1 INTRODUCTION

A Bio-Economic Analytical Modelling Workshop on the Thai demersal fisheries in the Gulf of Thailand was held in the Melia Hua Hin Hotel, Hua Hin, Thailand from 31 May to 8 June 2000. The workshop was organized by the Thai Department of Fisheries (DOF) and supported by Sub-Programme F of the FAO/Norway FISHCODE Project GCP/INT/648/NOR. It also received support from ICLARM as part of the ICLARM/ADB Project "Sustainable Management of Coastal Fish Stocks in Asia" and from FAO's Regular Programme.

The workshop was attended by 35 full-time participants, 17 observers and 5 guests, comprising DOF scientists and administrators, researchers of Kasetsart University, representatives of fishermen's organizations as well as staff of the Malaysian Department of Fisheries, Shanghai Fisheries University, Vietnamese Fishery Research Institute and Ministry of Fisheries, DANIDA Project on Support to Fisheries Development and Management in Vietnam, SEAFDEC, ICLARM and FAO. A full list of participants is given in Appendix A and the Agenda in Appendix D.

The workshop was followed by a Policy Dialogue Meeting on 9 June, where the results of the workshop were presented and discussed with representatives of the fishing industry and administrators. The Policy Dialogue Meeting was attended by 57 participants, including 33 participants of the workshop. A list of participants is given in Appendix B and the Agenda in Appendix E.

1.1 OPENING OF THE WORKSHOP

Mr Somsak Chullasorn, Senior Advisor, DOF, opened the workshop on behalf of the Department of Fisheries and Thai Royal Government. In reference to the serious biological and economic conditions of the demersal fisheries in the Gulf of Thailand, he noted that the workshop offered a unique opportunity for the Department of Fisheries to analyze the biological and socio-economic effects of the transition to more responsible fisheries in an integrated fashion. This was in line with the Government's commitment to implement the FAO Code of Conduct for Responsible Fisheries and the International Plan of Action on the Management of Fishing Capacity. The full text of his opening address is reproduced in Appendix C.

1.2 OBJECTIVES AND PROCEEDINGS OF THE WORKSHOP

The objectives of the workshop were:

- 1. To investigate the bio-economic and socio-economic effects of a range of fisheries management measures for the Thai demersal fisheries in the Gulf of Thailand and
- 2. To enhance national capacity in bio-economic modelling and analysis.

The intended scope of the workshop was to analyse the effects of an eventual implementation of the following management measures:

- a) Complete ban on pushnet fisheries within 3 years;
- b) Expansion of the non-trawl and non-pushnet zones from 1.6 nm (3 km) to 3 nm;
- c) The impact of current regulations concerning closed seasons and areas;

- d) Increase the minimum mesh size of shrimp trawl gear to 2.5 cm and finfish trawl gear to 3 cm:
- e) Reduction of the numbers of various categories of trawlers;
- f) Increase fishing licence fees.

Due to data constraints and limited time, not all of these measures could be subjected to a detailed analysis during the workshop. Data constraints prevented an analysis of b) an expansion of the non-trawl and pushnet zones from 3 km to 3 nm and c) impact of current regulations concerning closed areas and seasons. Owing to time limitations, some of the analyses presented in this report could only be completed after the workshop.

The workshop was conducted in English. The agenda is reproduced in Appendix D. The workshop commenced with the presentation of reviews of fisheries management issues in the Asian region in general and the Gulf of Thailand in particular. This was followed by introductory presentations of three modelling approaches, i.e.

- a) Gordon-Schaefer type of model;
- b) BEAM 5 based on a Thompson & Bell biological model and an economic model adapted from project analysis methodology;
- c) ECOPATH approach to ecological modelling incorporating limited economic analysis. ECOPATH also incorporated pelagic resources.

The workshop then split into three working groups, one for each model, to apply these modelling approaches to the demersal fisheries of the Gulf of Thailand.

On the last day of the workshop the results were prepared for presentation to a wider audience including senior staff of DOF and representatives of fishermen's organizations in a Policy Dialogue Meeting held on 9 June.

1.3 OPENING, OBJECTIVES AND PROCEEDINGS OF THE POLICY DIALOGUE MEETING

Dr Oopatham Pawaputanon, Deputy Director General of the Thai Department of Fisheries opened the Policy Dialogue Meeting. This meeting was conducted in Thai.

The objective of the Policy Dialogue Meeting was to present the results of the bio-economic modelling workshop to representatives of the fishing industry and fisheries administration and to discuss the policies to be followed with regard to the management of the demersal fisheries in the Gulf of Thailand on the basis of the indications resulting from the modelling exercise.

The morning session was chaired by Dr Anant Saraya, Director of the Marine Fisheries Division of the Department of Fisheries.

Dr Somying Piumsombun, Mr Pongpat Boonchuwong and Ms Atchara Vibhasiri presented salient findings of the bio-economic analyses of the demersal fisheries in the Gulf of Thailand.

Mr Somsak Chullasorn presented the management issues of the demersal fisheries in the Gulf of Thailand.

Mr Kumpol Shotepunyo of the Executive Committee of the Thai Fishermen's Association, presented a fisherman's point of view on marine fisheries management issues.

The afternoon session was chaired by Mr Somsak Chullasorn, Senior Marine Fisheries Advisor of the Academic Office of the Department of Fisheries.

Dr Veravat Hongskul, FAO, presented policy options for the management of the demersal fisheries of the Gulf of Thailand, after which a discussion followed.

The chairman closed the meeting at 16.00h.