Institutional related issues**

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

### **III. Socio-economic issues**

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

### **IV. Research issues**

- 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

## V. 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)

## VI. Regional/National Policies and Actions for Management of Fishing Capacity

Country	NPOA/Policy	Sites/Fisheries National/Regional Action	How to?
Cambodia	Included in fishery law	-Kampong Som (trawl) -potential	-Freezing # of trawlers -Co-management & inter-agency cooperation
Indonesia	Included in National Strategic Plan for Fisheries 2005-2020	-Malacca Strait (gillnet) N. Java (gillnet) -potential : Indian ocean (long line)	-Freezing # of gillnet -Promote Co-management -National forum -VMS (vessel monitoring system) 100 GT
Malaysia	Draft at DoF	Malacca Strait (trawl in CZ, licensed only)	-Reduce # trawlers (to about 100 units) -Reinforce enforcement -Training for fishermen for other job opportunity (incl. to deep sea fishing)
Thailand	Draft for national consultation	GOT/Andaman, all gears (SSF & LSF)	-Reduce # boats -Co-management -Buyback -Training for alt. jobs -Fishing by zone -Provincial oriented legal framework -Rehabilitation/Enhancement -Monitoring and enforcement -Zero fuel subsidy
Vietnam	Included in the National Plan for 2015-2020	-Tonkin Gulf (common zone with China) -MOFI project (push nets) in all provinces	-Assess # boats -Prohibit use of trawl, push net, other destructive fishing gear -Other job opportunity
Region		-Malacca Strait (purse seine, luring light) -Gulf of Thailand (Cambodia, Malaysia, Thailand, Vietnam) trawls	Addressing IUU fishing across borders