# THE USE OF INDICATORS FOR THE SUSTAINABLE DEVELOPMENT AND MANAGEMENT OF CAPTURE FISHERIES IN THE ASEAN REGION: AN OVERVIEW

Phaik-Ean Chee
Marine Fishery Resources Development and Management Department (MFRDMD)
SEAFDEC
Kuala Terengganu, Malaysia

#### Introduction

The "Identification of Indicators for Sustainable Development and Management of Capture Fisheries" is one of the projects formulated under the Special 5-Year Program of SEAFDEC to support ASEAN Member Countries in the implementation of the Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region adopted at the Millennium Conference held in November 2001. The use of indicators of sustainability is a tool to monitor and control the development and management of fisheries in ASEAN and would be developed and used by relevant national management authorities. This was endorsed by the National Coordinators Meeting held in Bangkok, Thailand, from 17-19 June 2002.

#### First Regional Technical Consultation

This First Regional Technical Consultation (RTC) was organized from 16-18 September 2002 with the objectives outlined below to support fisheries management through the use of a range of suitable indicators.

- 1. To present and discuss the proposal for the introduction of the use of indicators in the ASEAN region.
- 2. To identify and test simple and practical indicators as management tools that can be used in ASEAN Member Countries through pilot projects in interested countries
- 3. To identify suitable sites for the implementation of pilot projects.

At this RTC five pilot projects were accepted for implementation in SEAFDEC Member countries. These included:

# Proposal 1: Trawl fishery in Brunei

- 1. A pilot project for the trawl fishery in Zones 2 and 3 off Brunei Darussalam was proposed to cover the coastal areas between 3-45 nautical miles.
- 2. Information on species and size composition will be collected besides additional information on trash and squids.
- 3. Collection of data will be focused on regular port sampling and onboard sampling if required.
- 4. The project will be carried out soon after some consultation with the team members.

# **Proposal 2**: Trawl fishery in waters of the northwest coast of Peninsular Malaysia, and based on fishing vessels of less than 70 GRT

- 1. A progress meeting to identify various indicators to be used in the study was recommended.
- 2. The use of a standardized format in monitoring the indicators was proposed.

# **Proposal 3**: "Mini" purse seine fishery in the northern part of Central Java Sea, Indonesia

- 1. A project at landing sites in Pekalongan District had been initiated before 1995 but was stopped because of budget constraints.
- 2. Due to the problems and issues that arose and the impact of fisheries to food security, data and information of the present status of this fishery should be studied.
- 3. It is proposed that the above-mentioned project be continued in 2003 and 2004 with focus on the "mini" purse seine of the northern part of the Java Sea, and using several indicators such as CPUE, biological parameters of the fishes *etc*.
- 4. The meeting recommends that the use of CPUE as an indicator should be stated clearly in the pilot project proposal.
- 5. The use of the term "down stream activities" should be clarified.
- 6. The objective of the study, the duration of the project to be implemented and the budget requirements need to be clearly stated.

# **Proposal 4**: Ringnet fishery in Camotes Sea, Philippines

1. Due to acute budget constraints, the Philippines may need to seek financial assistance from SEAFDEC for the initial implementation of pilot project in 2003. Further discussion is needed with MFRDMD.

### **Proposal** 5: The Tam Giang Lagoon fishery, Hue Province, Vietnam

- 1. The fishery in this area has been considered as the pilot project because it covers a small area (about 100 hectares), thus it is easy to be implemented.
- 2. The long-term objectives of the projects are to decrease the poverty level and to improve the quality of living.
- 3. The meeting agreed that sex ratio is an important indicator for the fishery since women contribute very significantly to this fishery.
- 4. Conflict management training is vital and should be used as a management tool for this fishery.

#### General Recommendations Adopted

- 1. The meeting recommends that all pilot projects on the use of indicators that are proposed be implemented. Countries that have not proposed any pilot studies now are encouraged to do so.
- 2. It is strongly recommended that stakeholders be involved in the implementation of pilot projects.
- 3. SEAFDEC will collaborate with member countries in the implementation of pilot projects on the use of indicators.
- 4. It is recommended that countries actively support the implementation of pilot project on the use of indicators.
- 5. It is recommended that countries maintain a close interaction and develop a network to facilitate information exchange and communication. SEAFDEC MFRDMD will interact closely with the Technical Officers for the pilot projects as well as with the National Coordinators of the respective countries.
- 6. It is recommended that regional seminars be held to discuss the use of indicators for fisheries management and the progress of pilot projects implemented. For 2003, a regional seminar is proposed for the third quarter.

- 7. It is recommended that standard methodologies for data collection related to the use of indicators of change in composition and selection of indicator species be prepared for the region.
- 8. Collaboration with FAO in the use of indicators for the development and management of capture fisheries should be strengthened.

## **Progress of Project Implementation: 2002-2003**

Pilot projects on the use of indicators for the sustainable development and management of capture fisheries were started in five countries.

The Philippines started the project on the ringnet fishery operating from Danao City, Cebu, in December 2002. This pilot project focuses on the small pelagic fishery. Resource and biological indicators have been selected. Existing data on this fishery are being compiled and new data are being collected under a regular sampling program that was started.

Malaysia started a pilot project in early 2003, focusing on the trawl fishery (covering vessels of <40 GRT) in the States of Kedah and Perlis on the north-west coast of Peninsular Malaysia. Indicators selected are fleet, socio-economic and environmental indicators and these have been agreed upon following a series of meetings, discussions and workshops with stakeholders.

Thailand started a pilot study on the trawl fishery in Pran Buri, Prachuab Khiri Khan District. A meeting with stakeholders was held in July 2003. Currently, stakeholders including fishers, are actively involved in this project. Existing data are being compiled and new data are being collected through a regular sampling program. Selected indicators include resource, fleet, economic and social indicators.

Brunei Darussalam is studying the use of indicators for the management of the trawl fishery beginning September 2003. Existing data on the fishery selected are being compiled while regular sampling programs have been planned.

Indonesia initiated a study on a traditional demersal fishery in Pekalongan, Central Java, beginning July 2003. Existing data on the fishery selected are being compiled while regular sampling programs have been planned.

Vietnam will not implement the pilot project proposed at the First RTC.

### Conclusion

This Second RTC is planned to review and monitor the overall progress of the project and to make proposals for improvement. This RTC also aims to propose a framework for preparing the draft regional guidelines on the use of indicators for improved fisheries management.