

Project Final Report

SEAFDEC-Sida Collaborative Project on "Human Resource Development on the Support of Implementation of the Code of Conduct for Responsible Fisheries Management for the ASEAN Region"

Southeast Asian Fisheries Development Center (SEAFDEC) The Secretariat

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LIST OF ABBREVIATIONS

ADB Asian Development Bank
AIT Asian Institute of Technology
APFIC Asia-Pacific Fisheries Commission
ASEAN Association of Southeast Asian Nations

CBNRM Coastal-Based Natural Resources Management CCRF Code of Conduct for Responsible Fisheries

CITES Convention on International Trade in Endangered Species of Wild

Fauna and Flora

COP Conference of the Parties

COBSEA Coordinating Body for the Seas of East Asia

COFI Committee on Fisheries (FAO)
CORIN Coastal Resources Institute

Danida Danish International Development Assistance
DMCR Department of Marine and Coastal Resources
FAO Food and Agriculture Organization of the United

Nations

FAO-RAP FAO- Regional Office for Asia and the Pacific

FCG Fisheries Consultative Group GEF Global Environment Facility

GTZ Deutsche Gesellschaft fur Technische Zusammenarbeit

(German Technical Cooperation)

HIV/AIDS Human Immunodeficiency Virus/Acquired

HRD Human Resource Development IUCN The World Conservation Union

KU Kasetsart University

LFA Logical Framework Approach
MAP Mangrove Action Project
MOFI Ministry of Fisheries Vietnam
MOE Ministry of Environment
MRC Mekong River Commission

MTCP Malaysian Technical Cooperation Programme
MMAF Ministry of Marine Affairs and Fisheries
NACA Network of Aquaculture Centres in Asia
NGO Non Governmental Organization
RTC Regional Technical Consultation

PCM Program Committee Meeting, SEAFDEC

RCCRF Regionalization of the Code of Conduct for Responsible Fisheries
RIDNIC-HRD Regional Inventory, Database and Network for Information

Collection on Human Resource Development in Fisheries

SEAFDEC Southeast Asian Fisheries Development Center

SEAFDEC-SEC SEAFDEC-Secretariat

SEAFDEC-SEC-OPPC SEAFDEC-SEC Office of the Policy and Program Coordinator

SEAFDEC-AQD SEAFDEC-Aquaculture Department

SEAFDEC-MFRD SEAFDEC-Marine Fisheries Research Department SEAFDEC-MFRDMD SEAFDEC-Marine Fisheries Resources Development

and Management Department

SEFADEC-TD SEFADEC-Training Department

SENSA Swedish Environment Secretariat in Asia

SBF Swedish Board of Fisheries

Sida Swedish International Development Cooperation

Agency

TOR Term of Reference UN United Nations

UNCED United Nations Conference on Environment and

Development

UNEP United Nation Environment Programme

UNEP/GEF SCS United Nation Environment Programme/Global Environment Facility

South China Sea

WTO World Trade Organization

WWF World Wide Fund

Executive Summary

I. Background

Southeast Asian Fisheries Development Centre (SEAFDEC) is established since 1967 with a purpose to promote fisheries development in the region. The number of member countries has gradually been increased and includes presently all ASEAN Member Countries plus Japan. Since the adoption by Member Countries of a Resolution and Plan of Action in 2001 SEAFDEC and its member countries are committed to promote sustainable fisheries in line with the Code of Conduct for Responsible Fisheries.

SEAFDEC has since August 2003 been implementing a project on "Human Resource Development on the Support of Implementation of the Code of Conduct for Responsible Fisheries Management for the ASEAN Region" under Swedish development cooperation through an Agreement between SEAFDEC and the Swedish Board of Fisheries (SBF). Project activities were to be carried out until 31 December 2006 within a total budget of SEK 5,700,000, including cost for staff, consultations, pilot process, etc. The challenge, thus for the project management is to maintain a regional dialogue and promote regional cooperation while at the same time "organize on-site training in selected venues in the ASEAN Member Countries" within the available amount of funding. Reports on the stages in the implementation process have been done regularly. In 2005 reporting was systematically focusing on achievements with reference to the four stated outputs of the project and how these achievements refer to HRD for fisheries management, and on issues related to fishing capacity, respectively.

The long-term or development objective of the project is aiming towards a drastic change of the course of actions in line with the implementation of Code of Conduct for Responsible Fisheries (CCRF) and the Regional Guidelines to the Code (RCCRF), which is imperative to mitigate the fisheries impacts on the aquatic environment to improve the trend of general poverty status among coastal and inland small- scale or subsistence fisher-folk. The Project objectives, or intended outputs of the process include: i) awareness enhanced of the necessity of appropriate fisheries management to achieve sustainable fisheries (central and local); ii) stakeholders advised on the mechanism of innovative fisheries management systems; iii) Human Resource Development activities promoted on fisheries management with identified target groups; and iv) various options identified to alleviate the problems caused by excessive levels of fishing capacity.

To ensure participation and consensus among member countries in planning and implementation, the project should ensure that the following three principles should be properly incorporated throughout the implementation:

1)Consensus building among the recipient countries

In order to systematically and effectively implement the proposed activities, consensus building exercise among the recipient countries will be sought. The project activities, including identification of target groups for project activities should be worked out in consultation with ASEAN Member Countries.

2)ASEAN/SEAFDEC Collaborative Program

In accordance with the establish mechanism the project should seek to be included under the umbrella of the ASEAN/SEAFDEC Collaborative Program.

3)Close collaboration with the ASEAN Member Countries.

In order to ensure the sustainable implementation of the project, some activities, especially those conducted at national level, such as on-site trainings, should be conducted in line with national priorities and planned in national consultations.

II. Summary Results and Lessons Learnt

In seeking consensus from ASEAN-SEAFDEC Member Countries high importance was given to timely planning and organizations of regional and national consultations and expert meetings to guide the project and to be able to define steps to be taken and activities to

implement to promote regional cooperation around the implementation of the CCRF and RCCRF. Important results from regional consensus building events, included:

- A strategy for Human Resources Development for fisheries management, including emphasis on social, environmental, legal and economic aspects (Kuala Lumpur, 2004);
- A general understanding that the specific situation, traditions, status of fisheries in each member country implies variations in the approach to HRD (Kuala Lumpur, 2004 and Phnom Penh, 2004)
- A methodical selection of four representative member countries (Indonesia, Thailand, Cambodia, and Vietnam) in which to implement the project's pilot process activities (Phnom Penh, 2004);
- ➤ Specification of a thematic focus for the project's work i) Management of fishing capacity; ii) Strengthening local fisheries management; iii) Integrating fisheries management into habitat management; (Kuala Lumpur, 2004 and Phnom Penh, 2004)
- Emphasis given to the need to develop capability on trans-boundary fishery and habitat management (Phnom Penh, 2004, Sihanoukville, 2006, and Phuket, 2006).
- Aggregated information on the status and profile of the available fishing capacity (large and small-scale) is not sufficient for management (Phnom Penh, 2004; Sihanoukville, 2006 and Phuket, 2006)
- The presently most critical issue in fisheries management is to manage the fishing capacity (Phnom Penh, 2004, Sihanoukville, 2006 and Phuket 2006)
- Recognition of the need to work toward the establishment of a "regional and subregional fisheries management body", that would allow member countries jointly work out solutions to common issues (Phuket, 2006)

The events and their outcomes were important, not only in directing the project, but also as it turned out to strengthen a common awareness of the necessity of appropriate fisheries management to achieve sustainable fisheries by giving emphasis to a number of critical aspects like those mentioned above. Building awareness along these lines was incorporated in the activities to promote HRD.

Promotion of HRD activities

During the implementation of the pilot process in Cambodia, Indonesia, Thailand and Vietnam HRD activities were promoted with identified target groups and on-site training and workshops on HRD were conducted at national and community locations in the four pilot countries. The total number of people involved in the pilot process and on-site training events were 547 (Cambodia, 212; Indonesia, 61; Thailand, 135; and Vietnam, 139). The focus on information being provided maintained elements of relevance to the RCCRF and CCRF by building upon the three thrusts: a) Management of fishing capacity; b) Strengthening of local fisheries management; and c) Integration of fisheries management into habitat management. Results and outcomes referred to below has been incorporated as an important part of training exercise and experiences shared during on-site training and other events. Furthermore, these events have provided important inputs to achieve the general process oriented results referred to below.

Two innovative approaches to the way of implementing the work proved to be successful in promoting HRD, to build capacity and to enhance awareness:

1. The pilot process: the way this was organised it turned out to be a practical approach to develop and promote HRD on fisheries management and the management of excess fishing capacity. Bringing selected groups from targeted areas together with "central" resource persons in a country or sub-region is a useful basis for sharing earning experiences and knowledge in all directions as well as a method to generate inputs to the regional policy level and further nation-wide management of fisheries and fishing capacity. Important in this process is that groups from one targeted area is brought to the training event in other targeted areas

2. For HRD, build upon existing material: The recommendations from the RTC in 2004 were clear in that the project should build upon existing material and experiences. This was further reinforced during the pilot processes in Cambodia, Indonesia, Thailand and Vietnam, respectively. The sequences of training workshops and on-site training was built around training and experiences being provided by a range of related projects and programs from within the country, in local language, thereby building a platform of shared learning.

HRD Materials: In an attempt to facilitate the use of the common pool of learning, from various sources, used during the pilot process a series of "packages" is being developed. This will document, in a power point format for easy use, the learning provided and information shared during the pilot process and on-site training in the form of four sets of "packages", one for each of Cambodia, Indonesia, Thailand and Vietnam. In summary HRD materials and regional reference database include:

- 1. Four HRD "packages" based on a the information and material used during training workshops and on-site training (with a different structure for Indonesia) (to be available after editing)
- 2. A "Regional Inventory, Database and Network for Information Collection on Human Resource Development in Fisheries" (RIDNIC-HRD). Already accessible through the internet.
- 3. In addition, a description and implementation approaches to a number of representative types of management situations will be summarized during 2007, including:
 - Development of local organizations and fisheries management in three areas (Lombok Indonesia, Satun Thailand and Koh Kong Cambodia);
 - The management of anchovy fishery in two locations (Thailand and Vietnam):
 - Establishment of MPA and Marine fisheries resources protection areas in Vietnam

Results and lessons learnt on approaches to HRD for fisheries management and the management of fishing capacity

An important result was that the project could help to push and promote the fact that HRD only on "technical issues are not sufficient". Rather, HRD in fisheries management and the management of fishing capacity should be developed at all levels considering:

- Legislation, Law and regulations implication of international initiatives and conventions, structure/rules of local management, co-management approaches, functions of rights-based fisheries and rights of resource users, institutional role and responsibility.
- Social and economics implications of limiting access, reducing and managing fishing capacity, facilitating exists from fisheries, supplementary/alternative livelihoods, co-management concepts, survey/research techniques including consultation and participations; and
- Environment habitats and reproduction areas, migratory routes and interconnectivity, supplementary/alternative livelihoods, necessity to maintain coastal features

An important lesson for the project was that it is important to avoid an "isolated" process in developing human resources for management of fishing capacity. Important also in the sense, that it reflects a criticism to parts of the design of the project document. HRD for the management of fishing capacity should be incorporated within the context of fishery management as such, thereby avoiding a parallel process that would not be optimal in use of project funds. Seen from the point of fisheries management you cannot really address fisheries management without addressing fishing capacity.

Direct results triggered by the pilot processes and on-site training

To follow up on effects, activities and planning that have been the direct or indirect result of implemented activities is important to trace impacts. Through the report of the review mission (March 2007) and through reports provided by counterparts in the four pilot countries examples of direct results include:

 Fishermen in Trad Province, Thailand, organize themselves along experiences gained from on-site training in Satun Province, including improved management of crabs

- Plans developed for the establishment of a fisheries resources conservation area/MPA in Quang Binh Province, Vietnam, based on lessons learnt from on-site training in Phu Quoc
- In Indonesia the MAFF decides to build upon "district models" based on traditional practices, such as the Awig-Awig that was used as a reference during the project events
- In Koh Kong Province, Cambodia, recommendations on cooperation across the border with Thailand on fisheries and habitat management has been confirmed as a priority by the DG of the Fisheries Administration of Cambodia, as is the cooperation with Vietnam and Kampot Province
- A senior Department of Fisheries official, in Thailand, recognized the need for provincial Fishery Officers to have skills in conflict resolution, facilitation, and planning, in addition to technical subjects. He made provision in the next year departmental (national) budget for training in these skill areas.

Results relevant to the process to promote regional cooperation in fisheries management and the management of fishing capacity

The long-term objective stated "to aim for a drastic change in course of action" together with the philosophy to build consensus among ASEAN-SEAFDEC member countries in close collaboration with and among ASEAN countries is, indeed, something that will take time. Time in which, gradually, countries of the region need to build up their means and mechanisms for cooperation. The project has been instrumental in paving the way for this, both in terms of ambitions for regional cooperation as well as in terms of fisheries management and the management of fishing capacity. In summary the major "process oriented results" in fostering cooperation among countries include:

1. Moving towards a regional fisheries management mechanism

The Consultation in Phuket, 2006, saw a "breakthrough" by seeing the ASEAN-SEAFDEC Member Countries for the first time recommending that **the** major long term policy issue or area for collaboration is to aim towards the establishment of a "**Regional Fisheries Management Body**". An important milestone was then the approval to work in this direction as stated in the report of the 39th Council Meeting in Siem Reap, 2007.

2. Willingness to cooperate in bordering (or trans-boundary) water areas

To move towards the common management mechanisms the project have established consensus to promote cooperation between neighbouring countries on integration of habitat and fisheries management (*Refugia*). Recommended areas include Gulf of Thailand, Andaman Sea, South China Sea and Sulu/Sulawesi Sea. The project has, with Cambodia, Vietnam and Thailand, respectively, successfully initiated the process in two locations:

> Trad – Koh Kong (Thailand – Cambodia)

Kampot – Phu Quoc (Cambodia – Vietnam)

The Review Mission strongly recommended continued work in this direction.

3. Management of Fishing Capacity in Southeast Asia

In fisheries management the management of fishing capacity has repeatedly been stated as *the* fisheries management issue. Based on the regional nature of fishing operation and migration of fish-workers the project has succeeded to emphasize the need for regional cooperation, while recognizing a number of points that need to be addressed, such as:

- There is no aggregated data on fishing capacity at national or regional level.
 Available information is more site-specific and relates to projects rather than statistical information. A critical problem is the lack of "statistics" with respect to fishing capacity especially at small-scale level
- Fishing capacity among large and small scale fisheries needs to be addressed in parallel
- Increased emphasis on the need for alternative, supplementary income opportunities to facilitate exit from fishery

- Transboundary and regional aspects of Illegal, Unregistered and Unreported (IUU) fishing
- Social aspects of reduction and management of fishing capacity

4. Successful promotion of cooperation and innovative approaches to management

The project has succeeded to build upon cooperation with other institutions and projects as it was from the onset obvious that in the process of implementation it is critical for the longer term results to seek broad cooperation also beyond the sphere of fisheries agencies. The need for broad cooperation is important in addressing all social, environmental, economical and legal aspects embedded in the processes to find innovative approaches and especially if aiming for improved regional cooperation. The project has been instrumental in:

- Promoting the integration of fisheries management into habitat management.
- Initiating activities to provide incentives to fishermen that are fishing in a sustainable way (eco-labelling)
- Improving coordination between fisheries, environmental and other agencies, including involvement of NGO's in work at various levels
- Introducing adaptive management through dialogue among projects and institutions

The pro-active interaction with other projects and programs proved to be a useful mechanism not only get inputs to project process as such, but also to be able to disseminate information and recommendation based on project results

Building upon experiences and results for future cooperation with Sweden

The results and recommendations achieved and experienced during the implementation constitute the foundation of the proposal for continued cooperation with Sida/Sweden. The proposal was submitted in 2006 and has been assessed by the Swedish Board of Fisheries in 2006. A revised proposal will be sent in April 2007, incorporating references to the endorsement of the general direction as expressed during the 39th SEAFDEC Council Meeting as well recommendations and references to the external Review Mission (March 2007).

In summary, as expressed by the Review Mission, the project has been very successful in: developing ASEAN-SEAFDEC consensus on priority issues for HRD in the implementation of the Regional Code of Conduct for Responsible Fisheries; and creating awareness, among stakeholders at local level, of mechanisms for innovative (local) management of fisheries and associated habitats. Notes were taken on more works needs to be done in: promotion of the regional fisheries management institution concept, to deal with the transboundary nature of many fisheries management issues; implementation of the pilot process, in partnership with national and other institutions and projects. Focus on fishery/habitat management at key sites, to gain experience in transboundary management; and closer monitoring of outcomes of activities, to identify opportunities for adaptive management of the pilot process, to achieve the objectives.

Project Final Report: SEAFDEC-Sida Collaborative Project on "Human Resource Development on the Support of Implementation of the Code of Conduct for Responsible Fisheries Management for the ASEAN Region"



1. Introduction and Rationale

Based on alarming reports on unsustainable and unregulated fisheries and fishing industry practices impacting on the aquatic environment the international "fisheries community" started in the late 1980's to discuss the elaboration of a code of conduct for a concerted and coherent approach concerning the sustainable use of aquatic resources in various forms¹. Under the coordination of the Food and Agriculture Organization of the United Nations (FAO), an international "Code of Conduct for Responsible Fisheries (CCRF)" was subsequently developed and officially adopted in 1995. The CCRF sets out principles and international standard of behavior for responsible fisheries to ensure sustainable exploitation of aquatic resources in harmony with the conservation and management of the aquatic environment. The CCRF and the resulting implementation plan encourage the fishing nations to comply with the requirements of CCRF and to help and create conditions that allow developing countries, in particular, to promote such required actions including the appropriate assistance.

There is no doubt that formulation of CCRF was an important step toward the world sustainable fisheries and provided comprehensive framework and principles to guide the countries for their consideration and appropriate actions harmonizing fisheries with aquatic environment. However, the condition and context of CCRF were mainly based on the concerns and situation of fisheries in more developed countries, less consideration for the issues of developing countries were provided. Many developing countries have less technical and financial capabilities, including a poverty situation, which makes it difficult for them to take appropriate action, even though they wish to do so. In addition the following three factors will have to be accommodated into CCRF, when the fisheries situation in developing countries is addresses and to effectively implement the CCRF in developing countries.

- 1) Fisheries Structure: The main fishing industries in developing countries are categorized as being of small-scale/ coastal nature (In case of ASEAN Countries, 95 % of people involved in fishing belong to this sub-sector). The management of small-scale/coastal fisheries should be managed based on specific requirements and differentiated from the large scale/industry type of fisheries.
- 2) Ecological Situation: The fisheries resources are of multi-species nature and, for example, there is no clear definition and understanding on the issue of by-catch, since most fisherfolk depend on the harvest from multi-species fisheries for their livelihood and not on particular target species. In addition, such ecological factors as fecundity, replenishment, migration and productivity of various species are different from those of temperate water. Furthermore, the tropical climate and topographical condition are unique and provide the basis for the specific ecological conditions. These factors also imply a need to differentiate the management measures and methodologies used to assess the aquatic resources in developing countries.
- 3) Socio-Economic and Cultural factors: It is apparent that the most developing countries, especially in the ASEAN region have traditionally developed their own cultures for "fish for food", as can been seen from the great diversity of local fisheries products. In addition, social and economic integration of fisheries in livelihoods of local communities, especially in small scale/coastal villages, is another aspect to be considered to develop and implement appropriate management mechanisms.

¹ The importance to develop a code were stressed at series of international gatherings such as the FAO Committee

on Fisheries (COFI) in 1991, the International Conference on Responsible Fishing in Cancun (Mexico) in 1992 and United Nations Conference on Environment and Development (UNCED) held in Rio in 1992.

Following the specific aspects to be considered for fisheries in tropical waters of developing countries it is imperative to accommodate these aspects into the implementation of the CCRF by providing additional guidelines that can be practically used as a framework for developing countries. Although there is no appropriate aggregation of statistical data on the fisheries production of developed and developing countries, it is roughly estimated that about 70% of the global fisheries production are currently harvested in the developing countries. It is very clear that sustainable fisheries will not be achieved unless developing countries take effective actions in line with provision of the CCRF. In the development of the project it was targeted to the ASEAN Member Countries. These countries are currently harvesting 11% of global fisheries production. The advantage of SEAFDEC in regional and national efforts to promote the implementation of CCRF should be seen in the light of the regional framework, under the ASEAN/SEAFDEC collaborative mechanism, established in the last five years and coordinated by SEAFDEC.

In the ASEAN region the "ASEAN/SEAFDEC Conference on Sustainable Fisheries for Food Security in the New Millennium, "Fish for the People (Millennium Conference)" was successfully held in November 2001 with more than 800 participants from inside and outside of the region. The Millennium Conference adopted "Resolution and Plan of Action on Sustainable Fisheries for Food Security for the Region" (Resolution and Plan of Action, as attached in Annex 1) by the ASEAN ministers responsible for fisheries related matters. The Resolution and Plan of Action is considered as a common regional fisheries policy of ASEAN in support of the CCRF. The Governmental commitment to promote sustainable fisheries both in the region and among ASEAN Member Countries is a good reference in the promotion of the CCRF.

Furthermore, SEAFDEC has been implementing a program on "The Regionalization of the Code of Conduct for Responsible Fisheries (RCCRF)" within the ASEAN/SEAFDEC collaborative program. The RCCRF program aimed to formulate regional guidelines of the selected Articles of the CCRF in order to provide guidance based on regional priority, regional needs and the specific ecological situation as mentioned above. So far regional guidelines on Article 7, 8, 9 and 11 of CCRF are completed. However, the regional guidelines on Article 10 Integration of Fisheries into Coastal Area Management and Article 12 Fisheries Research will not be further developed since the basic elements of these Articles are covered by the four regional guidelines. The project aimed to build upon the momentum created and the improved awareness on need for better management of fisheries in the ASEAN region to further promote the implementation of sustainable fisheries management in the context of the RCCRF through appropriate human resource development activities. Philosophy, objectives and targets for the project was built to aim to maintain and build upon this moment by taking a process oriented approach ("step by step").

1.1 Development Objective

The over-arching objective is a drastic change of the course of actions (in line with the implementation of CCRF and RCCRF) which is imperative to mitigate the fisheries impacts on the aquatic environment and improve the trend of general poverty status among coastal and inland small- scale or subsistence fisher-folk.

The fisheries sector around the World has developed rapidly over the last forty years. Specifically among Southeast Asian Countries the rapid increase in catches and development of fisheries related industries have led fisheries products to be significant part of the economic development and share of national income. This development has been fueled by an increasing international demand for fisheries products. However, it has been recognized that the availability of fisheries resources has deteriorated through increase in fishing capacity, including that of illegal, unregulated and unregistered fishing. If the required actions to reduce fishing effort and stop destructive fishing, as proposed in RCCRF, and to appropriately manage the fisheries is not taken as a matter of urgency the negative impacts of fisheries to the aquatic environment will be further aggravated. It should also be remembered that most of the people, who are engaged in fisheries in the region are working on small scale or subsistence level of fishing (using fishing boats less than 5G/T) and they have suffered from a

declining trend of catch and incomes subsequent to decreasing fisheries resource and environmental degradation.

1.2 Goals and Objectives

The overall objectives of the project is to facilitate the national implementation of the issues related to fisheries management contained in the Code of Conduct for Responsible Fisheries through appropriate human resource development activities including awareness building and training activities. It has the following detailed objectives.

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

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

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

1.3 Nature and Scope of Project/Activities

In attempt to focus the work around two main issues the project document made reference to two components:

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

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

The project aims to support the ASEAN Member Countries in their efforts to implement the RCCRF through human resource development activities. It was therefore assessed that overall human resource development activities would early on be very important, using appropriate materials to enhance the awareness on the areas and appropriate actions of government support and required actions by other stakeholders. However it should be noted that as both CCRF and RCCRF cover a wide range of issues and implying actions required in achieving sustainable fisheries. Thus, activities need to be focused through identification of problem areas and target groups relevant to priority issue to provide an input to the important area of support to ASEAN Member Countries in promotion of activities to implement the CCRF and the RCCRF. Reviewing the context of the RCCRF, it is evident that problems relating to excess fishing capacity are one priority area for action in the region. ASEAN Member Countries are considering to address the problem by introducing rights-based fisheries (licenses, fishing rights, etc.), to move away from the current "open access regime".

For the implementation of the project, and as stated in the project document, the following policy and/or philosophy were to be applied:

1) Consensus building among the recipient countries

In order to systematically and effectively implement the proposed activities, consensus building exercise among the recipient countries will be sought. In this context the project should aim to organize at least one regional technical consultation and/or expert meeting per year. The project activities, including choices/development of training materials, organization of national training courses and identification of target groups for project activities should be worked out in consultation with ASEAN Member Countries.

2) ASEAN/SEAFDEC Collaborative Program

In accordance with the establish mechanism the project should seek to included under the umbrella of the ASEAN/SEAFDEC Collaborative Program. Therefore, in addition to regional technical consultation, the project development and performance will be reviewed annually during the collaborative mechanism of the ASEAN/SEAFDEC Fisheries Consultative Group Meeting (FCG). Consultations and review meeting helps to establish ownership of the project by ASEAN Member Countries.

3) Close collaboration with the ASEAN Member Countries.

In order to ensure the sustainable implementation of the project, some activities, especially those conducted at national level, such as on-site trainings, should be conducted in line with national priorities and on a cost share basis as practical. Such arrangement will enhance the ownerships of the project by the respective ASEAN Member Countries and, furthermore, maximize the use of project resources. In line with the points raised here the project should continuously discuss with the ASEAN Member Countries to find ways that the activities initiated by the project could, in the long run, be incorporated or integrated into national human resource development program on the implementation of RCCRF.

Geographical Coverage of the Project embraces the Southeast Asian Countries and beneficiary countries are the Member Countries of Association of Southeast Asian Nations (ASEAN). The use of a Logical Framework was discussed the first year of implementation and at the first Annual Review Meeting (with SBF and Sida) should be used as a source of reference rather than as a basis for sequence of reports required by the Agreement with Sweden. The Logical Framework appears in *Annex 1*.

With reference to the two components mentioned above, the project has conducted the following activities in a step-by-step basis. The connection between the project components and activities are shown in Table 1.

Table 1 Connection between project components and activities.

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

8. Preparation and publication of the required training materials (specific and detailed training materials) on the mitigation of fishing capacity	*
9. Organization of on-site training on the fishing capacity at the selected venues in the ASEAN Member Countries	*

Based on the Outputs mentioned above, completed and on-going activities are shown in the following table² together with their interlink components.

Table 2 Interlink among Project Components, Activities and Outputs

Completed and On-going Project Activities		Component		Output			
		2	1	2	3	4	
Co-organized ASEAN-SEAFDEC Regional Workshop on HRD in Fisheries, Kuala Lumpur, Malaysia, 2004	*	*	√	✓			
Organized ASEAN-SEAFDEC RTC on HRD in Fisheries Management, Phnom Penh, Cambodia, 2004	*	*	√	√		√	
Organized Preparatory Experts Meeting on Fishing Capacity and Related HRD Needs in the ASEAN Region, Bangkok, Thailand, 2004	*	*	√	√	√	✓	
Implementing Pilot Process in Representative Set of Countries ³ , since 2004	*	*	✓	√	✓	✓	
Organized Planning Meetings (completed 3 meetings)	*	*	✓	✓		✓	
Organized National Workshop and On-site Training and National Workshop (completed 4 Workshops, 6 Trainings, and one pending)	*	*	√	✓	√	✓	
Collecting information on Regional Inventory, Database and Network for HRD in Fisheries (on- going)	*				√	✓	
Developing Supporting HRD Training Materials (on-going)	*		✓	√	✓		
Preparation and publication of the required training materials (specific and detailed training materials) on the mitigation of fishing capacity (on-going)		*	√	✓		√	
Organizing RTC on Management of Fishing Capacity and HRD in Support of Fisheries Management in Southeast Asia (completed)	*	*	√	✓	√	√	
Participation of Project Staff to Other Relevant/ Coordinating Works Work (completed and keep going)	*	*	√	√	√	✓	

1.4 Project Organization and Funding

The Project office was set up in the Secretariat office of the Southeast Fisheries Development Center (SEAFDEC) in the Kasetsart University Campus, Bangkok, Thailand. The project has been managed and implemented by SEAFDEC staff from the Project office in collaboration with relevant SEAFDEC Departments (Training Department, TD) in Thailand and Marine Fishery Resource Development and Management Department (MFRDMD) in Malaysia under overall supervision by the Secretary-General. There was also collaboration with all ASEAN

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² Interlinks between the activities, component and outputs shown in the table were specified based on the Logical Framework of the SEAFDEC-Sida Project, referred to "Sida-SEAFDEC Project: 2003 Annual Report and Activities Plan for 2004.

³ Cambodia, Indonesia, Thailand and Vietnam by organizing the sequence of events including (a) Planning Meeting and Consulting for the Pilot Process, (b) Organization of the National Workshop for HRD, and (c) Organization of Onsite Training and National Workshop for HRD Fisheries Management. See also *Annex2b* "Set of Representative Countries: Process to be applied for follow-up on HRD in Fisheries Management and the Code of Conduct", and *Annex 2c* "Pilot Process for the SEAFDEC-Sida HRD Program Implementation in Fisheries Management (including Management of Fishing Capacity).

Member Countries and organizations and projects in Southeast Asia during all stages of project implementation.

Within the SEAFDEC structure the operational responsibilities rested with the Office of Policy and Program Coordination (OPPC) at the Secretariat while the actual implementation was managed by project staff recruited under the project. The project staff was supported, as needed by SEAFDEC staff of the OPPC, TD and MFRDMD. The progress of the project was further supported in coordination of dialogue with member countries by the Working Group of the Regional Fisheries Policy (WGRFP) established in the Secretariat. The WGRFP was composed of seven staff seconded by ASEAN Member Countries through the SEAFDEC National Coordinators.

The context and directions of the project was in dialogue with ASEAN/SEAFDEC Member Countries presented for their comments at annual SEAFDEC Program Committee Meetings. Furthermore, the implementation of the project activities and development of annual work plan was monitored and discussed in dialogue with the Swedish Board of Fisheries. Annual Review Meetings were held by the end of each year. There were no major delays in the implementation of the project activities and consensus and advises from Member Countries could incorporated in a timely as envisaged. A good sense of regional and national project ownership were built, especially in the four representative countries.

The Swedish contribution, through disbursement of funds from Sida through the Swedish Board of Fisheries (SBF) amounted to a total of SEK 5.700.000, including costs for staff, advisors, etc. Disbursements for the implementation were made semi-annually with a total for each year of a) 2003 SEK 1,400,000 b) 2004 SEK 2,000,000 c) 2005 SEK 1,200,000 and d) SEK 1,100,000. Its actual expenditures paid out each year during the project implementation were a) 2003 SEK 360,080 b) 2004 SEK 1,026,059 c) 2005 SEK 1,356,971 and d) 2006⁴ SEK 2,653,154. The challenge, thus for the project management was to maintain a regional dialogue and promote regional cooperation while at the same "organize on-site training in selected venues in the ASEAN Member Countries" within the available amount of funding.

2. OUTCOMES AND RESULTS

The section above provided a general overview on how the project had advanced in terms of addressing the four objectives and the nine generic activities listed in the project document. This section provides more detailed information on a) process oriented results, and b) more specific results.

2.1 Process Oriented Results

In seeking consensus from ASEAN-SEAFDEC Member Countries high importance was given to timely planning and organizations of regional technical consultations and expert meetings to guide the project and to be able to better define (than in the generic indications of the project document) steps to be taken and activities to implement to **promote regional cooperation around the implementation of the CCRF and RCCRF**. The first in the line of events was a co-organized ASEAN-SEAFDEC Regional Workshop on HRD in Fisheries, Kuala Lumpur, Malaysia, in early 2004. The meeting resulted in the formulation of an HRD Strategy for Fisheries Management (later adopted by the SEAFDEC Council). Important step taken by this meeting was not only to focus on "technical aspects", but also to provide an emphasis on social, environmental, legal and economic aspects at all levels. Background being, that earlier approaches had emphasized technical aspects in HRD programs. In the continuation of the report specific only limited references are made to CCRF and the RCCRF as such as all of the activities are in line with and supportive to the implementation of CCRF.

During the ASEAN-SEAFDEC Regional Technical Consultation (RTC) on HRD in Fisheries Management, which included a special section on fishing capacity, organized by the project in

⁴ Excluding activities for the "project review", and few other follow up activities. And this will be finalized soon after SEAFDEC receiving budget for the Extension Year 2007.

Phnom Penh, Cambodia, June 2004 further steps were taken in terms of defining key aspects to address and how to move the process further. On the thematic focus recommendations were provided to, through the ASEAN-SEAFDEC regional consultation process, focus on three thematic issues:

- Management of Over Fishing Capacity
- Strengthening of Local Fisheries Management
- > Integrating Fisheries Management into Habitat Management

To move the process further the workshop followed up on earlier advises to move into a sequence of pilot processes in a set of countries representative for the ASEAN Region. Selected countries were Cambodia, Indonesia, Thailand and Vietnam. This recommendation was based on the notion that HRD and fisheries management is specific to the national situation. See *Annex2b* for a summary of specifics for member countries. The process in the countries should not be implemented only for the countries themselves but be **promoted as an approach for sharing experiences at the regional level**. A summary of the outcome of the four pilot processes are provided below. In summary the outcome of the Regional Technical Consultation in Phnom Penh effectively became the guiding framework for the continued implementation of the project.

To specifically get to promote the need to address the management of fishing capacity a Preparatory Experts Meeting on Fishing Capacity and Related HRD Needs in the ASEAN Region was organized in Bangkok, Thailand, 2004. The meeting in general terms agreed to opinions and recommendations from earlier events. The important message here is the fairly straightforward cause and effect chain between excess capacity and environmental degradation – this has been stated, as has the vulnerability of poorer communities. The important addition being that one cannot look either at small scale or large scale isolation and the management of capacity need to balance the interest of various groups and the country as a whole.

The pilot process in the four countries are presented separately but based on the experiences from the pilot process in Cambodia, Indonesia, Thailand and Vietnam, a seguence of expert meetings on HRD for fisheries management and the need to address fishing capacity was organised. This was followed by a Regional Technical Consultation on Management of Fishing Capacity and Human Resource Development in Support of Fisheries Management in Southeast Asia that was held in Phuket, Thailand, 19-22 September 2006. The major thrust of the Consultation focused on fishing capacity both in management terms and with reference to HRD needs. In terms of HRD on fisheries management recommendations, in summary, urged for better sharing of expertise, sharing of experiences (model areas/pilot activities), efforts to build upon existing training materials, networking and attempts to make use of regional initiatives/projects as external input/factor to facilitate national planning and activities for HRD. For the management of fishing capacity in Southeast Asia the Consultation provided recommendations for priority issues and suggested actions to consider for ASEAN-SEAFDEC Member Countries. This included need to implement National Plans of Action; recommendations on HRD to support management of fishing capacity at various levels and target groups, the importance of creating alternative/supplementary employment to facilitate exit and; recommendations on regional cooperation and collaborative arrangements for subregional sea area to support or complement Member Countries in managing fishing capacity.

A summary of the findings and recommendations for HRD, for fisheries management and for the need to address fishing capacity emerging from the regional technical consultation is provided in the Section 4 of this report. However, three key points to consider were emphasized, namely:

• In this region, the major issue⁵ – with regards to fisheries management related to the management of fisheries, relates to the *management of fishing capacity* and to *reduce over-capacity*.

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⁵ This finding has been stressed in several instances and can be referred to in the series of reports of the meetings/events organized by the project.

- **Empowering community** and **strengthening local institutions** should be key elements of capacity building for sustainable coastal resource management.
- The major long-term policy issue or area for collaboration is to aim towards the
 establishment of a "regional and sub-regional fisheries management body", that
 would allow member countries jointly to work out solutions to common issues.

Furthermore, the importance to **integrate fisheries management into habitat management**⁶ were maintained as a central challenge with due consideration given to the need for fisheries and environmental agencies to work together.

Pilot process in Cambodia

Cambodia exemplifies a country that is in the process of re-establishing its institutional structures and trying to economically and socially recover from the Khmer Rouge regime. The situation in Cambodia is also special, apart from the need to build up a functioning system for fisheries management in coastal areas, in that many programs building capacity at local level for environmental and natural resources management at province and commune level has been run by others than the Department of Fisheries (DOF) even when fishing activities has been involved. Hence, the planning was done to ensure the involvement of the Ministry of Environment, IDRC and others. In Cambodia most fisheries projects have, up until now, mainly had a strong focus on inland fisheries.

In the Cambodian scenario the need to integrate social, legal and environmental aspects was emphasized and a continued follow up on the three "thematic" thrusts identified at the RTC's was seen as appropriate, namely: a)Management of over fishing capacity; b) Strengthening of local fisheries management capacity; c) Integrating fisheries management into habitat management. The latter point further emphasized through the role of the Ministry of Environment (MOE) in implementing habitat related projects and projects for Coastal Zone Management. For this pilot process to promote HRD activities it was recommended that the whole of the coastline with all coastal provinces should be included in the process. A sequence of one national workshop and two "on-site-training" events should be held providing awareness-raising and training including aspects of three points mentioned above (on-sitetraining in fisheries management and fishing capacity - Activities 5 and 9). Participants should be invited from Koh Kong, Sihanoukville, Kep, Kampot (fishermen, province fisheries administration and commune council member) as well as from Phnom Penh (DOF, MOE and WorldFish Centre). The meetings should be held in Khmer and training/experiences to be shared should be based on activities and projects, of relevance to Code of Conduct for Responsible Fisheries, implemented in Cambodia.

Activities implemented in Cambodia include:

- 1. Organization of the Planning Meetings and Consultations for pilot process in Phnom Penh, Cambodia, 9 10 February 2005 (8 participants) and 17 March 2005 (16 participants)
- 2. Organization of the National Workshop for Human Resource Development in Phnom Penh, Cambodia, 6 8 July 2005 (53 participants)
- 3. Organization of On-site Training in Kampot, Cambodia (70 participants), 20 22 September 2005
- 4. Organization of On-site Training and National Workshop on Capacity Building for the Establishment of Refugia and Coastal Resources Management in Koh Kong, Cambodia 27 31 March 2006 (68 participants)

Already the planning meetings were successful in terms of creating some awareness and insights in different aspects of coastal and fisheries development in Cambodia and the way it has been addressed by various institutions/projects. In the national workshop, with participants from the two coastal provinces, two municipalities and Phnom Penh, a more

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⁶ As referred to *Annex 2e* "Addressing Integration of Fisheries Management into Habitat Management"

general picture of the coastal Cambodia was provided and together with a description of problems and ways in which these have been addressed. In the first on-site-training, in Kampot Province, resource persons gave presentations/lectures with more specific reference to the experiences of Kampot. Participants included 10 from Koh Kong, 10 from Sihanoukville, 5 from Kep and 15 from Kampot and remaining from Phnom Penh. Good examples were given from experiences in Cambodia, on links between habitat and fisheries management (in mangroves and seagrass beds), on conflicts between various groups of fishermen as a result of *over-capacity*, and on community based management including the Community Fisheries⁷. For government officials the event was also positive in terms of learning in showing that you actually can build in fishermen and villagers as resource persons in the presentations. Following the events so far a request emerged to organise a workshop/training for central DOF to view its current measures to manage fishing capacity and to manage fisheries as a whole in the perspective of compliance with the CCRF.

In the on-site-training of Koh Kong, participants included 20 from Koh Kong, 15 from Sihanouk Ville, 10 from Kampot, 5 from Kep and remaining from Phnom Penh. A brief background and concept of Fish refugia was provided while stressing the importance of management of fisheries resources in connection with habitat management, including need to focus on transboundary migration, nursing ground, feeding ground of aquatic species. Awareness on importance to manage fisheries habitat through the refugia concept in the coast of Cambodia was recognized due to the lack/depletion of the natural fisheries/habitat resources and also increasing demand of fish production, growing population and increasing number of fishing gears/activities. Good introduction of the fishery refugia was raised up by the Deputy Director General of the Department of Fisheries Cambodia, and discussion on future promotion and support on management mechanism for sustainable fisheries resources was carried out in the on-site-training in Koh Kong. A set of suggestions 9 was provided through group discussion, including a) resolution for the conflict management of coastal resource users, b) activities to eliminate destructive fishing gear and practices, particular for trawlers and purse seine net, c) activities to eliminate foreign fishing boats, d) activities for coastal resources stock enhancement, e) process for the establishment of fish refugia in coastal area of Cambodia, f) activities for future cooperation among neighboring countries to establish and manage fish refugia (between Cambodia and Thailand, and between Cambodia and Vietnam).

Pilot Process in Indonesia

Indonesia exemplifies one of the archipelagic states in the region. Indonesia is also the most populated country in the region and, as underlined during the planning meeting in Jakarta, with a population that is very unevenly spread.

In the Indonesian context the importance to integrate social, legal and environmental aspects was again emphasized and a continued follow up on the three "thematic" thrusts identified at the RTC's was seen as appropriate, namely: a)Management of over fishing capacity; b) Strengthening of local fisheries management capacity; c) Integrating fisheries management into habitat management. It was stressed that interventions and training needed to be designed to "match the local culture".

The organizational focus has so far been with the Ministry of Marine Affairs and Fisheries (MAFF) and various departments linked to the MAFF. A positive, for the project, thrust in process was that the MAFF took on the process and used the opportunity for its own planning purposes with regards to HRD planning, trying to develop and build on district models, etc. It was made clear that Indonesia have fairly well established training programs for fisheries,

Refers to community fisheries organisations set up under the Sub-decree on Community Fisheries

⁸ Fisheries Refugia in Southeast Asia are commonly understood as: "Spatially and geographically defined, marine or coastal areas in which specific management measures are applied to sustain important species [fisheries resources] during critical stages of their lifecycle, for their sustainable use."

⁹ Referred to the report of the On-site Training and National Workshop on Capacity Building for the Establishment of Fishery Refugia and Coastal Resources Management, 27-30 March 2006, Koh Kong, Cambodia.

educational centers and universities and presentations on the content of existing training were made during the planning meeting. Basically existing training has a technical orientation hence the acknowledged need to incorporate social, legal and environmental aspects. Having said that and in the perspective of the specific situation in Indonesia the focus of the activities under the pilot process has been to "promote HRD on fisheries management" rather than the implementation of HRD as such which is well in line with scope of the outputs to be achieved.

For the purpose of the pilot process and the need to increase awareness and to promote HRD the planning meeting highlighted two distinctly different management scenarios based on the complexity of capture fisheries in Indonesia; 1) high population density with many people involved in traditional and small-scale fishing activities in **coastal waters off Java** vs. 2) less people and traditional/small-scale fishing but with many companies involved in fishing in **eastern part of Indonesia** implying that different strategies need to be developed to implement the CCRF and to manage fisheries and specifically fishing capacity.

Activities implemented in Indonesia include:

- 1. The organization of the planning meeting for pilot process in Indonesia, Jakarta, Indonesia, 28 June 2005 (20 participants)
- 2. Organization of National Workshop for Human Resource Development in Jakarta, Indonesia, 27 29 September 2005 (40 participants)

The national workshop became an opportunity for the MAFF to plan for HRD programs focusing on different characteristics of the fisheries – in both cases with the issue of **how to manage capacity** in the forefront. Elements of training/lectures during the meeting consisted of presentations of the situation in northeast Java (specifically related to aquaculture) and of traditional management practices (Awig Awig) in Lombok Timur. Recognition were made on the benefits of the traditional system and district models to be developed should incorporate those were available. HRD should also include training in understanding of the traditional systems and their relevance for the implementation of the CCRF.

The meeting resulted in an activity plan with assigned implementing agencies, time lines, etc for the MAFF and its units to be implemented by the MAFF (including two on-site-training events - one in northeast Java, on aquaculture, and one in Lombok Timur, on the Awig Awig) and two studies to be made as inputs and background material for the on-site-training. The training in Java with its focus on aquaculture is beyond the scope of this project and will be supported by the MAFF. As for the on-site-training in Lombok Timur it was the intention that this would be supported by the project as part of the pilot process. However, MAFF organized the on-site-training during the last quarter of 2006 and the results of the on-site-training will be later shared with the project. This will be included in the formulation and development of HRD supporting package.

Pilot process in Thailand

Thailand exemplifies a highly developed fishing nation being one of the world's largest exporters of fisheries products. A very large commercial fishing fleet is fishing in Thai waters as well as in distant waters as far away as off Africa. Still along the coast many small coastal villages are dependent on small-scale near shore fishing. The villagers are also among the poorer groups of the country. The resources are threatened by over-fishing both through large and small scale operations, through destructive fishing, through habitat destruction and through coastal developments.

Given the fabric of the Thai fisheries there is also in Thailand a need to integrate social, legal and environmental aspects and a focus on the three "thematic" thrusts identified at the RTC's, namely: a) Management of over fishing capacity; b) Strengthening of local fisheries management capacity; c) Integrating fisheries management into habitat management. The relevance was confirmed during the planning meetings.

During the planning it was at the onset recommended to keep a link to major projects such as the CHARM project (local fisheries management capacity) and the UNEP/GEF South China Sea Project (integrating fisheries management into habitat management). Management of fishing capacity is the major challenge and presently there are conflicts between groups of fishermen as a result of the large pressure on the resources. In response to the recommendation UNEP/GEF South China Sea Project and CHARM were invited to the second planning meeting together with experts from Kasetsart University and Prince of Songkla University (CORIN). The result being that the planning meeting developed into a seminar where especially the three thematic areas were discussed together with views on how to address those in HRD programmes at various levels.

Activities implemented so far in Thailand, include:

- 1. Organization of planning meetings for pilot process in Bangkok, Thailand, 24 February 2005 (4 participants) and 28 June 2006 (15 participants)
- 2. Organization of National Workshop in Koh Chang, Trat Province, Thailand, 2 4 August 2005 (30 participants)
- 3. Organization of the On-site Training on Capacity Building for Coastal Resources Management in Trang Province, Thailand, 14 16 March 2006 (42 participants)
- 4. Organization of the On-site Training on Human Resource Development for Responsible Coastal Resources Management in Satun Province, Thailand, 27-30 June 2006 (48 participants)

To reflect the management issues related to fisheries in Thailand the Project were recommended to focus on selected number of provinces, namely Satun and Trang on the Andaman Sea and Trat with Koh Chang in the Gulf of Thailand. Subsequently, the national workshop was organised in Koh Chang, Trat Province, thus in practice also becoming an onsite-training event, conducted in Thai. In the meeting participants included fishermen, tambon and province administration from Satun, Trang and Trat Provinces together with people from DOF, Kasetsart University, CORIN and key projects such as CHARM, UNEP/GEF South China Sea Project and the Mangrove Action Project. Koh Chang and Trat are demonstration sites for mangroves and coral reefs under the UNEP/GEF South China Sea Project. The major management challenge for fisheries presented and discussed during the meeting was again over-fishing and conflicts between groups of fishermen, and degradation of habitats through shrimp-farming and destructive fishing. Responses suggested included limiting access, rights-based fisheries, establishment of *refugia*, facilitate the creation of alternative/supplementary employment opportunities, etc.

The on-site-training was followed up with on-site-training events held in Satun and Trang Provinces in 2006 that also came to include post-tsunami responses. Major outputs from the on-site-training in Trang, in the context of human resources development to support the coastal resources management, included suggestions for strengthening local capacity such as to improve: a) capacity of the local villagers/community leaders to facilitate/cooperate in local coastal resources management with all stakeholder; b) capacity in communication ad coordination skill; c) capacity of multi-criteria analysis; d) capacity for data collection and participatory rural appraisal; e) knowledge, understanding and awareness in the areas of laws and rights, f) responsibility of the local villagers/communities in relation to coastal resources management; g) capacity in writing proposal and technique for project proposal in achieving budget support; h) capacity to negotiate in the consultation process; i) capacity to analyse who are the actual stakeholders in coastal resources management together with skills for them to work together with the stakeholders, j) capacity to improve characteristics to act as the leader and coordinator among stakeholders in the villages/communities; I) capacity to understand idea of local resource conservation in the village; and m) capacity to integrate new knowledge into their local knowledge for resources conservation and enhancement. These suggestions could provide a basis and directions for improvement of the future planning for strengthening human capacity to support responsible fisheries/resources development and management, and also to increase efficiency and effectiveness for strengthening and improvement of coordination among agencies concerned for coastal resources management.

As suggested at the on-site training in Trang the organization of the follow up on-site training in Satun was carried out by having topics formed and agenda arranged by Satun's local organizations. The training in Satun worked very well in having field-work visit and learning from and sharing experience among the local fisherfolk organization in Satun and participants from Trat and Trang. It is important to note that participants from Trat and Trang have learned through the process how themselves to establish fisherfolk groups and how to manage their own resources for sustainable development of coastal fisheries.

Pilot process in Vietnam

Vietnam exemplifies a country that is in transition from a centralistic and communist planning structure to more modern market based planning models. This process involves the fishing sectors as well as other sectors and areas throughout the country. In the process it is also in Vietnam important to look beyond "technical solutions" by integrating social, legal and environmental aspects as recognised during the planning meeting. The planning meeting also recognised the relevance of the three "thematic" thrusts identified at the RTC's, namely: a) Management of over fishing capacity; b) Strengthening local fisheries management capacity; c) Integrating fisheries management into habitat management.

In a process to promote HRD activities for fisheries management and to address the issue of fishing capacity the first planning meeting recommended to hold a national workshop with presentations from relevant projects such as the Danida Fisheries Sector Support, Norad and the new fishing law, UNEP/GEF South China Sea Project as well as from other ministries like the Ministry of Natural Resources and Environment. To cover some of the different situations in terms of fisheries in Vietnam it was recommended that at least three provinces should be invited; Kien Giang (with Phu Quoc), one province in central Vietnam (Quang Binh) and one province in the Haiphong/Ha Long Bay area (Haiphong).

Activities implemented in Vietnam include:

- 1. Organization of the planning meeting for pilot process in Hanoi, Vietnam, 13 July 2005 (26 participants)
- 2. Organization of National Workshop in Do Son, Vietnam, 4 6 October 2005 (34 participants)
- Organization of On-site Training on Capacity Building for the Establishment of Fishery Refugia in Phu Quoc, Vietnam, 14 – 16 June 2006 (41 participants)
- 4. Organization of On-site Training on Capacity Building for Resources Management and Establishment of Marine Fisheries Resources Protections Areas in Vietnam, in Quang Binh, Vietnam, 2 4 August 2006 (38 participants)

The national workshop organised in Do Son gathered, as recommended, provincial fisheries administration from Kien Giang, Quang Binh and Haiphong Provinces together with staff from Ministry of Fisheries and key projects such as those mentioned above. The meeting was informative in giving a perspective to different projects, their rationale including approaches to HRD. The Danida project is developing an HRD plan for the fishing sector and welcomed comments and cooperation. The three provinces were also clear in emphasising the need for HRD at provincial level both among the DOFI staff as well as among fishermen. In Kien Giang and Haiphong they also highlighted the problem they are facing with over-capacity. Kien Giang/Phu Quoc is also a demonstration site for the UNEP/GEF Project (Coral Reef and Seagrasses). Kien Giang and Haiphong were also facing trans-boundary issues with (sea borders to) Cambodia and China, respectively. In Quang Binh, being one of the poorer provinces, fisheries are very important to many villages.

Phu Quoc, Vietnam's most southern island, located in Kien Giang province, is abundant in various aquatic resources and important coastal habitats raging from mangrove forest, sea grass beds, to coral reef. Participants at the on-site training in Phu Quoc included, apart from

people from local and national fisheries administrations, People' Committee members, NGO's and two representatives from Cambodia (Kampot and Phnom Penh). During the on-site training in Phu Quoc, recognition was made on problems with over-exploited coastal resources, deterioration of coastal eco-system due to over-fishing and lack of effective management system for fisheries. It was noted that the increased concern over the status of coastal resources had stimulated a number of initiatives promoted by Ministry of Fisheries and other agencies. Representative of Kien Giang Fisheries Department presented at the on-site training in Phu Quoc the proposed establishment of marine protected areas as one of the 15 MPAs in Vietnam supporting by MOFI. A plan for establishment of fisheries refugia in neighbouring waters in Cambodia was presented by the representative from Kampot Province of Cambodia. The training urged representatives from Kampot, Cambodia and Kien Giang, Vietnam to explore in greater details with appropriate higher authorities approaches to future collaborative mechanism and arrangement between the two countries on matters related to fisheries and habitat management. A starting point could be to address trans-boundary migratory species and habitats such as seagrass beds, mangroves and coral reefs.

During the training in Quang Binh, clarification was made on the current status and needs of capacity building to support sustainable coastal resource management, and particular emphasis was given to the establishment of "marine fishery resources protection areas¹⁰". In the view of establishing fishery resources protection areas, Quang Binh Department of Fisheries has developed, through the discussion at the training, a proposal (which focus on areas around 5 main islands and reef system in Ho La and Hon Nom areas. The proposal includes plans for: a) protection, rehabilitation and development of valuable and endangered species and protection of breeding and nursing seasons in the areas; b) set up regulation for management, protection, and rehabilitation of valuable and endangered species through conservation of eco-system in coral reefs, sea grass, and biodiversity of coastal area; c) raising awareness and capacity building to support management of marine fishery resources protection areas; and d) integration of fishery resources protection to tourism activities.

2.1.1 Specifics on the training/learning aspect of the pilot process

The pilot process was organized in four countries, for Southeast Asia representative countries, namely Cambodia, Indonesia, Thailand and Vietnam. In this section a few points will be highlighted to point at the benefit of the approach and method of implementation during the pilot process. Firstly, to ensure that the process were based on the priorities and identified directions for each of the countries the processes was initiated with a consultation at national level where the sequence of events were outlined, together with focal areas and/or provinces, projects and documentation of relevance to build upon as a basis for the training workshops and on-site training, etc as described in the section above in the four countries. The experiences reflected here are mostly in reference to the process in Cambodia, Thailand and Vietnam, as the process in Indonesia, based on the initiative of the Ministry of Marine Affairs and Fisheries, took a different approach and as described above became used as a platform for implementation by the MMAF themselves — which again is an important indicator of success in itself. An important element to highlight, thou, is their wish to define a number of "village models" based on traditional systems, such as the awig-awig, for the management of their coastal fisheries.

In the other three countries three to four provinces or areas were selected during the initial planning meeting – in Cambodia the focus was on the whole coast including Koh Kong, Sihanoukville, Kep and Kampot; in Thailand Trat, Satun and Trang; and in Vietnam Haiphong, Quang Binh and Kien Giang with in each country a "resource pool" from central authorities and active organizations and projects. The important part in the process was to build an interactive platform for both people in the provinces as well as for those from the "resource pool" – in this case done by trying to get the provincial people more active in presentations and discussions rather than solely relying on "lecturing" by the "resource pool" during training workshops and on-site training.

¹⁰ Clarified in similar concept and criteria to that of "fishery refugia" promoted by the UNEP/GEF/SCS and the Project.

Another basic element in the approach is that the group of people from each of the provinces (which includes fisherfolk, provincial/district fisheries and environmental authorities and commune council/tambon administration/people's committee) is, together with pool of resource persons, participating throughout process, thereby facilitating sharing of experiences between areas. The result from all the three countries is clear in that there has been a positive learning as well as increases in awareness for both the people from the provinces and, which is more difficult to get confirmed or recognized, but still important to stress also by providing a substantial learning among people from the "centre". The sequence of meetings in Cambodia is a good example on the feedback back to the "centre". It would be good to follow up with the people from the provinces if they feel that they through this system have had an "impact" on the awareness among people from the "centre". The learning experience provided though the interaction during the process between provinces could be well referred to from Thailand in terms of comments made by the group from Trat at the final day of the on-site training in Satun. They stated that they appreciated the experiences on organizing the villagers into different areas/groups to diversify the way of managing their resources as shown by the example provided by the villagers in La-Nguu District – and they followed on by saying that they would try to move in similar direction back in Trat.

To follow up on effects, activities and planning that has been the direct, or indirect result of implemented activities is important to trace impacts. Through the report of the review mission (March 2007) and through reports provided by counterparts in the four pilot countries examples of direct results include:

- Fishermen in Trad Province, Thailand, organise themselves along experiences gained from on-site training in Satun Province, including improved management of crabs
- Plans developed for the establishment of a fisheries resources conservation area/MPA in Quang Binh Province, Vietnam, based on lessons learnt from on-site training in Phu Quoc
- In Indonesia the MAFF decides to build upon "district models" based on traditional practices, such as the Awig-Awig that was used as a reference during project events
- In Koh Kong Province, Cambodia, recommendations on cooperation across the border with Thailand on fisheries and habitat management has been confirmed as a priority by the DG of the Fisheries Administration of Cambodia, as is the cooperation with Vietnam and Kampot Province
- A senior Department of Fisheries official, in Thailand, recognized the need for provincial Fishery Officers to have skills in conflict resolution, facilitation, and planning, in addition to technical subjects. He made provision in the next year departmental (national) budget for training in these skill areas.

The major shortcoming, as with many projects coming to the end of an agreement period, is that you build up a momentum with ideas and enthusiasm being developed on how to progress towards better and more sustainable management – but there are not really any resources available to build upon that momentum. Hopefully, that could be changed by being able to build upon some of the recommendations that was brought forward during the pilot process by involving the (some of the) people that have been part of the on-site training during coming stages of the Swedish cooperation with SEAFDEC.

2.1.2 Towards the establishment of a Regional Fisheries Management Body

The Consultation in Phuket saw a "breakthrough" by seeing the ASEAN-SEAFDEC Member Countries for the first time recommending that **the** major long term policy issue or area for collaboration was to aim towards the establishment of a "**Regional and Sub-regional Fisheries Management Body**". To work in this direction the consultation recommended that programs should be developed that would allow Member Countries (jointly and/or in subgroups) to work out solutions to common issues, to develop joint opportunities and in various way gradually build common understanding and trust among Member Countries to pave the

way for the legal framework needed to establish a regional fisheries management body. Examples of areas and actions considered suitable by the Consultation to promote regional cooperation and development of common understanding and trust include:

- Organise regional expert consultation/discussion fora in areas of importance to regional fisheries and aquatic/marine environmental management
- Mitigate regional fisheries and marine/aquatic environmental conflicts/mitigation of overcapacity
- Monitoring Control and Surveillance establishment, experience & lesson learned
- Harmonization of national policies related to fisheries and aquatic/marine environment
- Analysis of national, regionally compiled data (the get a profile and understanding of existing or old problems)
- Identify common fisheries management issues (to provide a platform for new options and opportunities)
- Share experiences on the management of critical habitats, MPAs, fisheries reserves, Refugia, etc
- Review the existing mechanisms for regional collaborative arrangements and agreements
- Establish/ reinforce partnerships and existing mechanisms for regional cooperation (including ASEAN, SEAFDEC, UNEP, Worldfish Center, FAO, NACA, MRC, etc.)
- Promote collaboration/ cooperation in the integration of habitat and fisheries Management (including establishment of transboundary "fisheries resources conservation areas" or refugia). Suggested areas include: Gulf of Thailand; Andaman Sea and Malacka Stratits; Sulu and Sulawesi Seas; South China Sea, and; the Mekong River

Apart from regionally active organizations and intergovernmental bodies like ASEAN it was noted that in the process to establish a regional fisheries management body it is important to engage national institutions among ASEAN-SEAFDEC Member Countries in the process, such as 1. The agency(ies) responsible for fisheries (DOF, MOF or other); 2. The agency(ies) responsible for habitat and marine/aquatic resources, and; 3. The responsible body for Foreign Affairs

The longer term vision to establish a regional fisheries management body and the recommendations from the Consultation, together with the result of earlier regional expert meeting and the results, experiences and priorities from the pilot process in the four representative countries is providing the basis for the development of a collaborative program between SEAFDEC and Sweden 2008 and onwards. This framework is also the basis for suggested activities for the extension/bridging period of 2007. An ambition is to try to maintain the momentum being built up so far. The endorsement by the SEAFDEC Council during the 39th Council Meeting, in April 2007, in Siem Reap, Cambodian is an important support to the relevance of the aim to work for an establishment of a fisheries management mechanism.

2.1.3 HRD for Fisheries Management

In the project document, activities were not developed for each of the Output but rather being more general and included/suggested activities should be able to contribute to more that one output. The project document mentioned nine activities that were to be implemented "step by step". Furthermore, it is obvious that activities implemented to achieve outputs 2), 3) and 4) would include elements that will be part of achieving output 1) for example, to promote HRD on fisheries management there is a need to increase the awareness on the necessity of appropriate fisheries management or to identify options to alleviate problems caused by excessive fishing capacity you need to increase the awareness on the problem and the necessity to address that with regards to appropriate fisheries management. This is to say that the need to address the management of fishing capacity has been central all trough the processes described above.

The project implementation, including aspects related to HRD for fisheries management, had followed a process oriented (step-by-step) approach, seeking consensus and

recommendations from ASEAN-SEAFDEC Member Countries along the way with the aim to set directions and priorities through a sequence of regional consultations and meetings organized by the project and other relevant initiatives as discussed above.

In the regional consultations and expert meetings organized it was made clear by the participants that "HRD in fisheries management is specific to the national situation" and the project was recommended to embark upon a "pilot process" in a representative set of countries¹¹. The pilot process/studies of the project aimed at enhancing management of fishery resources through effective implementation and regional application of the CCRF/RCCRF. This pilot process involved a sequence of meetings, workshops and on-site training in the representative set of countries – including four countries, Cambodia, Indonesia, Thailand and Vietnam – by addressing both fisheries management and fishing capacity issues. Specific reference to process in the four countries is made above. Experiences and lessons learned from the process were to be shared at the regional level – which were done during 2006 in a sequence of regional consultations and expert meetings.

In summary the promotion of HRD followed the recommended thrusts the three thematic areas that were referred to above, namely:

- Management of Over Fishing Capacity
- Strengthening of Local Fisheries Management
- Integrating Fisheries Management into Habitat Management

The approach to seek consensus and understanding (increased awareness) within the region has been maintained through regional consultations on HRD needs for fisheries management thus providing recommendations relevant to these three areas as well as other related areas that were considered important in the context of fisheries management.

Moving towards the pilot processes in the four countries and down to the on-side training the focus on the strengthening of local fisheries management has been targeted to address the strengthening of local capacity in the management of fishing capacity and in processes to integrate fisheries management into habitat management – two of the key aspects to build up for a sustainable fisheries. As a short presentation on each of the four countries has been done earlier, this, and the following section will provide a more general summary seen from the perspective the thematic areas. With the understanding that ways of addressing local fisheries management is an integrated part of the overall process this section will focus on the integration of fisheries management into habitat management while the next section will follow up on the management of fishing capacity. Direct references to recommendations on local fisheries management are provided in the Section 4 of this report. The thrust in Indonesia has been more directed towards the local management as such by identifying and promote "local models" based on traditional systems such as awig-awig (see more the section on Indonesia) and basically taken over by the Indonesians. A follow up on the awig-awig is/was planned by the project.

Human capacity building in support of the integration of fisheries management into habitat management in promotion of the establishment of fisheries resources conservation areas (or fisheries refugia) in Southeast Asia has been carried out since 2004 by collaboration and coordination works with relevant initiatives/institutes such as MOFI-Vietnam, IUCN/MPA-Vietnam FiA-Cambodia, Ministry of Environment— Cambodia, DOF-Thailand, CHARM-Project, Thailand and the UNEP/GEF South China Sea Program as well as other project and programs. For this purpose, a similar sequence of project implementation process has been organized in parallel in Cambodia, Thailand and Vietnam. The process of consultations and on-site training at national and local/provincial level included institutions and people concerned in management of coastal habitats and fisheries including fisherfolk and commune council, tambon administration and people's committee in selected areas.

The basic concept or method was to build the training and exchange of information around experiences and documentation available in each of the countries and of relevance to management of habitats and fisheries. Resource persons were from various project were

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¹¹ Referred also *Annex 2b* . And process for the "pilot process" appears as *Annex 2c*.

invited to present methods and experiences ranging from participatory management, coastal zone management, status and functions of specific habitats (such as mangroves, sea-grass beds and corals), social aspects to fisheries and conflict among groups involved in fisheries (including conflicts between coastal fishermen and larger vessels. An important segment came to deal with destructive fishing and over-capacity and the way to address that in each of the countries and in specific locations. During the process there was a gradual move towards designing an inter-active on-site training platform specifically in moving towards the establishment of *refugia*, based on the given conditions in the specific provinces. This, apart from aspects referred to above, also included review of concepts and basic design for establishment of conservation areas (MPA's "Fisheries *Refugia*" etc) and to discuss the link to the context of coastal resource management, fisheries management and to manage fishing capacity. Furthermore, areas to be targeted for continued capacity building were discussed and identified by the participants in the events. All in all 758 persons ¹² took part in the events 212 in Cambodia, 61 in Thailand, 135 in Vietnam and 139 in Indonesia.

Parallel, and in connection with on-site training events, a discussion was initiated on work to develop a collaborative mechanism between Cambodia and Thailand, and Cambodia and Vietnam, in coordination of efforts to integrate fisheries management into habitat management and for the establishment of "Fisheries *Refugia*" of trans-boundary importance. The initiative was met positively by all three countries and the project is recommended to continue the process into future stages of cooperation. Subsequent to the events organized a set of recommendation with regards to the establishment of fisheries *refugia* in Thailand-Cambodia-Vietnam were made as follows:

- Suggested process for the establishment of fisheries refugia
 - Criteria for selection/establishment of fisheries refugia
 - o Motivation to establish fisheries refugia
 - o Establishing of fisheries refugia
 - Management of fisheries refugia
- Suggested activities for future cooperation among neighboring countries to establish and manage fisheries refugia
 - Cooperation between Cambodia-Thailand (Koh Kong and Trat Provinces)
 - Cooperation between Cambodia-Vietnam (Kampot and Kien Giang Provinces)
- Suggested mechanisms of neighboring provinces for the process of establishment of fisheries refugia
 - o Provincial working group establishment
 - o Technical working group establishment

2.1.4 HRD: Specifics to the Management of Fishing Capacity in Southeast Asia

The general approach and method described above for HRD for fisheries management were applied also in connection with consultations and on-site training sessions to specifically address the management of fishing capacity - often included as a segment in the sequence of events that were organized.

The Project has addressed management of fishing capacity through the promotion and support of HRD activities at various levels. The outputs that specifically relate to the issue of management of fishing capacity, roles and task¹³ of the project include:

- Information collection on excess capacity in small-scale and commercial fisheries could not lead to a comprehensive set of figures, but rather, which is important, was leading to an understanding or confirmation that aggregate levels on actual fishing capacity is not available
- Initiation of, or participation in, the process to identify of the problem areas and target groups of the HRD activities on fishing capacity based on the complication and

¹² See details appeared as Annex 3a.

¹³ Also with reference, as combined here, to the activities 6, 7, 8 and 9 in Table 1.

analysis of the collected data on fishing capacity with the aim to identify various options to alleviate problems caused by excessive levels of fishing capacity. The main result being that you cannot treat either small-scale or large-scale fisheries in isolation and to alleviate problems caused by excessive fishing effort, while at the same time address the social and environmental situation, an "all-embracing" approach need to be taken – that even go beyond national boundaries into the regional sphere.

- Organize and participate in meetings and consultations to share experiences, results and information on approaches to manage fishing capacity throughout the region in order to make use of generated information and recommendation. In terms of preparation and publication of training materials on the management of fishing capacity a general recommendation was provided (as for fisheries management in general) to build upon existing material, and incorporate innovative approaches, rather than to make new sets of material.
- ➤ Organization of on-site training on the fishing capacity and initiation on the specific training need for local participation in fisheries management to focus on alternative and/or supplementary employment opportunities to provide options to alleviate excess fishing capacity. The emphasis on ways and means to facilitate exist from fisheries is an important message that has been conveyed through the activities.

In summary, the following activities were implemented within the scope/framework of project roles/tasks concerning the Output 4 related to management of fishing capacity especially to assist the Southeast Asian Member Countries in "identifying various options to alleviate problems caused by excessive levels of fishing capacity".

- Organization of the Regional Technical Consultation on HRD in Fisheries Management, Phnom Penh, June 2004.
- Organization of the Preparatory Expert Meeting on Fishing Capacity and Related HRD Needs in the ASEAN Region, Bangkok, September 2004.
- Organization/implementation of the "pilot process" in the representative set of countries, namely Cambodia, Indonesia, Thailand and Vietnam, during the year 2005 2006. The process included on-site training in selected venues. Further reference is made above under process oriented results.
- Consultations with experts and involvement from various projects on matters related to fishing capacity, during 2004 to 2006
- Organization of the Expert Meeting on Management of Fishing Capacity in Southeast Asia, July 2006.
- Participation in meetings and consultations organized by FAO/APFIC, WorldFish Centre, UNEP/GEF South China Sea Project, MRC, FAO/Cambodia, NACA, etc to share experience and results from the project of relevance to the management of fishing capacity to

As resulted from the sequence of activities organized during the course of project implementation; meetings, national workshop, trainings, etc.; it is clear that in the Southeast Asian Region the major issue with regards to the fisheries management are linked to the management of fishing capacity and to reduce over-capacity – be it large scale or small-scale, seasonal or the whole year, site specific or more general. An overview of some recommendations with reference to the management of fishing capacity is given in the Section 3 and 4 of this report.

2.2 Project implementation seen from the perspective of social, environmental and health aspects

2.2.1 Cross-cutting issues:

Although not directly specified in the project document the project already from the first sequence of consultation were advised not only to address technical issues but to give more focus and priority to social, environmental, legal and economic aspects in promotion of fisheries management and in addressing the management of fishing capacity. During the

process of regional dialogues, national consultations and on-site trainings a number of critical aspects such as those of social concerns (including poverty), environmental concerns as well as health concerns (including HIV/AIDS) were also highlighted. The implications for fisheries management and for the implementation of programs to manage and reduce fishing capacity need to be considered to avoid further environmental stress and social marginalization and poverty.

2.2.2 Social concerns: It is well recognized that coastal (and inland) fishing communities are among the poorer groups in countries throughout Southeast Asia. Often they are marginalized and getting further marginalized and are getting further marginalized due to "development" in coastal areas and around inland water bodies - adding to problems caused by diminishing coastal resources. One move would be to get fisheries and the situation of fishing communities to be more in focus in the broader dialogue would be to have agencies working with fisheries building up a better dialogue with environmental, coastal resources, planning and other agencies to seek improved capacity building among coastal villagers in areas other than fishing - and to try to secure the "rights" of coastal people to certain coastal areas, including beaches. Furthermore, to ensure that developments don't affect important fisheries habitats. Another well recognized fact is the role of women in the livelihood among fisher-folk and in coastal village. Important to bear in mind is to build upon that strength in looking for alternative employment opportunities, not only for the fishermen but also the women and all members of the coastal villages. The project has been addressing the issues by inviting other departments (than fisheries), organizations and project workshops and on-site training to promote a better dialogue both horizontally and vertically. An aspect with social implications that have been stated during the process is to stress the need to broaden the employment opportunity as a tool to facilitate exit based on the fact that, even with references to national constitutions, countries would have difficulty to reduce fishing effort in subsistence and smallscale fisheries if that's the only available option - otherwise the fishermen and their families would be further pushed into poverty.

Another less well recognized aspect is the social profile of those working on the larger fishing vessels. The crew, or fish-workers, on these vessels are to a majority made up of migratory workers both within a country as well as to a large extent from neighbouring countries reflecting the relative poverty of areas these countries. The large number Cambodian and Myanmar workers on the Thai vessels are well known – however the total number is not known. That migratory workforce often works under very un-secure conditions without workpermits, etc. The implication in terms of management of fishing capacity is that it is not really a "pure" national issue but rather regional matter – as is that of the fisheries in Southeast Asia as a whole. During the process of the project this has been obvious in discussions on conflicts among groups of fishermen in that people involved in small-scale and large-scale fisheries respectively are not recruited from the same source of people.

2.2.3 Environmental concerns: If trying to reduce and manage your activity fishing capacity because the fisheries resources are declining - that is a key element of environmental management. The spirit of the CCRF and the RCCRF is in essence providing directions for environmentally sound fisheries and in general the whole project is promoting approaches towards more sustainable practices in line with that spirit. The push by the project for cooperation and dialogue between fisheries and environmental agencies as well as socially and environmentally focused NGO is also part of a strategy to build bridges between different interest groups with an underlying aim to build a stronger joint "critical mass" to form a common agenda for the management of fisheries, coastal and inland (aguatic) resources and the environment. The bottom line being that a healthy aquatic environment, with well managed habitats and fisheries managed in a sustainable and un-destructive manner should be part of the same strategy. The recommendation by member countries and the adoption by the project to give high priority during implementation to the promotion of the integration of fisheries management into habitat management - also in promotion of cross-boundary dialogues – is a positive step in this direction. The focus on management of fishing capacity and the integration of fisheries management into habitat management will be central in suggested activities for next phase of Swedish support - with aim not only to improved environmental performance but also as a platform for dialogue in working towards a "regional fisheries management body"

- **2.2.4 Health concerns**: In the project document health aspect were not included but indirectly aspects related to health and the well-being of fisher-folk came to be indirectly highlighted by reference to risks in fishing operations as such including the vulnerability of fishing villages to natural hazards; through the changing nutritional balance through diminishing catches; food safety and the dependence on fish products; indications that in some areas HIV/AIDS might be higher than average (reference to a study made in Cambodia and to indications provided from coastal villages in Southern Thailand) in this context, even though not the focus of any activity, it has been mentioned that the crew members are facing certain health hazards, including HIV/AIDS, drug use, etc. A general notion is that if successfully improving the overall livelihood situation, diversifying the employment pattern and education would also improve the health perspective. Another point, that was made clear during the project, is that villagers that are well organized are also more resilient to health and natural hazards (including responses to the tsunami).
- 2.2.5 Poverty: A focus on improving the situation among small-scale or subsistence fisherfolk is by "definition" a focus on poverty alleviation. The project document did not include any direct intervention, or activities, at field level other than to provide "on-site training at selected venues". Nevertheless, the project a number of important points was emphasized during the process to regional and national responsible organizations. Points that are necessary to address to alleviate poverty and to improve the livelihood perspectives for coastal (and inland) villagers involved in fisheries. Four of these points will highlighted here: 1) to address the management of fishing capacity it is not enough to look only at the small-scale "sector", but strong measures needs to be implemented to manage and reduce to fishing effort by larger vessel (especially those fishing in coastal waters) thereby reducing the total pressure on the resource - and giving more "space" for coastal fishermen, 2) capacity building, education and creation of alternative and supplementary employment opportunity in other sectors than fisheries to diversify and strengthen the economy and income for the households (important to stress the need for employment opportunities for both women and men), 3) Secure the right of coastal (and inland) villagers to the use and management of fisheries and other coastal resources - and to secure (document) the right to maintain their household and villages in coastal areas and coastal habitat, be it mangroves, sandy beaches or other coastal features, 4) Prevent coastal (and inland) fisherfolk from being further marginalized through developments in other sectors - and large scale/industrial fisheries. As far as possible these points will be addressed in coming stages of Swedish support.
- **2.2.6 Legal and institutional concerns**: Already at the onset the project was recommended to address legal and institutional concerns, this has also been done both in terms of references to the actual fisheries regulations (including the new fishing laws in Vietnam and Cambodia) as well as to indicate the need to look at other regulations including, even, the basic constitutions of each of the countries. In institutional terms an aim has been to involve also other institutions than the fisheries agencies an obvious need for this is linked to the aim to integrate fisheries management into habitat management which would, at least, imply cooperation with departments responsible for marine and coastal resources or the ministries of environment. Another area were a clearly stated need for cooperation with others have been stated during the project is in the creation of alternative and supplementary employment opportunities.
- **2.2.7 Civil society/NGO's:** The project has made some major advances in broadening the dialogue also beyond the circle of government agencies by extending to bodies or representative entities for the civil society, such as the Commune Councils (Cambodia), the Tambon Administration Office (Thailand), People's Committee (Vietnam) and from members of the Awig-Awig (Indonesia). Furthermore, the project has also been able to involve relevant NGO's in various stages of the process and dialogue, such as Mangrove Action Project, Yadfon Association, IUCN-Vietnam and WWF-Vietnam.
- **2.2.8 Capacity building**: The whole thrust of the project had a focus on HRD, capacity building and awareness raising as is clearly stated in the project document In this context the project also successfully supported the development of a strategy for HRD in fisheries management and through the pilot process the project was also able to "organize on-site training at selected venues in ASEAN Member Countries". The method applied made it also

possible to share experience and build up learning between villagers/fishermen and provinces (horizontal) as well as between the villagers/fishermen and the "centre" (be it government bodies or independent organizations) through an inter-active process. The challenge now (for the coming stages) would be to try to build upon the momentum and move the experiences into some tangible action.

2.3 Specific Results

2.3.1 Packages of Training Materials

The recommendations from the RTC in 2004 were clear in that the project should build upon existing material and experiences. This was further reinforced during the pilot processes in Cambodia, Indonesia, Thailand and Vietnam, respectively and the sequences of training workshops and on-site training built around training and experiences being provided by a range of related projects and programs does building a platform of shared learning.

In an attempt to move this common pool of learning into a series of "packages" linked to the work on the development and use of training materials and packages for HRD and to get feedback from member countries an Expert Meeting on "Development of National and Regional Training Materials for Human Resource Development in Fisheries Management" was held in Hua Hin, Thailand, 4-7 July 2006 to discuss the practicalities and usefulness of approaches on the development of training materials. In an attempt to facilitate the use of the common pool of learning, from various sources, used during the pilot process a series of "packages" is being developed. This will document, in a power point format for easy use, the learning provided and information shared during the pilot process and on-site training in the form of four sets of "packages", one for each of Cambodia, Indonesia, Thailand and Vietnam. In summary HRD materials and regional reference database include:

- 1. Four HRD "packages" based on a the information and material used during training workshops and on-site training (with a different structure for Indonesia) (to be available after editing)
- 2. A "Regional Inventory, Database and Network for Information Collection on Human Resource Development in Fisheries" (RIDNIC-HRD). (More details in next section).
- 3. In addition, a description and implementation approaches to a number of representative types of management situations will be summarized during 2007, including:
 - Development of local organisations and fisheries management in three areas (Lombok Indonesia, Satun Thailand and Koh Kong Cambodia);
 - The management of anchovy fishery in two locations (Thailand and Vietnam):
 - Establishment of MPA and Marine fisheries resources protection areas in Vietnam

2.3.2 Database/Network for Information Collection on HRD Activities

As an approach to promote the innovative fisheries management system with the ultimate goal to improve human capacity in fisheries related fields in the region. This program was initiated in 2003 by SEAFDEC and the Malaysian Department of Fisheries. It was agreed, during ASEAN-SEAFDEC Regional Workshop on HRD in Fisheries in February 2004 Kuala Lumpur, that each ASEAN-SEAFDEC Member Countries will conduct the inventory of program on HRD in fisheries. This was endorsed by SEAFDEC 36th Council Director Meeting in April 2004.

Following the endorsement of the SEAFDEC Council the program "Regional Inventory, Database and Network for Information Collection on Human Resource Development in Fisheries" (RIDNIC-HRD) was been established by SEAFDEC and it is now accessible through the internet at http://map.seafdec.org/ridnic_hrd/index.php. RIDNIC-HRD continues since the initiation in 2003 to the aim to promote human capacity building and to provide a basis for networking on HRD in fisheries that contain essential and useable information from fisheries related agencies and HRD programs operated by relevant institutions. RIDNIC-HRD is managed by the Secretariat of SEAFDEC in collaboration with the ASEAN-SEAFDEC Member Countries based on cooperation between SEAFDEC and National Focal Point (NFP) of each Member Country.

Each ASEAN-SEAFDEC Member Countries should conduct the inventory of program on HRD in fisheries and feed into the database. In summary the RIDNIC-HRD program is a regional initiative to develop and maintain a database on the national/regional HRD courses/programs to be shared for national, regional and international usage by ASEAN-SEAFDEC member countries and/or non-members countries and other organisations. Information will be selected and collected by the national focal point of each country for further be complied by SEAFDEC.

2.3.3 Study on Eco-labelling of Aquatic Products

The reliance on fisheries and aquaculture in the ASEAN region as a mean of providing foreign revenue, poverty alleviation and food security is evident. However, there is a general concern that overexploitation of the marine resources has made the fisheries productivity continually declining. At the same time, aquaculture has been encouraged to compensate for the reduced marine productivity so as to meet the demand in the global markets. The dependency of fisheries and aquaculture on natural resources and the importance of these sectors when it comes to national economies are also well recognised. Hence, a common concern in the region has been raised over how to maintain sustainable trade of fisheries and aquaculture products for sustainable livelihood of local people.

Trade- and environmental issues associated with fisheries and aquaculture products have been discussed widely in the region. These issues are even more important today due to the increasing demand of environmentally-preferred products by the consumers. As a result, it has become a real challenge for the region to be able to respond to the consumers' expectations. This challenge implies the development of environmentally-friendly fisheries and aquaculture production as well as the communication of environmental information to consumers.

Eco-labelling, also known as Environmental labelling, is a symbol, logo, text or data sheet of environmental profiles attached to a product to indicate its origin from environmentally-sustainable practices. It has emerged as a tool to provide environmental information of products to consumers. Eco-labelling is seen as a mean to differentiate the products to assist consumers in their purchasing decisions for environmentally-friendly products.

The eco-labelling issues have been received a special interest in the international fish trade forum. It is seen as a potential tool to stimulate more responsible fisheries and aquaculture practices and hence improving sustainability. Whilst the eco-labelling principles are consistent with the sustainability concepts, there are however major concern given to its impacts on trade

Due to the many questions raised over advantages and disadvantages of eco-labelling implementation to the ASEAN countries, a regional study on Eco-labelling of aquatic products was initiated by SEAFDEC. The study was conducted with technical support from the Swedish Board of Fisheries and financed by the Swedish International Development Cooperation Agency (Sida), from November 2005 to February 2006. The information regarding eco-labelling issues was obtained from 12 questionnaires, interviews/meetings with 450 people, and 10 site visits in nine countries. It has been compiled to represent the general views and future consideration for the region.

The overall impression based on this regional study is that there are some vague ideas about what eco-labelling is. Its scope and definition is not yet clearly understood. Hence, there are both positive and negative views on eco-labelling from various stakeholders. Most of the countries consider eco-labelling as an environmental management tool to encourage more responsible practices. It is seen as an opportunity to add value, particularly to traditional products, and to facilitate the access to potential markets where a premium price can be expected.

However, many countries look at eco-labelling as a regulation imposed by importing countries to discriminate ASEAN products – this might create a non-tariff barrier to trade. A great concern over the feasibility and practicality of eco-labelling principle and criteria is given to

multi-species fisheries in ASEAN. More importantly, eco-labelling markets are not yet certain and premium price of eco-labelled products are not guaranteed. All countries raise a common concern regarding the practical approaches of eco-labelling implementation in terms of principle and criteria development as well as certification procedures. Costs associated with certification systems are also raised as a major issue of consideration, especially to small-scale producers. Capacity building together with technical and financial assistance is demanded if eco-labelling will be implemented.

On the other side, there are great opportunities for the ASEAN region attached to ecolabelling adoption identified by this study. Eco-labelling principles are consistent with sustainable management strategies practised in the region. Moreover, the eco-labelling criteria seem compatible with the environmental management aspects covered in existing environmental conservation and management programmes. Possible options for eco-labelling schemes have been suggested here: species-, community- and processing-oriented, which are basically originated from extensive, poly-culture or low-input production systems. The institutions responsible for monitoring and certifying environmental management programmes (such as CoC, GAP, BMP or Organic) can be the same for the eco-labelling schemes. The study also found out that there are national eco-labelling schemes in some countries which could be adopted or adjusted to fisheries and aquaculture products.

By analysing the ASEAN situation, issues to be considered concerning the eco-labelling application to aquatic products are:

- Should we consider the opportunities attached to eco-labelling application more carefully to prevent it from becoming a barrier to trade;
- Should we adopt the international Eco-labelling principles and criteria;
- Should we develop regional principles and criteria;
- Should we only ecolabel products that are technically and economically feasible;
- Should we start with species originate from existing sustainable practices; and
- Who should be responsible for the technical and financial supports for further development on Eco-labelling?

In conclusion, several countries share the same opinion that eco-labelling will be implemented only if it is required from importing countries (which is not yet the case). Most of the countries prefer taking the eco-labelling actions step by step, in a very cautious way.

Based on the increased demand for eco-labelled products, it is highly recommended that the eco-labelling issues should be approached in a pro-active way. Capacity and awareness building on Eco-labelling principles and criteria as well as certification procedure should be provided to ASEAN countries – International institutions (SEAFDEC, FAO, and NACA) working and leading on the Eco-labelling issues can take an active role. The practical implementation of Eco-labelling should be demonstrated through pilot projects, which could be the species, originate from existing sustainable practices. To ensure the marketing channels for Eco-labelling products, marketing research should be conducted indentifying potential markets and pricing systems. The communication with markets should be performed along with the further development of Eco-labelling. And all of these will urge the communities to take up the challenges on eco-labelling.

2.4 Problems, Constraints and Opportunities

A review of problems, constraints and opportunities should not only be made in reference to the project as such but also, and importantly, to where SEAFDEC are today and, through the expressed aspirations by member countries to where SEAFDEC is heading. SEAFDEC is this year reaching its 40th anniversary as an intergovernmental body established to promote development of fisheries in the region. The funding for the basic structure of SEAFDEC is provided by the member countries and the host countries for the four countries are covering the costs for the four Departments. Up until recently there had been a stable and substantial inflow of funding for project and programs through a number of trust funds from Japan. This inflow has been reduced, due to reasons beyond SEAFDEC itself, and the countries has responded by looking towards themselves and to increase their responsibility for sustaining

the organization. The background is important as the path towards greater ownership among the ASEAN member countries, as also reflected in the ASEAN-SEAFDEC Fisheries Consultative Group and the development of an ASEAN-SEAFDEC Strategic Partnership (ASSP), and the interest to maintain the organization as forum to address common issues has turned a problematic situation into an opportunity. In other words, SEAFDEC is an organization in change, not only in its funding base but also, which is important, in its way of programming of activities moving towards more programmatic approaches, in the aims to strengthen regional cooperation and to mitigate conflicts and disparities between ASEAN-SEAFDEC Member Countries. It is in these perspectives of change that the project has proved to be catalytic through an interactive and cooperative way of implementation with a focus on fisheries management in general and specifically on the management of fishing capacity. The need to cooperate and to be adaptive to the recommendations from member countries while building upon inputs from other organizations and projects should also be seen against a fairly limited budget.

Opportunities:

There are basically to sets of opportunities a) opportunities provided through the project from its onset, and b) opportunities created by the project:

a) Opportunities provided through the project implementation

As mentioned above the project was timely approved and could act as catalyst to initiate a process for the organization to move into a new mode of operation pro-actively seeking cooperation at various levels and with various types of organizations, both within governments and outside – in that sense it could also be argued that the fairly small budget were "helpful" by forcing the project management and SEAFDEC to be more interactive. The basic "philosophy" of the project strategy, to build upon and seek consensus among ASEAN-SEAFDEC Member Countries provided another opportunity in the same direction.

Addressing the management of fishing capacity and HRD in fisheries management is a Herculean task if expecting to solve the problems or cover all aspects and all countries, but the four stated objectives provide workable opportunities by being more generic and aiming for a more interactive, advisory and consultative process at various levels rather than a traditional "on the ground" project. Thus, the objectives invited to a process to 1) "Enhance awareness of the necessity for appropriate fisheries management..." 2) "To advise the stakeholders innovative fisheries management systems" 3) "To promote HRD activities fisheries management with identified target groups", and 4) "To identify various options to alleviate problems caused by excessive levels of fishing capacity"

Recommendations by member countries, during early consultative events, to focus on a representative set of countries provided as it turned out to be a useful mechanism both in terms of promotion of HRD and awareness raising, including "identified target groups", as well as to build up sources of experiences to be shared at the regional level to advance the regional platform for common approaches to fisheries management and the management of fishing capacity.

b) Opportunities created by the project

The project created, in broad terms, a momentum and related opportunities in five areas, at the regional level and in each of the four representative countries. The challenge ahead is to incorporate these opportunities and build upon this momentum in activities and actions to be implemented – not only with Swedish funding and not only by SEAFDEC but also with other initiatives.

Section four of this report summarizes recommendations provided through the project and the Regional Technical Consultation in Phuket in September 2006 as articulated by member countries. One of the main opportunities here is that they provide indications on steps to take, and aspects to include to move the process forward, and to aim for better management of

fisheries and environment in the ASEAN region. In the formulation of a proposal for continued Swedish support due note has been taken to address many of these recommendations. A few of the opportunities created are mentioned below.

One of the most exciting opportunities emerging through the project is the strong recommendation to work towards the establishment of a "Regional Fisheries Management Body". In this respect the Consultation in Phuket provided a "breakthrough". Subsequently, the creation of a Regional Fisheries Management Body is the main long term objective for the proposal for continued Swedish cooperation with SEAFDEC.

Several opportunities were also provided through the pilot process, and momentum – and expectations – has been built up. Two aspects will be highlighted here. 1) In Cambodia, Thailand and Vietnam the project have provided better opportunities to move in the direction of integrating fisheries management with habitat management and to promote cooperation between fisheries and environmental departments and other government and non-government institutions. 2) A process have been initiated, and/or further developed where others have started, to promote dialogue on fisheries and habitat management in border areas such between Cambodia and Vietnam (Kampot and Phu Quoc/Kien Giang), Cambodia and Thailand (Koh Kong and Trat) and Thailand and Malaysia (Satun and Langkawi)

Furthermore, by having highlighted that no aggregated information is available on actual fishing capacity – small as well as large scale – there is an improved opportunity to, in cooperation with FAO and others, to start building up a profile of the active fishing capacity in various parts of the region.

In Indonesia it is interesting to note that opportunities have been building up through the Ministry of Marine Affairs and Fisheries in terms of incorporating recommendations from meetings held so far into their regular work plan. It will be interesting to see how they succeed to build upon "village models" based on traditional systems, such as the awig-awig.

Constraints

For a project with a limited amount of funding the availability of financial resources is a constraint – as it were the project turned that into an opportunity by adopting an inter-active mode of working building on cooperation and inputs from other projects and resource persons. In coming stages a continuation at the same level could become a constraint in not being able materialize some of the expectations that have been created.

Another, general constraint for a regional organization like SEAFDEC is the expectation to "cover" all countries. In the case of the SEAFDEC-Sida project we were advised to manage by focusing on a set of four representative countries. This could continue to be a constraint, especially when projects with limited funding comes that cannot cover more than a couple of countries to have some meaningful, if not merely to be in support of some regional thematic/technical consultation. This is something for the countries to address and for the organization to work on in terms of its programming exercise. This could be done in the way that a "program" or "program thrust" could cover the whole region, with sub-components for countries or sub-regional such as the Gulf of Thailand, the Andaman Sea or the Sulu-Sulawesi Sea.

In the early days of the project there was a full "Working Group for Regional Fisheries Policy" recruited and stationed at the Secretariat, with people from seven member countries. This group was instrumental and helpful in facilitating the pilot process in the four member countries. As the funding for the group ended early 2006, this also led to some (minor) constraint for the project in the continued dialogue with member countries and the work to finalize the training "packages" has seen some delay. In coming stages of Swedish support it is proposed to recruit resource parsons from member countries.

Problems

Problems could be seen from two angles: 1) from the side of the project management, and 2) from the side of the target groups and cooperation partners

a) Project management and implementation

In the course of management and implementation the project has not been facing any problems to speak of. What could have been a problem for the project are some inconsistencies in the project document, where the sequence of two components, four objectives and nine generic activities are not really matching or logical. Based on the Agreement with SBF and based on agreements at Annual Review Meetings, the project have been able to plan the activities at an annual rolling planning basis – still with the objectives of the project document in focus. Summing up the implementation the project had covered all the outputs as well as been able to address the generic activities.

b) Target groups and cooperating partners

Seen from the point or view of target groups (for on-site training, etc) and cooperating partners all indications are that no problems has surfaced during the processes of implementation – rather the fact seems to be that all indications are positive to the project and to SEAFDEC as implementing agency.

What could be seen as a problem, especially at province level, is that certain expectations of things to be delivered by the project most likely would have developed. This is difficult to avoid, especially in programs to promote HRD and in providing on-site training without immediate funds available to put learning into practice. The project response is to 1) avoid building up expectations in the first place, 2) by working together with, and inviting resource persons from other (ongoing) projects some expectations could be met through the implementation by others, and 3) by incorporating the momentum and expectations of a continuum into proposals for future support (including the present extension for 2007)

3. Discussion and Synthesis of Lessons Learned from Project Implementations

The following sections are highlighting a number of aspects brought during the process of implementation of the project. It is summarizing, in the form of bullets points to consider not only for upcoming phases of Swedish support, but also for other national and regional actors. The first section is general points and reflections brought forward during the project, some points merely emphasizing known experiences, the second section takes up specific points with regards to fishing capacity and the third section is again looking at fisheries management as such.

3.1 Major Lessons Learned and Experiences to be Shared

- **Technical issues are not sufficient**. HRD in fisheries management should be developed at all levels considering:
 - Legislation, Law and regulations implication of international initiatives and conventions, structure/rules of local management, co-management approaches, functions of rights-based fisheries and rights of resource users, institutional role and responsibility.
 - Social and economics implications of limiting access, reducing and managing fishing capacity, facilitating exist from fisheries, supplementary/alternative livelihoods, co-management concepts, survey/research techniques including consultation and participations; and
 - Environment habitats and reproduction areas, migratory routes and interconnectivity, supplementary/alternative livelihoods

These aspects were also highlighted during the development of regional HRD Strategy for fisheries management – with co-support from the project.

- Learning from the "Pilot Process" to enhance awareness on the necessity for appropriate fisheries management and to alleviate the problems cased by excessive fishing capacity. The pilot process turned out to be a practical approach to develop and promote HRD on fisheries management and the management of excess fishing capacity. Bringing selected groups from targeted areas together with "central" resource persons in a country or sub-region is a useful basis for sharing earning experiences and knowledge both horizontally and vertically as well as a method to generate inputs to the regional policy level and further nation-wide management of fisheries and fishing capacity.
- Learning from experiences and good practices of other organizations. Existing experiences in the region related to fisheries management should be taken into consideration. For this reason, benefits to the project from participation of the project staff to other related projects/initiatives have been seen in opportunities to convey experiences and results directly into other dialogues, and also benefits in terms of facilitation and promotion of collaborative working with other relevant agencies on the issues related to fisheries management and management of fishing capacity.
- Avoiding an "isolated" process in developing human resources for management of
 fishing capacity. HRD for fisheries management of fishing capacity should be
 incorporated within the context of fishery management as such, thereby avoiding
 "isolated" process that would not be optimal in use of project funds in reaching results
 related to project objectives/aims. Seen from the point of fisheries management you
 cannot really address fisheries management without addressing fishing capacity.
- Enhancing awareness through HRD programs by building upon existing training materials and resource persons available in the country. In translation of CCRF and RCCRF and other texts such as conventions to national languages to support awareness building at national and local level emphasis should be given to "convey the message" to the audience, not direct translation. Furthermore, it is important to explore what's available in terms of available in terms of training material and resource persons before embarking upon development of new materials.
- Improving and better planning and management of fisheries: based on recommendations defined by ASEAN-SEAFDEC Member Countries, one of the key challenge for future improvements of planning and management of coastal fisheries through capacity building and HRD programs is to package policy and technical advices and awareness building for policy makers/high level officials in fisheries management including management of fishing capacity.
- Seek broader partnership and cooperation when creating plans and framework for HRD in fisheries management: In the process of developing plans and framework for HRD in fisheries management since 2004, through the ASEAN-SEAFDEC regional consultation process, it became obvious that in the process of implementation it is critical for the longer term results to seek broad cooperation also beyond the sphere of fisheries agencies. The need for broad cooperation is important in addressing all the three thematic areas that was the focus for implementation by the project, namely:
 - Management of Over Fishing Capacity
 - Strengthening of Local Fisheries Management
 - Integrating Fisheries Management into Habitat Management
- Establishing a collaborative work among institutions concerned: during the course
 of project implementation, active participation of the project staff in SEAFDEC and nonSEAFDEC relevant events/activities was carried out to maintain the dialogue with the
 countries and collaborative projects/initiatives on the issue related to fisheries

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¹⁴ See the list of Coordinating Projects/Initiatives appeared as *Annex 3c*.

management (more in coastal small-scale issues) and management of fishing capacity. The pro-active interaction with other projects and programs proved to be a useful mechanism not only get inputs to project process as such, but also be able to disseminate information and recommendation based on project results

3.2 Management of Fishing Capacity in Southeast Asia

Another important lesson, or message, provided through pilot process and the sequence of Regional Technical Consultations and Expert Consultations is that there are no aggregated data on fishing capacity at national or regional level. Available information is more site-specific and relates to projects rather than statistical information. In adapting to the situation the process of "identification of the problem areas and target groups of the human resource development activities on fishing capacity based on the compilation and analysis of the collected data on fishing capacity" would have to be done through consultations with experts and involvement from various projects as the aggregated data on fishing capacity is not available to get a general picture. A critical problem is the lack of "statistics" with respect to fishing capacity especially at the smaller scale.

Through the process of project implementation a number of *key issues in managing fishing capacity* was found, or emphasized, including:

Policy related issues

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

- Addressing closing/regulating access to fisheries/freezing the numbers. If in the process certain groups left without means of subsistence this might in some cases mean violating the constitution or going against established policies.
- > Often political will to really address the management of fishing capacity is lacking
- No policy for wrong subsidies/incentives (such as fuel subsidies or lack of tax)
- ➤ No lenient political intervention for illegal fishing (whether SSF or LSF) strict enforcement of laws and severe fines
- Setting-up buy back schemes, finding financial support, mechanisms to do so
- Addressing conflicts and ambiguities between Departments
- Addressing conflict between fisheries and other sectors (e.g. tourism) for coastal resources
- Fishing capacity among large and small scale fisheries needs to be addressed in parallel

• Institution related issues

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

• Socio-economic issues

- > Lack of job opportunities for fishermen (and their families) to exit fisheries
- Need to go fishing is often a safety net for the vulnerable/poor

• Research issues (technical)

Finding a balance between SSF and LSF

- Boundary between demarcated areas for small-scale and large-scale fisheries respectively not always clear or easy to implement/monitor
- Understanding the real numbers behind SSF and LSF (number of vessels, total production)
- Implications of fuel costs on different types of boats
- Responses to natural disasters need to have reliable baseline information on fisheries to ensure rehabilitation is sustainable (and not to an increase in capacity)
- Identifying key fleets (types of boats/gear) contributing to the problem of overcapacity (e.g. trawlers, push-netters)
- > Assessment of changes in catch composition and volume as a tool to assess excess capacity
- Role of MPAs/refugia in ensuring sustainable fisheries and to define levels of active fishing capacity at given times of the year

• Regional level issues

- Managing fisheries across borders: how to bring countries to manage these together (Malacca Straits, Gulf of Thailand) and to provide a forum to jointly discuss management of fishing capacity
- Safety at sea: setup of standards (remotely linked with fishing capacity)
- Increasing demand for fish (direct consumption and processing/export) and impacts on levels of fishing capacity

3.3 Status of HRD for Fisheries Management in Southeast Asia

In the process of the project in promoting HRD programs for fisheries management in Southeast Asia a number of pertinent issues, or lessons on matters to consider in program development and implementation of future activities, including as follows:

Major issues

In the region, the major issues with regards to fisheries management relates to the management of fishing capacity and to reduce over-capacity.

Empowering community and strengthening local institutions should be key elements of capacity building for sustainable coastal resource management.

That the major long-term policy issue or area for collaboration is to aim towards the establishment of a "regional and sub-regional fisheries management/development body", that would allow member countries jointly to work out solutions to common issues.

There is a need to integrate fisheries management into habitat management

Major problems that need to be addressed

Current Situation

> Illegal and/or destructive fishing practices particularly push nets and trawls in coastal areas.

Four Major Limitations

- Capacity for alternative/supplementary livelihoods
- Coordination among agencies concerned
- Participation of resource users and local administrative organizations in development and management of coastal resources
- Budget and knowledge capacity of local administrative organizations

Unclear, Unorganized, Weak, and Ineffective

- Unclear institutional arrangement and weak institutional capability for coastal fisheries management particularly at the local level
- Unorganized policy for development and management of coastal resources use and weak translation of the policy into action
- > Ineffective implementation of existing management measures and law enforcement

4. Recommendations

Based upon the results of the process of implementation, that cumulated through the organization of the Regional Technical Consultation in Phuket, September 2006, the , following the set of recommendations on the management of fishing capacity and HRD for fisheries management was proposed to guide continued action. (Will be later proposed for endorsement by the SEAFDEC Council 39th Meeting to be held in Cambodia in April 2007 – revise wording after council). Reflecting the focus of the Consultation the following section present the recommendations under two headings: 4.1 Management if Fishing Capacity and 4.2 HRD for Fisheries Management and fisheries management

4.1 Management of Fishing Capacity

Recommendation 1 Guiding Principles for Management of Fishing Capacity in Southeast Asia

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

- Follow up on recommendations of the FAO IPOA-Capacity
- Address the specifics of multi-gear/multi-species of fisheries
- Provide an emphasis on small-scale fisheries and livelihood of fisherfolk, both inland and marine waters, while in parallel address management of large-scale fisheries
- Ensure the integration of social, economic, environmental, legal and political considerations in planning
- Establish clear priority and practicability of implementation schemes

Recommendation 2 Directions towards management of excess fishing capacity

Major issues of management of (excess) fishing capacity were identified as follow:

- 5. To *understand status and trend of fisheries* in terms of fishing boats, gear, fishers and resources. In connection to this, indicators are regarded as a useful tool to monitor actions.
- 6. To *replace open-access with limited access* regime of fisheries. It was noted that licensing is appropriately used for commercial fisheries while other forms of right-based fisheries systems is more appropriate for small-scale fisheries.
- 7. To *control/regulate fishing capacity*. This can, initially, be done through freezing number of fishing boats and gear as a first measure.
- 8. To **promote co-management** approaches in fisheries management. This will facilitate consensus building among

government authorities and stakeholders in managing fishing capacity. This includes identification of management actions to reduce fishing capacity (particularly in destructive fishing) and supplementary/alternative livelihoods (aquaculture, tourisms, agro-business, etc.)

Recommendation 3 Points to bear in mind for the Southeast Asian Countries in Managing Fishing Capacity

To provide further options for managing excess level of fishing capacity, following critical points should be kept in mind:

- In developing and promoting right-based fisheries systems, supporting legal provisions should be ensured, taking into account variations in fishing seasons – including national and regional migration of fish-workers.
- 2. Raise awareness to ensure political will and clarify practical approaches and steps in the management of excess fishing capacity at the national level. National consultation can be conducted as an initial process.
- 3. In the long-term process, there may be a need to restructure or realign government bodies and policies related to fishery management in response to the real fisheries situation.
- 4. As a practical approach to develop/promote management of excess fishing capacity, highlighting good examples, and encourage promising pilot activities in selected areas/countries in the region as a basis for sharing experience at the regional level and continued national management of fishing capacity.
- 5. Consumer awareness building or education initiatives to build up a preference for fish and fishery products from sustainable/responsible fisheries should be developed (could be linked to scheme for eco-labelling).
- 6. To facilitate exit in reducing excess fishing capacity, HRD to support supplementary/alternative livelihoods (in other sectors) should be developed and implemented.
- 7. When developing supplementary/alternative livelihoods it is important to build upon requirements from the target beneficiaries and to make sure to avoid other groups are taking advantage of the (government) work to promote new opportunities.

Recommendation 4 Priority Target Groups for HRD in Support Management of Fishing Capacity

Through the consultations/meetings, there exist two main target groups for HRD in relation to management of excess fishing capacity, apart from the fishermen and their families:

- 1) Government authority.
- 2) Other **stakeholders and consumers** of fish and fishery products.

In addition, HRD should also focus on three different levels: national/central, provincial/state, and local/community.

Recommendation 5 Priority Areas of HRD Requirements

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

- 1. Ability to develop criteria for 'fishing capacity', to develop indictors, and criteria for rights-based fisheries systems
- 2. Ability to work with policy development and social, economic, environmental and legal aspects
- 3. Extension/consultation/coordination, not only on technical aspects but also awareness building and facilitation skills to enhance ownership, higher degree of compliance and cooperation from stakeholders (including aspects under 1 and 2).

Recommendation 6 Roles of International/Regional Organizations in Managing Fishing Capacity in SEA

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

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

4.2 HRD for Fisheries Management and Fisheries Management

Recommendations 1 For Better Planning and Implementation of HRD Activities to Support Fisheries Management

- Packaging policy an technical advices and awareness building for policy makers/high level officials in fisheries management including management of fishing capacity
- Community organization and empowerment toward improved livelihood and capacity building towards coastal resources management
- Establishment of model areas and networking to support capacity building
- Sustainability of initiatives that will go beyond the end of specific projects
- Mainstreaming good practice and create enabling environment
- Establishment of a regional network for HRD in fisheries management
- Ensure that skill enhanced and knowledge are also made use of
- Capacity building on resource users rights
- Make use of regional initiatives/projects (such as SEAFDEC, WorldFish Center, UNEP/GEF/SCS, etc.) as external forces to facilitate national planning/activities for HRD

Recommendations 2 For Policy, Legal and Institutional Framework

- Policy framework for sustainable coastal fisheries development and management should be developed as a basis for actions to be taken at the provincial and local levels as well as in seeking outside project assistance and funding support.
- Where excessive fishing capacity exists, exit scheme from the fisheries sector may be considered but only with due

- consideration given to social and economic conditions.
- Alternative and supplementary livelihoods should aim at diversifying occupations and sources of income and be identified considering potentials and capacity of community in the context of broader coastal area development and management.

Recommendation 3 For Sustainable Development and Management of Coastal Resources

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

Recommendation 4 For Cooperation and Networking of Agencies and Projects/Initiatives

- Inter-agency coordination mechanism and dialogue among line agencies concerned for coastal development are strongly encouraged. As a result, an overarching policy framework for sustainable coastal development including institutional arrangement and demarcation of responsibilities could be developed to facilitate actions to be taken by respective agencies.
- In the context of management and conservation of habitat and transboundary resources, dialogues among neighboring areas/countries should be initiated and supported by collaborative mechanism for sharing information and expertise.
- Networking of national centers in coastal resource management at the regional level could facilitate sharing of information and experience.
- Target goal and strategy for management of coastal resources of the agencies concerned should be connected and streamlined.
- Coordinators need to have characteristics of: leadership, flexibility, transparent mode of working, and high level of acceptance in the villagers/communities. These could lead to the success and improvement of the effectiveness of the coordination.
- Strengthen capacity for group of villagers/communities for being centres of cooperation for effective continuation of collaboration among all agencies concerned.

5. Future Directions and Challenges

It could be seen that efforts initiated by the project together with some other related organizations (not only fisheries related agencies but also environmental concerned agencies in supporting implementation of sustainable fisheries management in line with CCRF/RCCRF and to alleviate the problems caused by the excessive level of fishing capacity) are already in place at both regional and national level. While the project has been taking a gradual

"learning-by-doing" approach to address these issues, there is also a need to upgrade awareness both within SEAFDEC related programs and non-SEAFDEC programs as discussed earlier. In doing so, the project in full collaboration with SEAFDEC related programs and other non-SEAFDEC programs/initiatives should be addressing the following aspects:

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

A major long-term task ahead is for SEAFDEC, ASEAN-SEAFDEC Member Countries and others to embark upon the process to establish a "Regional Fisheries Management Body" for the Southeast Asian Region. Recommendation provided, and the points stated above, will be tools to consider during the process. Steps in this direction could include:

- Develop and implement an action plan, for the region and sub-regions, including
 - a. Capacity building
 - b. Information gathering
 - c. Collaborative research
 - d. Plan for management actions responsible agencies, actions and scheduling
- Mobilizing existing mechanisms of FAO, UNEP, SEAFDEC and other relevant projects/initiatives.
- Promote common approaches to the management of fishing capacity

An immediate challenge, or direction, is to put in practice the recommendation to promote **regional collaboration** and if possible establish **sub-regional management areas** in the following areas:

- Gulf of Thailand (Cambodia, Malaysia, Thailand, and Vietnam)
- Malacca Strait (Indonesia, Malaysia, and Thailand) and Andaman Sea (Indonesia, Malaysia, Myanmar, and Thailand)
- South China Sea
- Sulu Sea or Celebes Sea (Indonesia, Malaysia, and Philippines)

Steps in promotion of this could include:

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

Annex 1
Project on "Human Resource Development on the Support of Implementation of the Code of Conduct for Responsible Fisheries Management for the ASEAN Region – Logical Framework

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions & Risks
Development Objectives			
Enhance management of fisheries resources through effectively implementation and regional application of the Code of Conduct for Responsible Fisheries Management and reduced excess capacity	 Reduction in conflict between small-scale fisheries and commercial fisheries as well within each "group" Increased capacity for sustainable management of fisheries resources Increased alternative and supplementary income opportunities Reduced environmental impact from capture fisheries and coastal aquaculture 		 National level commitment to improving capacity at national, provincial and local level Legislative reform maintains commitment to decentralization and greater management control of resources by stakeholders
Immediate Objective	·		
To enhance human resources capacity with respect to priority issues contained in Article 7, Fisheries Management of the Code of Conduct for Responsible Fisheries and the Regional Guidelines – specifically with regards to the reduction of fishing capacity	- Consultation, consensus building among recipient countries, close collaboration among ASEAN Member Countries and with stakeholders as part of capacity building and awareness raising process - Availability of relevant information to decision making institutions at provincial and national level — including commune councils.		 Target institutions are receptive to outputs The time and effort that will be required to involve stakeholders in capacity building is considered valuable enough to allocate national and provincial resources. Options presented and advises provided is of practical use for fisheries management and
Ref: Article 7 of the Code of Conduct Reg. Guidelines – Resp. Fisheries Manag	including commune councils, people's committees, etc - System established for enhancing capacity at various levels		decentralized local planning to local authorities and people involved in fishing and their organizations. That consensus can be built

Resolution points 1 to 16 Plan of Action sections A, C, D and E, but specifically section A			among recipient countries - That close collaboration with the ASEAN Member Countries can be maintained
Outputs			
OUTPUT 1			
Project well managed, monitored and reported	Project Advisory Committee Meetings, Reviews, and Evaluations, Annual Consultations, Coordination mechanism and meetings under the ASEAN-SEAFDEC Collaborative Program. Coordination meetings and arrangement with other relevant projects.	Progress Reports, Annual Reports, Minutes from Meetings, Review and Evaluation Reports, Financial Reports	That the ASEAN-SEAFDEC Collaborative Program continuous to develop as a mechanism for collaboration
OUTPUT 2			
Awareness enhanced of the necessity of appropriate fisheries management to achieve sustainable development (central + local)	 Information is collected/clarified with regards to fisheries management policy and needs to achieve sustainable development Strategies for further enhancement developed through consultation and consensus building Workshop/training held to identify Stakeholders profiles with regards to fisheries management issues, over capacity and information needs, including livelihoods aspects such as poverty, gender and HIV/AIDS. 		
OUTPUT 3			
Stakeholders advised on the mechanisms of innovative fisheries	Information collected/clarified on mechanisms for innovative fisheries management systems –	- Documentation of the information that is collected/clarified	- Statistics - Rights based fisheries

Ref: Resolution Point 1, account the specifics Resolution Point 2, coordinate/collaborate Resolution Point 3, enhanced capabilities Resolution Point 4, reduce disparities Resolution Point 5, effective management Resolution Point 6, introduce rights-based	for small-scale and commercial fisheries - Stakeholders identified for small-scale and commercial fisheries respectively - Meetings and consultations held on mechanisms of innovative fisheries systems - Key stakeholders consulted periodically using participatory discussion methods	 Reports on the process, including consultations, to identify stakeholders for both small-scale and commercial fisheries Documented outputs to the various stakeholders meetings 	 Subsidies Decentralisation Aquaculture Overcapacity Supplementary livelihoods Village authorities
OUTPUT 4 Human resource development activities promoted on fisheries management with identified target groups Ref: Resolution Point 2, identify constraints Resolution Point 3, enhance human resources at all levels Resolution Point 4, reduce disparities Small-scale fisheries and large commercial-based fisheries in four representative countries (Vietnam, Thailand plus Indonesia/Philippines) Ref: Special focus Vietnam and Cambodia (Loas) in accordance with Point 4 of the Resolution – to "reduce disparity" among ASEAN Countries	 Nationally and locally applicable training material produced Target groups for Human resources development identified – based on a mix local/provincial authorities and representatives for the fisheries sector Workshops/training held to promote human resource development Examples of developed/modified (Provincial) fisheries management policy and management plans as a means of human resource development 	 Produced training material Reports on the process of identification and selection of target group for human resource development Reports and documentation of workshops and training events Documented outputs in terms examples of modified/developed fisheries management policy and management plans 	 Decentralisation Rights based fisheries Central/local Urban/rural Commune councils, etc Subsidies Statistics Overcapacity Aquaculture

OUTPUT 5			
Various options identified to alleviate the problems caused by excessive levels of fishing capacity	 Available Information on excess capacity in small-scale and commercial fisheries collected Consultative process undertaken to identify various options to alleviate problems caused by excess levels of fishing capacity Meeting/consultation held on paths to alleviate excess capacity and make use of available information SEAFDEC initiates specific training course for local participation in fisheries management – and options to alleviate excess capacity 	 Reports on status of excess capacity in small-scale and commercial fisheries Reports on various options identified Reports and outputs from meetings and consultations Evidence of local information used in identifying various options Evidence of information reported and options identified have been used as an input in other processes 	 Overcapacity Statistics Decentralisation Central/local Urban/rural Other sectors Environment COBSEA Local Authorities Supplementary income Alternative income
Activities for Year 1 (October 2003 to September 2004)	Note: Specific activities has been singled out for Output 1 (Project well managed) whereas for Output 2 to 5 it is expected that specific Activities can/should contribute to several Outputs.	Note: Activities such as workshops, meeting, training, etc. should if possible tag on to some other events to better use available resources, to economise on the number of meetings and to facilitate coordination.	
Activity	Objectively Verifiable Indicator	Means of Verification	Assumptions, notes, activities of related programs
Activities to Output 1: Project well managed, monitored and reported			
 Recruitment of Project Manager, identification of project staff and establishment of the project office and structure 	Number of people linked to the project, office space and implementation structure	Staff lists and report on project implementation structure and available facilities	Link or cooperate with the attempts by COBSEA to do a survey of ongoing projects in "their" field as well as other institutions that are

 Make a survey and document ongoing projects and activities in related fields by SEAFDEC and other organizations Inception planning workshop, a planning workshop to refine overall project approach, identify stakeholders, establish institutional arrangements (with NBF, and others Organise two meetings of the Project Advisory Committee, first one to review the project activities during the SEAFDEC Program Committee (Jan. 2004) Annual Report will have to be prepared for November meetings, LogFrame to be prepared for Nove 2003 	 Survey of projects and activities undertaken Workshops held for project planning, LFA development and to establish institutional arrangements (with NBF and others) Initial Stakeholders identified Two Project Advisory Committee meetings organised Annual Report prepared and LogFrame (LFA) prepared during Nov 2003 	 Report and database on ongoing projects and activities Reports of meetings and workshops held, revised LFA, project meetings with NBF List of initial stakeholders Report from meetings Annual Report; LogFrame (LFA) 	doing similar surveys SEAFDEC Program Committee Meeting, 12 / 16 January 2004, in Philippines Check with NBF at what time and intervals they want to have reports! Stakeholders – the "list" and the context of stakeholders to be revised from time to time depending on scope and administrative level. Cooperate with FAO, COBSEA and others
Activities to Outputs 2 – 5 Collection/clarification of available information: - Collection/clarification of national policies, laws and institutional	Information on national policies, laws and institutions collected and	List of available informationReports clarifying the aspects of	Consultations, workshops and meetings should in as far as
framework for fisheries & aquaculture relevant to the Code of Conduct for Responsible Fisheries in each country in	clarified in consultation with national stakeholders	national policies and the legal and institutional status/functions (one "general" for each country + four "specific")	possible try to link up with other SEAFDEC (and others) consultations and meetings to economise on the number of

consultation with national stakeholders – based on available documentation

- Collection/clarification of available information on fishing capacity in each country in consultation with national stakeholders – based on available documentation
- Collection/clarification of management policies and practices for fisheries & aquaculture in one province (or more) per country, in four countries, in consultation with national stakeholders. DOF, Provincial Fisheries Office, Provincial Environment - based on available documentation

Regional consultations and meetings:

- Organise a Regional Consultation Meeting to explain the project objectives, scope and activities.
 Seek consensus on draft outlines and draft training materials and the human resource development program, specifically with regards to:
 - 1. Accommodation of national priorities and needs in the

- Information on fishing capacity collected and clarified in consultation with national stakeholders
- Information on management policies and practices at provincial level collected and clarified, in four countries, in consultation with national stakeholders

to present the project and draft training outlines and material - Consensus established on

Regional Consultation organized

- Consensus established on development of training materials
- Consensus established on the human resource development program

- List of consulted national stakeholders
- List of available information
- Reports clarifying the status of fishing capacity (one "general" for each country + four "specific")
- List of national stakeholders consulted
- List of available information
- Four reports clarifying management policies and practices at provincial level
- List of national stakeholders consulted

- Report from the Regional Consultation, list of participants, etc.
- Consensus on training materials as reflected in the project report
- Consensus on human resource development program as reflected in the project report

meeting and the use of resources.

The number of people (stakeholders) consulted and involved in various activities will also depend on the way that suggested activities can build upon and add to other projects (add one or two days to another meeting with similar "stakeholders")

Direct reference to specific dates, number of people, etc. has not been made as these will depend on links (both in terms of joint activities or to avoid plans for activities at the same time as other activities) to other SEAFDEC projects as well as other projects. Some projects, like "toward decentralized management of sustainable fisheries in the ASEAN region" is of direct relevance in this context.

Methods/strategy for information collection, synthesis, clarification, etc. (usefulness/value of information, required format, periodicity, feedback, availability of resources, sustainability) to be discussed (also with other projects) and if needed become

training material. 2. Human resource development program in general (methodologies and schedule) at the national level. 3. Human resource development program on Fishing Capacity			an "activity" of its own Again – "Stakeholders" – and the context of stakeholders to be revised from time to time depending on scope and administrative level and activity to be implemented. Cooperate with FAO, COBSEA and others
- Preparation of the Regional Technical Consultation for Fishing Capacity	- Regional Technical Consultation on Fishing Capacity prepared	- Agenda, prospectus, list of documents, list of invitees, etc.	
Additional regional meeting(s) might be envisaged in order to coordinate with ASEAN Member Countries and/or other projects	Additional regional meeting(s) prepared to coordinate with ASEAN Member countries and/or other projects	- Reports from meetings, lists of participants	
Training materials: preparations, translation, etc			
- Preparation of public training materials using the regional guidelines of the fisheries management (Article 7) of the Code of Conduct for Responsible Fisheries and circulation to member countries	Public training materials based on the Regional Guidelines prepared drafted and presented	- Draft training materials	
- Training textbook, posters and flyers finalized for printing	- Textbooks, posters and flyers printed	- Textbooks, posters and flyers	
Translation of the Training Material (only training textbook) on the Fisheries Management of	Training materials (textbook) translated and published into five (?) languages	- Copies of translated training materials	

RCCRF to national languages (Cambodia Indonesia, Malaysia (for Brunei), the Philippines, Lao, Thailand and Vietnam.). Full collaboration of the ASEAN Member Countries is required to conduct the activities.	
Indicative generic activities for Year 2 to 4	
Output 1 Project well managed, monitored and reported	Output 1 Project well managed, monitored and reported
	 Include the items that needs to be repeated every year from the year 1 indications such as "Organise meetings of the Project Advisory Committee twice a year" Organization of the Project Advisory Committee to review the project activities during the SEAFDEC Program Committee. Prepare Annual Reports Prepare for mid-term review (reviewing exercises of activities in 2003 and 2004) Prepare for final evaluation Value and usage of information generated (feedback from users & producers) Incorporation into management planning meetings, policy formulation discussions (feedback from the different management levels) Assess the extent to which national and provincial level departments can be made responsible for monitoring information collection synthesis & usage Participatory stakeholder consultations to evaluate usefulness of system and requirement for modification National workshop to disseminate the project results Regional workshop for dissemination/transfer of experiences & lessons learned to other countries & regional institutions Year 4: Performance evaluation of the project activities including the following activities including organization of a Regional Technical Consultation meeting in order to systematically include recipient countries in the evaluation process. Year 4: Organization of the Final Project Advisory Committee to review and evaluate the project activities

during the SEAFDEC Program Committee. Final reports and other publications of the project will be presented.
Organization of the Final Project Advisory Committee to review and evaluate the project activities during the
SEAFDEC Program Committee. Final reports and other publications of the project will be presented

Output 2 – 5

Output 2 – 5

Collection/clarification of available information

- Identification of the problem areas and target groups for human resources development activities based on the compilation and analysis of the collected data on the fishing capacity
- Regional collection of the information on the fishing capacity (Numbers of boats/vessels and fishers with main fishing gears at the districts level of the countries) in collaboration with ASEAN Member Countries.
- Compilation into the digitized atlas and analysis (including field visits at the identified areas) of the collected data on fishing capacity and preparation and publication of the required training materials (specific and detailed training materials) on the mitigation of the problems caused by the excessive fishing capacity

Regional and national consultations and meetings

- Additional regional meeting might be envisaged in order to coordinate with ASEAN Member Countries (FAO suggestions: Ad hoc support to fisheries management dialogues that arise during the lifetime of the project looking for opportunities to realize the use of information generated and provide positive reinforcement of the value of the process)
- Organization of the Regional Technical Consultation for Fishing Capacity (May 2004) In addition to the human
 resource development activities on the fisheries management, specific activities on the fishing capacity will be
 started. However, it is envisaged that some basic works will have to be conducted to systematically identify the
 problem areas and target groups on the issue prior to the required human resource development activities. In
 this connection, the collaboration with ASEAN Member Countries on the following issues will be discussed.
 - 1. Regional collection of the information on the fishing capacity (Numbers of boats/vessels and fishers with main fishing gears at the districts level of the countries) Component 2
 - Compilation of data into digitized atlas. The above data collected through the regional collaboration will be imputed into the existing SEAFDEC Digitized Atlas software for better presentation and appropriate analysis. Component 2
 - 3. Formulation of the pilot project to enhance awareness on the problems of the Fishing Capacity.

- Component 2
- 4. Consideration to introduce the appropriate management mechanism including right-based fisheries. Component 2
- 5. Finalization of the human resource development program on (methodologies and schedule) the Fisheries Management of RCCRF at the national level, and the required follow –up activities. Component 1
- Organization of the regional consultation meeting on fishing capacity.
 - Analysis and discussion on the fishing capacity in ASEAN Member Countries.
 - Finalization of the pilot projects on human resource development on fishing capacity (inputs, methodologies)
 - Collaboration mechanism with recipient countries.

FAO Suggestions of interest

- Participatory stakeholder consultations on fisheries (management & environment related) and aquaculture (resources & environment) issues
- Follow-up consultation with local fisher communities & fisher/aquaculture producer organizations to identify data and information requirements and their formats that are acceptable to, understandable to, and meet the needs of, local fisher communities

Training and Training materials: preparations, translations, training events, etc.

- Continued preparation and publication of required training materials (specific and detailed) on the mitigation of fishing capacity
- Organizations of the on site trainings to test the applicability of the regional training materials on the Fisheries Management of RCCRF.
- Organisation of on site training on trainings on fisheries management at the selected venues (three to four representative countries) in the ASEAN Member Countries (FAO suggestion - sensitization and hands on training in participatory consultation techniques for Provincial and District fisheries Officers, SGFDC etc.)
- Organisation of on site training on Fishing Capacity at selected venues (in three to four countries in representative countries) in ASEAN Member Countries
- Support on the organization of on site training on the fisheries management at the selected venues in the ASEAN Member Countries in cost sharing basis. (Four times in four countries; June- Sept. 2004, including preparation period).

 Modification of the training materials based on the trials and finalization and publication of the training materials 	3
on the Fisheries Management of RCCRF.	-
Continued support (year 2 and 4) on the organization of an aita training the Figherica Management of DCCDE	

- Continued support (year 3 and 4) on the organization of on site training the Fisheries Management of RCCRF at the selected venues (in capital) in the countries in cost sharing basis. (Four times in four countries).
- Continued support (year 3 and 4) on the organization of on site training on the Fishing Capacity at the selected venues (at the identified Districts) in the countries in cost sharing basis. (Four times in four countries).

REGIONAL AND NATIONAL CONSULTATIONS AND MEETINGS

	Events	Cost
Reg	ional Events	
1	ASEAN-SEAFDEC Regional Technical Consultation on Human Resource Development in Fisheries Management, 3-6 June 2004, Phnom Penh, Cambodia	1,852,453 THB
2	Expert Meeting on Fishing Capacity and Related HRD Needs in the ASEAN Region, 14-16 September 2004, Bangkok, Thailand	100,811 THB
3	Expert Meeting on Development of National and Regional Training Materials for Human Resource Development in Fisheries Management, 4-7 July 2006, Hua-Hin, Thailand	620,163 THB
4	Expert Meeting on Management of Fishing Capacity in Southeast Asia, 27-29 July 2006, Sihanouk Ville, Cambodia	662,998 THB
5	Regional Technical Consultation on Management of Fishing Capacity and Human Resource Development in Support of Fisheries Management in Southeast Asia, 19-22 September 2006, Phuket, Thailand.	1,111,833 THB
Nat	ional Events	
1	Planning Meeting for SEAFDEC-Sida Project in Cambodia, 17 March 2005, Phnom Penh, Cambodia	41,155 THB
2	Planning Meeting for SEAFDEC-Sida Project in Indonesia on HRD for Fisheries, 28 June 2005, Jakarta, Indonesia	493,077 THB
3	Planning Meeting for SEAFDEC-Sida Project in Thailand on HRD for Fisheries, 30 June 2005, Bangkok, Thailand	2,400 THB
4	Planning Meeting for SEAFDEC-Sida Project in Vietnam on HRD for Fisheries, 13 July 2006, Hanoi, Vietnam	70,291 THB
5	Workshop on Human Resource Development in Fishery Management in Cambodia, 6-8 July 2005, Phnom Penh, Cambodia	395,080 THB
6	On-site Training and Workshop on Development of Community-based Fisheries Management in Coastal Areas of Cambodia, 20-23 March 2006, Kampot, Cambodia	630,804 THB
7	On-site Training and Workshop on Capacity Building for the Establishment of Refugia and Coastal Resources Management, 27-31 March 2006, Koh Kong, Cambodia	961,702 THB
8	Workshop for Human Resource Development in Supporting the Implementation of the Code of Conduct for Responsible Fisheries, 28-29 September 2005, Jakarta, Indonesia	493,077 THB
9	Workshop on Human Resource Development for Coastal Fisheries Management – Issues, Strategies, and Future Directions – in Thailand, 2-4 August 2005, Trat, Thailand	354,562 THB
10	On-site Training and Workshop on Capacity Building for Coastal Resources Management, 14-16 March 2006, Trang, Thailand	331,986 THB
11	On-site Training and Workshop on Human Resource Development for Responsible Coastal Resources Management, 27-30 June 2006, Satun, Thailand	405,928 THB
12	Workshop on Human Resource Development in Vietnam, 5-6 October 2005, Hai Phong, Vietnam	425,305 THB
13	On-site Training and Workshop on Capacity Building for the Establishment of "Fisheries Refugia" and Coastal Resources Management, 14-16 June 2006, Phu Quo, Vietnam	768,219 THB
14	On-site Training and Workshop on Capacity Building for Resources Management and Establishment of Marine Fisheries Resources Protection Areas in Vietnam, 2-4 August 2006, Quang Binh, Vietnam	660,475 THB

Annex 2b

"Representative set" of countries: Process to be applied for follow up on HRD in Fisheries Management and the Code of Conduct

The recommendations from the ASEAN-SEAFDEC Regional Technical Consultation (RTC) on Human Resource Development in Fisheries Management (Phnom Penh, Cambodia, 3 – 6 June 2004) stated in point 8 that:

"HRD in fisheries management is specific to national situation. The Member Countries are encouraged to take initiatives and ownership in addressing the issues in accordance with the overall objective of fisheries development and management of each country. International/regional organizations are in the position to support or facilitate the national initiatives."

In point 16 it was furthermore stated that:

"As a practical approach to develop/promote HRD in fisheries management, pilot projects in a representative set of countries in the region should be promoted as **an approach for** sharing **experience at the regional level** and further nation-wide HRD in fisheries management. Based on the outcomes of the group discussion, criteria should be developed considering reduction of disparities among Member Countries. Differences in development stage and fisheries situation should be considered including:

- Inland and marine fisheries (1)
- Building up process of developing marine fisheries (2)
- Archipelago fisheries (3)
- Major fishing industries with diversity of fisheries with conflicts between small-scale and commercial fisheries (4)
- Land-locked country (5)
- Fisheries in political and economic transition (6)

In planning for activities to be implemented there should be a "follow up in the collaboration among institutions at the national level as well as regional, and international organisations and projects" (point 12 under RTC recommendations).

Given the variations among ASEAN Member Countries and the recommendations provided during the RTC the framework for the development and dialogue in terms of continued activities looks as indicated below with respect to the individual ASEAN Member Countries. The notes given bellow will also indicate opportunities to follow up on collaboration with other institutions and projects. In summary the indicated "pilot project" development would, as far as the **SEAFDEC-Sida Project** is concerned, include Cambodia, Vietnam, Thailand and Indonesia to promote the sharing of experiences at regional level by in as far as possible "extracting" such experiences from ongoing national and regional projects. The SEAFDEC-Sida Project and SEAFDEC as such being regional in scope activities will primarily maintain this regional focus. Dialogue with the other countries will be maintained and experiences and resource persons from the FISH project in Philippines and the MTCP in Malaysia will be integrated in the process.

CLMV Countries (Cambodia, Lao PDR, Myanmar and Vietnam)

Cambodia – the prime focus has been on *inland fisheries (1)* but there are also *substantial marine and coastal fisheries (1)*. Seen from the point of management the marine and coastal fisheries are in a *building up process of developing (2)* in terms of applying organised management schemes as well as in relation to the collection of information on the status of marine and coastal fisheries. With regards to inland fisheries the MRC has been a major provider of support whereas the coastal fisheries only have had limited support through the DOF. Most of support to "coastal development" has been provided through the Ministry of Environment, including support from Danida, IDRC, ADB (with Sida funds) and/or programmes such as those under UNEP-COBSEA (sometimes with involvement of DOF staff). A sequence of workshops similar to those organised for training on "statistics" could be

recommended, using the experiences from these workshops while at the same time coordinate with FAO-Sida Project on "Strengthening the Capacity in Fisheries Information Gathering for Management" and related activities in Cambodia. The prime objective is to "extract" experiences to be shared at the regional level through a process that would also provide an initial training in defining fisheries management needs and opportunities to Cambodian authorities. Cooperation with UNEP-GEF South China Sea Project in the border areas towards Thailand and Vietnam respectively would help to focus on ways on addressing fisheries management aspects in "habitat" management (and finding a way to getting a dialogue between production and conservation interests — or between ministries/departments of fisheries and ministries/departments of environment) which was a regional priority aspect identified during the RTC. Given the coastal and EEZ "geography" of Cambodia the "pilot area" would initially cover all coastal provinces.

Lao PDR – is unique in the sense that it is the only *landlocked (5)* ASEAN Member Country. Being more or less totally within the Mekong basin, Laos is much dependent on the important inland fisheries of the Mekong. Laos is very much involved in the MRC Fisheries Programme which includes HRD for fisheries management, co-management, reservoir fisheries (a stated Lao priority during the RTC on statistics) as well as the MRC Environment Programme which among other things looks into aspects of "people and aquatic ecosystems". As far as the SEAFDEC-Sida project is concerned, being set up to focus on coastal fisheries (knowing the important efforts already being done through the MRC on Mekong Fisheries), there is not any plans within the SEAFDEC-Sida project for specific activities in Laos. Experiences on regional and trans-boundary dimensions of fisheries management as perceived by the MRC could as found applicable be useful in building HRD on small-scale coastal fisheries in the region. Other SEAFDEC projects and initiatives are, and will continue to be implemented in Lao PDR. Reference above to MRC and Mekong Fisheries is also applicable to the Mekong fisheries in Cambodia, Vietnam and Thailand

Myanmar – is rich in both *inland and marine/coastal fisheries (1)*. There are needs in HRD in both marine/coastal and inland fisheries management, development of statistical systems, etc. A well known problem is that it is at the moment difficult to attract external funding for activities and projects in Myanmar. Being a Member Country of SEAFDEC, SEAFDEC could explore possible ways to facilitate promotion of HRD in Fisheries Management in Myanmar.

Vietnam - is with its long coastline and "narrow" landmass highly dependent on marine and coastal resources and other developments in the coastal areas. In the deltas of the Mekong and Red River there is also a rich freshwater fishery. Vietnam is a country that is in political and economic transition (6) while maintaining the central role of the Party. This is also reflected in the need for HRD in fisheries management at various levels. The sequence of work would, with regards to follow up under the SEAFDEC-Sida project, (at least initially) be a line of consultations from which to "share experiences at the regional level as there are a number of major fisheries related projects such as the sector support from Danida and the support from Norad to develop the Fisheries Law (and mariculture). Cooperation with UNEP/GEF South China Sea Project would allow for views and responses to the integration of fisheries management into habitat management (note that the Ministry of Fisheries has been asked to develop a strategy for Marine Parks, etc). On the collection of information, including social, environmental and legal aspects experiences could be drawn from a number of earlier projects such as the PCM (Sida funded) and an ADB project on the South China Sea (Sida funded through ADB) while in the immediate future follow up on the implementation of the FAO-Sida Project "Strengthening the Capacity in Fisheries Information Gathering for Management".

Countries other than the CLMV

Thailand – is the country in the region with the largest and most **developed fishing industry** (4) (even though Indonesia is landing more fish). At the same time there is a **substantial small-scale fishing sector** and there are **frequent conflicts** (4) between the commercial

and small-scale sectors indicating that to develop and sustain local village based management of the small-scale fisheries aspects related to the "management" of the commercial (urban based) fisheries needs to be addressed. The complexity is important as under the 1997 Constitution there is an obligation to involve villagers in planning and management and the through the development of Tambon Administrations decentralisation is promoted. Subsequently HRD on fisheries management is needed at all levels (centrally to adopt and adjust to a new system). With regards to the **Sida-SEAFDEC Project** the activities will primarily be to maintain a dialogue with projects such as **CHARM**, **SEAFDEC Chumpon**, etc. and thereby be provided with "experiences to share at the regional level". Along the same line it will also be important to explore ways to interact with and follow up on the implementation of the **FAO-Sida Project** "Strengthening the Capacity in Fisheries Information Gathering for Management". Cooperation with UNEP/GEF South China Sea Project would allow for views and responses to the integration of fisheries management into habitat management including aspects related to trans-boundary management issues in the border area between Thailand and Cambodia (Trat and Koh Kong Provinces).

Indonesia and Philippines – are both archipelagic states with large archipelagic fisheries (3). Indonesia is the country with the highest reported landings of the ASEAN Member Countries. Indonesia will be approached by SEAFDEC (under the SEAFDEC-Sida Project) to explore what steps to be taken, projects to follow up on with regards to aspects and experiences related to HRD in Fisheries Management (to be shared at the regional level). Parallel to this there will be a follow up on a dialogue between the Swedish National Board of Fisheries and Indonesia. With regards to the Philippines the initial stage will be based on a dialogue with the FISH Project. A maintained dialogue with UNEP/GEF South China Sea Project would in both countries allow for views and responses to the integration of fisheries management into habitat management.

Malaysia – is through its federal constitution a bit unique in that marine fisheries is a federal matter and freshwater and river fisheries is a state matter. Malaysia has embarked on an ambitious programme for "Development of National Plan and Framework for Human Resources Development in Fisheries". It is expected that progress of the development will provide useful experiences to the region. Based on these experiences and other Malaysian projects together with staff at a number of institutes located in Malaysia (including SEAFDEC MFRDMD, World Fish Centre, INFOFISH, etc) there is a pool of resource persons available to draw upon.

Brunei and Singapore – are also unique due to the small size of the countries and in the case of Singapore in being a small island state. For the immediate work under the SEAFDEC-Sida Project Brunei and Singapore will primarily be a pool for resource persons, as needed, and a dialogue partner in the sharing of experiences.

Pilot process for the SEAFDEC-Sida HRD program implementation in Fisheries Management (Including Management of Fishing Capacity)

Through the WGRFP organize a planning and criteria setting meeting with countries

- Initiate and have meetings in Cambodia, Indonesian, Thailand and Vietnam
- Establish/confirm links and cooperation with FISH Project (the Philippines), MTCP (Malaysia) and UNEP/GEF Fisheries Comp.
- o Meeting with MRC on their HRD program for inland fisheries

Pilot Process 1a: Organization of National Consultations

- Mobilization of SEAFDEC and other resource persons as indicated during planning and criteria setting
- Mobilization/invitation of relevant institutions and expertise within the country.

Pilot Process 1b: Meeting with cooperating projects

- Arrange meeting with FISH Project (the Philippines), MTCP (Malaysia) and UNEP/GEF Fisheries, respectively, and/or take part in some relevant event under each/either of the projects
- o Follow up on MRC experiences as indicated during earlier meeting

Pilot Process 2a + 2b: Continued activities, dialogue and/or "on-site training" (including references and materials development)

Build on results and recommendations from stage 1a and 1b, by:

- As recommended, on a country by country basis, embark on sequence of "on-site training" (similar to the ones for statistics in the CLMV countries) and in a learning-by-doing process gather experiences to be shared at the regional level
- In other countries establish links/cooperation with major project(s) to share experiences at the regional level
- Continue the dialogue/cooperation with FISH, MTCP and UNEP/GEF Fisheries to share experiences at the regional level

Pilot Process 3: Lessons learned and experiences to share

- o As needed a final sequence of the "on-site-training"
- Mobilization of SEAFDEC and other resource persons to analyze lessons learned and experiences to share
- , o Preparation for a Regional Technical Consultation, including mobilization and invitation of relevant institutions and expertise

Organization of the Regional technical consultation (Fisheries Management and the Management of Fishing Capacity)

DEVELOPMENT AND FORMULATION OF HRD SUPPORTING/TRAINING MATERIALS

In the Regional Technical Consultation on HRD in Fisheries Management (Phnom Penh, Cambodia, 3-6 June 2004) and Expert Meetings on Fishing Capacity and Related HRD Needs in the ASEAN Region (Bangkok, 14-16 September 2004) organized by the project, it was clearly stated by the participants that "HRD in fisheries is specific to the national situation" and the project was recommended to embark upon a "pilot process" in a representative set of countries including Cambodia, Indonesia, Thailand and Vietnam. This pilot process involves a sequence of meetings, workshops and on-site training in the four countries addressing both over-fishing, capacity issues and fisheries management. Experiences from the pilot processes will be further shared at the regional level.

Through a sequence of national workshops and on-site trainings in the four representative countries, organized from July to October 2005, together with the basis in experiences from national ongoing programs and projects in the four representative countries, the project was recommended to formulate and develop sets of information and publication of training materials (specific and detailed training materials) on the mitigation of fishing capacity using the regional guidelines for fisheries management of the Code of Conduct for Responsible Fisheries (RCCRF)". Also through the documentation, presentations and references that have been included in meetings and on-site trainings so far there are a good basis to further work on the formulation of the training materials, and these should be developed and further made available in both national languages (translation and publication in national languages) and English.

During the Preparatory Expert Meeting on "Development of National and Regional Training Materials for Human Resource Development in Fisheries Management" held in Hua Hin, Thailand, 4-7 July 2006 the meeting discussed the practicalities and usefulness of approaches on the development of training materials, and could be summarized as follow:

- HRD materials comprise various forms (electronic/audio-visual and printed materials) and usages (i.e. awareness building campaigns, toolkits, learning modules, best practices/ manuals/guidelines (issues or target groups), case studies).
- In producing any HRD materials, knowing "audience", "means" and "message" of the materials are among priority consideration. HRD materials should be pilot tested to ensure their relevance and effectiveness. Regarding the translation issue of HRD materials, ones should not limit to the language per se but rather the translation of context. This is to increase accessibility to HRD materials and deepen understanding of audience on the issue particularly on implication for actions.
- Note was taken that in various countries, there exist materials that can be used for HRD purposes both within and outside fisheries agencies/sector. Attempts for producing HRD materials should not be to "reinvent the wheel" but to "repackage" the materials. Suggestion was also made that there is a need for a clearing house system to identify the available materials and their sources. Need was also expressed for developing (regional) common concepts/purposes to interface the existing materials and practices not a new set of definitions/terminologies, considering different legal provision and institutional responsibilities.

In recognition of the existence of a wide range of different type of training materials, both in local languages and in English, the meeting in Hua-Hin recommended that four "packages" should be developed, one for each of Cambodia, Indonesia, Thailand and Vietnam. These packages should consist of:

 The four HRD proposed "packages" based on the pilot process in each of the four countries

- 2. A "library" on available and relevant HRD material from each of the four countries. The basis for this to be the Regional Database and Network for Information Collection on Human Resource Development in Fisheries (RIDNIC-HRD)
- 3. Description on implemented approaches to three representative types of management situations with reference to the capacity development cycle and the "directions" developed during the meeting (T.o.R available in **Annex 3**). The three types are:
 - Development of local organisations and fisheries management in three areas:
 - Lombok Timur, Indonesia and the Awig-Awig system
 - Satun, Thailand and the fisheries organisation in La-Nguu District
 - Koh Kong, Cambodia and the fisheries/mangrove management in Peam Krasop Wildlife Sanctuary
 - The management of anchovy fishery in two locations:
 - Satun and Trang Provinces in Thailand
 - Phu Quoc/Kien Giang, Vietnam
 - Marine fisheries resources protection areas (Vietnam) in three provinces:
 - Haiphong
 - Quang Binh
 - Phu Quoc/Kien Giang

Regional synthesis: When the four packages a regional synthesis will be developed based on the information contained.

Facilitation of studies and documentation: To facilitate the process of conducting suggested studies and compiling available training materials into e "library" the meeting in Hua Hin, and each of the country groups, selected one team from each of the countries. Each team is headed by a National Facilitator. The National Facilitators will be invited to an expert meeting in Sihanouk Ville schedule during 27-29 July 2006. National facilitators and teams for Cambodia, Indonesia Thailand and Vietnam respectively, include:

0	Cambodia	Mr. Chun Sophat (NF), Mr. Kim Nong, and Mrs. Rebecca R.
		Guieb
0	Indonesia	Dr. Soen'an H. Pernomo (NF) and Mr. Mohamad Ali Syahdan
0	Thailand	Dr. Somsak Boromthanarat (NF), Dr. Kanit Naksung, and Mr.
		Pirochana Saikliang
0	Vietnam	Dr. Dao Manh Son (NF), Mr. Ngo Duc Sinh and Ms. Nguyen Thi
		Trang Nhung

Reporting:

A) HRD Packages

To be developed through editing of material used during the pilot process

- B) The "library" of available training materials See RIDNIC-HRD
- C) The sets of studies to be included in follow up activities
 - A written report is expected
 - The report could be supplemented by enclosing available reports on the described system
 - Optional: if any of the groups would like to add some further documentation in terms of a small video or other product this could be discussed and budgeted for (in the case of Awig-Awig one video already exist which could be added and developed further if that is suggested)

Progress of work to date: due to the limitation of the budget during the year 2006 to develop and formulate the HRD Supporting/Training Materials, it is envisaged and proposed that this activities will be carried out by using the input resources from Sweden on the Extension Year 2007.

Terms of Reference for the description on implemented approaches to three representative types of management situations with reference to the capacity development cycle and the "directions" developed during the Meeting in Hua-hin is appeared as *Annex 2d-2*.

The Terms of Reference for the <u>description on implemented approaches to three representative types of management</u> situations with reference to the capacity development cycle and the "directions" developed during the meeting.

I. Development of local organisations and fisheries management in three areas:

- Lombok Timur, Indonesia and the Awig-Awig system
- Satun, Thailand and the fisheries organisation in La-Nguu District
- Koh Kong, Cambodia and the fisheries/mangrove management in Peam Krasop Wildlife Sanctuary

Introduction

The ambition is not to make an in depth research work, but rather to make a summary of the local system, its development and social setting. Based on the summary or description the intention is to view described system in the light of the HRD framework worked out by the country groups during the Hua Hin meeting. The T.o.R or points to be included is kept short to highlight the purpose rather than to dwell in details. It is also advised to build upon available material.

T.o.R or "points to be included"

- Description of the local organisation(s)
 - Structure and organisation/membership/numbers/gender
 - Development over time/history
 - Social setting/basis in local traditions also other than for fisheries
 - Geographical setting/where/how many villages
 - Links to other organisations/associations/other livelihoods
 - Scope for management (fisheries/environment/tourism/trade, etc)
- 2. Functions to respond to internal changes, opportunities and pressures
 - Adaptive management and/or flexibility
 - Negotiation as a tool (formal/informal)
- 3. Functions/ability to respond to external changes, opportunities and pressures
 - Adaptive management and/or flexibility
 - Negotiation as a tool (formal/informal)
- 4. Functions/ability to integrate fisheries management with habitat management and environmental/resources protection
 - management of fisheries
 - management of mangroves
 - management of other habitats
 - aquaculture
- 5. Conflict resolution internal and with "outsiders"
- 6. Means of dealing with large-scale fisheries
- 7. Capacity/functions to respond to natural hazards
- 8. Capacity/functions to widen the livelihood base (create alternative and supplementary livelihoods)
- 9. Encouragement for education
- 10. Local research
- 11. Self monitoring
- 12. Describe the status of the organisation from where they are relative to the "capacity development cycle" and the HRD directions provided by the Hua Hin working group

Reporting

- A written report is expected
- The report could be supplemented by enclosing available reports on the described system
- Optional: if any of the groups would like to add some further documentation in terms of a small video or other product this could be discussed and budgeted for

(in the case of Awig-Awig one video already exist which could be added and developed further if that is suggested)

Budget

Each of the teams is requested to estimate their cost. As mentioned in Hua Hin SEAFDEC could cover the costs (up to some limit) for the teams to hire a person (student/consultant/special staff assignment) to do the study not to add too much to the work load of the "appointed" participants of the Hua Hin meeting. It is also expected that SEAFDEC could cover costs for travels, etc.

II. The management of anchovy fishery in two locations:

- Satun and Trang Provinces in Thailand
- Phu Quoc/Kien Giang, Vietnam

Introduction

The ambition is not to make an in depth research work, but rather to make a summary of the way anchovy fisheries is handled/managed in two locations, its development and social setting. Based on the summary or description the intention is to view described location and people involved in the light of the HRD framework worked out by the country groups during the Hua Hin meeting. The T.o.R or points to be included is kept short to highlight the purpose rather than to dwell in details. It is also advised to build upon available material.

T.o.R or "points to be included"

- 1. Description of the anchovy fisheries
 - Structure and organisation/people involved/locals and outsiders
 - Development over time/history
 - Social setting/basis in local practices
 - Geographical setting/where/how many villages
 - Large scale small-scale
 - Scope for management (local management or provincial management or regional management)
- 2. Responses to local changes, opportunities and pressures with regards to available resources
- 3. Response to external changes, opportunities and pressure
- 4. Attempts to link management of anchovy fisheries to the management of habitats
- 5. Overcapacity among small-scale fishermen
- 6. Overcapacity among large-scale operators
- 7. Conflict resolution internal and with "outsiders"
- 8. Means of dealing with large-scale fisheries
- 9. Options for management
- 10. Local research and anchovy fisheries
- Self monitoring
- 12. Describe the status of the fisheries and the people involved relative to the "capacity development cycle" and the HRD directions provided by the Hua Hin working group

Reporting

- A written report is expected
- The report could be supplemented by enclosing available reports on the described fisheries
- Optional: if any of the groups would like to add some further documentation in terms of a small video or other product this could be discussed and budgeted for

Budget

Each of the teams is requested to estimate their cost. As mentioned in Hua Hin SEAFDEC could cover the costs (up to some limit) for the teams to hire a person (student/consultant/special staff assignment) to do the study not to add too much to the work

load of the "appointed" participants of the Hua Hin meeting. It is also expected that SEAFDEC could cover costs for travels, etc.

III. Marine fisheries resources protection areas (Vietnam) in three provinces:

- Haiphong
- Quang Binh
- Phu Quoc/Kien Giang

Introduction

The ambition is not to make an in depth research work, but rather to make a summary of the MPA's (existing or planned) in the three areas, its development and social setting. Based on the summary or description the intention is to view described systems in the light of the HRD framework worked out by the country groups during the Hua Hin meeting. The T.o.R or points to be included is kept short to highlight the purpose rather than to dwell in details. It is also advised to build upon available material.

T.o.R or "points to be included"

- 1. Description of the MPA's (established or planned)
 - Structure and organisation/membership/numbers/gender
 - Development over time/history
 - Social setting/basis in local traditions including fishing
 - Geographical setting/where/how many villages would be involved (inside or near the MPA)
 - Scope for management (fisheries/environment/tourism/trade, etc)
- 2. Functions to respond to internal changes, opportunities and pressures
 - Adaptive management and/or flexibility
 - Negotiation as a tool (formal/informal)
- 3. Functions/ability to respond to external changes, opportunities and pressures
 - Adaptive management and/or flexibility
 - Negotiation as a tool (formal/informal)
- 4. Functions/ability to integrate fisheries management with habitat management and environmental/resources protection
 - management of fisheries
 - management of mangroves
 - management of other habitats
 - aquaculture
- 5. Conflict resolution internal and with "outsiders"
- 6. Means of dealing with large-scale fisheries encroaching into the MPA
- 7. Capacity/functions to respond to natural hazards
- 8. Capacity/functions to widen the livelihood base (create alternative and supplementary livelihoods)
- 9. Encouragement for education
- 10. Local research
- 11. Self monitoring
- 12. Describe the status of the organisation from where they are relative to the "capacity development cycle" and the HRD directions provided by the Hua Hin working group

Reporting

- A written report is expected
- The report could be supplemented by enclosing available reports on the described system
- Optional: if any of the groups would like to add some further documentation in terms of a small video or other product this could be discussed and budgeted for

ADDRESSING INTEGRATION OF FISHERIES MANAGEMENT INTO HABITAT MANAGEMENT (INCLUDING PROMOTION OF FISHERIES REFUGIA IN THE REGION)

In follow up to recommendations by ASEAN-SEAFDEC Member Countries to address the need to integrate fisheries management into habitat management the SEAFDEC-Sida project have since 2004 been in cooperation with the UNEP/GEF South China Sea Project and specifically with the fisheries component. Under this project the concept of refugia have been introduced for the management of habitats important to fisheries and SEAFDEC have been an active dialogue partner in the early stages of this process. Countries participating in the Fisheries Component of the UNEP/GEF Project include Cambodia, Indonesia, the Philippines, Thailand and Vietnam. The focus of discussion for development of refugia has so far been on the eastern Gulf of Thailand and habitats in the border areas between Cambodia and Vietnam, and Cambodia and Thailand. A restriction or limitation so far has been that dialogue has been based on refugia to be developed at existing habitat demonstration sites of the UNEP/GEF Project. A map of the demonstration sites of the UNEP/GEF Project are provided in Figure 1 below. These sites are defined but the boundaries of refugias beyond these sites is yet to be defined and here SEAFDEC is in better position to facilitate the process of defining the areas in and between the countries by not being restricted by the UNEP/GEF Project Document. The UNEP/GEF Project will end by the end of 2007.

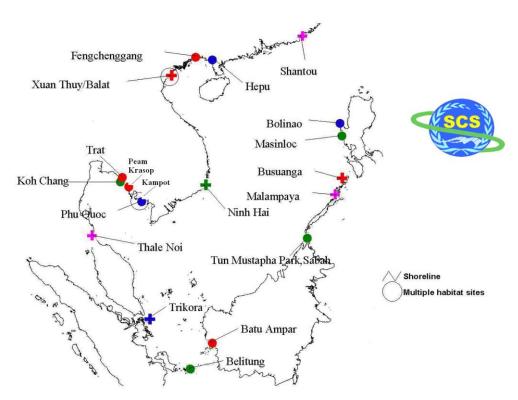


Figure 1 UNEP/GEF South China Sea Project Habitat Demonstration Sites

Follow up and further promotion of *refugia* is by ASEAN-SEAFDEC Member Countries recommended. Recommendations in this direction have been done during the implementation of the pilot process in Cambodia, Indonesia, Thailand and Vietnam. The recommendations have been confirmed during a Regional Expert Meeting in Sihanoukville, Cambodia, 27 – 29 July 2006 and a Regional Technical Consultation in Phuket, Thailand, 19 – 22 September 2006.

Experiences in the region show that the multi-species and multi-gear composition of most fisheries makes assessment of the resources difficult and setting of catch limits (output

control) problematic. Still knowledge of the status and trends of fisheries, not only in terms of fishery resources but socio-economic aspects, is a key to sound policy-making and responsible fisheries management. By using the fishery data and information as a basis, simple fisheries indicators can be developed, to be used as a ready tool for describing the state of fishery resource and fishery activities and also for assessing trends regarding sustainable development objectives.

Under a broad management concept, or any concept in a tropical system, management need to be adaptive. Adaptive management is by itself a process to achieve management objectives and also a learning process among interested stakeholders about fisheries or systems being managed in order to adapt policies and management framework to be more responsive to future conditions. The backbone of a good adaptive fisheries management system relies on a good data and information system – and dialogue in all directions.

Most common approaches to fisheries management in the ASEAN region have not effectively integrated **spatial considerations** into fisheries management frameworks. The success or failure of fisheries management has largely been determined by the ability of the management system to control fishing effort so as not to exceed resources capacity and, to a lesser extent, economic attributes of fisheries.

Integrating fisheries into habitat conservation and management, under the concept of fisheries refugia, is promoted based upon the emerging body of evidence that the existence of natural refugia is a basic element explaining the resilience of commercial fish stocks to exploitation. Commercial fisheries in the ASEAN region are subject to high levels of fishing effort, such that stocks of most commercially important species are considered fully fished or overexploited. Maintenance of natural refugia, or creation of refugia in cases were natural refugia no longer exist, should be important priorities for the management of fisheries in the ASEAN region, and may act as effective buffers against uncertainty and recruitment failure, of which the latter is especially important in terms of food security.

Fisheries Refugia in Southeast Asia are commonly understood as: "Spatially and geographically defined, marine or coastal areas in which specific management measures are applied to sustain important species [fisheries resources] during critical stages of their lifecycle, for their sustainable use."

Fisheries refugia can complement conventional fisheries management measures and MPA systems, such as effort or gear restrictions, and should be a priority consideration in the ASEAN region in situations where fisheries are subject to intense and/or unmanageable fishing pressure. They may also be used to separate potentially conflicting uses of coastal and marine habitats and their limited resources. However, the effectiveness of fisheries refugia will largely depend on the selection and appropriate use of fisheries management measures within the refugia area, and at the most general level, the process of establishing fisheries refugia must consider the:

- Life-cycle of the species for which refugia are being developed;
- Type(s) of refugia scenarios(s) that relate to the species for which refugia are being developed;
- Location of natural refugia and appropriate sites for the establishment of [artificial] refugia;
 and
- National and regional level competencies in the use of fisheries management and habitat management measures and spatial approaches to resource management and planning.

Unlike a number of protected areas or aquatic reserves, important characteristics of fisheries refugia are:

- NOT "no take zones",
- Have the objective of sustainable use for the benefit of present and future generations,

- Provide for some areas within refugia to be permanently closed due to their critical importance [essential contribution] to the life cycle of a species or group of species,
- Focus on areas of critical importance in the life cycle of fished species, including spawning, and nursery grounds, or areas of habitat required for the maintenance of broodstock,
- Have different characteristics according to their purposes and the species or species groups for which they are established and within which different management measures will apply,
- Be sub-dividable to reflect the differing importance of sub-areas to the species or species groups for which they are established. Management plans for the refugia should reflect different fisheries management measures for the sub-divisions.

It is understood that any innovative fisheries management methodology will not be effectively implemented, as far as the fishing operation is conducted under the current unregulated and "open access" manner.

PROJECT MANAGEMENT, DIRECTION AND EVALUATION

Project Management

The project will be administrated by SEAFDEC headed by the Secretary-General. The operation responsibilities will be rested at the Office of Policy and Program Coordination (OPPC) in the Secretariat and implemented by the project staff recruited by the project. The project staff will be fully supported by SEAFDEC staff of the OPPC, TD and MFRDMD. The progress of the project will be monitored and coordinated by the Working Group of the Regional Fisheries Policy (WGRFP) established in the Secretariat, composed of seven staff seconded by ASEAN Member Countries and National Coordinators at the ASEAN Member Countries side through established net-work mechanism.

Project Direction

The project activities and its direction will be guided by the Project Advisory Committee to be established under the Project. The proposed annual Committee will be organized in every November during the **SEAFDEC Program Committee Meeting**. The Committee will be composed of the representatives from collaborating agency, donor, ASEAN Member Countries and SEAFDEC. The project manager of the project will act as a secretary of the Committee.

Project Evaluation

In addition to the routine monitoring and coordination exercise to be monthly conducted, two major evaluation exercises will be conducted. The mid-term evaluation will guide the course of actions with the inputs from the recipient countries and donor in 2004. The outcome of the mid-term evaluation will be presented at the Project Advisory Committee used as a basis for the necessary modification of the project scope and activities. In final stage of the project in 2006, final evaluation exercise will be conducted in order to wind up the project and evaluation on the requirement of the follow up projects and concluded at the final Project Advisory Committee.

LIST OF EVENTS/REPORTS OF THE MEETING ORGANIZED BY THE PROJECT

I. Regional Events

Events	Venue		Date	No. of
				Participants
1. ASEAN-SEAFDEC Regional Technical Consultation on Human Resource	Phnom Penh	Cambodia	3-6 June 2004	58
Development in Fisheries Management				
2. Expert Meeting on Fishing Capacity and Related HRD Needs for Fisheries	Bangkok	Thailand	14-16 Sep 2004	23
3. Expert Meeting on Development of the National and Regional Training Materials	Hua-Hin	Thailand		
for HRD in Fisheries Management				
4. Expert Meeting on Management of Fishing Capacity in Southeast Asia	Sihanouk Ville	Cambodia	4-7 July 2006	37
5. ASEAN-SEAFDEC Regional Technical Consultation on Management of Fishing	Phuket	Thailand		65
Capacity and HRD in Support of Fisheries Management in Southeast Asia				
Sub-total for Item I				211

II. National Events

Events	Venue		Date	No. of
				Participants
6. Planning Meeting for SEAFDEC-Sida Project in Cambodia	Phnom Penh	Cambodia	17 March 2005	16
7. National Workshop on HRD in Fisheries Management in Cambodia	Phnom Penh	Cambodia	6-8 July 2005	55
8. On Site Training and Workshop on Development of Community-based Fisheries	Kampot	Cambodia	20-23 Sep 2005	73
Management in Coastal Areas of Cambodia				
9. On Site Training and Workshop on Capacity Building for the Establishment of	Koh Kong	Cambodia	27-31 March	68
Refugia and Coastal Resources Management			2005	
Sub-total Sub-total				212
10. Planning Meeting for SEAFDEC-Sida Project in Indonesia	Jakarta	Indonesia	28 June 2005	20
11. National Workshop for HRD in Supporting the Implementation of the Code of	Jakarta	Indonesia	28-29	41
Conduct for Responsible Fisheries			September 2005	
Sub-total Sub-total				61
12. Planning Meeting for SEAFDEC-Sida in Thailand	Bangkok	Thailand	30 June 2005	15
13. National Workshop on HRD for Coastal Fisheries Management "Issue, Strategies,	Trat	Thailand	2-4 August 2005	30

and Future Directions" in Thailand				
14. On Site Training and Workshop on Capacity Building for Coastal Resources	Trang	Thailand	14-16 March	42
Management			2006	
15. On Site Training and Workshop on HRD for Responsible Coastal Resources	Satun	Thailand	27-30 June	48
Management			2006	
Sub-total				135
16. Planning Meeting for SEAFDEC-Sida Project in Vietnam	Hanoi	Vietnam	13 July 2005	26
17. National Workshop on HRD for Fisheries Management in Vietnam	Hai Phong	Vietnam	5-6 October	34
			2005	
18. On Site Training and Workshop on Capacity Building for the Establishment of	Phu Quoc	Vietnam	14-16 June	41
"Fisheries Refugia" and Coastal Resources Management in Vietnam			2006	
19. On Site Training and Workshop on Capacity Building for Resources Management	Quang Binh	Vietnam	2-4 August 2006	38
and Establishment of Marine Fisheries Protection Areas in Vietnam				
Sub-total				139
Sub-total for Item II.				547
Grand Total				<i>758</i>

OTHER RELEVANT DOCUMENTS

- 1. Report of the Regional Workshop on Management of Fishing Capacity
- 2. 2003 Annual Report and Proposed Activities for 2004 of the SEAFDEC-Sida Project
- 3. 2004 Annual Report and Proposed Activities for 2005 of the SEAFDEC-Sida Project
- 4. 2005 Annual Report and Proposed Activities for 2006 of the SEAFDEC-Sida Project
- 5. Study on Eco-labelling of Aquatic Products: General View and Future Considerations for the ASEAN Region
- 6. Minutes of NBF SEAFDEC 2004 Annual Review Meeting on the Support Provided by Sida to "Human Resource Development on the Support to the Implementation of the Code of Conduct for Responsible Fisheries in the ASEAN Region", 22 November 2004, Bangkok, Thailand
- 7. Minutes of the Meeting "Swedish Board of Fisheries SEAFDEC 2005 Annual Review Meeting", 12 December 2005, Bangkok, Thailand
- 8. Minutes of the Meeting "Swedish Board of Fisheries SEAFDEC 2006, Annual Review Meeting" 1 December 2005, Bangkok, Thailand

LIST OF COORDINATING PROJECTS/INITIATIVES

Coordinating Programs/Initiatives of SEAFDEC

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

Coordinating Programs/Initiatives of non-SEAFDEC with the Project

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

ACKNOWLEDGEMENT

We would like to thank all of SEAFDEC National Coordinators, National Focal Points of SEAFDEC-Sida Project, SEAFDEC and Non-SEAFDEC resource persons, all delegates and participants of the meetings/events organized regionally/nationally, coordinating projects/initiatives (AIT, ASEAN Secretariat, CBNRM-Learning Institute, CHARM, CORIN, CZM-Cambodia, DMCR, FAO-Expert in Cambodia/Philippines, FAO/RAP, GTZ Project in Cambodia, IUCN-Vietnam, KU, Mangrove Action Project, MOE-Cambodia, MOFI-DANIDA, PSU, Save Andaman Project, Senior Experts of Department of Fisheries Thailand, UNEP/GEF South China Sea Project, Wild Life at Risk, WorldFish Center, WWF-Vietnam, Yad-fon Association, etc) – all of those who involved with the project implementation. Thanks also to the project "reviewers", Mr. Andrew McNaughton and Dr. Sirisuda Jumnongsong for their excellent comments. Many thanks to our colleagues at the SEAFDEC-SEC-OPPC, other staff concerned, and Members of the SEAFDEC Regional Working Group for Fisheries Policy for their kind coordination and cooperation.

Finally, sincere thanks is given to the Swedish International Development Cooperation Agency (Sida) for their financial support, and to Swedish Board of Fisheries for their technical support and cooperation to the project.

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