### **FISHCODE**

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# TECHNICAL REPORT ON THE ANCHOVY FISHERIES IN THE GULF OF THAILAND





FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

ROME, DECEMBER 2000

## FISHCODE MANAGEMENT

FAO/NORWAY PROGRAMME OF ASSISTANCE TO DEVELOPING COUNTRIES FOR THE IMPLEMENTATION OF THE CODE OF CONDUCT FOR RESPONSIBLE FISHERIES

SUB-PROGRAMME F: ASSISTANCE TO DEVELOPING COUNTRIES FOR IMPROVING THE PROVISION OF SCIENTIFIC ADVICE FOR FISHERIES MANAGEMENT

# TECHNICAL REPORT ON THE ANCHOVY FISHERIES IN THE GULF OF THAILAND

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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
ROME, DECEMBER 2000

Supongpan, M.; Chamchang, C.; Boongerd, S.; Laowapong, A.

Technical report on the anchovy fisheries in the Gulf of Thailand. FAO/FISHCODE Project GCP/INT/648/NOR: Field report F-6 Suppl. (En). Rome, FAO, 2000:105p.

#### **ABSTRACT**

This report describes the development of the anchovy fisheries in Thailand, as well as biological aspects of the main species. It also contains results of studies on the effects of light attaction on other resources and socio-economic studies on fishermen and processors of anchovy.

The history of management measures and conflicts between different types of fisheries is also given.

This report was first produced in Thai, and in that version the various chapters were presented at the Workshop in Cha-am as described in Field report F-6.

#### Distribution:

Norway (through TCD)
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#### PREPARATION OF THIS DOCUMENT

This document was first produced in Thai and subsequently translated into English by the authors. FAO staff have edited that text substantially, trying to give the essence of what was said in order to give the reader a rather clear view of the processes that are taking place in Thai fisheries for anchovy and their bycatch.

The document presents a useful case study on a tropical fishery in an area that has been claimed for years to be seriously overfished.

The delay in processing this document is very much regretted.

Siebren C. Venema Project Manager GCP/INT/648/NOR

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#### **SUMMARY**

This report describes the fisheries as well as biological and socio-economic aspects of anchovies (genera *Encrasicholina* and *Stolephorus*) in Thai waters, in particular the Gulf of Thailand, based on research carried out by the Department of Fisheries since 1965. These studies and results of new research were used as background information in trying to solve conflicts between fishermen aiming for anchovy and those aiming for other pelagic and demersal resources. This research included a study of bycatches of the anchovy fisheries and the effects of luring with strong lights on other resources. Anchovy is mostly processed into boiled-dried anchovy, fish sauce and dried anchovy. The fishery developed strongly since 1981 due to the discovery of lucrative markets for boiled-dried anchovies, rather than the traditional fish sauce.

The estimated MSY for anchovy was 120,000 tonnes at an effort of about 54,000 days of a standard Anchovy Purse Seiner without light, while the landings reached 169,000 tonnes.

From 1983 to 1991, six official notifications concerning anchovy fisheries were issued as follows:

- 1) February 14 1983, light luring fishing with mesh sizes of less than 2.5 cm prohibited in all areas.
- 2) November 29 1984, fishing on spawning and nursery grounds off Prachuab Kiri Khan, Chumphon and Surat Thani Provinces during 15 February to 15 May not permitted.
- 3) January 24 1985, fishing with all types of purse seines not permitted in Trad Bay.
- 4) January 11 1988, allowed the use of anchovy purse seine (APS) in daytime.
- 5) April 16 1990, prohibited anchovy fisheries within 3 km from the shore in areas off Tab Sakae, Bang Sapan, Bang Sapan Noi in Prchuab Kiri Khan Province and Patue in Meang of Chumphon Province.
- 6) November 14 1991, to become effective on January 1 1992, fishing at nighttime with anchovy purse seines with light luring (APSL) prohibited in all provinces.

Arguments and conflicts on the anchovy fisheries have been going on for a long time. Various problems were reported and several protests occurred all over the country including in the Andaman Sea, but the conflicts in Songkhla Province created the most confusion and severe problems. Most of the problems centred on the unwillingness to let anchovy fishermen from other provinces fish on grounds occupied by local fisheries. The report describes the history of conflicts and management measures in detail.

Several workshops and seminars on the anchovy fisheries were held during the last decade. Finally, the National Fishery Policy Board designated the concerned sectors to implement further research, including a socio-economic study, revisions of old and proposals for new laws and regulations aiming at maintaining a sustainable anchovy fishery.

The National Fishery Policy Board approved in principle the following rulings for implementation by the sectors concerned:

Anchovy Purse Seines fishing with Light (APSL) to be declared illegal

Limiting the number of anchovy fishing boats by licensing.

Mesh size limitation. The mesh size used of the anchovy fisheries should not be less than 6 mm and further studies on selectivity should be carried out.

Anchovy fisheries to be carried out by zones, measured in nautical miles from the shore:

- 0-3 nm reserved for small scale fisheries;
- 3-5 nm fishing with lights not permitted, but local authorities in agreement with all stakeholders can decide.

Special regulations for Songkhla were recommended as follows:

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- 5-12 nm boats less than 14 m LOA (LNL, FNL) are allowed to fish;
- 12-15 nm fishing with lights is not allowed;
- Further than 15 nm, anchovy fishing boats (LNL, FNL) of less than 16m LOA are allowed to fish.

#### **ACKNOWLEDGEMENTS**

The authors are grateful to Mr. Somsak Chullasorn, for his suggestions and comments. Thanks also to: the Group (see Section 15.8) for providing unpublished data, Dr. Veravat Hongskul, who gave some published news from the press, Mrs. Supanee Cheque for improving some figures and Mr. Pairojana Saikliang for preparing some tables.