

**ON-SITE TRAINING/NATIONAL WORKSHOP ON  
CAPACITY BUILDING FOR THE ESTABLISHMENT  
OF REFUGIA AND COASTAL RESOURCES MANAGEMENT**  
**Koh Kong Province, Cambodia**  
**27-31 March 2006**



**THE SECRETARIAT  
SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER**

Supported by the Swedish International Development Cooperation Agency (Sida)  
Implemented under ASEAN-SEAFDEC Fisheries Consultative Program,  
Regionalization of the Code of Conduct for Responsible Fisheries Management

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

The Report of the On-site Training/National Workshop on Capacity Building for the Establishment of Fish Refugia and Coastal Resources Management of Cambodia, Koh Kong Province, 27-31 March 2006 was prepared by the Secretariat of Southeast Asian Fisheries Development Center (SEAFDEC). The document is distributed to participants the National Workshop for Human Resource Development in Supporting the Implementation of the CCRF, the SEAFDEC Member Countries, SEAFDEC Departments and concerned institutions.

## **BIBLIOGRAPHIC CITATION**

SEAFDEC 2006. Report of On-site Training/National Workshop on Capacity Building for the Establishment of Refugia and Coastal Resources Management of Cambodia, Southeast Asian Fisheries Development Center. 63pp.

## **NOTICE OF COPYRIGHT**

This publication may not be reproduced, in whole or in part, but any method or process, without written permission from the copyright holder. Applications for such permission with a statement of the purpose and extent of the reproduction desired should be made through and address to:

SEAFDEC Secretariat  
Suraswadi Building  
Kasetsart University Campus  
P.O. Box 1046 Kasetsart Post Office  
Bangkok 10903, Thailand

All Rights Reserved  
© SEAFDEC 2006

## TABLE OF CONTENTS

	<b>Page</b>
<b>I. INTRODUCTION.....</b>	<b>5</b>
<b>II. OPENING OF THE TRAINING.....</b>	<b>5</b>
<b>III. ADOPTION OF THE AGENDA AND ARRANGEMENT OF THE TRAINING.....</b>	<b>6</b>
<b>IV. BACKGROUND AND RATIONALE OF THE TRAINING.....</b>	<b>6</b>
<b>V. PAST-ONGOING ACTIVITIES OF PROJECT/INITIATIVE ACTIVITIES COMMUNITIES NATURAL RESOURCE MANAGEMENT IN COASTAL OF CAMBODIA.....</b>	<b>6</b>
<b>VI. CONCLUSION AND RECOMMENDATION.....</b>	<b>10</b>
<b>VII. CLOSING OF THE TRAINING.....</b>	<b>16</b>

## LIST OF ANNEXES

	<b>Page</b>
<b>ANNEX 1. List of Participant.....</b>	<b>17</b>
<b>ANNEX 2. Speech of Mr. Tham San.....</b>	<b>25</b>
<b>ANNEX 3. Speech of Dr. Siri Ekmaharaj .....</b>	<b>27</b>
<b>ANNEX 4. Speech of Mr. Ing Try.....</b>	<b>28</b>
<b>ANNEX 5. Agenda of the Training.....</b>	<b>31</b>
<b>ANNEX 6. Background introduction by Suy Serywath.....</b>	<b>35</b>
<b>ANNEX 7. Issue and Solution for Coastal Zone Management in Cambodia.....</b>	<b>37</b>
<b>ANNEX 8. Community-based Natural Resource Management, DANIDA/MoE.....</b>	<b>41</b>
<b>ANNEX 9. Experiences of Long-term Capacity Building for Community-based Natural Resources Management in Coastal Area of Cambodia.....</b>	<b>45</b>
<b>ANNEX 10. Results of Consultations with Coastal Fishing Communities on Conflicts and Resolution as well as Socio-economic Issue.....</b>	<b>49</b>
<b>ANNEX 11. Experience of Community Fisheries Establishment Process and Effectiveness of Community Sub-degree Enforcement.....</b>	<b>52</b>
<b>ANNEX 12. Conservation and Management of Coral Reef and Sea grass in Cambodia..</b>	<b>53</b>
<b>ANNEX 13. Sea grass and Green Turtles in Cambodia.....</b>	<b>57</b>
<b>ANNEX 14. Key Points to be discussed for Fish Sanctuary Zone’s Establishment and Management.....</b>	<b>61</b>
<b>ANNEX 15. Speech of Mr. Ing Try.....</b>	<b>63</b>

## I. INTRODUCTION

1. The On-site Training/National Workshop on Capacity Building for the establishment of Fish Refugia and coastal resources management was organized by SEAFDEC under SEAFDEC-Sida program and the Department of Fisheries Cambodia (DoF) in Koh Kong province from 27-31 March 2006.
2. The Training was organized as part of SEAFDEC activities of Sida support project on “Capacity Building for Human Resource Development on the support to the Implementation of the Code of Conduct for Responsible Fisheries Management in the ASEAN Region”. The Training was conducted as a follow-up to the results of the National Workshop on Human Resource Development in Fisheries Management in Cambodia held in Phnom Penh during 6-8 July 2005, and On-site Training and Workshop on Development of Community-based Fisheries Management in Coastal Areas of Cambodia held in Kampot Province during 20-23 September 2006.
3. Participants attended the Training were officers from DOF Phnom Penh, Koh Kong, Sihanoukville, Kep and Kampot; officers from Ministry of Environment and relevant institutions, NGOs, Community Fisheries, and from administrative organization in Trat Province, as well as representative from SEAFDEC Secretariat. The list of participants appears as *Annex 1*.

## II. OPENING OF THE TRAINING

4. Dr Magnus Torell, Senior Advisor of the SEAFDEC Secretariat, welcomed and thanked participants, resource persons of the Training and also he briefly remarked the important of the Training in human capacity building to support the establishment of the Fish Refugia and locally-based coastal resources management for Cambodia.
5. Mr. Tham San, Deputy provincial governor of Koh Kong province, welcomed the participants and resource persons to the Training; and also he thanked to SEAFDEC through SEAFDEC-Sida program to organize this On-Side Training in Koh Kong province that it would provide at opportunity for capacity building for fisheries management through conceptual of Fish Refugia in Cambodia coastal area, his speech appeared as *Annex 2*.
6. Dr. Siri Ekmaharaj, Secretary General of SEAFDEC, welcomed the participants and resource persons of the Training and briefly explained the importance of the Training. He also stressed on the importance of Human Resource Development in terms of capacity building for coastal resource management. His speech appeared as *Annex 3*.
7. Mr. Ing Try, Deputy Director General of Fisheries Department of Cambodia, welcomed to participants and appreciated to SEAFDEC-Sida organizers as well delegations from SEAFDEC Secretary-General; his speech appeared as *Annex 4*.

### **III. ADOPTION OF THE AGENDA AND ARRANGEMENT OF THE TRAINING**

8. Mr. Chun Sophat introduced the agenda and timetable arrangement of the Training, and requested for suggestion and comments from the Training. After revision, the agenda was adopted, appeared as Annex 5.

### **IV. BACKGROUND AND RATIONALE OF THE TRAINING**

9. Mr. Suy Serywath, Member of Regional Fisheries Policy Working group (RFPWG) for Cambodia, SEAFDEC Secretariat, introduced a brief background of SEAFDEC-Sida project on Capacity Building for Human Resource Development that it's supported to the implementation of the Code of Conduct for Responsible Fisheries (CCRF) in the ASEAN region; and he outlined the project background, objective and process for strengthening human capacity building to carried out the CCRF Annex 6.

10. As part of the series activities of the project, he introduced the results of events of the National Workshops/On-site training in Phnom Penh from 6 to 8 July 2005 and in Kampot province from 20 to 23 September 2005, in which the social, cultural, environmental and legislation have been concerned and implemented in Cambodian coastal area.

11. He explained the objective of the this workshop, which was primary to provide a national platform for various project activities/initiatives working support of development of costal area of Cambodia to exchange experiences and lessons learned – particularly from Koh Kong province. This could therefore help in strengthen and sustain local fisheries management capacity to support the promotion of community-based coastal resources management in order to increase on legal, economic and social aspect. Moreover, he also addressed expected output of this workshop that will be focused on the introduction and promotion of the concept of fisheries refugia initiated by UNEP/GEF/South China Sea and SEAFDEC, particularly to support future establishment of local community-based management of the resources in the coastal areas between Cambodia – Thailand (Trad and Koh Kong) and Cambodia – Vietnam (Kampot and Kien Giang) for improving people living condition in local community in these countries.

### **V. PAST-ONGOING ACTIVIES OF PROJECT/INITIATIVE ACTIVITIES COMMUNITIES NATURAL RESOURCE MANAGEMENT IN COASTAL OF CAMBODIA**

#### **4.1 Issues and Solution for Coastal Zone Management in Cambodia (Annex 7)**

By Mr. Van Munyneath, National Coordinator, CZM/Danida/MoE

12. Mr. Van Munyneath introduced the management regime in coastal zone, issues and solution. There are 7 protected areas including National Park along the coastal of Cambodia. He stressed the interaction between upland and water body that play a very important role biodiversities. He outlined issues related to degradation for forestry, mangroves that could affect to the ecosystem, habitat as well Fish Refugia.

13. He addressed the mangroves were cut and damaged in the costal areas of Koh Kong Province and in Kep Municipality, solid waste a long the coastal area especially in Koh Kong

province where proper management is really needed while the population in the area rapidly increases. In addition, he pointed out that the water quality caused seriously not only aquatic animal but also human health in terms of using these resources.

14. While the pressure due to the human activities, development and urbanization, he addressed the potential solution concerning legislation, inter ministerial committee lead by the ministry of environment, empowerment to local community worked with authorities (commune, provincial) and cooperation with relevance institution (Department of Fisheries, provincial fisheries office, etc.) and NGOs (IDRC, DFID, WWF, UNEP/GEF etc.).

#### **4.2 Community-based Natural Resource Management DANIDA/MoE (Annex 8)**

Mr. Pouk Bunthed, Coordinator of CZM project in Koh Kong province

15. Mr. Pouk Bunthed gave briefly presentation on the coastal zone management project in Cambodia started since 1997, which covered four Municipal/provinces of Sihanoukville, Kep Municipality, Kampot province and Koh Kong province. He informed that the target area in Koh Kong province is 5 communes and 7 villages (Prek Svay village, Stungveng villag, Beuong Kachange village, Koh Kong village, Koh Sralao village, Koh Kape village and Chroy Bras village). He also stressed on overall of the project's intention and the main objective is to sustain natural resources use for local communities after finishing the third phase of the CZM project.

16. As part of CZM project, He outlined the activities have been done in Koh Kong province, replanting mangrove forest in local community, reducing illegal fishing by set up artificial reef in community domain fisheries, providing training on intergraded farming systems where local people can learn agricultural systems, veteran, credit to family system, electronic training, environmental education to five primary school and other proposal for environmental program in schools.

17. He also emphasizes potential of this target area related to the eco-tourist, which the project cooperation with SEILA program, authorities, technical staff and local people to identify sub-area to be tourist place.

#### **4.3 Experience of Long Term Capacity Building for Community-Based Natural Resources Management in Coastal Area of Cambodia (Annex 9)**

Mr. Nith Chia on behalf of Mr. Kim Nong Team Leader of the project, IDRC/MoE

18. Mr. Nith Chia, gives a briefly historical and caused serious to the natural resource in Peam Krasaop Wildlife Sanctuary because of trend free market/political issues and security. Thus lack of law enforcement while the local people living depending on natural resource as well migration of people in to this area to make illegal activities on natural resources (cutting forest, fishing activities etc.). He pointed out the evident of degradation of the natural resources through cutting mangrove for shrimp farming, charcoals, logs of mangrove, charcoal kiln, fishing gears operation in shallow water, etc.

19. Connection with issues above, He also introduced Community-based natural resources management (CBNRM) project supported by IDRC, started since 1997 and it remains only one

and half year, which will finish in the third phase of the project activities. He stressed project is to build capacity at the different scale and level, to integrate CBNRM into commune level plans to develop local community and to advocate to the decision-makers on CBNRM.

#### **4.4 Results of Consultation with Coastal Fishing Communities on Conflicts and Resolution as well Socio-economic Issues (Annex 10)**

Mr. Thor Sensereivorth, Director of Fisheries Quality and Processing Division;  
FAO-Sid/Department of Fisheries

20. Mr. Thor Sensereivorth briefly introduced the activities have been done in consultation with local communities in coastal area particular in Koh Kong province, the objective of the consultation is to collect local problems, their needs, suggestion and solution related to fishing action. He highlighted the conflicts fishing activities, which occurred among area local people from outside community, community and community in the fishing ground, fishing gears (trawler, push net with engine operated in shallow water) and foreigner boat (off shore).

21. He gave the results and suggestion of the consultation including solution, conclusion of the conflicts for management and encouraging their living condition in local area. He also gave question for discussion as in his presentation document.

#### **4.5 Experience of Community Fisheries Establishment Process and Effectiveness of Community Sub-degree Enforcement (Annex 11)**

Mr. Ly Vuthy, Director of Community Fisheries Division

22. Mr. Ly Vuthy, briefly introduced background of the fisheries community – where originated from forestry community since 1995 under supported by FAO – established in Kratie and Stungtreng province by NGOs since 1998. Since 2000, fisheries reformed in Cambodia, the Department plays very important role in establishing the fisheries communities, there are 440 fisheries communities were established around countries by year 2005.

23. He explained reasons for the need in establishing fisheries community management that because of the world paradigm have changed to central level to participatory approach and Government policy for poverty alleviation through fisheries reform. Moreover, he raised the 4 main keys to achieve and success in establishing fisheries communities. He also raised the problems impacted to process fisheries community management including lack/limitation of dissemination of fisheries law, legislation, administrative of fisheries community (general community map and fish sanctuary etc.), limited knowledge of community committees and local people, and as well as lacking of fund to maintain the process of management by the fisheries community.

#### **4.6 Conservation and Management of Coral Reef and Sea grass in Cambodia (Annex 12)**

Mr. Ouk Vibol, Deputy Director Domain and Extension Division; UNEP/GEF/DoF

24. Mr. Ouk Vibol, introduced general status of sea grass and coral reef in Cambodia and its conservation in Koh Kong province such as Koh Sdach for coral reef, Chrouy Bras for sea grass and Sea grass in Kampot province. He explained important of protected area in term of fish



production, and the reason to select area to be managed, identification coral reef, sea grass, relevance stakeholders, and management plan system.

25. He explained the casual change analysis and threat on coral reef and sea grass in Cambodia, strategies, and plan of action to manage and conservation the sea grass and coral reef; and he mentioned mechanism to cooperation sea grass in Kampot province (Prek Apil sea grass bed) with Viet Nam in Kein Yang province (Koh Tral or Phu Quak island).

#### **4.7 Sea grass and Green Turtle in Cambodia (Annex 13)**

Mr. Pich Sereywath, Assistant of Marine Working Group

26. Mr. Pich Sereywath introduced sea grass, major treats on green turtle was studies in Cambodia so far. He mentioned location of sea grass in Cambodia water through research methodology and results of study; and he also raised the problems of identification species in term of local name (Khmer name) due to limited research and knowledge. Mr. Sereywath outlined the green turtle was seen and caught in sea grass bed, and he also gave consideration for future to manage sea grass as habitat of diversity species and protect to destructive fishing activities.

#### **4.8 Key Point to be Discussed for Fish Sanctuary Zone's Establishment and Management (Annex 14)**

Ms. Kaing Khim, Deputy Director of Community Fisheries Division

27. Ms. Kaing Khim outlined briefly the reason to establish fish sanctuaries, the needed of fisheries communities, the need of fish sanctuaries/, she gave concept of establishment of the fish sanctuary and the strategies to manage; and out come etc. Through the concept of fisheries communities needed and sanctuaries, he raised question for participants to discuss related to establish Fish Refugia during the workshop.

#### **4.9 Introduction to Fish Refugia**

Mr. Ing Try, Deputy General of Fisheries Department of Cambodia

28. Mr. Ing Try, give a briefly back ground and concept of Fish Refugia which he highlighted the important of management fisheries resource through Fish Refugia, and he also explained connection habitat and migration (tranboundary), nursing ground, feeding ground of aquatic species. It is very important to manage fisheries habitat/Fish Refugia in coast of Cambodia, while lack of natural fisheries resources; and also increasing demand fish production, population and fishing gears as well fishing actives.

29. He explained the useful of management habitat through establishing Fish Refugia, the management regime, seasonal management etc. Long line with concept, usefulness of establishing Fish Refugia in term of fisheries resource management. He also raised fisheries management mechanism to sustainable fisheries resource use that Cambodia government had reformed in fisheries policy which provided right to local people to manage and use their resource by establishment Community Fisheries.

#### **4.10 The experiences local fisheries management along coastal of Trat province, Thailand**

Mr. Chanarong Rungsri, Representative of community in Trat province, Thailand

30. Mr. Chanarong Rungsri, introduced background of fisheries management in coastal of Thailand in Trat province, he raised action management in local communities, patrolling boundary for communities and illegal activities. He outlined the development for shrimp farm, which mangroves were cleared to be shrimp farm and it's remain empty land with replant mangroves after fail of shrimp farm activities.

### **VI. CONCLUSION AND RECOMMENDATION**

31. Based on the group discussion sessions, there are three major issues and problems confronting the locally-based fisheries community management in the coastal area of Koh Kong province as follow:

- Conflict among the fishers/resource users
- Destructive fishing gear and practices: Trawlers and push netters in the area of Koh Kong Province
- Illegal fishing boats operated in the area of Koh Kong

#### **5.1 Suggested resolution the conflict management of the coastal resource users**

32. Suggestions from the group to reduce the conflict among fishers and resource users include:

##### Suggested conflict management of community VS community

- Provide alternative job to reduce pressure on fishing activities
- Strengthen public awareness of regulation to local communities
- Clearly limit fishing boundary of communities
- Organization of the meeting among communities committees to coordinate and to find solution
- Use legal fishing gears and respect each other
- Should have coordinator to solve conflict
- Each member should have study tour to other communities to share experiences and closely relationship.

##### Suggested conflict management between Community and outside of community

- Prepare community regulation to publish to people from outside community to know and respect
- Prepare community structure
- Identify fishing boundary of community
- Cooperation with authorities and relevant institutions to protect, punish and educate illegal fishermen from outside community
- Coordinate to solve illegal fishing
- Help to publish awareness and other regulation
- Equity and transparency.

## **5.2 Suggested activities to eliminate destructive fishing gear and practices, particular for trawlers and purse seine net**

33. With the aim to promote sustainable use of coastal resources in responsible manner, the following are suggested activities/ways to reduce the pressure of fishing capacity in the coastal areas of Cambodia:

- Strengthen law enforcement
- Strengthen community-based management
- Advise/educate local people to change their character to use only legal fishing gears
- Extension and train community regulation to authorities and local people
- Stop build up small boats (with lack power of engine)
- Government should have policy to buy small boats with lack of power engine, provide budget with low interest rate in order to change type of fishing gears or change business from fishing
- Create conservation and protected area or Fish Refugia; and law enforcement
- Support from national level to protect on stolen fishing gears, limit boundary for fishing boats, and felling cooperation all institutional level.

## **5.3 Suggested activities to eliminate foreign fishing boats**

34. The group stressed on the important in eliminating the foreign fishing boats, they suggested to:

- Prohibit using illegal fishing gear (based on fisheries law)
- Limit type and number of fishing gears and to give permission to operate
- Clearly identify fishing boundary
- Provide modern patrol equipment to fisheries authorities to protect foreign fishing boats and the Department of Fisheries has to strengthen in fisheries inspector unit
- Empowerment to fisheries institution to manage marine fisheries
- Eliminate supporter of illegal fishing activities
- Cooperation among neighbor countries
- Supported of Government policy
- Government should punish to supporter of illegal fishing activities
- Local authorities have to responsible any illegal action
- Government officers have to responsible and in good manner.

## **5.4 Suggested activities for coastal resources stock enhancement**

35. To promote and encourage fisheries resource enhancement programs/activities in the near future in the coastal area of Cambodia, the followings are suggested activities based on the group discussion:

- Government officers have to responsible and in good manner
- Identification critical/important habitat, Fish Refugia
- Limit number and type of fishing boats depending on fish stock
- Survey and monitor the changing of environment and fish stock
- Seasonal fishing (close season and fishing season)
- Reforestation

- Establish community to sustainable manage and protect fisheries resources
- Establish Fish Refugia, protect and conservation area (coral reef, sea grass and mangroves)
- Eliminate illegal fishing
- Protect natural habitat (coral reef, sea grass and mangroves, etc.)
- Protect deforestation and encourage to reforestation
- Strengthen aquaculture
- Encourage fish day to release more fish seeds to the nature
- Study natural fish stock
- Law enforcement
- Establish fisheries station to release marine fish to community fish boundary (endanger/economic species)
- Establish marine institute.

### **5.5 Suggested process for the establishment of Fish Refugia in Coastal Area**

36. After carefully review the legal support together with the related issues/problems in the coastal areas of Cambodia, the group suggested the process for establishment of Fish Refugia in the coastal area of Cambodia as follow:

#### **Step1. Criteria for selection/establishment Fish Refugia:**

- Sea grass area
- In boundary of communities (possible to manage)
- Appropriate area (water deep and water quality)
- Nursing and feeding ground, habitat for main species and economic species
- Should locate in outside from protected area.

#### **Step2. Motivation to establish Fish Refugia:**

- Enhance natural fish stock
- Protect illegal fishing activities
- Conservation and protection natural resource, endanger and economic species (dugong, dolphins, sea grass coral reef, mangrove etc.)
- Reduce over fishing
- Sustain natural resource use and science research

#### **Step3. Establishing of Fish Refugia:**

The following sequence of the activities should be taken into the consideration.

- Assessment and evaluation of resources and relevant information (general status of location, science information and local knowledge)
- Identify fisheries resources/location (preparing Map)
- Consultation (find supporters from stakeholders)
- Find coordination and support (equipment, fund, technical and legal)
- Make proposal to establish Fish Refugia by coordination with relevant institution
- Prepare to establish Fish Refugia (Based on Government policy and official support from relevant institutions)

**Step4. Management of Fish Refugia:**

- Identify boundary of Fish Refugia
- Create management committees
- Make management planning
- Public awareness to local people on usefulness of establishment Fish Refugia
- Public on Fish Refugia (location)
- Set up regulation (type of fishing gears, number of fishermen)
- Make sign of Fish Refugia area
- Encourage community participatory
- Strengthen funding support and technical
- Preparing official documents
- Patrolling group (regularly patrolling)
- Cooperation with authorities, stakeholders, and communities members.

**5.6 Suggested activities for future cooperation among neighboring countries to establish and manage Fish Refugia**

37. The group stressed on the importance of sustainable management of fishing capacity and resources management in the area where close to the neighboring countries of Thailand and Vietnam. Followings are suggested future collaboration between Cambodia and both countries.

**Cooperation between Cambodia and Thailand (Koh Kong province and Trat province)**

1. Set up agreement both countries
  - Government of Cambodia and Thailand
2. Establish technical working group
  - Create law,
  - Capacity building for human resources,
  - Fishing activities (using fishing gear and seasonal fishing),
  - Aquaculture; and
  - Processing fisheries production.
3. Share/exchange experiences and knowledge
4. Select location for establishing Fish Refugia
  - In country
  - Overlap zone

**Cooperation between Cambodia and Viet Nam (Kampot province and Kien Giang province)**

1. Cooperation research to identify species (Dugong and Dolphins) that migrate in water body of both countries in order to cooperation management.
2. Study on possibilities to establish Fish Refugia in both countries.
3. Set up management structure
  - 3.1 Negotiation working group (provincial government as chair person)
    - 3.1.1 Navy
    - 3.1.2 Policy

- 3.1.2.1 Provincial agriculture department
- 3.1.2.2 Environment
- 3.2 Technical working group (Fisheries Unit as the chaired person)
  - 3.2.1 Environment
  - 3.2.2 Community

### **Responsibilities for the Negotiation and Technical Working Group**

#### **Negotiation working group of both countries meet one a year and technical working group meet twice a year**

- Establish cooperation policy
- Share information
- Consultation on management plan

#### **Technical working group**

- Monitor and report the results
- Share experiences and techniques

### **5.7 Suggested role of fishery refugia in the management of fishing capacity: Overall**

38. To sustainable management and protection of the important species in the coastal areas of Cambodia, the group identified role of fisheries refugia as follow:

- To enhance coastal resources that could profit to the ecosystem
- To conserve and protect illegal and/or destructive fishing gear/practice of the outsiders
- Economic potential to support the livelihoods (need to link with the national and local development plan)

### **5.8 Identification of the Capacity Building needs and activities for establishment of fish refugia in Cambodia**

39. The group identified role of Fish Refugia as follow:

- Training on the management of waste both on land and coastal areas
- Understanding Fisheries Law
- Knowledge on sustainable development of infrastructure in coastal areas
- Conduct study/research on the cultural/livelihoods (local knowledge) of the local villages for future planning for HRD activities
- Knowledge on data collection: catch, monitoring and evaluation on the changes of the resources status
- Field visit
- Skill/knowledge of the local community/group of people on Vessel Monitoring System (VMS)
- Skill/knowledge on: mangrove replanting, patrolling (protecting the illegal fishing gear and destructive fishing gear), conflict management (among communities, institution)
- Skill to be a facilitator (effective)
- Knowledge of the “supporting law” to establishment of the refugia

- Guidelines for the establishment (site selection/identification, etc) and sustainable management of refugia for community and other stakeholders should be formulated/developed by mobilizing/using both scientist and local knowledge

## **5.9 Potential Collaborative Mechanism for Implementation of Fisheries Refugia in Cambodia and Thailand**

40. For future support to establish fisheries refugia in Cambodia and Thailand the Training stressed the important of following issues:

- Sustainability of the management of fisheries refugia; e.g. use of “eco-tourism”.
- Need to establish new “community” or make use of existing community for coordination and collaboration to implement fisheries refugia both in the country and neighboring countries
- Make use of the existing legal supports, e.g. fishery domain, and management committee for the course of implementation.

## **5.10 Plan for future address and implement a process for establishment of fisheries refugia by integrating locally-based management based on the experience in Koh Kong**

### **Suggestion for Establishment of Cambodia-Vietnam Refugia**

41. The comment and suggestion collaboration between Cambodia and Vietnam on Fish Refugia, the group discussion subtracted the suggestion as following:

- Carry out “joint-research” between Cambodia and Vietnam on marine fisheries resources<sup>1</sup> (dugong, dolphin, sea turtles, etc) for potential establishment of refugia.
- Establish “Technical Working Group” (for monitoring and evaluation of implementation; technical exchange, of the refugia, meeting 2 times/year), members from both sides are: eg Provincial Fisheries Officials, Representative of MOE, Fishers, Community, etc.
- Establish “Management Working Group”: Governor of the provinces (border Officials and Marine Police), meeting 1 time/year,
- Agreement for the establishment of refugia between Cambodia and Vietnam.

### **Suggestion for Establishment of Cambodia-Thai Refugia**

42. In cooperation between Cambodia and Thailand on Fish Refugia, the group discussion give some comments and suggestion as follow:

- Establish “Provincial Working Group” (action plan and management of the implementation of the refugia)
- Establish “Technical Working Group” for
  - o Study/Research on the status of the coastal resources
  - o HRD (or transfer knowledge or techniques from Thailand to Cambodia) on utilization of coastal resources (capture)

---

<sup>1</sup> In the context of Cambodian’s fisheries law aquatic flora and fauna are considered as fisheries resources.

- HRD (or transfer knowledge or techniques from Thailand to Cambodia) on aquaculture and fish processing

### **5.11 Next Step of SEAFDEC-Sida Support and Other related HRD Program/Project**

43. At the end of workshop, the participant decide to further act of SEAFDEC-Sida supported and other related HRD as given some comments as below:

- organization of the meeting Cambodia-Thailand-Vietnam (around July 2006 and this will be further checked with UNEP/GEF/SCS) to discuss on the transboundary issues regarding process for establishment of Fish Refugia
- for the next phase of the support from Sida through SEAFDEC, pilot/demonstration site, could be large refugia, for Cambodia-Thailand-Vietnam, to follow-up the outcomes from the pilot process
- to develop HRD training package and materials by the year 2006
- to support the establishment of refugia in Sihanouk Ville, Kampot (in sea grass area), Kep, and Koh Kong (Koh Sdach)

## **VII. CLOSING OF THE TRAINING**

44. Before announcing to close the Training, Mr. Ing Try highlighted the future establishment of Fish Refugia to the Training starting from verifying and explaining its means and concept in order to make clear to the participants. He highly appreciated to the organizers and participants for their hard work to achieve the fruitful results, and then announced to close the Training. His closing speech appeared as *Annex 15*.



*Annex 1*

**LIST OF PARTICIPANTS**

**DEPARTMENT OF FISHERIES**

1. Mr. Ing Try  
Deputy Director General  
  
Department of Fisheries  
Ministry of Agriculture Forestry and Fisheries  
# 186 Preah Norodom Blvd,  
P. O. Box 582, Phnom Penh, Cambodia.  
Phone: (855 23) 219 256  
Fax: (855 23) 219 256  
E-mail: ttmp.cam@bigpond.com.kh
  
2. Mr. Lim Nguon Kruy  
Deputy Director  
  
Administration and Personnel Division,  
Department of Fisheries  
Ministry of Agriculture Forestry and Fisheries  
# 186 Preah Norodom Blvd,  
P. O. Box 582, Phnom Penh, Cambodia.  
Phone: (855 12) 919 018  
Fax: (855 23) 215 470
  
3. Mr. Hang Sereyvuth  
Deputy Chief  
  
Human Resource Section,  
Department of Fisheries  
Ministry of Agriculture Forestry and Fisheries  
# 186 Preah Norodom Blvd,  
P. O. Box 582, Phnom Penh, Cambodia.  
Phone: (855 12) 871 925  
Fax: (855 23) 215 470
  
4. Mr. Va Longdy  
Assistant of Marine Working Group  
  
UNEP/GEF  
Department of Fisheries  
Ministry of Agriculture Forestry and Fisheries  
# 186 Preah Norodom Blvd,  
P. O. Box 582, Phnom Penh, Cambodia.  
Phone: (855 12) 995 665  
Fax: (855 23) 215 470  
E-mail: maric@online.com.kh
  
5. Mr. Nhem Sophea  
  
Human Resource Section,

Officer

Department of Fisheries  
Ministry of Agriculture Forestry and  
Fisheries  
# 186 Preah Norodom Blvd,  
P. O. Box 582, Phnom Penh, Cambodia.  
Phone: (855 12) 871 925  
Fax: (855 23) 215 470

## **SIHANOUK VILLE**

6. Mr. Sam Sathya  
Chief

Marine Fishery Inspection Unit,  
Sihanouk Ville  
Phone: (855 12) 911 142  
E-mail: maric@online.com.kh

7. Mr. Hoc Laim  
Vice Chief

Fisheries Office, Sihanouk Ville  
Phone: (855 12) 683 666  
Fax: (855 34) 933 684

8. Mr. Meas Chan Da  
Vice Chief

Fisheries Office, Sihanouk Ville  
Phone: (855 12)  
Fax: (855 34) 933 684

9. Mr. Nen Chamroeun  
Chief

Community Fisheries Development  
Unit Fisheries Office, Sihanouk Ville  
Phone: (855 16) 777 312  
Fax: (855 34) 933 684

10. Mr. Kang Maxey  
Chief

Aquaculture Unit,  
Fisheries Office, Sihanouk Ville  
Phone: (855 11) 983 842  
Fax: (855 34) 933 684

11. Mr. Yi Boros  
Officer

Fisheries Office, Sihanouk Ville  
Phone:(855 12) 776 362  
Fax: (855 34) 933 684

12. Mr. Heng Seng  
Chief

Administration Unit,  
Fisheries Office, Sihanouk Ville  
Phone: (855 11) 983 842  
Fax: (855 34) 933 684

13. Mr. Phoeun Nam  
Chief

Sangkat Toeuk Thla,  
Khan Prey Nup, Sihanouk Ville

14. Ms. Chea Thoeun  
Representative

Community Fisheries Prey Nup II,  
Sihanouk Ville

15. Mr. Yin Yam  
Chief

Community Fisheries Federation,  
Sangkat Prey Nup, Khan Prey Nup,  
Sihanouk Ville

## **KOH KONG PROVINCE**

16. Mr. Khy An  
Vice Chief

Fisheries Office,  
Koh Kong Province  
Phone: (855 16) 862 2219

17. Mr. Ith Seang Sovimol  
Vice Chief

Fisheries Office,  
Koh Kong Province  
Phone: (855 16) 858 635

18. Mr. Lang Kiri  
Vice Chief

Fisheries Office,  
Koh Kong Province  
Phone: (855 16) 767 618, 012 683 377

19. Mr. Soam Piset  
Vice Chief

Fisheries Office,  
Koh Kong Province  
Phone: (855 16) 452 222

20. Mr. Chho Bunchhoung  
Chief

Administration Unit,  
Fisheries Office,  
Koh Kong Province  
Phone: (855 16) 885 709

21. Mr. Tan Thearith  
Chief

Community Fisheries Development Unit,  
Fisheries Office,  
Koh Kong Province  
Phone: (855 12) 670 977/ 016 737 323  
E-mail: thearithtan@yahoo.com

23. Mr. Doeul Dully  
Chief

Litigation Unit,  
Fisheries Office,  
Koh Kong Province  
Phone: (855 11) 747 755

24. Mr. Lonh Chandara  
Officer

Fisheries Office,  
Koh Kong Province  
Phone: (855 16) 896 207

25. Mr. Phay Savin  
Officer

Fisheries Office,  
Koh Kong Province  
Phone: (855 16) 896 207

26. Mr. Hin La  
Officer  
Fisheries Office,  
Koh Kong Province  
Phone: (855 16) 251 222
27. Mr. Nou Ngoy  
Officer  
Fisheries Office,  
Koh Kong Province  
Phone: (855 16) 933 192
28. Mr. Por Rany  
Officer,  
Fisheries Office,  
Koh Kong Province  
Phone: (855 16) 769 667
29. Mr. Soam Phearin  
Chief  
Thmor Sor Commune,  
Botum Sakor District,  
Koh Kong Province
30. Mr. Krauch Pheng  
Chief  
Chroy Proash Commune,  
Koh kong District,  
Koh Kong Province
31. Mr. Nop Born  
Deputy Chief  
Andaung Toeuk Commune,  
Botum Sakor District,  
Koh Kong Province
32. Mr. Khour Chun  
Vice Chief  
Community fisheries Coastal Zone,  
Tameak,  
Koh Kong Province
33. Ms. Nuor Chhay  
Representative  
Community fisheries Koh Khyoang,  
Sre Ambil District,  
Koh Kong Province
34. Mr. Chhun Chhin  
Chief  
Community fisheries Chroy Svay  
Commune, Koh Kong Province
35. Ms. Prak Sarin  
Chief  
Community fisheries Thmor Sor  
Commune, Botum Sakor District,  
Koh Kong Province
36. Mr. Prak Sovat  
Chief  
Community fisheries Chroy Proas  
Commune, Koh Kong Province

## **KAMPOT PROVINCE**

37. Mr. Thai Samorn  
Vice Chief  
Fisheries Office, Kampot Province  
Phone: (855 11) 907 469

- Fax: (855 33) 932 661
38. Mr. King Sophany  
Vice Chief  
Fisheries Office, Kampot Province,  
Phone: (855 12) 494 269  
Fax: (855 33) 932 661
39. Mr. An Tha  
Chief  
Exploitation Unit, Kampot Province,  
Kampot Province,  
Phone: (855 12) 705 780  
Fax: (855 33) 932 661
40. Mr. Ly Seiha  
Vice chief  
Aquaculture Unit, Kampot Province,  
Kampot Province,  
Fax: (855 33) 932 661
41. Mr. Kem Sambo  
Officer  
Fisheries Office, Kampot Province,  
Fax: (855 33) 932 661
42. Mr. Soun Savoan  
Officer  
Fisheries Office, Kampot Province  
Fax: (855 33) 932 661
43. Mr. Kao Veasna  
Officer  
Fisheries Office, Kampot Province,  
Fax: (855 33) 932 661
44. Mr. Meas Hann  
Chief  
Community Fisheries Kdat,  
Choang Hoan Village, Prek Thnoat  
Commune, Kampot District,  
Kampot Province
45. Mr. Khiev Sat  
Chief  
Community Fisheries,  
Koh Kreusna village,  
Reusey Srok Khang Lech Commune,  
Kampong Trach District,  
Kampot Province
46. Mr. Seng Chanthan  
Representative of the commune  
Kampot Province  
Phone: (092-972 649)

#### **KEP MUNICIPALITY PROVINCE**

47. Mr. Sreng Kry  
Vice Chief  
Fisheries Office, Kep Municipality  
Phone: (855 12 ) 949 782
48. Mr. Kuch Virak  
Vice Chief  
Fisheries Office, Kep Municipality  
Phone: (855 12 ) 949 782

49. Mr. Chak Sineath  
Chiefe

Community Fishery Development Unit,  
Kep Municipality  
Phone: (855 12 ) 828 926

50. Mr. Sith Bros  
Chief

Community fisheries Coastal Zone,  
Kep Municipality

51. Mr. Nop Sarin  
Representative

Community Mangrove protection  
NREM, Kep Municipality

## **RESOURCE PERSONS**

51. Mr. Vann Monyneath  
National Coordinator

CZM Project  
# 48, Preah Norodom Blvd.  
Tonle Bassac, Chamkarmon,  
Phnom Penh, Cambodia  
Phone/Fax: (855 23) 211 406  
Mobile Phone (855 12) 706 470  
Email: monyneath@czmcam.com

52. Mr. Pouk Bunthet  
National Coordinator

CZM Project  
Coastal Resource Center,  
Koh Kong Province  
Mobile Phone: (855 12) 973 887

53. Mr. Nith Chhia  
Team Leader

UNEP/GEF/Moe  
# 48, Preah Norodom Blvd.  
Tonle Bassac, Chamkarmon,  
Phnom Penh, Cambodia  
Phone/Fax: (855 23) 211 406  
Mobile Phone (855 12) 772 878  
Email: pmmr@online.com.kh

54. Mr. Thor Sensereivorth  
Director

Fish Quality and Processing Division  
Department of Fisheries  
Ministry of Agriculture Forestry and  
Fisheries  
# 186 Preah Norodom Blvd,  
P.O. Box 582, Phnom Penh, Cambodia  
Phone: (855 12) 868 815  
Fax: (855 23) 215 470  
Email: sereywath@hotmail.com

55. Mr. Ly Vuthy  
Director

Community Fisheries Development  
Division,  
Department of Fisheries  
Ministry of Agriculture Forestry and  
Fisheries  
# 186 Preah Norodom Blvd,  
P.O. Box 582, Phnom Penh, Cambodia  
Phone: (855 11) 868 815  
Fax: (855 23) 215 470  
Email: lyvuthy@online.com.kh  
cfdo@online.com.kh

56. Mr. Ouk Vibol  
Deputy Director

Fisheries Domain and Extension  
Division  
Department of Fisheries  
Ministry of Agriculture Forestry and  
Fisheries  
# 186 Preah Norodom Blvd,  
P.O. Box 582, Phnom Penh, Cambodia  
Phone: (855 11) 836 376  
Fax: (855 23) 215 470  
Email: aims1@online.com.kh

57. Mr. Pech Sereywath  
Assistant of Marine Working Group

Aquaculture Division  
Department of Fisheries  
Ministry of Agriculture Forestry and  
Fisheries  
# 186 Preah Norodom Blvd,  
P.O. Box 582, Phnom Penh, Cambodia  
Phone: (855 12) 303 255  
Fax: (855 23) 215 470  
Email: maric@online.com.kh

58. Ms. Kaing Khim  
Deputy Director

Community Fishery Development  
Division, Department of Fisheries  
Ministry of Agriculture Forestry and  
Fisheries  
# 186 Preah Norodom Blvd,  
P.O. Box 582, Phnom Penh, Cambodia  
Phone: (855 12) 506 199  
Fax: (855 23) 210 154  
Email: kaingkhim@online.com.kh

59. Mr. Channarong Rungsri

Trad Province, Thailand

## **Organizer of the Training – SEAFDEC Secretariat**

- |                                   |   |
|-----------------------------------|---|
| 60. Dr. Siri Ekmaharaj            | SEAFDEC Secretariat,<br>P.O. Box 1046, Kasetsart Post Office,<br>Bangkok 10903, Thailand<br>Phone: (66 2) 940-6326-9<br>Fax: (66 2) 940-6336<br>Email: sg@seafdec.org |
| 61. Mr. Somnuk Pornpatimakorn     | somnuk@seafdec.org  |
| 62. Dr. Magnus Torell             | magnus@seafdec.org  |
| 63. Mr. Suriyan Vichitlekarn      | suriyan@seafdec.org   |
| 64. Dr. Worawit Wanchana          | worawit@seafdec.org   |
| 65. Mr. Suy Serywath              | suy@seafdec.org   |
| 66. Ms. Anongnard Denrassameethep |   |
| 67. Ms. Sanguan Sasoam            |   |
| 68. Mr. Kittti Kittichaiyanon     |   |



**Annex 2**

**WELCOME SPEECH**

Mr. Tham San, Deputy Governor of the Koh Kong Province

On-site Training/ National Workshop on Capacity Building for the Establishment of Fish  
Refugia and Coastal Resources Management

27-31 March 2006, Bopha Koh Kong Hotel, Koh Kong Province

---

**Respected distinguished guests!**

**Respected National and international guests!**

**Ladies and Gentlemen who are friendly participants!**

First of all, I would like to express my warmest welcome the present of H.E. Excellencies, all ladies and gentlemen, all national and international guests who have attended in opening ceremony of the workshop on human resource development for the establishment of refugia and coastal fisheries resource management.

Today on behalf of Koh Kong provincial hall as well as myself I am honor and very happy with the organization of the workshop on human resource development for the establishment of refugia and coastal fisheries resource management at this day and I also deeply thank department of fisheries, especially Mr. Ing Try, deputy director of department of fisheries, Dr. Siri Ekmaharaj, SEAFDEC General Secretary, Dr. Magnus Torell, SEAFDEC-Sida representative in Bangkok, who is a sponsor to enable this workshop to be happened.

**Respectful distinguished guests!**

**Honorable guests, ladies and gentlemen!**

As Your Excellencies, ladies and gentlemen knew that the coastal areas of the Kingdom of Cambodia stretch along four provinces and municipalities with the length about 435 Km. where are the important economic and tourism bases requiring exact management.

Presently coastal area bases become an important object to define national development work as well as to improve living standard of people living in the areas.

The effective implementation of coastal area management needs to create and organize fisheries communities with the promotion of sustainable fisheries community development and prosperity. In our Koh Kong province is taking measure to manage, develop and identify coastal fisheries conservation areas in order to arrange coastal areas become more freshly beautiful and enjoyable place to attract tourists as well as to contribute in national economic development.

Concerning fisheries sector, sea of the Kingdom of Cambodia endows with abundant fisheries resources that provide many thousand tons of catch each year. Therefore, there is needed to have precise managers in managing fisheries resources and fisheries product which are considered an essential part of agriculture sector and play diet role to support Khmer citizen and to export to foreign countries. In the past department of fisheries of the ministry of agriculture, forestry and

fisheries as well as Koh Kong's provincial fisheries office always organize and attend workshops and training courses related to the extension of coastal fisheries management. However, the carrying out of these extensions, have been limited to absorbance of the important of fisheries sector to remote areas. Seeing the issues, department of fisheries in collaboration with SEAFDEC has paid a great effort to organize workshop on human resource development for the establishment of Fish Refugia and coastal fisheries resource management at this time to discuss with and to extend to all participants.

Once again on behalf of Koh Kong's provincial hall and myself I admire and thank the sponsorship from department of fisheries and SEAFDEC. I realize that this sympathy is an important support to encourage human resource development. Then if we have many human resources, the country development will prosper as developed countries in the world and enable fisheries resource management getting success and sustainability.

Finally I request all participants pay great effort and high attention to discussion on and to absorbance of knowledge on human resource development for the establishment of Fish Refugia and coastal fisheries resource management to more highly and effectively serve future development and management works. Then I wish you all always in peace, prosperity and achieving success at all time.

Thank you!

## **OPENING ADDRESS**

On-Site Training/National Workshop on Capacity Building for the Establishment of Refugia and  
Coastal Resources Management  
Koh Kong Province, Cambodia, 27-31 March 2006

*Delivered by:*

Dr. Siri Ekmaharaj, SEAFDEC Secretary General

Mr. Tham San, Deputy Governor of Koh Kong province  
Dr. Magnus Torell, Senior Advisor of SEAFDEC  
Mr. Ing Try, Deputy General of the Department of Fisheries  
Distinguished Guests, Participants, Lady and Gentlemen

Good Morning,

First of all, welcome and it's my greeting to all of you, and sincere appreciation to delegations and resource persons to give your valuable time to participate the National Workshop on "Capacity Building for the Establishment of Fish Refugia and Coastal Resources Management" in support to the Implementation of the Code of Conduct for Responsible Fisheries in the ASEAN Region which was adopted by Council Director in the New millennium Conference. In conjunction with our concern, this workshop is an approach to enhance awareness and to promote various human resource development activities for establishment Fish Refugia and coastal resource management to alleviate problems caused by excessive levels of fishing capacity in the ASEAN region as well in Cambodia.

On behalf of the SEAFDEC Secretariat, I would like to express my gratitude to the participants, resource person of international and national relevance institutions, my colleagues and the Department of Fisheries of Cambodia to take many effort to make this important event smoothly operated as scheduled.

This workshop plays a significant role not only to prioritize strategic action plans of the Department of Fisheries to manage fisheries sources, but provides concept on establishment of Fish Refugia; and it also encourages cooperation Fish Refugia management near border between Cambodia and Thailand.

Finally, to conclude this opening address, may I again request your active participation and contribution to make this workshop end successfully, which will ensure effective outcomes and activities for establishment Fish Refugia and coastal resource management of Cambodia. Now I am happy to declare the workshop officially opened.

Thank you.

**OPEN SPEECH**

Mr. Ing Try, Deputy Director of the Fisheries Department  
On-site Training/ National Workshop on Capacity Building for the Establishment of  
Fish Refugia and Coastal Resources Management  
27-31 March 2006, Bopha Koh Kong Hotel, Koh Kong Province

---

H.E. Governor of Koh Kong Province  
Mr. Director of Department of Agriculture the Koh Kong Province  
Dr. Siri Ekmaharaj, SEAFDEC General Secretary  
SEAFDEC Delegates  
National and International Honorable Guests  
Ladies and Gentlemen

First of all, I would like to express my extreme pleasure and thank H.E. Governor of Koh Kong for permitting and making the organization of this workshop happened. At the same time, I also would like to thank Southeast Asian Fisheries Development Center (SEAFDEC) delegates, national and international guests, officers participating in giving national and international presentations, and all participants who have spent their precious time to come to the national workshop on “Capacity Building for the Establishment of Fish Refugia and Coastal Resources Management” which is a part of implementation of activity plan in South-east Asia Area that also include Kingdom of Cambodia. In conjunction with the plan the has been taken by Board of Trustees in the occasion of Important New-Millennium Meeting, we has paid attention to the workshop to enhance knowledge and human resource development activities for sustainable use and management of fisheries resources and for Southeast Asia fishing conflict reduction, especially our Kingdom of Cambodia.

On behalf of the department of fisheries and myself I would like to thank all national and international presenters and colleagues who have cooperated with SEAFDEC secretariat, particularly Dr. Magnus Torell, **General** Consultant of SEAFDEC, Dr. Woranwit Wanchana, policy component manager of SEAFDEC ( Sida-SEAFDEC), Mr. Suryan Vichitlaekan, SEAFDEC policy program coordinator, Mr. Suy Sereywath, Cambodian counterpart at SEAFDEC as well as Mr. Chun Sophat National communication coordinator working hard to cooperate in organizing the workshop and enabling the arrangement of the workshop went smoothly with expected plan.

Distinguished guests, ladies and gentlemen

The workshop that we all have participated at this time is a great result emerging from good and close cooperation between Department of Fisheries of the Kingdom of Cambodia and SEAFDEC Under Training and Strengthening Human Resource Capacity program aiming to extend work of Cambodian Coastal Resources management, conservation and maintaining via the establishment of Fish Refugia in many places to enable all fish species safely live, breed and prawn from generation to generation.

In this context, the present Cambodian human resource development and the capacity enhancement of management work are critical after the fisheries reform in the past five years. Human resource development and enhancement of working capacity have been gradually carried with noticeable achievements. Department of Fisheries (DoF) as well as Ministry of Agriculture Forestry and Fisheries (MAFF) have recognized the importance of human resource development and enhancement of working capacity since human resource factor has played an important role in achieving all objectives of Cambodian fisheries resource management and development.

Previous capacity building and enhancement for Royal Government officers in fisheries still remain a major problem. Furthermore lack of fisheries experts at remote areas is one of the big aggravated problems of the department of fisheries to challenge with at present.

To solve this problem, it is necessary for the DoF to have a clear and suitable human resource development plan responding to the real needs at present time as well as in the future. At the same time, in order to achieve a clear and suitable human resource development plan, it is required a plan to build human resource capacity develop for timely implementing it which is parallel to Cambodia's Royal Government Policy Program and Needs in human resource development that is an important key to national economic development, particularly to reduce poverty and to upgrade people's daily livelihood which is a main target of the Royal Government.

In this regard, the need of human resources with high competent capacity and high capacity to improve the situation is a very important factor to ensure national success and to play a key role in ensuring the sustainability of Cambodian fisheries sector development.

As you all knew that the present fisheries management system, especially the management of our Cambodian coastal fisheries resources is weak due to technical and budget problems. According to meeting on 17<sup>th</sup> March 2005 in Phnom Penh between department of fisheries and SEAFDEC representatives (SEAFDEC-Sida) as well as concerned institutions decided to establish national workshop which is a third training workshop on human resource development of SEAFDEC-Sida project for strengthening the capacity of coastal fishery resource management with high efficiency at this time. The workshop will concentrate on learning from each other and on exchanging of experiences that have gained from implemented projects at coastal areas and inland areas. The exchange of experience and information is not only to promote close collaboration among each other, but it also avoid repetition of implementation of overlapping projects as well as to promote high efficient management action and to explore other new clues as an input for future improvement and development.

Following this very important national workshop I hope that we will achieve a suitable human resource development strategy for the establishment of refugia and coastal fisheries resource management in the Kingdom of Cambodia for future department of fisheries as well as it is enabled us to clearly understand the trans-boundary experiences and issues. Therefore I would like to take this opportunity to appeal all ladies, gentlemen, resource person, participants should share and deeply study more all past existing experiences. Although we have participants who are the regional, national, provincial and community levels with different knowledge and experiences, we should pick up all good lessons/experiences for deeply sharing and discussing to

exchange ideas for exploring more new clues to effective implementation of fisheries resource management at their own areas.

Once again on behalf of Ministry of Agriculture Forestry and Fisheries (MAFF) as well as Department of Fisheries I would to highly admire supports from SEAFDEC and all experts, particularly sponsor, SEAFDEC-Sida who has initiated and supported this project. I also realize that this sympathy is very essential support to encourage and enable the coastal fisheries resource management task increasingly achieving more success.

Finally I wish all participants getting success in the discussion and learning more all new experiences for strengthening capacity and human resource development for the establishment refugia and for coastal fisheries resource management in our Kingdom of Cambodia.

I would like to declare the workshop open.

Thank you!

*Annex 5*

**Timetable & Tentative Agenda**  
**On-site Training/National Workshop on Capacity Building for the Establishment of**  
**Refugia and Coastal Resources Management**  
Bopha Koh Kong Hotel, Koh Kong Province, 27-31 March 2006.

\*\*\*\*\*

**Objective :** To investigate the concepts and requirements (particularly supporting capacity building) for establishment of “Fisheries Refugia” near/in the Cambodia-Thailand border and to promote human capacity building for coastal resources management by mobilizing the lessons learned from projects/initiatives based on the experiences in Koh Kong and others related provinces/projects;

**Specific Objectives:**

- To develop a plan to further address and implement a process to for establishment of fishery refugia integrated with locally based management (based on the experiences in Koh Kong)
- To review concepts and basic design for establishment of “fisheries refugia”
- To clarify linkage of “fisheries refugia” in the context of locally based coastal resources management
- To clarify the role of fisheries refugia in the management of fishing capacity
- To identify capacity building needs and activities including HRD materials in support of the establishment of fisheries refugia
- Outline of a training package HRD on the management of fisheries refugia and locally-based coastal fisheries management in Cambodia
- To discuss potential collaborative mechanisms between Cambodia and Thailand in the implementation of fisheries refugia

**Expected Outputs:**

- A draft plan for the establishment of for fisheries refugia integrating locally-based coastal fisheries management in Cambodia
- Suggested collaborative mechanism for the implementation of fisheries refugia in Cambodia and Thailand
- People trained in the concept of fisheries refugia and locally based management of fisheries and coastal resources based on the situation in Koh Kong

**Target Participants:**

**Cambodia**

Officers from DOF, Phnom Penh, Koh Kong, Sihanoukville, Kep and Kampot; officers from MOE and relevant NGO’s  
Fishermen, Villagers/Commune Council, etc from the four provinces

**Thailand**

Officers from DOF as well as from Trad Province

**Day 1 (27 March 2005, Mon.)**

<b>Timetable</b>	<b>Topics and Programme</b>	<b>Name of Presenters</b>
08:30-09:00	Registration	
09:00-10:00	Introduction National Anthem Salutation  Welcome Address Welcome Address  Opening Speech	- Dr. Magnus Torell - Mr. Tham San, - Dr Siri Ekmaharaj - Mr. Ing Try
10:00-10:30	Project/Program Presentation On-site training/Workshop on Establishment of Refugia and Coastal Resources Management, Cambodian representative to SEAFDEC	Mr. Suy Serywath
10:30-11:00	Refreshment break	
11:00-11:30	2.2 Issues and Solutions for Coastal Zone Management in Cambodia, ( <i>CZM/Danida/MoE</i> )	Mr. Van Monyneath
12:00-14:00	Lunch break	
14:00-14:55	2.3 Lesson Learnt from Local Area Coastal Resources Management in Koh Kong ( <i>CZM/Danida/MoE</i> )	Mr. Pok Bunthed, CZM Centre, Koh Kong
14:55-15:10	Refreshment break	
15:10-15:25	Prepared discussion points	Mr. Ly Vuthy and Ms. Kaing Khim
15:25-15:40	Prepared input form Province/Commune Council	Mr. Ly Vuthy and Ms. Kaing Khim
15.40-17.00	Discussions	Plenary

**Day 2 (28 March 2006, Tue.)**

09:00-10:00	2.6 Community Based Resources Management in Koh Konga, ( <i>IDRC/DFID/WWF</i> )	Mr. Kim Nong
10.10-10.15	Prepared discussion points	Mr. Thor Sensereivorth
10.15-10.30	Prepared input form Province/Commune Council/Fisherfolk	All
10:30-10.45	Refreshment break	
10.45-11:15	Introduction to the new Fisheries Law and the Sub-decree on Community Fisheries	Mr. Ly Vuthy
11.15-12.00	Introduction to Group Work and Open Discussion	
12:00-14:00	Lunch break	
14:00-15:00	Group Work in 4 – 5 Groups	Facilitators
15:00-15:30	Refreshment break	
15:30-16:30	Presentation of Group Works and Discussion	Groups



**Day 3 (29 March 2006, Wed.)**

08:30-09:15	Seagrass, Corals and Mangroves in Koh Kong Province <i>UNEP/GEF/DoF (Seagrass, Corals, Mangroves)</i>	Mr. Ouk Vibol
09:15-10:00	Management & Conservation Program on Endangered Species and Commercially Important Species in Koh Kong/ Coastal Area of Cambodia, <i>DoF/NGOs Projects</i>	Mr. Pich Sereywath
10:00-10:30	Refreshment break	
10:30-10:45	Prepared discussion points by CBNRM Learning Initiative	Ms. Kaing Khim
10.45-11.00	Prepared input form Province/Commune Council/Fisher folk	Mr. Ly Vuthy and Ms. Kaing Khim
11.00-11.30	Discussion	All
11.30-12.00	Introduction to Refugia	Mr. Ing Try
12:00-14:00	Lunch break	
14.00-14.30	Introduction to Refugia (con't) and Introduction to group	Mr. Ing Try
14.30-14.45	Prepared discussion points on refugia and locally based management	All
14.45-15.00	Prepared input form Province/Commune Council/Fisher folk	All
15:00-15.:30	Group Work	Groups
15:30-16:00	Refreshment break	
16:00-17.00	Group work Continues	Groups

**Day 4 (30 March 2006, Thu.)**

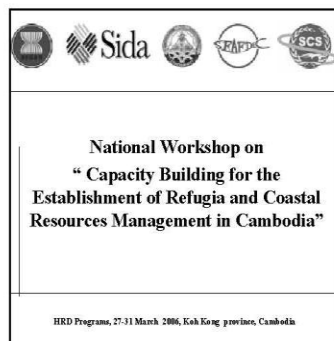
08:30-09:30	Presentation of Group Works and Discussion	Groups
9:30-10:30	Discussion	All
10:30-11:00	Refreshment break	
11.00-12.00	Experience on locally based management from Trad Province in Thailand and Discussion	Mr. Chanarong Rungsri Representative of Trad Province, Thailand
12:00-14:00	Lunch Break	
14:00-15:00	Discussion on potential collaborative mechanism between Cambodia and Thailand on fisheries refugia	Facilitator, Chair
15:00-15:30	Refreshment break	
15:30-16:00	Wrap up and make conclusion of the workshop	Dr. Magnus Torel
16:00-16:30	Clarification of the next step for SEAFDEC-Sida HRD program	All
16:30-16:45	Closing of the Workshop	Mr. Ing Try

**Day 5 (31 March 2006, Fri.) Field Study**

07:00-7:30	Take the cars from the Hotel to the Peam Krosorp CF	
07:30-09:00	Meet with Peam Krosorp Community Fisheries	
09:00-11:00	Take the boat to visit Mangrove reforestation, and look at fishing practices and aquaculture activities in the Mangrove area, etc	
11:00-12:00	Lunch break (be provided)	

## BACKGROUND AND RATIONALE OF THE TRAINING

By Mr. Suy Serywath, Regional Fishery Policy Net Work for Cambodia



Background and Rationale (cont)
<p>B. H. Resources and F. Management</p> <ul style="list-style-type: none"> <li>☞ Major constraint of CCRF implementation: Lack of qualified/trained personnel.</li> <li>☞ SEAFDEC-SIDA: developed a regional program on HRD in 2003.</li> <li>☞ RTC in Kuala Lumpur, Feb 2003: HRD in fisheries.</li> </ul>
HRD Programs, 27-31 March 2006, Koh Kong province, Cambodia

Background and Rationale (cont)
<ul style="list-style-type: none"> <li>☞ RTC in Phnom Penh, June 2004: HRD in fisheries management: Strategy &amp; Regional inventory.</li> <li>☞ Expert Meeting on Fishing Capacity and HRD, in Bangkok Sept 2004: Pilot Process is agreed.</li> </ul>
HRD Programs, 27-31 March 2006, Koh Kong province, Cambodia

Background and Rationale (cont)
<p>C. Pilot Process on HRD in SEA.</p> <ul style="list-style-type: none"> <li>➢ Consideration: commonality and differences among the countries.</li> <li>➢ Strategy to draw lessons and experience from a representative set of countries to provide a basis to develop future direction: so called "PILOT PROCESS"</li> </ul>
HRD Programs, 27-31 March 2006, Koh Kong province, Cambodia

Background and Rationale (cont)
<p>E. Action of pilot Process: in Cambodia</p> <ul style="list-style-type: none"> <li>➢ The meeting 17 March 2005;</li> <li>➢ Workshop 6-8 July 2005, Phnom Penh.;</li> <li>➢ On-sit training 20-23 September 2005, Kampot province.</li> </ul>
HRD Programs, 27-31 March 2006, Koh Kong province, Cambodia

Background and Rationale (cont)
<p>F. Existing activities related to HRD</p> <ul style="list-style-type: none"> <li>✓ <b>Social, cultural:</b> awareness on "so-economic" provide through study, survey etc.</li> <li>✓ <b>Natural resource management:</b> awareness on "environment" provided through training, participatory approach (community development plan of action) etc.</li> <li>✓ <b>Legislation:</b> Regulation, degree, sub-degree provide to the local community.</li> </ul>
HRD Programs, 27-31 March 2006, Koh Kong province, Cambodia

<b>Background and Rationale (cont)</b>
<p>G. Recommendation 1</p> <ul style="list-style-type: none"> <li>✓ Management of fishing capacity;</li> <li>✓ Strengthening of local fisheries management capacity;</li> <li>✓ Integrate fisheries management into habitat management.</li> </ul>
<p>HRD Programs, 27-31 March 2006, Koh Kong province, Cambodia</p>

<b>Background and Rationale (cont)</b>
<p>G. Recommendation 2</p> <ul style="list-style-type: none"> <li>✓ Establishment fishery refugia;</li> <li>✓ Participatory fishery resource management through experiences of project activities along the coastal area of Cambodia;</li> <li>✓ Cooperation between Cambodia-Thai on establishment of fish refugia near the border.</li> </ul>
<p>HRD Programs, 27-31 March 2006, Koh Kong province, Cambodia</p>

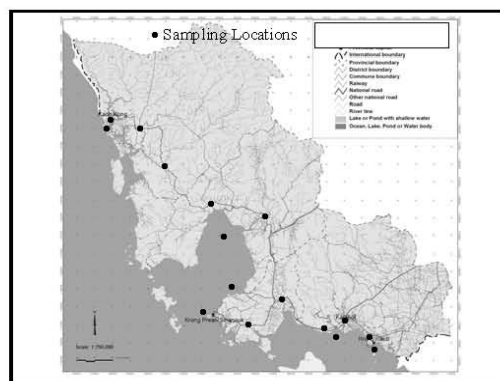
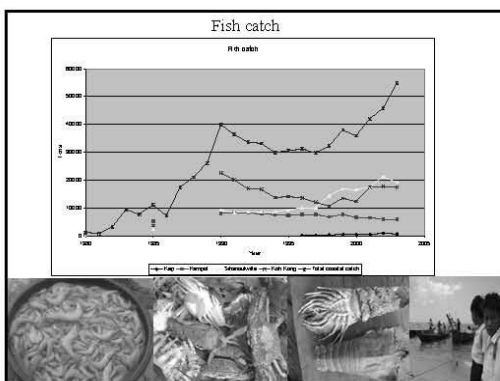
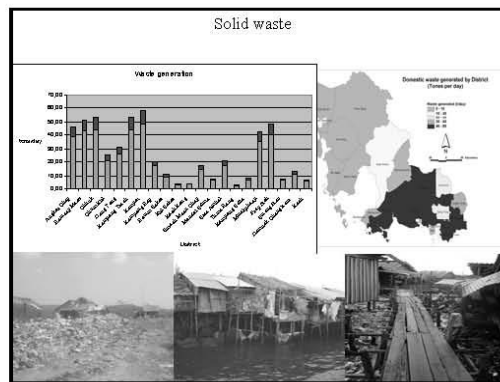
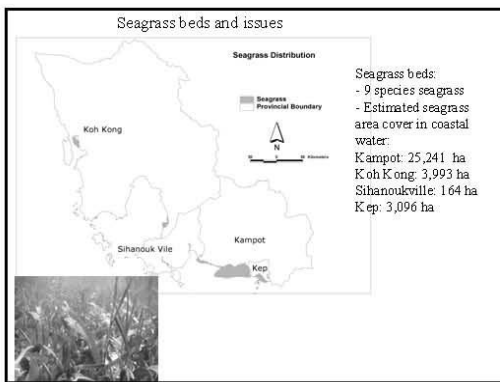
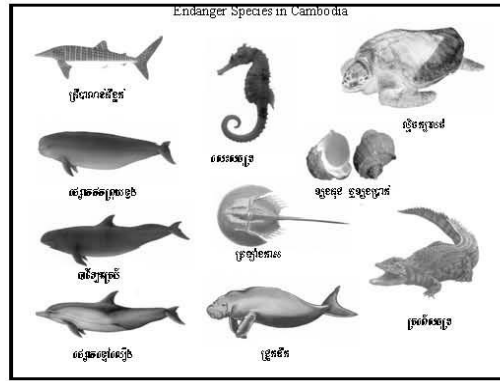
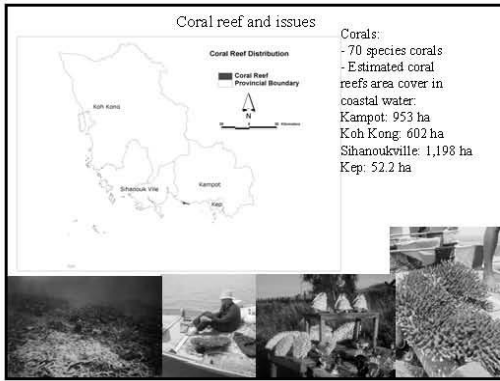
<b>National Workshop (cont)</b>
<p>➤ Specific Objectives:</p> <ul style="list-style-type: none"> <li>✓ To develop a plan to further address and implement a process to for establishment of fishery refugia integrated with locally based management (based on the experiences in Koh Kong);</li> <li>✓ To review concepts and basic design for establishment of “fisheries refugia”;</li> </ul>
<p>HRD Programs, 27-31 March 2006, Koh Kong province, Cambodia</p>

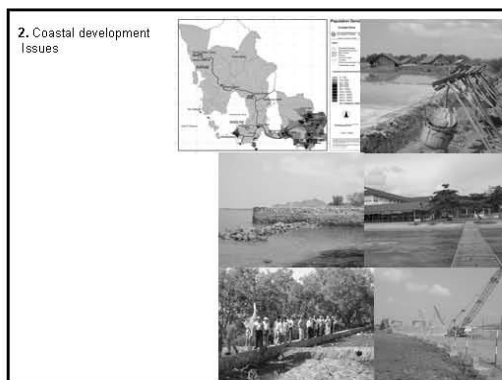
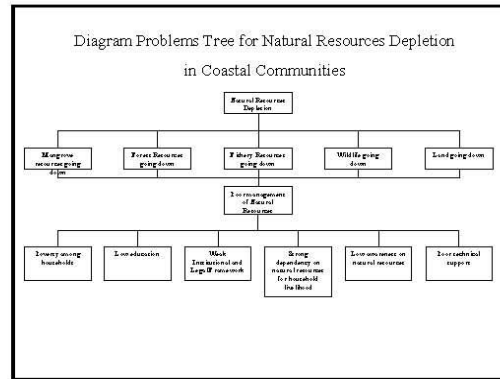
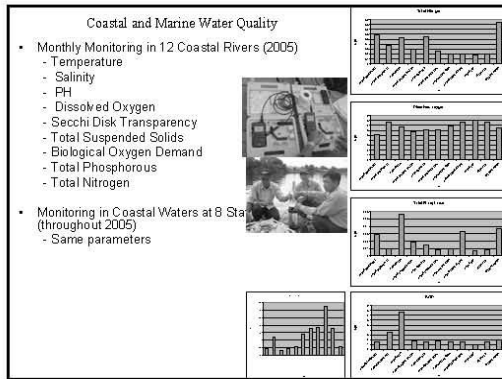
<b>National Workshop (cont)</b>
<ul style="list-style-type: none"> <li>✓ To clarify linkage of “fisheries refugia” in the context of locally based coastal resources management;</li> <li>✓ To clarify the role of fisheries refugia in the management of fishing capacity;</li> <li>✓ To identify capacity building needs and activities including HRD material in support of the establishment of fisheries refugia;</li> </ul>
<p>HRD Programs, 27-31 March 2006, Koh Kong province, Cambodia</p>

<b>National Workshop (cont)</b>
<ul style="list-style-type: none"> <li>✓ Outline of a training package HRD on the management of fisheries refugia and locally-based coastal fisheries management in Cambodia;</li> <li>✓ To discuss potential collaborative mechanisms between Cambodia and Thailand in the implementation of fisheries refugia.</li> </ul>
<p>HRD Programs, 27-31 March 2006, Koh Kong province, Cambodia</p>

<b>National Workshop (cont)</b>
<p>➤ Expected Outcome</p> <ul style="list-style-type: none"> <li>✓ A draft plan for the establishment of for fisheries refugia integrating locally-based coastal fisheries management in Cambodia;</li> <li>✓ Suggested collaborative mechanism for the implementation of fisheries refugia in Cambodia and Thailand;</li> <li>✓ People trained in the concept of fisheries refugia and locally based management of fisheries and coastal resources based on the situation in Koh Kong.</li> </ul>
<p>HRD Programs, 27-31 March 2006, Koh Kong province, Cambodia</p>



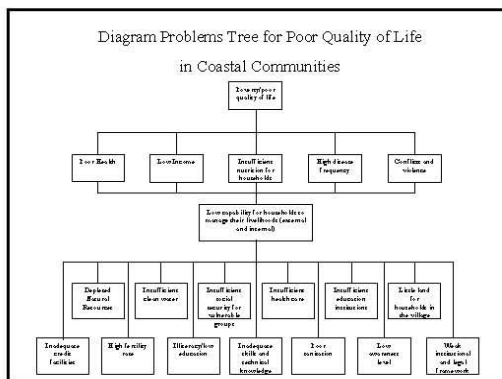




**3. Policy legislation and institutions involved CZM**

3.1 Policy involved CZM

- Recognizing the necessity of decentralization policies,
- Recognizing the necessity of land use policies,
- Recognizing of marine policies,
- Recognizing the necessity of sustainable resources utilization policies and balance of socio-economic development and natural resources and environmental management,
- Recognizing the necessity of integration and coordination, public and private cooperation and community participation in NRM.



3.2 Legal involved in CZM

Law on Environment and Natural Resources management

- Land Law
- Law on Forestry
- Law on Fisheries (Drafted)
- Law on Communal Administration
- Investment Law
- Law on Protected Areas (Drafted)
- Law on Mines and exploitation
- Others Sub-decrees and regulations

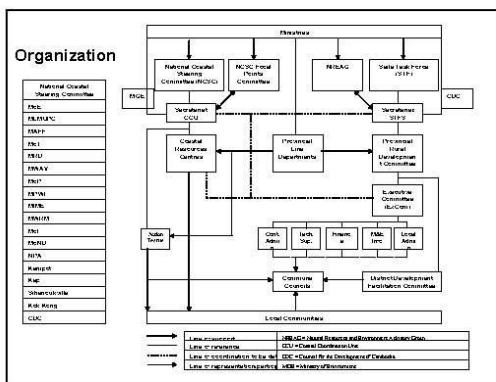
### 3.3 Institutions involved CZM

- National Coastal Steering Committee
- National Committee for Support to Communes
- Seila Task Force/D & D Strategy
- Provincial Rural Development committee
- Prime Minister's recommendations

### Coastal Resources Centres



- Information (general, specific)
- Exhibition (coastal management issues)
- Meetings (public, private, government, non-government)
- Training (vocational, NGOs, government staff, etc)
- Education (support schools and higher learning institutions)
- Resource (Staff, Office, IT, Boat, Surveying, etc.)



### 4. Regional and International Involved CZM

- Donor partners to CZM in Cambodia
- CZM project (Danida)
- Participatory Management of Coastal Resources (IDRC/Canada)
- Participatory Natural resource management and Land Use Planning (GTZ)
- Integrated Coastal management in Sihanoukville (PEMSEA/IMO)
- Commune and Community Based National Resource Environmental Management (Seila/Danida)
- South China Sea Regional Project (UNEP/GEF)
- NGOs



**COMMUNITY-BASED NATURAL RESOURCE MANAGEMENT DANIDA/MOE**

By Mr. Pouk Bunthed, Coordinator of CZM project in Koh Kong province

Environmental Management in the Coast line of Cambodia  
 Ministry of Environment & Danida

**Presentation on  
 Community Based Participatory  
 Natural Resource Management**

Prepared By Pok Bunthed, CZM, Koh Kong, 2006

**1- Introduction**

Cambodian Coastal Natural Resource Management Project commenced its activities in 1997 under the financial support from Danida. This is the 3<sup>rd</sup> phase, and it will be finished its activities through:

- 1- Increasingly communicative support from partner projects implementing the same activities on environmental and natural resource management.
- 2- Seek for long-term financial support;
- 3- Enhance capacity building for sustainable environmental management.

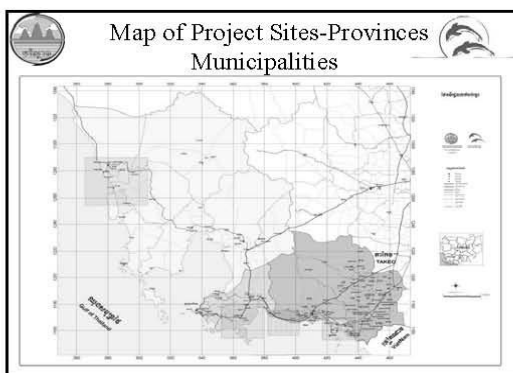
**2- Province-City under Project Sites**

Selected project sites consist of:

- Sihanouk Ville: in Ream National Park contains 12 villages.
- Kep: Along Kep coastal line, there are 5 villages.
- Kampot: Along national road no. 3, it consists of 8 villages.
- Koh Kong: In Peam Krosaup wildlife sanctuary. There are 7 villages.

**Selected Sites for Development in Koh Kong**

- Prek Svay village locates in Stung Veng commune, Smach Meanchey district.
- Stung Veng village locates in Stung Veng commune, Smach Meanchey district.
- Boeung Tachang village locates in Pak Khlorng commune, Mondol Sema district.
- Koh Kong village locates in Peam Krosaup commune, Mondol Sema district.
- Koh Srorlao village locates in Kapi commune, Koh Kong district.
- Koh Kapi village locates in Koh Kapi commune, Koh Kong district.
- Chrauy Pros village locates in Chrauy Pros commune, Koh Kong district.



**Key issues occurred in the Project Area**

- Poverty
- People livelihood depends mainly on natural resource
- People awareness about the value of natural resource is limited
- Population increased causes the more increase of fishermen
- Natural resource seriously destroys by the illegal fishing activities and increasing of illegal fishing methods
- Technical support and collaboration from relevant agencies are limited
- Conflict within communities and communities and outsiders.

**3- Goal and Objective of the Project**

Protect the environment and natural resource along the coastal area in order to enhance the people livelihood in the area through sustainable utilization and development.

**4- Key Strategies for Implementation**

- 1- Sustainable development (fund, natural resource, human resource)
- 2- Contribute to the poverty reduction
- 3- Gender equity
- 4- Good government (democracy transparency and accountability)
- 5- Ownership of the local community
- 6- Suitable management of lowest class
- 7- Cling to the knowledge and culture in the region.

**5- Supported Project Activities**



- 1- Set up and develop the community based natural resource management
- 2- Apply small scale multi-agricultural system
- 3- Vocational training
- 4- Environmental education in the system
- 5- Set up clear water system and waste management as well as rural hygiene
- 6- Rehabilitation of agricultural land and provide the cattle
- 7- Eco-tourism

**6- Outcomes**

**6-1 Develop the Community based Natural Resource Management**



- Elect the community member for the new mandate
- Amend the CF statute
- Demarcate CF border and make map for each CF
- Arrange study tour in order to exchange experiences
- Set up patrol group and educate the statute
- Jointly protect and replant mangrove forest.





### 6-2 The Implementation of Small Scale Integrated Farming System.

- Train villagers to become the village veterinary
- Select the best farming family for the first trial
- organize the study tour on the practice of integrated farming in Takeo province for the representative of the best farmers veterinaries and agricultural officers.
- Train on the technique of integrated farming practice



### (cont.)

- Set up committee for funding management and accountability
- Provide the best families the breeding cattle, vegetable seed, fruit tree to apply in their daily activities
- Monitoring and evaluation of the operational practice of the best family
- Prepare the future action plan for the best family and select more families in order to extend the programme.

### 6-3 Vocational Training

- Dialogue with the council on the actual needs of the village/commune
- Recruit and allow the trainees to attend the small scale machinery and electronic repairing training
- Prepare the materials for implementing process  
Set up women selection criteria for sewing, marriage and hair dressing.

### 6-4 Environmental Schooling Programme

- Set up the national working group for coastal environmental education.
- Select the school and responsible teachers for environmental education.
- Train the school principals, referent teachers, district educational officers, and officers coming from provincial youth and sport department.
- Support to the relevant document and significant materials for activity implementation.
- Organize the study tour in order to share and transfer technology and practice
- Make budget and material planning for implementing in each school.



**6-5 Cleaning Water Management and Rural Sanitary**

- Survey on the issues of cleaning water and waste management in the community areas.
- Set up the committee to manage the water and waste.
- Discuss with the commune council on the policy of funding operation which profits from water selling.
- Make the budget proposal and to be auctioned the construction materials.
- Monitoring and evaluation of implementing activities.



**6-6 Eco Natural Tourism**

- Survey and information gathering from the relevant stakeholders.
- Survey on the site selection for implementation.
- Organize the workshop in order for discussing on the potential of eco tourism establishment.
- Set up the working group for management and implementation.
- Define the main locations for tourism zones.
- Organize the exchange programme study tour.



**7- Constrains in the Process of Implementation**

- Less counterpart staff, but there is too much work
- Limited capacity and skills of staff and working group
- Difficulties in communication and information access
- Unclear management structure
- Unclear ToRs of all relevant stakeholders.

**Annex 9**

**EXPERIENCE OF LONG TERM CAPACITY BUILDING FOR COMMUNITY-BASED NATURAL RESOURCES MANAGEMENT IN COASTAL AREA OF CAMBODIA**

**By Mr. Nith Chia on behalf of Mr. Kim Nong Team Leader of the project, IDRC/MoE**



**What is the Value of Coastal Biodiversity Resources?**

It includes all the living creatures of the world, as well as the ecosystems and ecological processes of which they are part.

**The Value of Environment and Economic**

Biodiversity provides our food, clothing, building materials, medicine etc... But it is more: it is also a source of pleasure, knowledge, beauty and belief...

There are six PAs designate along the coastal area by the Royal Decree of November 1993. They include four National Parks, a Wildlife Sanctuary and a Multiple Use Area

**Protected Areas**

**Trend and Issues of Coastal Cambodia in 1990s**

- Opening up of export market
- Fish catch began to decline as population increased
- Forest and mangrove destruction activities increased (esp. for logging shrimp farming, charcoal producing and other consumptions...)
- Poor management due to political crisis
- Fewer people have access to modern fishing gears...

**Trend and Issues of Coastal Cambodia in 1990s**

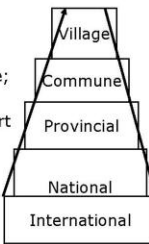
**Scope of Participatory Management of Coastal Resources Project**

**Main Objectives:**


- CBNRM Approach
- CBNRM capacity building at the different scales and levels
- Integration of CBNRM into commune level plans
- CBNRM
- Outreach and advocacy to decision-makers on CBNRM
- Sharing experience, skill and attitudes to community development workers (with focus on resource planning and management; small scale livelihoods activities community organizing and conflict resolution inside and outside the protected area)

**Networking and Capacity Building of Human Resources for NRM**

- Multi-disciplinary research team (different technical departments) working at different scales (international, national, provincial, commune and local) i.e. cross-scale;
- Focus on researching how to support local level institutions for resource management and on enhancing livelihoods.



**Priority Partnerships in Resources Management**



- Local authorities
- Provincial Technical departments
- Respected elders
- Long-time residents in area
- Group of indigenous knowledge or environmental experiences
- Newcomers to PKWS
- General population

**Why Do We Think Local People First?**


- Local communities are at the heart of coastal resource management
- They depend on the natural resources for their way of life; their in-dept knowledge of the environment is key for conservation.
- Their decisions will have the greatest impact on the natural environment.
- Local inhabitants should be involved in the management of the natural resources and benefit most directly from long-term conservation of their habitat.

**Common Tools in Human Resources Development**

- PRA ( eg. historical times line, resource mapping, problem tree, season calendar, venn diagram, semi-structure interview....)
- Trainings (values and beneficial of coastal ecosystem, concepts of CBNRM etc...)
- Workshops (sharing and discussing on research information and perception of government civil society and private sectors on coastal resource management...)
- Study tours (in and outside country)
- Learning and sharing of need
- and other tools etc...

**Tips**

Facilitation in capacity building of human resource is a bit like medicine: It depends on how the doctor administers this medicine. If a facilitator is good then the process will be effective, if the facilitator is not so strong then the process will not be so useful.



**Learning by Doing and Doing With Learning**

- Villagers (with facilitation from PMMR) formulated their own VMC and management regulations, and action plane include mangrove replanting, home gardening, cleaning village and conflict resolution etc...



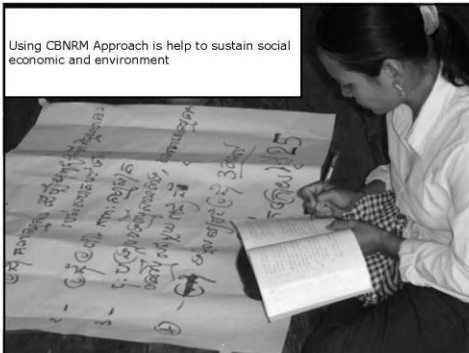
**Key Learning of Sustainable CBNRM**

- Clearly identify objectives and study with participatory analysis;
- Discussion and get support from the inter-institutions (technical and financial support);
- Identify and spend time with key persons discussing ideas for the management;
- Have the community decide and consideration on what they are interested doing and managing;

**Key Learning of Sustainable CBNRM (con't)**

- Organizing committees and develop management regulation and guideline;
- Boundary demarcation of the community management area with support by relevant institutions;
- Dissemination of these regulations and guideline and have the community involving with management planning and implementation;
- Monitoring of activities, Evaluation and review of the community 's management plan, etc.

Using CBNRM Approach is help to sustain social economic and environment



**The Impact of PMCR Research Project**

- The pressure on natural degradation have been reduced such as: mangrove degradation, illegal fishing, hunting, environmental pollution & etc..
- The village and commune development planning is more easies (most villagers provide good comment for conservation and development of their own local resources)
- The supporting from other sources have been increased, both in and out side community. e.g. mangrove replanting, cleaning village, stop illegal fishing, infrastructure development: school, pagoda, wells, and other alternative livelihoods, etc...

- Policy and legal framework reform such as: to enhance local community on learning, sharing knowledge and perception, negotiating, and taking role and responsibility for NRM and participation in policy and legal framework development, etc...
- Creation of a study area for students and community development workers to understand what work and what do not work on the ground of CBNRM
- Networking expansion for implementation of CBNRM with CZM, MREM-Seila, CBNRM-LI and other CBNRM projects and programs.

**The Challenge In Wider Implementation of Sustainable CBNRM**

- Institutional conflicts;
- Legal framework support is limited;
- Understanding of the beneficial CBNRM approaches from stakeholders (esp. national and international) is limited;
- Time of learning and adopting is not appropriate;
- Linking local knowledge and scientist knowledge is still big gap (need to fix outside knowledge with local knowledge/experiences);

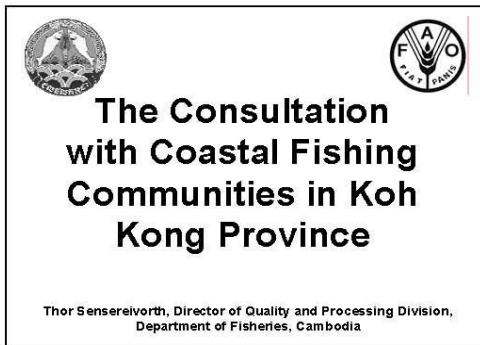
- Negative impact of modern fishing gears on small scale fishing community area
- Cross boundary issues on fishing activities (eg. Provincial boundary and country boundary...)





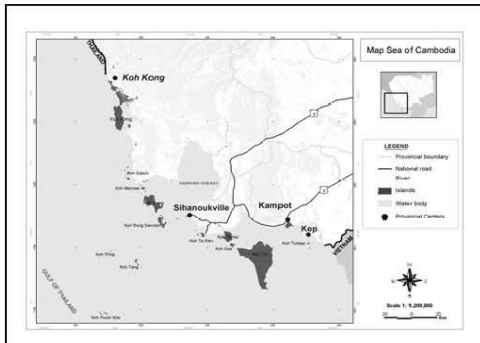
## RESULTS OF CONSULTATION WITH COASTAL FISHING COMMUNITIES ON CONFLICTS AND RESOLUTION AS WELL SOCIO-ECONOMIC ISSUES

By Mr. Thor Sensereivorth, Director of Fisheries Quality and Processing Division;  
 FAO-Sid/DoF



### Introduction

- ✓ The consultation meetings with coastal fishing communities on conflicts and resolutions, as well as socio-economic issues was conducted from 03 August – 02 November 2005 in Kampot province, Sihanoukville, and Koh Kong province.
- ✓ The purpose of the project is to get voices from local people about their problems, requirement, proposals, and solution issues related to sustainable coastal resources use.



### The Main Issues of the Fisheries Conflict

The main fisheries conflicts of coastal fishermen in Cambodia are evidently consisted of 3 types:

- With foreign fishing vessels
- With poachers from outside areas (unknown)
- With neighbouring community fisheries

### Method of Consultation Techniques




- ✓ 5 fisheries communities were selected in Koh Kong province.
- ✓ The consultation meeting took place on day 1, and a trip to visit fishing ground was on day 2.

- **Day 1:** The consultation meeting took place at the house of the head of community fisheries or the head of commune or the head of village.
- **Day 2:** The group was led by head of fisheries community to see the fishing ground, fishing gears, and boats.

**Questionnaire on the Socio-economic issue of coastal small scale fishermen**

**I- Socio-Economic**

- 1- General status of the family
- 2- Household income and expenses
- 3- Fishing activities and boat

- What kind of fishing gear you use?
- What type of engine of fishing boat you use?
- How much fish do you catch per day?

- 4- Education
- 5- Health
- 6- Awareness about fisheries legislation
- 7- Perception of fisheries management
- 8- Do you have any comment, questions or ...



**II- Coastal Fisheries Conflicts**

- 1- What Kind of fisheries conflicts?
- 2- Conflicts and resolutions

**The Result of the Consultation**

**1- Koh Srolao Community Fisheries**

Created date: 6 December 2001 (by DOF/PMMR/IDRC)  
 Population : 1,959 (372 families)  
 Location : Koh Srolao village (island), Koh Kapi commune, Koh Kong district/province  
 Supporters : PMMR/IDRC, DANIDA, CZM  
 Main job : Fishing with main fishing gears: crab trap, fish trap, and fish net.  
 Main conflict: With trawlers from neighbouring communities (Koh Kapi CF, Chroy Pros CF) and Steung Hao in Sihanoukville.  
 Request : Assistance from fisheries authority to crack down illegal fishing activities, training course on fisheries law, creating more community fisheries, equipments to facilitate patrolling work, i.e camera or GPS etc.

**The Result of the Consultation**

**2- Koh Kchornng Community Fisheries**

**Created date:** 14 May 2003 (by DOF/AFSC/QUAKER)  
**Population :** More than 400 (285 families)  
**Location :** Koh Kchornng village (island), Chikhor commune, Sre Ambel district, Koh Kong province  
**Supporters :** AFSC/QUAKER, Khmer Non-violence, CARE, PFD  
**Main job :** Fishing with main fishing gears: crab net, shrimp net, and fish net.  
**Main conflict:** With trawlers from Steung Hao (in Sihanoukville).  
**Request :** Assistance from fisheries authority to crack down illegal fishing, training course on fisheries law, equipments to facilitate patrolling work, i.e camera or GPS etc.

**3- Chroy Pros Community Fisheries**

Created date: 22 April 2002 (by PMMR/ IDRC)  
 Population : 1,649  
 Location : Phum Tmey village, Chroy Pros commune,  
 Supporters : ICRD/CZM/PMCR  
 Main job : Fishing with main fishing gears: crab net, shrimp net, and fish net.  
 Main conflict: With trawlers that operate near the shore and destroy small scale fishing gears. With Thai fishermen in the deep water fishing ground. Thai fishermen are pair trawlers and trawlers combining with light attractive device.  
 Request : Community Fisheries should have the right to arrest illegal fishermen. Fisheries authority should crack down on illegal foreign fishing vessels, give training course on fisheries law, and provide equipments to facilitate patrolling work, i.e camera or GPS etc.

**4- Boeng Kachhang Community Fisheries**  
 Created date: 17 October 2002 (by DANIDA)  
 Population : 113 families  
 Location : Boeng Kachhang village, Pak Klong commune, Mondul Seima district, Koh Kong province  
 Supporters : DANIDA/CARE  
 Main job : Fishing with main fishing gears: crab/shrimp/fish net, push net, fishing boat combining with light.  
 Main conflict : - With Cambodian engine push-net that operate near the shore and destroy small scale fishing gears.  
 - With Thai fishermen are pair trawlers and trawlers combining with light attractive device.  
 Request: Fisheries authority/government must stop foreign boats from entering their fishing grounds, give training course on fisheries law, and provide equipments to facilitate patrolling work, i.e camera or GPS etc.

**5- Koh Kapi Community Fisheries**  
 Created date : 26 June 2003 (by PMMR/IDRC)  
 Population : 1,673 (324 families)  
 Location : Koh Kapi village, Koh Kapi commune, Koh Kong district/province  
 Supporters : IDRC  
 Main job : Fishing with main fishing gears: trawlers  
 Main conflict : - With its neighbour Khum Chroy Pros community fisheries.  
 - With foreign fishermen are pair trawlers and trawlers combining with light attractive device.  
 Request: Fisheries authority/government must stop foreign boats from entering their fishing grounds, give training course on fisheries law, and provide equipments to facilitate patrolling work, i.e camera or GPS etc.

**SOLUTIONS**

The real voices of community fisheries members demand the following points:

- √ Government got to stop the encroachment of foreign fishing vessels.
- √ Local authority, local police officers, and fisheries inspectors must be transparent, more cooperate, and take their request for assistance more serious.
- √ Donor community is kindly requested for financial support or at least incentive such as equipment to facilitate guarding fishing ground (camera, binocular, GPS, or patrol boat, etc.), or providing training course on fisheries law, community fisheries.
- √ Alternative livelihood is warmly welcome. Skill training for other jobs is expected for their young generation as fisheries is no longer a promising job.

**CONCLUSIONS**

- ◇ Technical assistance and financial assistance are of importance to strengthen community fisheries.
- ◇ Some incentives such as equipment to facilitate guarding and understanding fishing grounds (camera, binocular, GPS) should be provided for a better management of each community fisheries.
- ◇ For the long term solution to the poverty alleviation, it is suggested that alternative livelihood be provided to the young generation so that pressure on marine resources be reduced and we still have a healthy ecosystem without conflicts.



**Annex 11**

**EXPERIENCE OF COMMUNITY FISHERIES ESTABLISHMENT PROCESS AND  
EFFECTIVENESS OF COMMUNITY SUB-DEGREE ENFORCEMENT**

**By Mr. Ly Vuthy, Director of Community Fisheries Division**

Experiences of Community Fisheries Establishment  
Process and the Effectiveness of Community  
fisheries Sub-decree Enforcement

Main keys:

- History of CF Organization in Cambodia
  - 1995: FAO cooperated with Siem Reap DoF to establish Community Flooded Forest Protected in SR Province
  - In 1998, some NGOs initiated to establish community fisheries in Kratie and Strureng province
  - In October 2000, fisheries reform in Cambodia
  - In 2001: 165 community fisheries were established
  - In 2002: 258 CFs established
  - In 2003: 329 CFs established
  - In 2004: 275 CFs established
  - In 2005: 440 CFs established

- Why Community Fisheries in Cambodia?
  - World fisheries management paradigms have shifted from centralize to participatory
  - Fisheries Policy Reform in Cambodia
    - Population Increase
    - Fishing Ground is to small compared to no. of local people
    - Fisheries conflicts occurred
    - Encourage local participation in fisheries resources management
    - General reform of the Royal Government in important sectors

- 4 pillars for community fisheries successful
  - Policy and legal framework to support CFs
  - Community Fisheries Empowerment
  - Institutional support and linkages
  - Provision of adequate resources to CFs

- Issues:
  - The dissemination of community fisheries, laws and other legal documents are limited
  - Most CFs have no map, by-law, management plan and conservation area
  - The capacity of CFs committees are limited
  - Some area has no support from projects and NGOs
  - In some areas the cooperation and support from relevant institutions and stakeholders are not smooth
  - CFs still have no fund for operate themselves

Discussion Point

- Based on experiences, how do you think of community fisheries establishment process? (Achievements, and limitations)
- Since the Sub-decree on CFs Management have been officially approved by the RGC, what is the significant change in terms of community fisheries establishment and community fisheries on going? (Strengths and limitation of implementation of CF sub-decree)
- What is your recommendations to improve the process of CFs establishment and management?

Annex 12

**CONSERVATION AND MANAGEMENT OF CORAL REEF AND SEA GRASS  
 IN CAMBODIA**

**By Mr. Ouk Vibol, Deputy Director Domain and Extension Division; UNEP/GEF/DoF**

**Training/Workshop on Human Resource Development to Establish Fish Refugia and Fisheries Resource Management in Coastal Area 27-31 March 2006**

**Conservation and Management of Coral Reef and Seagrass in Cambodia**

By Ouk Vibol  
 Deputy Chief of Fisheries Domain and Extension Division  
 National Focal Point for Coral Reef and Seagrass -UNEP/GEF

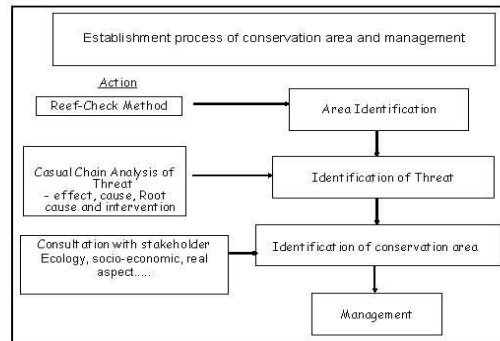
Acknowledgement : Mr. Ing Try, Pich Serenewath, Sim Sothareath, Ouch Wittha, Kim Sour, Suy Serenewath, Chhon Bunly and Vo Langdy

**Introduction**

- Coral reef and seagrass habitats are some of the most biologically rich and economically valuable ecosystems.
- Total area of reefs is 28.065km<sup>2</sup>, and indicate 70 species of coral in 33 genera and 11 families
- Total area of seagrass is 324.92km<sup>2</sup>, consists of 9species

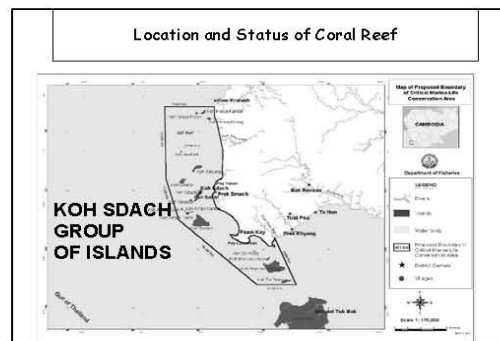
**Coral reef and seagrass distribution**

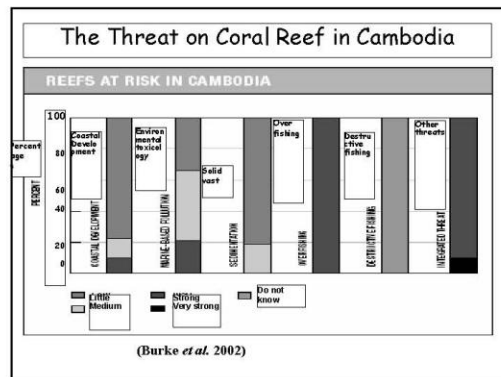
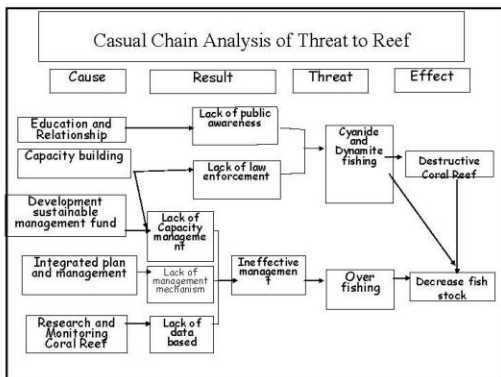
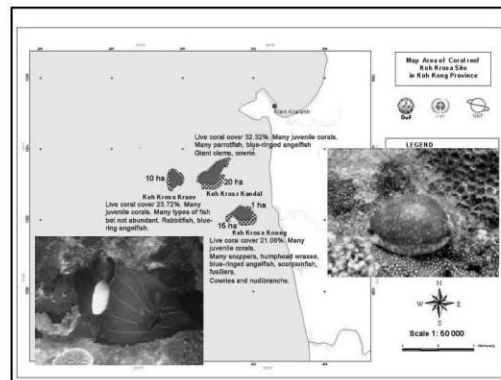
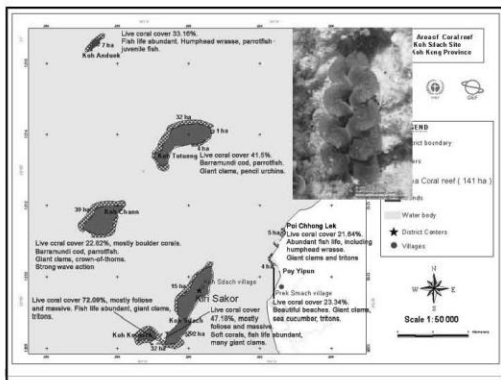
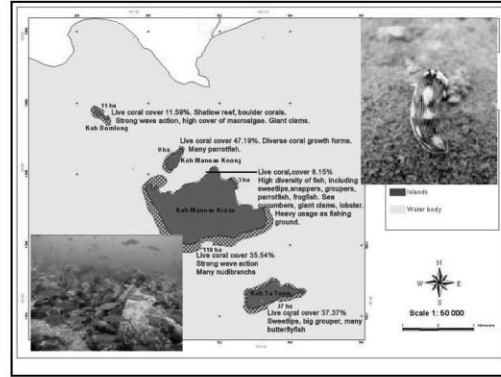
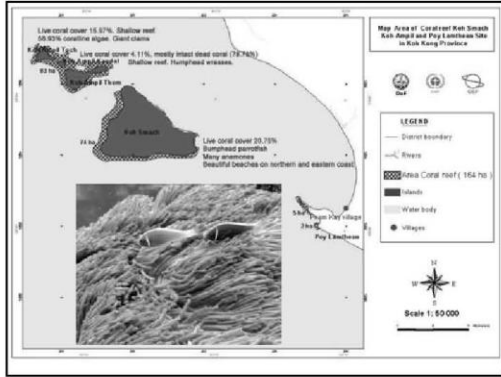
<ul style="list-style-type: none"> <li>• <b>Coral Reef Distribution</b></li> <li>• Koh Konh Province                             <ul style="list-style-type: none"> <li>• 602 ha</li> </ul> </li> <li>• Sihanoukville                             <ul style="list-style-type: none"> <li>• 1198 ha</li> </ul> </li> <li>• Kampot Province                             <ul style="list-style-type: none"> <li>• 953 ha</li> </ul> </li> <li>• Kep Municipality                             <ul style="list-style-type: none"> <li>• 52.5 ha</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Seagrass Distribution</b></li> <li>- Koh Konh Province                             <ul style="list-style-type: none"> <li>• 3,993 ha</li> </ul> </li> <li>- Sihanoukville                             <ul style="list-style-type: none"> <li>• 164 ha</li> </ul> </li> <li>- Kampot Province                             <ul style="list-style-type: none"> <li>• 25,240 ha</li> </ul> </li> <li>- Kep Municipality                             <ul style="list-style-type: none"> <li>• 2,790 ha</li> </ul> </li> </ul>
---	--

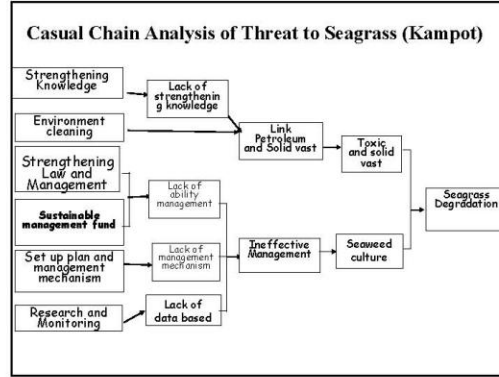
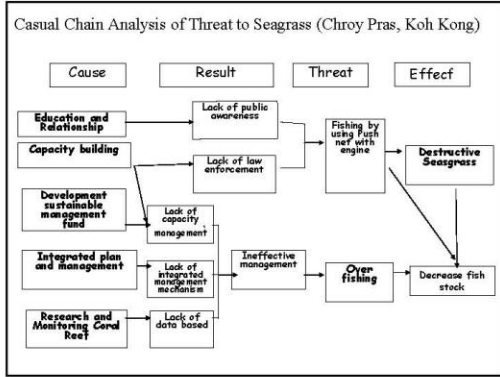


**Location and Status of Coral Reef**

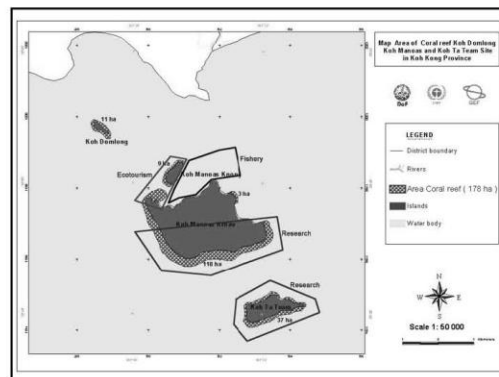
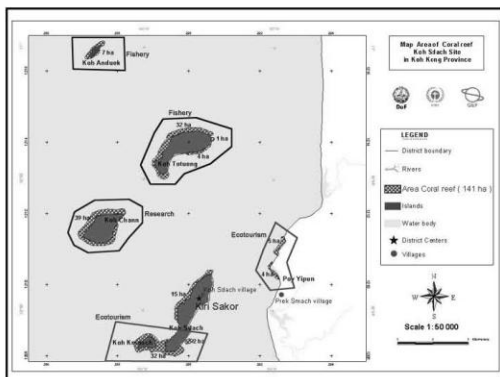
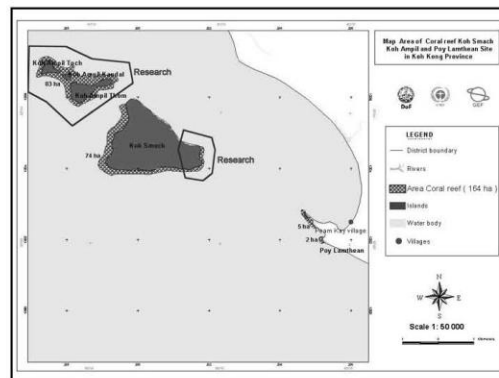
Location	Koh Kong	Koh Sdach	Koh Rong	Koh Takiev	Koh Tang	Prek Ampil	Koh Pouh
Net CR Area (ha)	72.5	529.0	468.0	292.5	439.0	953.0	52.5
Live Coral (%)	47.4	29.3	23.1	58.1	38.3	53.8	41.0
Dead Coral (%)	29.6	35.6	44.9	0.6	13.1	0.0	19.2
Other Fauna (%)	4.2	2.2	5.1	3.1	4.2	5.6	2.4
Algae (%)	1.6	17.5	0.6	0.0	0.6	0.6	10.1
Abiotic (%)	17.2	15.4	26.4	38.1	43.8	40.0	27.4

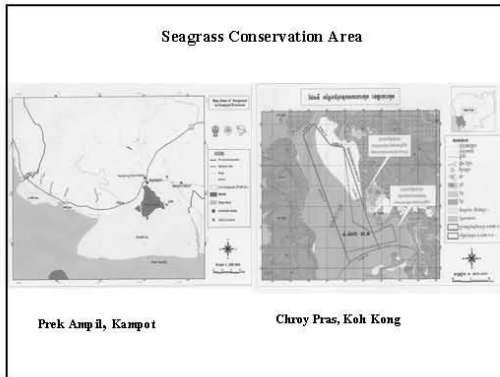






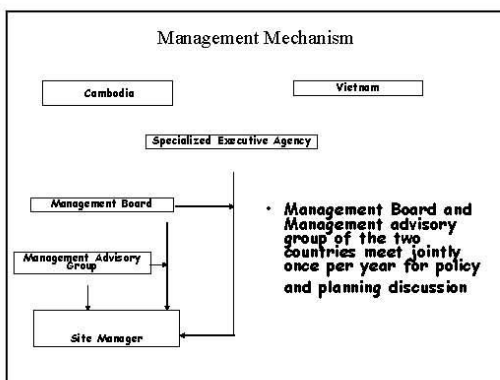
- ### Result of conservation area in Koh Sdach Group of Islands
- consultation in Koh Sdach group of Islands
    - Agreed to have conservation area because that is marine resource habitat and spawning ground potential eco-tourism and need to reduce illegal fishing activities.
    - Influence to fishers who use small scale fishing gear: fish trap, fish crap, squid trap hook and gill net.
    - Solution
      - Keep some place for small scale fishing
      - Zonation of ore zone, buffer zone and fishing zone.
      - Provide alternative livelihood





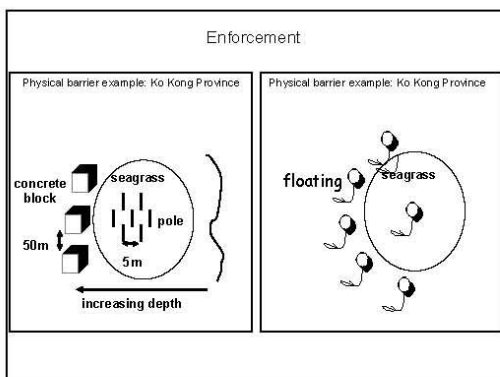
Coral reef and Seagrass Conservation

- Management mechanism
- Data and Information for Management Plan Purpose
- Development of Management Plan
- Enforcement
- Public Awareness and Training



**JOINTLY MEETING ON TRANSBOUNDARY MANAGEMENT**  
 29-31 May 2006, Phu Quoc, Vietnam

- Problems of Resource use: over-exploitation, illegal fishing practices, pollution, mariculture, trade
- Problems of Resource Management: policy, legislation, guideline, conservation of endangered and migratory species
- Guideline for monitoring and research, and exchange information
- Training and exchange

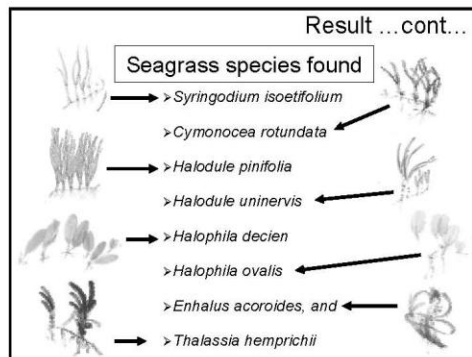
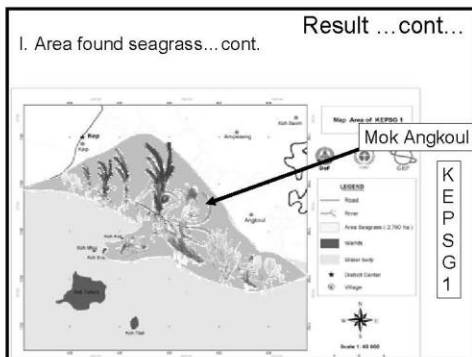
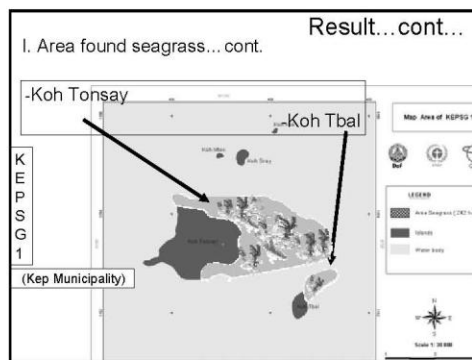
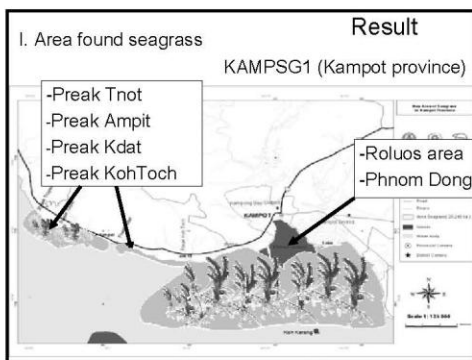
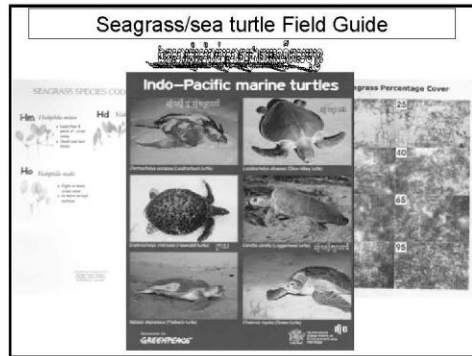
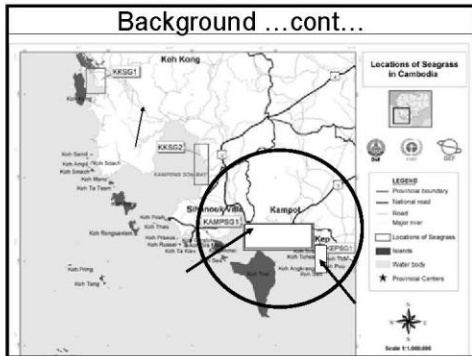


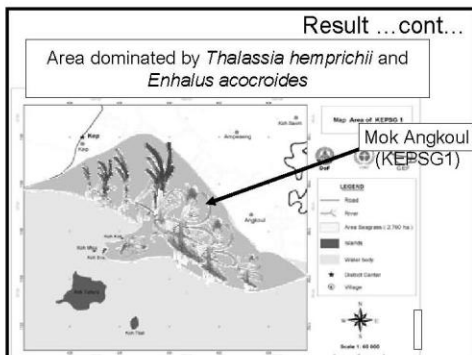
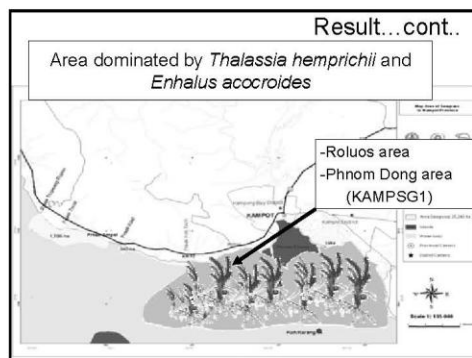
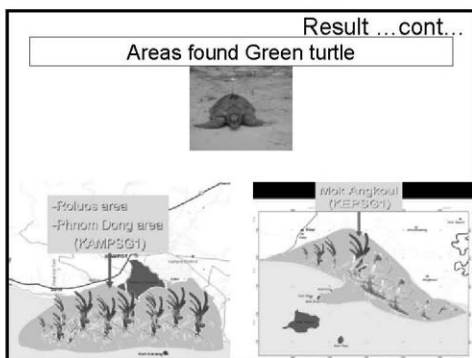
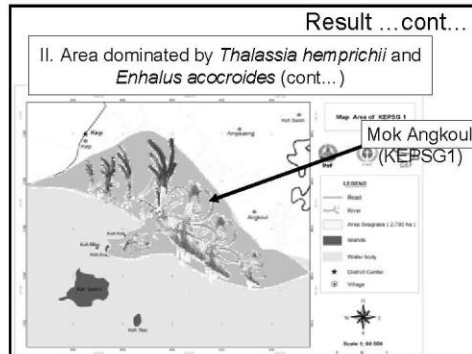
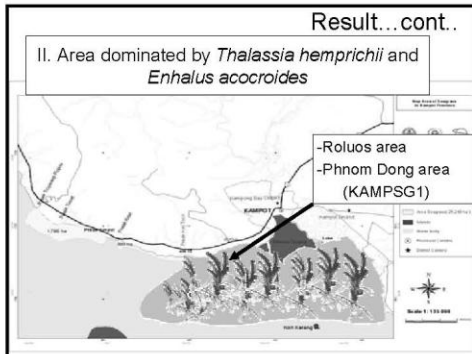
**Conclusion and Recommendations**

- Coral reef and seagrass are still in good condition
- However they under threat caused by explosion for coral reef and trawler and motorized push netting
- Good conservation and management if:
  - Coral reef and seagrass conservation
  - Threat identification
  - Agreed from community
  - Involvement of community in management
  - Clear management mechanism
  - Sustain funding









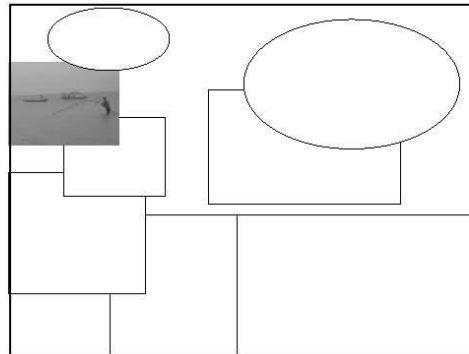
Result ...cont...

**Green turtle Status**

Referred to the on-land interview:

- green turtle have been found year round in the areas which are dominated by *E. acocroides* and *T. hemprichii*, particularly the areas where are rich in *T. hemprichii*. Sea turtles were found when they swimmmed or were accidentally caught around the seagrass areas
- Also, found in the areas with shallow water, sandy flat with seagrass and reefs near by seagrass beds

Result ... cont...	
<b>Impact on seagrass bed and Green turtle</b>	
<p><b>Main Case: Human activities in seagrass areas:</b></p> <ul style="list-style-type: none"> <li>- Trawl fishing</li> <li>- Engine-pushing net</li> <li>- Stingray hookline</li> <li>- Mangrove deforestation</li> </ul> <p>These activities were not caused only degradation of biodiversity in the seagrass or destroyed seagrass beds, also reduced green turtle population while they migrate for finding their feeding ground. In fact, number of green turtle recently declined if compared to the past.</p>	



Discussion
<ul style="list-style-type: none"> <li>- Even research/survey were done only two sites, there were at least 8 species of seagrass and two large feeding ground of green turtle found, particularly two dominated species of seagrass (<i>E. acoroides</i> and <i>T. hemprichii</i>) recognized.</li> <li>- Moreover, it is expected that there might be more than ten species of seagrass will be present in Cambodia water if other two sites (KKSG1 and KKSG2) will be conducted.</li> <li>- Also, more number of feeding ground and preferred seagrass species for green turtle will be found in Koh Kong water.</li> </ul>

Conclusion
<ul style="list-style-type: none"> <li>- Research/survey on seagrass bed and feeding ground in Cambodia is a good initiative to set up any plan for future to prevent seagrass beds from destruction through collaboration with local community and other line agencies.</li> <li>- Seagrass beds are main habitat for marine animals and endangered species, especially green turtle. If all illegal activities are still happy in Cambodia waters, green turtle population will be declined its number.</li> </ul> <p>Hopefully, this information will be useful for local or regional management and conservation on seagrass widow and endangered species, typically sea turtles.</p>

Future considerations
<ul style="list-style-type: none"> <li>- Public awareness campaign and extension program on the importance of protecting natural resources, particularly seagrass areas should be conducted immediately <u>at all levels</u>.</li> <li>- More research is needed on REFUGIA or areas that could be suitable for setting up to be protected zone for protecting and conserving seagrass/sea turtle and their environments.</li> <li>- Need good collaboration with countries in the region and both technical and financial support from concerned agencies.</li> </ul>

**KEY POINT TO BE DISCUSSED FOR FISH SANCTUARY ZONE'S ESTABLISHMENT AND MANAGEMENT**

**By Ms. Kaing Khim, Deputy Director of Community Fisheries Division**

**Key Points to be Discussed for Fish Sanctuary Zone's Establishment and Management**

prepare for work shop on Capacity Building to Establish Fish Refugia and Coastal Management in Cambodia, 23-27 March 2006, Koh Kong province

Kaing Khim, CFDO/DoF

**Key Points To be Discussed**

1. Why do we need Fish Sanctuary zone?
2. How do we set up it?
3. How do we manage it?

Lessons Learned From the Establishment and Management of CF Fish Sanctuary in Inland Fisheries (by MRRF-MRC & CFDO)

1. Why do CF need Fish Sanctuary in their CF Area?
  - To implement CF management plan and action plan?
  - To increase the catch - To achieve the idea of fishers to re-produce the brood-stock?

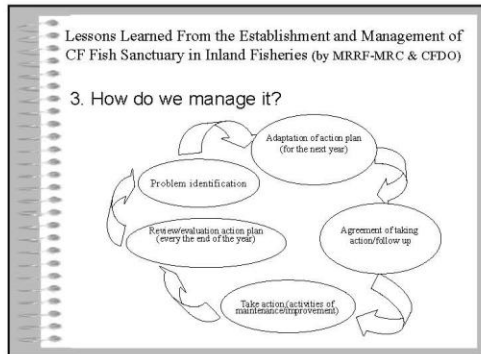
Lessons Learned From the Establishment and Management of CF Fish Sanctuary in Inland Fisheries (by MRRF-MRC & CFDO)


2. How do we set up it?

Lessons Learned From the Establishment and Management of CF Fish Sanctuary in Inland Fisheries (by MRRF-MRC & CFDO)

Lessons Learned From the Establishment and Management of CF Fish Sanctuary in Inland Fisheries (by MRRF-MRC & CFDO)

3. How do w manage it?
  - Daily patrolling (by CF patrol group) - Monthly monitoring (CF committee monthly meeting)
  - Informal meeting/discussion when there is problem
  - Maintain/improve where and when needed
  - Dissemination of regulation (broadcasting in the village, sign boards...)
  - Follow CF regulation
  - Review/evaluation of action plan (year end) and yearly catch assessment

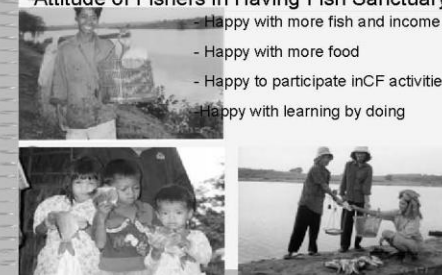


- Lessons Learned From the Establishment and Management of CF Fish Sanctuary in Inland Fisheries (by MRRF-MRC & CFDO)
- Outputs/outcomes**
- Increase fish catch Reproduce brood-stock and fish habitat
  - Fishers get more understanding on the important of having fish sanctuary
  - Fish sanctuary play the important role for fish stocking
  - Improve livelihoods of fishing family
- 

Lessons Learned From the Establishment and Management of CF Fish Sanctuary in Inland Fisheries (by MRRF-MRC & CFDO)

**Attitude of Fishers in Having Fish Sanctuary**

- Happy with more fish and income
- Happy with more food
- Happy to participate inCF activities
- Happy with learning by doing



- Key Points To be Discussed For Fish Sanctuary in coastal area?
1. Why do we need Fish Sanctuary in coastal area?
  2. How do we set up it?
  3. How do we manage it?

*Annex 15*

**Closing Speech by**

**Mr. Ing Try, Deputy Director of the Department of Fisheries**

On the On-site Training/National Workshop on Capacity Building for the Establishment of  
Refugia and Coastal Resources Management in Cambodia  
Bopha Koh Kong Hotel, Koh Kong Province, 27-31 March 2006

Distinguished guest, ladies and gentlemen,

First of all, on behalf of the Department of Fisheries, I would like to express my pleasure to close the On-site Training/National Workshop Capacity Building for the Establishment of Refugia and Coastal Resources Management in Cambodia under cooperation of SEAFDEC-Sida and the Department of Fisheries.

In addition, I would like to deeply thank to working group of the Fisheries Department in cooperation with delegations of SEAFDEC Secretariat during for three days, especially I am very appreciated on discussion and exchange experiences including Fish Refugia to strengthen human resource development in fisheries for the future. At the same time, I would like to thank Sida-SEAFDEC for support in funding the workshop. This workshop plays a very important role to support the plan on human capacity building of provincial fisheries, particularly provincial fisheries office along coastal area. The result of the workshop is part of government's policy on human resource development in order to facilitate poverty alleviation and increase standard people living condition.

The discussion in this workshop provided fruitful analysis for not only in manage coastal resource in Cambodia but also cooperation coastal resource with neighbor countries, thus it is a main key to carry out plan of action on human capacity building for sustain fisheries management in the future.

Distinguished guest, ladies and gentlemen,

At current, knowledge, skills and experiences, considered as the tool to strengthen economic in the society in the world. Therefore, human resource is needed in Cambodian as well the Department of Fisheries.

Government of Cambodia considered fisheries as priority for poverty reduction and for the encouraging of living condition of the poor. So, it is necessary to have enough human resource for development.

In connection with, I would like all of you for strengthen more your cooperation with donor and relevant institutions in order to gather more resources in capacity building for fisheries management as in this workshop. On the other hand, I am very proud and support the useful comments of workshop, which will be used for encouraging human resource for fisheries management in Cambodia as well cooperation with neighbor countries. Moreover, I would like all participants bring these comments for tool in their own career.

One again, I would like to thank SEAFDEC-Sida to support and promote both fund and spirit to this national workshop for human resource development for fisheries management in Cambodia.

Finally, I wish you ladies and gentlemen got five Buddhism and announce to close the workshop.

Thanks