# REGIONAL TECHNICAL CONSULTATION FOR THE DEVELOPMENT OF REGIONAL CODE OF PRACTICE FOR RESPONSIBLE AQUACULTURE IN MANGROVE ECOSYSTEMS

Tagbilaran, Bohol, Philippines 25-27 August 2004

#### INTRODUCTION

### **Background**

The Mangrove Friendly Aquaculture Program, conceived by the Aquaculture Department (AQD) of the Southeast Asian Fisheries Development Center (SEAFDEC) in 1998, refocused its thrust on mangrovefriendly shrimp aquaculture as a response to the growing concern on the loss of mangroves in the region, which has been attributed to the fast development of the shrimp aquaculture industry. Funded by the Japanese Trust Fund, the Five-year Mangrove-Friendly Shrimp Culture Project (MFSCP) implemented in 2000-2004 has as one of its goals, the formulation of the Regional Code of Practice for Responsible Aquaculture in Mangrove Ecosystems.

SEAFDEC/AQD started implementing the Mangrove-Friendly Shrimp Culture Project in mid-2000 under the ASEAN-SEAFDEC Fisheries Consultative Group (FCG) collaborative mechanism. A series of workshops and training sessions have been conducted in the region to promote the conservation and preservation of the mangroves while transferring developed shrimp culture technologies that are environment-friendly, to the countries in the region.

The first MFSCP workshop, held in Iloilo City, Philippines in 2000, aimed to assess the status of utilization of the region's mangrove areas for aquaculture. The workshop identified problems encountered in such aquaculture activities, and came up with recommendations and strategies on sustainable aquaculture in mangrove areas, most of which were incorporated in the Project Framework. The MFSCP comprises four major activities, namely, pilot demonstration and verification, research, training, and information dissemination. A Mid-Project Workshop was convened in September 2001 in Bangkok, Thailand to review the progress and assess the problems encountered in the implementation of the Project.



The participants in the Regional Technical Consultation for the Development of Regional Code of Practice for Responsible Aquaculture in Mangrove Ecosystems

The Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region, adopted during the ASEAN-SEAFDEC Millennium Conference in Bangkok, Thailand in November 2001, stipulated the need to work towards the conservation and rehabilitation of aquatic habitats essential to enhance resources and to increase aquaculture production in a sustainable and environment-friendly manner. This was re-emphasized during the Seminar on ASEAN-Japan Cooperation for Sustainable Fisheries through SEAFDEC in Tokyo, Japan in December 2003. Therefore, the need to reassess the responsible use of mangroves for aquaculture became apparent in line with the SEAFDEC efforts to promote rural aquaculture in the region as an integrated rural development strategy.

The Regional Guidelines for Responsible Aquaculture in Southeast Asia established in 2001 include among others, Article 9.1.3 of the Regional Guidelines, which stipulates that:

"(4) Given the importance of mangroves, States and regional institutions should prepare regional guidelines for the responsible use of mangroves for aquaculture. States should ensure coordination among departments, agencies and other units that have jurisdiction and stake in mangroves."

The Regional Seminar-Workshop on Regional Mangrove-Friendly Shrimp Culture in Bangkok, Thailand in June 2003 assessed the extent of implementation of the ASEAN-SEAFDEC FCG Project on Mangrove-friendly Shrimp Culture including the dissemination of technologies developed through the Project. The Workshop also reviewed policy issues relating to the use of mangroves for aquaculture in the region, which were used as basis in the initial plans for the development of the Regional Code of Practice for Responsible Aquaculture in Mangrove Ecosystems. Among the recommendations of the June 2003 Seminar-Workshop was the need to develop such Regional Code of Practice in the soonest possible time, hence this Regional Technical Consultation.

Based on the initial efforts made at the June 2003 Regional Seminar-Workshop and making use of the list of initial experts to be involved in the formulation of the Regional Code of Practice as well as the proposed scope and program of work as initial working documents, the Regional Technical Consultation for the Development of the Regional Code of Practice for Responsible Aquaculture in Mangrove Ecosystems was convened in order to:

- 1. Come-up with the draft Regional Code of Practice;
- 2. Establish legal framework for the use of non-land based aquaculture putting more emphasis on the integration of aquaculture into coastal area management;
- 3. Develop strategies for an integrated approach to development and sustainable use of aquaculture areas such as lakes, rivers, mangroves and other aquatic ecosystems; and
- 4. Recommend approaches for the rehabilitation of abandoned and unutilized aquaculture facilities in mangrove areas within the context of an ecologically sustainable system.

Forty one participants coming from Brunei Darussalam, Cambodia, Indonesia, Japan, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam attended the Regional Technical Consultation. Representatives from UNESCO, JIRCAS, the LGUs and NGOs as well as representatives from SEAFDEC, also atended the Consultation.

### THE REGIONAL TECHNICAL CONSULTATION

The Regional Technical Consultation for the Development of the Regional Code of Practice for Responsible Aquaculture in Mangrove Ecosystems was convened by AQD in Tagbilaran, Bohol, Philippines from 25 to 27 August 2004. The SEAFDEC Deputy Secretary General and Trust Fund Program Manager, Mr. Junichiro Okamoto gave the Opening Remarks and declared the Regional Technical Consultation open. The Chief of SEAFDEC/AQD and Trust Fund Program Co-Manager for AQD, Dr. Rolando Platon, who also served as Chairman of the Regional Technical Consultation explained the rationale for the Consultation and gave a brief background on the Project. He mentioned that the Consultation is an offshoot of the workshops held in Iloilo City, Philippines in 2000 where the Regional Guidelines for Responsible Fisheries in Southeast Asia: Responsible Aquaculture was drafted, the output of which was published in 2001. He also informed the participants that a technical committee was formed at AQD to prepare the first draft of the Regional Code of Practice, which served as one of the working documents for the Regional Technical Consultation.







SEAFDEC Deputy Secretary General and Trust Fund Program Manager, Mr. Junichiro Okamoto (right) with AQD Chief, Dr. Rolando R. Platon (left) at the opening of the Regional Technical Consultation

In his Message, the SEAFDEC Council Director for the Philippines and the Philippine Undersecretary of Agriculture for Fisheries, Cesar M. Drilon, Jr. thanked the Government of Japan for the financial support in the MFSCP and specifically for the conduct of the Regional Technical Consultation. He expressed his appreciation to the participants for their inputs in the draft Regional Code of Practice for Responsible Aquaculture in Mangrove Ecosystems. He recalled the series of regional technical consultations that were convened by AQD in 2000 and 2001 to draft the Code of Conduct for Responsible Fisheries: Responsible







SEAFDEC Council Director for the Philippines and DA Undersecretary for Fisheries, Cesar M. Drilon, Jr. (right) giving his Message for the Consultation participants (left)

Aquaculture, which he also participated in and he commended AQD for its efforts to prepare a Regional Code of Practice which is now focused on responsible aquaculture in mangroves. He lamented the sorry state of the mangroves in the Philippines and expressed confidence that the outcome of the Consultation will not only save the remaining mangroves in the region but may also rehabilitate and hopefully bring this resource back to its former state.

## **Mangrove-Friendly Aquaculture Initiatives**

The ASEAN-SEAFDEC Mangrove-Friendly Shrimp Culture Project implemented by SEAFDEC/AQD was presented in brief by SEAFDEC/AQD Chief Dr. Rolando R. Platon. Dr. Platon discussed the progress of the verification activities of the mangrove-friendly shrimp culture project being implemented in the Philippines, Thailand, Vietnam, Cambodia, Malaysia and Myanmar. He noted that the activities also include Research, Training, and Information. The representatives from organizations attending the Consultation presented their respective organization's initiatives on mangrove-friendly aquaculture. The representative from Japan International Research Center for Agricultural Sciences (JIRCAS), Dr. Yoshimi Fujioka presented the initial results of the JIRCAS Project on Sustainable Production Systems of Aquatic Animals in Brackish



JIRCAS Representative, Dr. Yoshimi Fujioka (middle) presenting the initial results of JIRCAS mangrove project implemented in Thailand. Also in photo are MFRDMD Representative, Mr. Zulkifli Talib (left) and UNESCO Representative Mr. Makoto Ikeda (right)

Mangrove Areas: Role of Benthic Organisms as Food for Marine Resources, which is implemented by JIRCAS in Thailand. Dr. Fujioka determined the role of benthic organisms as food of Marine resources and compared the potentials of close and recirculting systems to purify shrimp farm waste water.

The Regional Technical Director for Research and Development of the Philippine Department of Environment and Natural Resources (DENR)-Region VII, Dr. Dioscorro M. Melana, presented the outcome of a case study on the Mangrove Reforestation in Barangay Banacon, Banacon Island, Getafe, Bohol, Philippines. Initiated by the late Mr. Eugenio Paden, the Banacon Mangrove Reforestation Project now covers about 410 ha surrounding an area of about 15 ha of dry land.

Left photo: DENR Region-VII Director Dr. Dioscorro Melana (left) presenting the Banacon Reforestation Project Case Study, assisted by Ms. Emma Melana (right). Right photo: Mr. Teodorico Barral, of the DENR-VII Coastal and Marine Management Division, also provided additional information regarding the Banacon Mangrove Reforestation Project





### **International/Regional Guidelines and Codes**

Representing the AQD Technical Committee for the Code of Practice, Dr. Jurgenne H. Primavera, provided some information on mangroves in relation to sustainable aquaculture. She cited some indices of mangrove status and health based on an ASEAN Manual, and gave examples of action points for aquaculturists as basis for formulation of national aquaculture framework. She summarized the various international and regional Codes and Guidelines related to responsible aquaculture and mangrove conservation that can be used as basis for the formulation of the Regional Code of Practice for Responsible Aquaculture in Mangrove Ecosystems. She focused on the following Codes: the 1997 FAO Technical Guidelines for Responsible Fisheries; the 1999 Codes of Practice for Responsible Shrimp Farming of the Global Aquaculture Alliance emphasizing on Best Management Practices; the 1999 Thai Code of Conduct for Responsible Shrimp Aquaculture: Good Management Practices; the 2000 Bangkok Declaration and Strategy specifically Article 3.5 which stipulates the need to develop and adopt policies and practices that ensure environmental sustainability; the 2000 Code of Practice for Sustainable Shrimp Farming of the Philippines, which encourages responsible and sustainable development and management practices for the preservation of mangroves and the sustainability of aquaculture; the 2001 Environmental Code of Practice for Australian Farmers; the 2001 SEAFDEC Regional Guidelines for Responsible Fisheries in Southeast Asia - Responsible Aquaculture; and the 2004 Code of Conduct for the Management and Sustainable Use of Mangrove Ecosystems developed by the World Bank and the ISME.













AQD's Dr. Jurgenne Primavera (top left photo), presenting some information on mangroves in relation to sustainable aquaculture and the various international and regional Codes and Guidelines related to responsible aquaculture and mangrove conservation that can be used as basis for the formulation of the Regional Code of Practice for Responsible Aquaculture in Mangrove Ecosystems. Other photos show the participants in the Regional Technical Consultation

### Preparation of the Draft Regional Code of Practice

Dr. Jurgenne H. Primavera also briefed the participants on how the first draft of the Code of Practice was prepared, specifically using the consolidation of various international and regional guidelines and codes related to mangroves and sustainable aquaculture as basis. She explained the expected output of the Workshop, which is the draft Regional Code of Practice and exhorted the participants to share their knowledge and provide inputs as it was deemed necessary that the participants reflect their respective concerns in the draft Code of Practice.

### **Adoption of the Draft Regional Code of Practice**

After the Workshop, the draft Regional Code of Practice was developed and adopted on 26 August 2004. Also adopted was the Future Plan of Action that included discussion and consultation with respective governments on the draft Code. The participants were advised to send more comments on the draft Regional Code of Practice to SEAFDEC Aquaculture Department not later than December 2004 as the Code would be finalized in early 2005. The Code will be printed in final format in mid-2005.