DEVELOPMENT ON COLLATION OF TUNA FISHERY STATISTICS FOR THE SOUTHEAST ASIAN REGION

by

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1. INTRODUCTION

The collation of tuna fishery statistics in the region has been undertaken by Indo-Pacific Tuna Development and Management Programme (IPTP) based in Sri Lanka since 1982. Historical and current tuna statistics were collected, processed and disseminated for use in the development and management of tuna fisheries in the region. However, with the establishment of the Indian Ocean Tuna Commission (IOTC) in March 1996, IPTP transferred its activities on tuna in the Western Central Pacific to SEAFDEC.

A Memorandum of Understanding between FAO and SEAFDEC was signed on 17 June 1996, regarding the transfer of responsibility from FAO to SEAFDEC for the collation of tuna fishery statistics in the Southeast Asian region. With the effect of this agreement, the Marine Fishery Resource Development and Management Department (MFRDMD) of SEAFDEC, in particular has requested countries fishing for tuna in the region to provide statistical data that are previously entrusted to FAO, to MFRDMD for collation. MFRDMD will also maintain appropriate databases and publish the data or disseminate it upon request. MFRDMD has also developed a computer program known as the Fishery Resources Information and Management System (FRIMS), to facilitate information transfer to and from Member Countries.

SEAFDEC through MFRDMD will report on the status of the database and plans for its future maintenance, including the updating of statistics for non-SEAFDEC member countries. Under the agreement established between FAO and SEAFDEC, SEAFDEC is responsible for the collation of tuna statistics in FAO area 71. However, for this specific task, SEAFDEC will only concentrate its activities in the Southeast Asian region as indicated in Map 1. With such understanding SEAFDEC will avoid overlapping with the activities of the other established regional body operating in the area, i.e., the South Pacific Commission (SPC).

The list of species covered under this program is tabulated in the Table 1. In general, three major groups of tuna and tuna like species were included, i.e., tunas and bonitos, seerfshes and billfishes. Coding for each species followed the FAO species code as published in IPTP Data Summary No. 12.

2. DEVELOPMENT AND PROGRESS

SEAFDEC has received eight designations as the liaison officers from Member Countries who are responsible for the collation of tuna fishery statistics in their respective countries. The names and addresses of those nominated liaison officers are indicated in the Appendix. SEAFDEC will organize a two-day technical meeting at MFRDMD in Kuala Terengganu, tentatively in December 1997. The official announcement and invitation will be released to all designated liaison officers not later than September 1997. The objectives of the meeting are to formalize procedures for data collection data format; and to draw up the expected outputs of the data collection for dissemination.

Three types of data are requested by SEAFDEC from Member Countries annually. These will include landing statistics by gear type and species, type and number of boats catching for tuna and catch and effort statistics. Member Countries are asked to use special forms provided by SEAFDEC when providing the needed statistics. Samples of the data format are given as MFRDMD FORMS 1, 2 and 3.

3. FUTURE ACTIVITIES

Provided with a good and adequate data, SEAFDEC plans to produce charts and maps on tuna landings by area and gear types for the whole Southeast Asian region. This information is useful for management of the tuna resources in this area. With the advantages of information technologies, SEAFDEC plans to provide facilities for data transfer and receiving using computers in the Member Countries of SEAFDEC.

4. PROBLEMS ENCOUNTERED

Several problems were encountered in the collation of tuna fishery statistics provided by Member Countries. These include:

a) Member Countries consider it time consuming to respond to SEAFDEC's requirement for tuna statistics;

b) Tuna landings reported in many cases are not according to species level;

c) Some liaison offices do not come from statistical division;

d) Lack of awareness among different sections in collecting tuna statistics;

e) Problems of species identification for early stages of tuna species, especially yellowfin and bigeye; and

f) Tuna landings are scattered and difficult to centralize.

References

FAO, (1992) Indian Ocean and Southeast Asian Tuna fisheries Data Summary For 1990. IPTP Data Summary No. 12, May 1992

NAMES AND ADDRESSES OF LIAISON OFFICERS DESIGNATED TO COLLATE TUNA FISHERY STATISTICS

Name	Official Address
Mr. Hj. Halidi Mohd. Salleh (Brunei)	Acting Senior Fisheries Officer Fisheries Department Ministry of Industry and Primary Resources Jalan Menteri Besar Negara, Brunei Darussalam 2069
Dr. Naozumi Miyabe (Japan)	Head of Tropical Tuna Section Pelagic Fish Resources Division National Research Institute of Far Seas Fisheries (NRIFSF) 5-7-1 Orido, Shimizu City Shizuoka-ken, 424 Japan
Mr. Lee Yuen Tong (Singapore)	Chief Fisheries Officer Primary Production Department Ministry of National Development 5 Maxwell Road #03-00 National Development Building Singapore 0106
Mr. Pirochana Saikliang (Thailand)	Marine Fishery Biologist Bangkok Marine Fishery Development Centre 89/1 Soi Saphan Pra, Yannawa Bangkok 10120
Mr. Noel C. Barut (Philippines)	Chief, Pelagic Vertebrate Resources Section Fisheries Resources Research Division Bureau of Fisheries and Aquatic Resources 860 Arcadia Bldg., Quezon Avenue Quezon City 1100, Philippines
Mr. Phan Duc Toan (Vietnam)	Deputy Director East Sea Fisheries Corporation-ESFICO Ministry of Fisheries - Vietnam 30-32 Ham Nghi Street, District 1 Ho Chi Minh City, Vietnam

Name	Official Address
Mr. Raja Bidin Raja Hassan (Malaysia)	Research Officer Fisheries Garden MFRDMD Chendering 21080 Kuala Terengganu Malaysia
Dr. Faturi Sukadi (Indonesia)	Chief Centre for Marine Fisheries Research Institute Balai Penelitian Perikanan Laut Pusat Litbang Perikanan Jln. Muara Baru Ujung Jakarta 1440, Indonesia

MAP 1: Southeast Asian Region

Table 1. List of species under SEAFDEC interest

Scientific Name	FAO English Name	Code
Tuna and Bonito		
Thunnus albacares	Yellowfin tuna	YFT
Thunnus obesus	Bigeye tuna	BET
Thunnus alalunga	Albacore	ALB
Thunnus tonggol	Longtail tuna	LOT
Thunnus maccoyii	Southern bluefin tuna	SBF
Euthynnus affinis	Eastern little tuna	KAW
Auxis thazard	Frigate tuna	FRI
Auxis rochie	Bullet tuna	BLT
Sarda orientalis	Indo-Pacific Bonito	BIP
Scombriadae	Tunas NEI	TUN
Seerfishes		
Scomberomorus commerson	Narrow-bared Spanish mackerel	COM
S. guttatus	Indo-Pacific King Mackerel	GUT
S. lineolatus	Streaked seerfish	STS
Acanthocybium solandri	Wahoo	WAH
Scomberromorus spp	Seerfishes NEI	KGX
Billfishes		
Makaira mazara	Indo-Pacific blue marlin	BLZ
M. indica	Black marlin	BLM
Tetrapturus audax	Striped marlin	MLS
Istiophorus platypterus	Indo-Pacific sailfish	SFA
Xiphias gladius	Swordfish	SWO
Istiophoridae	Billfishes NEI	BIL

MFRDMD FORM 1.

TUNA STATISTICS IN SOUTHEAST ASIAN REGIONS
LANDINGS STATISTICS

REPORTING COUNTRY: _____

FLAG COUNTRY: _____ WEIGHT UNITS: _____

YEAR: _____ BOAT SIZE UNITS: _____

DATA TYPE: SUBSAMPLE ☐ DATA SOURCE: LOGBOOK ☐ RAISED DATA: YES ☐

TOTAL ENUMERATION ☐ LANDINGS ☐ NO ☐

								LANDINGS BY SPECIES											
AREA	GEAR	TYPE OF BOAT	BOAT SIZE RANGE	LOCAL/ DISTANT OPRTN.	FISH CONDI-TIONING	TOTAL VALUE	TOTAL LANDINGS	TUN	KGX	BILL									
			:																
			:																
			:																
			:																
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TOTAL YEARLY LANDINGS								:											
TOTAL YEARLY VALUE								:											

MFRDMD FORM 2.

TUNA STATISTICS IN SOUTHEAST ASIAN REGIONS
FISHING CRAFT STATISTICS

REPORTING COUNTRY:

ACTUALLY OPERATED: ☐

REGISTERED: ☐

FLAG COUNTRY:

YEAR:

BOAT SIZE UNITS:

TYPE OF BOAT	BOAT SIZE RANGE	MECHANISATION	FISH PRESERVATION	LOCAL/DISTANT OPRTN.	GEAR	NUMBER OF BOAT CATCHING TUNA		
						MULTI-PURPOSE	TUNA ONLY	TOTAL
	:							
	:							
	:							
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MFRDMD FORM 3.

TUNA STATISTICS IN SOUTHEAST ASIAN REGIONS
FISHING CRAFT STATISTICS

REPORTING COUNTRY: M _____

FLAG COUNTRY: _____

YEAR: _____

RAISED DATA: ☐

UNRAISED DATA: ☐

COVERAGE RATE: _____

TYPE OF GEAR: _____

TYPE OF BOAT: _____

BOAT SIZE RANGE: _____

LOCAL/DISTAN OPERATED: _____

BOAT SIZE RANGE: _____

LOCAL/DISTANT OPERATED: _____

UNIT OF EFFORT: _____

UNIT OF EFFORT: _____

UNIT OF CATCH: _____

							CATCH BY SPECIES				
MONTH	SIZE	QUADRANT	LAT.	LONG.	EFFORT	TOTAL CATCH	TUN	KGX	BILL		
TOTAL											