

2 PRESENTATIONS AT THE WORKSHOP

2.1 OVERVIEW OF REGIONAL FISHERIES MANAGEMENT IN ASIA

Dr. Mahfuzuddin Ahmed, ICLARM, sketched the dramatic changes that have occurred in Asia's fisheries during the last three to four decades and provided a brief exposé of the factors that have contributed to these changes. These included the 1982 United Nations Convention on the Law of the Sea and the establishment of EEZs, large technological improvements increasing dramatically fishing power and efficiency, the globalization and expansion of markets and changes in the institutional and legal arrangements for fisheries development and management. Countries in the region generally face the problem of reconciling the limits of their natural resources including fishery resources with the need to generate economic growth and provide remunerative employment for a growing population, especially in coastal areas.

After a period of largely open-access regimes prior to the 1970s, countries have attempted to control and regulate access to fishery resources through mostly centralized State control. In more recent years, this approach is increasingly complemented, or even replaced, by decentralized community-based and/or co-management arrangements between the resource users and government agencies at various administrative levels. Experience with these innovations in fisheries management is still limited, but there is increasing evidence that decentralized and co-management approaches are better suited for the management of the widely dispersed small-scale fisheries that are typical for coastal fisheries in Asia.

In concluding his presentation, Dr Ahmed referred to the roles and importance of novel instruments and approaches to fisheries management including the Code of Conduct for Responsible Fisheries, the precautionary approach and eco-labeling and certification.

2.2 DEVELOPMENT OF DEMERSAL FISHERIES AND THE STATUS OF DEMERSAL RESOURCES

Dr Mala Supongpan presented the developments in the Thai demersal fisheries in the Gulf of Thailand over the last four decades. The most significant technological innovation was the introduction of trawling in the early 1960s. This technology was highly efficient and profitable and rapidly attracted investments in new and larger-sized boats. Within a period of just about 15 years, the number of trawlers and fishing effort had increased to a level to take the maximum sustainable yield on an average over all species groups. Thus already in the late 1970s, the demersal resources of the Gulf of Thailand were considered fully exploited. As fishing capacity and effort continued to further augment driven by increasing fish prices and attractive returns to investors, especially the longer-lived species became severely depleted and were partly replaced by small and fast-growing species. As a consequence, the proportion of what is lumped together as 'trash fish' in the fishery statistics has steadily increased and has attained a share of about 60 percent. A significant part of this 'trash fish' is made up of juveniles of commercially important species that could produce a more valuable catch if the juveniles were given time to grow to adulthood.

Thai fisheries research is blessed with the probably unique feature that one and the same type of research vessel has undertaken trawling surveys, using trawl gear of the same size and shape, at regular intervals for a continuous period of nearly forty years. These long time series data illustrate in a dramatic fashion the massive resources depletion and ecological changes that have taken place in the Gulf of Thailand during this period. The data show that the catch

per unit of effort has decreased about 15-fold from 298 kg per hour in 1961 to some 20 kg per hour in the late 1990s.

2.3 CURRENT AND ENVISAGED FISHERIES MANAGEMENT REGULATIONS

Mr Somsak Chullasorn provided an overview of the current and planned fisheries management regulations in the Gulf of Thailand. He observed that most current regulations relate to zoning and closed seasons and mesh size of the fishing gear. The limitation on the number of trawlers that had been put in place to avoid new additions to the fishing fleet was later revoked, which led to a significant increase in the number of vessels. Trawling and pushnetting are prohibited within 1.6 nm (3 km) from the coast and within a perimeter of 400 m from any stationary fishing gear.

Since 1999, fishing by all trawlers and all powered pushnetters exceeding 14 m is prohibited during the period from 15 February to 15 May in the western Gulf of Thailand covering the areas of Prachuab Kirikhan, Chumporn, Surat Thani, and Nakhon Sri Thammarat (at Kanom), except for otterboard trawlers not exceeding 16 m length fishing during night time.

Concerning envisaged future regulations, Mr Somsak Chullasorn referred to the outcome of the 1999 National Seminar on Future Directions of Thai Marine Fisheries (Department of Fisheries of Thailand, 1999) that made the following recommendations (a-j) with regard to trawl and pushnet fisheries and zoning:

2.3.1 Trawl fisheries

- a) Introduce and enforce a minimum mesh size for shrimp trawls of 2.5 cm and for fish trawls of 3 cm;
- b) Revise legislation to allow for the control of the production and import of fishing gear in order to prevent the use of destructive fishing gear;
- c) Based on area-specific resources assessments and other factors, the government is to implement a zoning policy for trawl fisheries;
- d) Increase the licence fees for trawl and other types of fishing gear in accordance with their efficiency;
- e) Improve the enforcement of a minimum distance of 3 km from shore for trawl fisheries;

2.3.2 Pushnet fisheries

- f) Ban all pushnet fishing within 3 years and through government financial support, facilitate the shift to other types of fisheries and to other occupations;
- g) Government should allocate and use budgetary resources to buy back pushnet vessels and to facilitate the change to other types of gear within 3 years;
- h) Government should, as a priority, support the buy-back of pushnet vessels and the change of fishing gear in provinces where alternative employment opportunities are good, and provide credit for fishermen who would like to start another business;

2.3.3 Zoning

- i) Extend the coastal fishing zone from 3 km to 3 miles that is reserved for suitable fishing methods and small fishing boats and where trawls and pushnets are not allowed, and establish zones for each type of fishing gear taking into account location-specific and geographic factors;
- j) Establish four zones for the Thai EEZ as follows:
 - (i) Up to 3 miles, reserved for subsistence fisheries and for resources rehabilitation;
 - (ii) 3-5 miles for medium-scale fisheries, i.e. vessels below 14 m length;
 - (iii) 5-12 miles for large-scale fishing, i.e. vessels from 14-18 m length;
 - (iv) Beyond 12 miles, all vessels with a length above 18 m.

In concluding his presentation, Mr Somsak Chullasorn noted that the principle legislative framework for management of fisheries, the Fisheries Act of 1947 is outdated and has been recognized as being inadequate. It was designed primarily to address the problems relating to inland fisheries. Moreover, the new Constitution of Thailand requires the making of laws for natural resource exploitation and contains broad principles that impact on drafting of natural resource management legislation. The Fisheries Act does not reflect these principles because it was enacted before the Constitution was promulgated.¹

¹ See also McDorman, T., 2000. *Final report on legal advice to Thailand*. FISHCODE Field Report C-4, Rome, FAO, 174p.