PART I: GENERAL NOTES

1. Introduction

The Notes of Completion provide necessary instructions to enable the fishery statistician in charge of submission of fishery statistics in the Southeast Asian countries, namely Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam, to complete the questionnaire for further compilation in the Fishery Statistical Bulletin for Southeast Asia (hereinafter called 'the Bulletin').

The Bulletin was established based on the Framework for Fishery Statistics of Southeast Asia, which was developed by SEAFDEC through the consultative process with ASEAN and the ASEAN-SEAFDEC Member Countries. The Fishery Statistics Framework was endorsed at the 40th Meeting of SEAFDEC Council and the 16th Meeting of the ASEAN Sectoral Working Group on Fisheries (ASWGFi) in early 2008, with the primary objective to serve as the "Minimum Requirement for Fishery Statistics of Southeast Asia". In addition, the Fishery Statistics Framework is also anticipated to facilitate a long-term improvement of national fishery statistics in order to support national planning and management of fisheries, as well as to facilitate the compilation and sharing of statistics and information at regional and international levels, i.e. those currently compiled by SEAFDEC, FAO, as well as other fishery-related organizations.

In the past, all Southeast Asian countries were requested by SEAFDEC and FAO to submit their national fishery statistics to both organizations. To reduce the burden of countries in submission of statistics, SEAFDEC and FAO therefore agree to use 11 fishery statistics questionnaires, and harmonized submission mechanism and timeframe, as follows:

Table 1: List of questionnaires, and harmonized submission mechanism and timeframe

Items	Questionnaire title	Questionnaire issued by *	Questionnaire returned to **
Q1	Fishery Production by Sub-Sector	SEAFDEC	SEAFDEC
Q2	STAT-SEAFDEC Capture Production by Species and SEAFDEC Sub-Areas	FAO	FAO & SEAFDEC
Q3	Producer Prices for Capture Production by Species	SEAFDEC	SEAFDEC
Q4	Marine Capture Production by Type of Fishing Gear and by Species	SEAFDEC	SEAFDEC
Q5	Inland Capture Production by Water Bodies	SEAFDEC	SEAFDEC
Q6	Number of Fishing Boats by Type and Tonnage	SEAFDEC	SEAFDEC
Q7	Number of Fishing Units by Size of Boat	SEAFDEC	SEAFDEC
Q8	AQ-NS 1 and 9 Forms for Reporting Statistics on Aquaculture of Fish, Crustacean, Molluscs, and Aquatic Plants (NS9) by Species, Production, Environment and Fishing Area	FAO	FAO***
Q9	Aquaculture Production of Ornamental Fish	SEAFDEC	SEAFDEC
Q10	Seed Production from Aquaculture	SEAFDEC	SEAFDEC
Q11	FISHSTAT FM: Fishers	FAO	FAO***

^{*} Questionnaire issued by FAO or SEAFDEC (as indicated in the table) by April-May for the statistics of the previous year (e.g. April-May 2009 for statistics of 2008)

^{**} Questionnaire returned from Member Countries to FAO and/or SEAFDEC (as indicated in the table) by 31 August (e.g. 31 August 2009, for statistics of 2008)

^{***} FAO would later share the completed questionnaire with SEAFDEC

The Questionnaires as listed above would be sent by FAO or SEAFDEC (as indicated in the table) to the Southeast Asian countries through the national focal points with a copy being sent to the member of the ASEAN Network on Fishery Statistics.

2. Time Reference

The Bulletin will be published starting from the statistics of the year 2008. The statistical period, in principle, covers January to December of the reporting year. In cases where country was unable to supply the statistics of the reporting year by the timeline as indicated in *Table 1*, the latest data available may be given, provided that the year to which the data belongs indicated in the space provided.

3. Data Source

Data and information available from various sources could be used as inputs for the Bulletin. These include the data collected through statistical surveys, from government records and semi-governmental organizations. In addition, data and information derived from new statistical techniques or small-scale surveys could also be used to provide inputs to the Bulletin.

4. Incomplete Data

Although it is desirable that standardized and complete data be supplied for the Bulletin; data that may not be entirely compatible with the coverage, definition and classification but could be useful should also be reported by countries, provided that the extent of incompleteness indicated as a footnote.

5. Unit of Measurement

Units of measurement used in the questionnaire are standardized as follows:

- Fishery production statistics in **quantity** are reported in **tonnes**, except ornamental fish and reptiles which are reported in **piece/number**.
- Fishery production statistics in value are reported in 1,000 USD. 1
- Fish prices are reported in **USD/kg**

¹ Country that have difficulty in reporting value in USD could report the value in local currency, which would be further converted to USD using standard exchange rate of the International Monetary Fund (IMF)

6. Standard Symbols and Abbreviations

The following standard symbols and abbreviations are used throughout the tables in this questionnaire:

... = Not available

– Magnitude zero or not applicable

Magnitude insignificant, i.e., less than half of the measurement

t = tonnes

USD 1,000 = 1,000 dollars in U.S. currency

No. = Number Q = Quantity V = Value

7. Submission of Questionnaires

Please return before 31 August the completed questionnaires to FAO and SEAFDEC at the following addresses:

FAO:

The Senior Fishery Statistician
Fisheries and Aquaculture Information and Statistics Service (FIES)
Fisheries and Aquaculture Department, FAO
00153 Rome, Italy

Fax: 0039-06-5705-2476 Tel: 0039-06-5705-5318/4949

E-mail: FIES-E-FORMS@FAO.ORG

SEAFDEC:

SEAFDEC Secretariat P.O.Box 1046, Kasetsart Post Office Bangkok 10903, THAILAND

E-mail: secretariat@seafdec.org

PART 2: NOTES ON STATISTICS

Part 2, Notes on Statistics, explain the practical steps for Member Countries to provide inputs to each individual questionnaire, as follows:

No.	Questionnaire Title
Q1	Fishery Production by Sub-Sector
Q2	STAT-SEAFDEC Capture Production by Species and SEAFDEC Sub-Areas
Q3	Producer Prices for Capture Production by Species
Q4	Marine Capture Production by Type of Fishing Gear and by Species
Q5	Inland Capture Production by Water Bodies
Q6	Number of Fishing Boats by Type and Tonnage
Q7	Number of Fishing Units by Size of Boat
Q8	AQ-NS 1 and 9 Forms for Reporting Statistics on Aquaculture of Fish, Crustacean, Molluscs, and Aquatic Plants (NS9) by Species, Production, Environment and Fishing Area
Q9	Aquaculture Production of Ornamental Fish
Q10	Seed Production from Aquaculture
Q11	FISHSTAT FM: Fishers

Note: tables that appear in the Notes may be extracted from only relevant part of the questionnaire, and figures provided in the tables are not real figures reported by countries.

Q1: Fishery Production by Sub-Sector

The questionnaire on "Fishery Production by Sub-Sector" aims at compiling data to provide the overall picture on fishery production of the country, both in terms of quantity and value. Fishery production comprises two major parts: 1) capture and 2) aquaculture. Capture production is further categorized into production from marine and from inland capture fisheries; while aquaculture production is categorized into freshwater culture, brackishwater culture, and mariculture.

The data to be reported in this questionnaire are usually based on the official National Fishery Statistics of the respective countries e.g. Statistical Bulletin or Yearbook. The data should be further cross-checked with the data provided in Q2 (capture production), and Q8 (aquaculture production) to ensure their consistency (see further explanations in Q2 and Q8).

Example of reporting data in Q1: Fishery Production by Sub-Sector:

		Capture		Aquaculture				
	Total	Marine	Inland	Total	Mariculture	Brackish water	Freshwater	
Quantity (t)	28,980	27,700	1,280	64,890	18,390	36,200	10,300	
Value (1,000 USD)	32,306	31,108	1,198	58,241	20,585	29,548	8,108	

Q2: STAT-SEAFDEC Capture Production by Species and SEAFDEC Sub-Areas

The questionnaire on "Capture Production by Species and SEAFDEC Sub-Areas" aims at collecting statistics of capture production of all aquatic organisms, by 1) country, 2) aquatic organisms, 3) fishing area, 4) quantity, and 5) value.

1. Country

Country name is to be filled in every rows of the first column.

2. Aquatic Organisms

Aquatic organisms listed in the questionnaire include freshwater, diadromous and marine organisms. The List of Aquatic Animals and Plants could be referred to in **Annex 3**, which is extracted from Aquatic Sciences and Fisheries Information System (ASFIS) List of Species for Fishery Statistics Purposes.²

Information required in this part includes: 3-Alpha Code, Scientific Name, and FAO English Name (Column 2, 3 and 4). Although the aquatic organisms could be reported at either species or broader taxonomic levels (i.e. genus, family, order); it is preferable that statistics at species level be reported. However, due to the constraints or limitation in data collection at species level; statistics at genus, family, or order levels are also acceptable.

Example of reporting aquatic organism, at species, genus, family, and order levels:

Country	3-Alpha Code	Scientific Name	FAO English Name	
Malaysia	CMC	Clarias macrocephalus	Bighead catfish	Species level
Malaysia	FKN	Notopterus spp.	Knifefishes	Genus level
Malaysia	MUF	Mugilidae	Mullet nei	Family level
Malaysia	FLX	Pleuronectiformes	Flatfishes nei*	Order level

* nei (not elsewhere included) shows statistics at group level, which excluded individual fish that can be reported in species level. For instance, several kinds of flatfish distributed in Indonesia and their catch data are recorded without species identification. Nevertheless, only catch data of Indian halibut can be collected separately. In this case, therefore, the reported statistics in Q2 should be: a) *Psettodes erumei* (Indian halibut), and b) Pleuronectiformes (Flatfishes nei) which referes to other unidentified flatfishes. In case that country cannot report statistics for any particular species in the group, one figure that represents all species of flatfishes should be reported as Pleuronectiformes (Flatfishes nei).

In the electronic questionnaire sent to Country, species that have previously been reported by the Country would already appear in the list. If Country needs to report statistics for particular organisms that have never been reported before, country may add the additional rows for such species, using the 3-Alpha Code, Scientific Name, and FAO English Name as appear in the List of Aquatic Animal and Plants or ASFIS List. However, the case that the organism is not available in the ASFIS List, Country is requested to add additional row after the last row of the questionnaire, and provide the Scientific Name. FAO would further update the ASFIS List and issue the new 3-Alpha code and FAO English Name, in order that statistics of such organism could be reported in the future.

 $^{^2\} The\ ASFIS\ List\ could\ be\ downloaded\ from\ \ http://www.fao.org/fishery/collection/asfis$

3. Fishing Area

Information required in this part (Column 5 and 6) includes: 1) Fishing Area Code, and 2) SEAFDEC Sub-Areas. (Annex 1)

Fishing Area Code and SEAFDEC Sub Areas:

Fishing Area Codes	SEAFDEC Sub-Areas
04 (Inland Waters)	No sub areas
57 (Indian Ocean Eastern)	
71 (Pacific Western Central)	Sub-Areas* could be referred to in Annex 1 .
61 (Pacific, Northwest)	J

SEAFDEC Sub-Areas are available for reporting by Indonesia, Malaysia, Philippines, Thailand and Vietnam; while for the countries with small fishing areas, i.e., Brunei Darussalam, Cambodia, Myanmar, Singapore and Timor Leste, and the landlocked country, i.e. Lao PDR, Sub-Area is not applicable. These countries should therefore report only Fishing Area Code.

For country with Sub-Areas, list of available SEAFDEC Sub-Areas would be provided in the electronic format of the questionnaire. The list could be viewed and selected by clicking at the arrow on the right of the cell in Column 6. For the aquatic organism(s) that statistics are provided for more than one Sub-Area, additional rows should be inserted for each sub-area in order to allow country to report the figure for each Sub-Area.

Example of specifying Fishing Area Code and SEAFDEC Sub-Areas:

Country	3-Alpha Code	Scientific Name	FAO English Name	Fishing Area Codes	SEAFDEC Sub-Areas
Malaysia	SNX	Lutjanus spp.	Snapper nei	57	57c
Malaysia	SNX	Lutjanus spp.	Snapper nei	71	71e
Malaysia	SNX	Lutjanus spp.	Snapper nei	71	71f
Malaysia	SNX	Lutjanus spp.	Snapper nei	71	71g

4. Quantity

The statistics for capture production represent the catches and landings of inland, brackishwater and marine species of aquatic organisms, killed, caught, trapped or collected for all commercial, industrial, and subsistence purposes. Member Countries are requested to provide quantity (in tonnes³) of capture production for each aquatic organism, by each Fishing Area and SEAFDEC Sub-Area.

Example of reporting Quantity of Capture Production:

Country	3-Alpha Code	Scientific Name	FAO English Name	Fishing Area Codes	SEAFDEC Sub-Areas	Unit	Quantity
Malaysia	SNX	Lutjanus spp.	Snapper nei	57	57c	t	200
Malaysia	SNX	Lutjanus spp.	Snapper nei	71	71e	t	3,000
Malaysia	SNX	Lutjanus spp.	Snapper nei	71	71f	t	1,000
Malaysia	SNX	Lutjanus spp.	Snapper nei	71	71g	t	1,000

³ For reptile, reporting unit is number of individuals (no.)

5. Value

In reporting production in value, the amount reported in the national currency should be converted into USD. Country should report the figure of the total value, irrespective of sub-areas, in the last row of that particular species.

Example of reporting Value of Capture Production:

Country	3- Alpha Code	Scientific Name	FAO English Name	Fishing Area Codes	SEAFDEC Sub-Areas	Unit	Quantity	Value (1,000 USD)
Malaysia	SNX	Lutjanus spp.	Snapper nei	57	57c	t	200	
Malaysia	SNX	Lutjanus spp.	Snapper nei	71	71e	t	3,000	
Malaysia	SNX	<i>Lutjanus</i> spp.	Snapper nei	71	71f	t	1,000	
Malaysia	SNX	<i>Lutjanus</i> spp.	Snapper nei	71	71g	t	1,000	8,888

Cross-checking the figures with Q1 (Total Production)

To cross check the data, after completing Q2; Q2 need to be copied to another sheet, and all data rows be sorted by Fishing Area Code. Total inland capture production (quantity and value) could be calculated by summing up the data from fishing area 04 (shaded in blue), while the total marine capture production (quantity and value) could be calculated by summing up the data from fishing area 57, 71 and 61 (shaded in yellow). The total production of inland production, both in quantity and value should be similar to those in Q1.

Scientific Name	FAO English Name	Fishing Area Code	SEAFDEC Sub-Areas	2006 (t)	Value (USD)	Add for Q Sum	Add for V Sum
Cyprinus carpio	Common carp	04		200	111		
Oreochromis niloticus	Nile tilapia	04		300	333		
Pangasius spp	Pangas catfishes nei	04		80	88		
Osteichthyes	Freshwater fishes nei	04		700	666	1,280	1,198
Cynoglossidae	Tonguefishes	57	57 c	200	2,222		
Cynoglossidae	Tonguefishes	71	71 e	1,000			
Cynoglossidae	Tonguefishes	71	71 f	200			
Cynoglossidae	Tonguefishes	71	71 g	300			
Mugilidae	Mullets nei	57	57 c	400	4,444		
Mugilidae	Mullets nei	71	71 e	2,000			
Mugilidae	Mullets nei	71	71 f	500			
Mugilidae	Mullets nei	71	71 g	500			
Priacanthus spp	Bigeyes nei	57	57 c	1,000	5,555		
Priacanthus spp	Bigeyes nei	71	71 e	4,000			
Priacanthus spp	Bigeyes nei	71	71 f	3,000			
Priacanthus spp	Bigeyes nei	71	71 g	3,000			
Lutjanus spp	Snappers nei	57	57 c	200	8,888		
Lutjanus spp	Snappers nei	71	71 e	3,000			
Lutjanus spp	Snappers nei	71	71 f	1,000			
Lutjanus spp	Snappers nei	71	71 g	1,000			
Clupeoidei	Clupeoids nei	57	57 c	4,000	9,999		
Clupeoidei	Clupeoids nei	71	71 e	1,000			

Clupeoidei	Clupeoids nei	71	71 f	600		
Clupeoidei	Clupeoids nei	71	71 g	800	27,700	31,108

Q3: Producer Prices for Capture Production by Species

The questionnaire on "Producer Prices for Capture Production by Species" requires information on: 1) country, 2) aquatic organism, and 3) prices.

1. Country: Country name is to be filled on the space provided above the table heading.

2. Aquatic Organisms

Aquatic organisms listed in the questionnaire include freshwater, brackishwater, and marine organisms. Information required in this part includes: 3-Alpha Code, Scientific Name, and FAO English Name (Column 1, 2 and 3). The list of organisms in Q3 may be different from those provided in Q2, based on to the availability of price data from country.

3. Prices

In Column 4-8, data on producer prices of fish should be reported for five year period. The price should be given in USD per kilogram of fresh fish by species. The figure should include two digits after the decimal point.

Figures contain in Producer Price in Q3 may either be similar or different from those that could be calculated from Q2:

Price (USD/kg) =
$$\frac{\text{Capture Production by Species Value (1,000 USD)}}{\text{Quantity (t)}}$$

depending on the data sources and collection methods, i.e. in Thailand capture quantity and value are collected by the Department of Fisheries, while the prices were collected by Fish Market Organization.

Example of reporting Producer Prices for Capture Production by Species:

Country: Inaliand U									
3-Alpha Code	Scientific Name	FAO English Name	2004	2005	2006	2007	2008		
FCP	Cyprinus carpio	Common carp	1.25	1.27	1.29	1.25	1.27		
LRH	Labeo rohita	Roho labeo	2.25	2.28	2.21	2.24	2.19		
FCG	Ctenopharyngodon idellus	Grass carp	1.25	1.24	1.11	1.70	1.55		
BIC	Hypophthalmichthys nobilis	Bighead carp	3.23	3.23	3.25	3.27	2.98		

Q4. Marine Capture Production by Type of Fishing Gear and by Species

The questionnaire on "Marine Capture Production by Type of Fishing Gear and by Species" requires information of marine capture production by: 1) Country, 2) aquatic organisms, 3) fishing areas, and 4) fishing gears.

1. Country: Country name is to be filled on the space provided above the table heading.

2. Aquatic Organisms

Aquatic organisms listed in the questionnaire focus only on diadromous and marine organisms, and not include freshwater organisms. Information required in this part includes: 3-Alpha Code, Scientific Name, and FAO English Name (Column 1, 2, and 3). Additional organisms could be added by Member Countries after the last row.

3. Fishing Area

Fishing Areas focus only on marine areas, which are: area 57 (Indian Ocean Eastern), area 61 (Pacific Western Central), and area 71 (Pacific, Northwest). In addition, Sub-Areas are also available for Indonesia Malaysia, Philippines, Thailand and Vietnam. The available sub-areas could be referred to in **Annex 1**.

For country with Sub-Areas, list of available Sub-Areas would be provided in the electronic format of the questionnaire. The Sub-Area could be manually filled in or individually selected by clicking at the arrow on the right to the column. For the aquatic organism(s) that statistics are provided for more than one Sub-Area, additional rows should be inserted for each sub-area in order to allow country to report the figure for each Sub-Area.

4. Fishing Gear

Fishing Gear comprises several columns, specifying various types of fishing gear. These columns allow Country to provide statistics on Quantity of Marine Capture Production. Fishing gears available in the Southeast Asian region could be referred to in **Annex 2**.

Some broad categories of fishing gear, i.e. seine net, trawl, and trap, could be categorized into several gear types, such as seine net could be categorized into boat seine and beach seine. The quantity could be reported under each gear type (boat seine and beach seine), and the figures have to be summed in order to provide a figure for the broad category (all seine nets). However, in the case that quantity is not available for each gear type, the cell could be filled with "...", and only the broad category would be filled with a figure.

Example of reporting statistics on Quantity of Marine Capture Production, when figures are available for detailed fishing gears:

(Thailand)			Quantity by type of fishing gear (t)										
		S	eine Ne	et		Tra	ıwl					Trap	
FAO ENGLISH Name	SEAFDEC Sub-Areas	All seine nets	Boat seine	Beach seine	All trawls	Beam trawl	Otter board trawl	Pair trawl	Lift net	Gill net	All traps	Stationary trap	Portable trap
		SX	SV	SB	TX	TBB	ОТ	PT	LN	GN	FIX		
Eeltail catfishes	57b	•	•	1	170	100	40	30	-	10	90	10	80
Eeltail catfishes	71a	15	10	5	-	-	-	-	-	10	-	-	-

Example of reporting statistics on Quantity of Marine Capture Production, when figures are not available for detailed fishing gears:

(Malaysia)					Qua	antity b	y type	of fishi	ng gea	r (t)			
		S	eine Ne	et		Tra	wl					Trap	
FAO ENGLISH Name	SEAFDEC Sub-Areas	All seine nets	Boat seine	Beach seine	All trawls	Beam trawl	Otter board trawl	Pair trawl	Lift net	Gill net	All traps	Stationary trap	Portable trap
		SX	SV	SB	TX	TBB	OT	PT	LN	GN	FIX		
Shads nei	57c	100			800				10	500	10		
Shads nei	71e	400			800				20	500	10		
Shads nei	71f	400			800				20	500	10		
Shads nei	71g	100			800				40	500	10		

Cross-checking the figures with Q2 and Q1 (Capture Production by Species and SEAFDEC Sub-Areas)

In principles, the total capture production of each species from all fishing gears must be the same figure as the total capture production by species in Q2. However, the cross-check process is complicate and time-consuming. The figures in the columns of broad categories of fishing gear (not include detailed gear types) in the same rows (same species and sub-areas) need to be summed, and should provide the same figure as in Q2.

In the example (following table), the summation of figures with red shade (bigeye nei in the Gulf of Thailand) should be equal to the total figure of "bigeye nei in the Gulf of Thailand" appears in Q2; while the figure of total capture production (last row), should also equals to total capture production in Q1.

Example of cross-checking the data in Q4 with Q2 and Q1:

(Thailand)		5 the data in s	2. 11.											TOTAL											
			Pur	se sei	ne	S	eine N	et		Tra	awl				alling r				Trap						
FAO ENGLISH Name	FAO Area Code	Sub-fishing area	All Purse seines (PS)	Anchovy purse seine	Fish purse seine	All seine nets (SX)	Boat seine (SV)	Beach seine (SB)	All trawls (TX)	Beam trawl (TBB)	Otter board trawl (OT)	Pair trawl (PT)	Lift net (LN)	All Falling net (FS)	Anchovy falling net	Squid falling net	Gill net (GN)	All traps (FIX)	Stationary trap	Portable trap	Hook and lines (LX)	Push/Scoop net	Shell fish and seaweed collecting gear	Others (MIS)	
Barramundi	57	Gulf of Thailand	1,000	500	500	-	-	-	-	-	-	-	-	400	200	200	400	10	-	-	-	-	-	-	1,810
Barramundi	71	Indian Ocean	500	300	200	-	-	-	-	-	-	-	-	400	300	100	130		-	-	-	-	-	-	1,030
Groupers	57	Gulf of Thailand	200	100	100	-	-	-	620	100	500	20	-	40	20	20	-	140	20	120	10	-	-	10	1,020
Groupers	71	Indian Ocean	400	200	200	-	-	-	500	-	300	200	-	40	20	20	-	400	200	200	10	-	-	-	1,350
Bigeye nei	57	Gulf of Thailand	300	200	100	-	-	-	910	10	500	400	10	200	100	100	20	200	100	100	10	-	-	10	1,660
Bigeye nei	71	Indian Ocean	600	300	300	-	-	-	650	-	200	450	-	200	100	100	10	40	20	20	-	-	-	-	1,550
Snapper nei	57	Gulf of Thailand	600	400	200	-	-	-	910	10	500	400	10	200	100	100	20	200	100	100	10	-	-	10	1,960
Snapper nei	71	Indian Ocean	600	300	300	-	-	-	650	-	200	450	-	400	200	200	10	40	20	20	-	-	-	-	1,700
Threadfin nei	57	Gulf of Thailand	ххх	xxx	xxx	-	-	-	ххх	xxx	xxx	xxx	ххх	ххх	xxx	xxx	ххх	ххх	xxx	xxx	ххх	ххх	XXX	ххх	ххх
Threadfin nei	71	Indian Ocean	XXX	XXX	XXX	-	-	-	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Sardinellas nei	57	Gulf of Thailand	ххх	xxx	xxx	-	-	-	ххх	xxx	xxx	xxx	ххх	ххх	ххх	ххх	ххх	ххх	xxx	xxx	ххх	ххх	ххх	ххх	ххх
Sardinellas nei	71	Indian Ocean	XXX	XXX	XXX	-	-	-	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Skipjack tuna	57	Gulf of Thailand	ххх	xxx	xxx	-	-	-	ххх	xxx	xxx	xxx	ххх	ххх	ххх	ххх	ххх	ххх	xxx	xxx	ххх	ххх	XXX	ххх	ххх
Skipjack tuna	71	Indian Ocean	XXX	XXX	XXX	-	-	-	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Giant tiger prawn	57	Gulf of Thailand	ххх	xxx	xxx	-	-	-	ххх	xxx	xxx	xxx	ххх	ххх	ххх	ххх	ххх	ххх	xxx	xxx	ххх	ххх	XXX	ххх	ххх
Giant tiger prawn	71	Indian Ocean	XXX	XXX	XXX	-	-	-	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Blood cockle	57	Gulf of Thailand	ххх	xxx	xxx	-	-	-	ххх	xxx	xxx	XXX	ххх	ххх	xxx	xxx	ххх	ххх	xxx	XXX	ххх	ххх	ххх	ххх	ххх
Blood cockle	71	Indian Ocean	XXX	XXX	XXX	-	-	-	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Jellyfishes	57	Gulf of Thailand	ххх	xxx	xxx	-	-	-	ххх	xxx	xxx	XXX	ххх	ххх	ххх	ххх	ххх	ххх	xxx	ххх	ххх	ххх	ххх	ххх	ххх
	TOTAL																								50,000

Q5. Inland Capture Production by Water Bodies

The questionnaire on "Inland Capture Production by Water Bodies" requires information by: 1) Country, and 2) type of water bodies.

1. Country: Country name is to be filled on the space provided above the table heading.

2. Water Bodies

Followings are the classifications and definitions of inland water bodies:

- (a) **Lakes:** Non-flowing, naturally enclosed bodies of water, including regulated natural lakes but excluding reservoirs
- (b) **Rivers:** running water body such as rivers, drainage canals irrigation canals which also cover creeks, streams and other linear water bodies
- (c) Flood plains/rice fields: Seasonally flooded areas including paddy fields
- (d) **Reservoirs:** artificial impoundments of water used for irrigation, flood control, municipal water supplies, recreation, hydroelectric power generation, and so forth
- (e) Others: Any water bodies other than the above; Peri-urban wetland is included in this category

Data are required in this questionnaire are: total quantity (t) and total value (1,000 USD), without specifying organisms.

(Countries)

Water Bodies	Quantity	Value
	(t)	(1,000 USD)
Lakes		
Rivers		
Flood plain/rice fields		
Reservoirs		
Others		
Total		

Cross-checking the figures with Q1 (Capture Production by Species and SEAFDEC Sub-Areas)

To cross-check the data, figures in 'Total' row, both in quantity and value must be similar to total capture production in the inland areas in Q1.

Q6: Number of Fishing Boats by Type and Tonnage

The questionnaire on "Number of Fishing Boats by Type and Tonnage", focuses only on marine fisheries. The questionnaire requires information on 1) Country, 2) sub-areas, and 3) number of fishing boats by types and tonnage.

1. Country: Country name is to be filled on the space provided above the table heading.

2. Sub-areas

For country with marine sub-areas, i.e. Indonesia, Malaysia, Philippines, Thailand and Vietnam, list of available SEAFDEC Sub-Areas would be provided in the electronic format of the questionnaire. In addition, the last row would also be added to calculate the total number of boats

in all SEAFDEC sub-areas. For country without marine sub-area, i.e. Brunei Darussalam, Cambodia, Myanmar, Singapore and Timor Leste, only the FAO fishing area would be provided.

3. Number of fishing boats by types and tonnage

The coverage and classification of fishing boat are:

1. Non-powered boat		
2. Powered boat	2.1 Out-board powered boat	
	2.2 In-board powered boat	Less than 5 tons 5 - 9.9 tons 10 - 19.9 tons 20 - 49.9 tons 50 - 99.9 tons 100 - 199.9 tons 200 - 499.9 tons
		More than 500 tons

Country would provide the figure on number of fishing boats in each detailed category of fishing boats. The electronic format of the questionnaire would automatically calculate the sub-total for all in-board powered boats (shaded in red), and all powered boats (shaded in green); and grand-total for all boats (shaded in blue).

_			
	hai	non	1

				Powered boat										
SEAFDEC	-	Non-		Out beaut				In-boa	rd powere	ed boat				
Sub-Areas	Total	powered boat	Sub- total	Out-board powered boat	Sub- total	< 5	5-9.9	10-19.9	20-49.9	50-99.9	100- 199.9	200- 499.9	> 500	
				boat		tons	tons	tons	tons	tons	tons	tons	tons	
Gulf of Thailand	1,410	10	1,400	100	13,000	1,000	1,000	1,000	3,000	3,000	2,000	1,000	1,000	
Indian Ocean	1,020	10	1,010	10	1,000	100	100	100	200	200	100	100	100	
All SEAFDEC Sub-Areas	2,430	20	2,410	110	14,000	1,100	1,100	1,100	3,200	3,200	2,100	1,100	1,100	

Q7. Number of Fishing Units by Size of Boat

The questionnaire on "Number of Fishing Units by Size of Boat", focuses only on marine fisheries. **Fishing unit** means the smallest unit in a fishing operation, which comprises generally a fishing boat, fishers and fishing gears. In cases where two fishing boats are jointly operated in fishing such as the pair trawler or two-boat purse seine, these two fishing boats are regarded as one fishing unit. The questionnaire requires information on 1) Country and 2) number of fishing units by type of fishing gear, and 3) size of boat (both powered and non-powered boats).

1. Country: Country name will appear at the table heading

2. Type of fishing gear

Followings are the classification of fishing gear with code and name:

Name of fishing goor
Name of fishing gear
Purse Seines
Anchovy Purse Seine
Fish Purse Seine
Seines Nets
Boat Seine
Beach Seine
Frawls
Beam Trawl
Otter Board Trawl
Pair trawl
Nets
alling Nets
Anchovy Falling Net
Squid Falling Net
Nets
- Traps
Stationary Trap
Portable Trap
ks & Lines
h/Scoop Nets
Ilfish & seaweed collecting gear
ers

3. Size of boats: See classification of size of powered boats in Q6

-	Type of Fishing Gear								Powered	l boat				
	type of Fishing Gear		Non-							In-board po	wered boa	t		
		Total	powered	Sub-	Out-board	Sub-	< 5	5-9.9	10-19.9	20-49.9	50-99.9	100-199.9	200-499.9	> 500
Code	Name of fishing gear		boat	total	powered boat	total	tons	tons	tons	tons	tons	tons	tons	tons
PS	Purse Seines	0		0		0								
	Anchovy Purse Seine				_									
	Fish Purse Seine													
SX	All Seines Nets	0		0		0								
SV	Boat Seines	0		0		0								
SB	Beach Seines	0		0		0	Ĭ							
TX	All Trawls	0		0		0	Ĭ							
TBB	Beam Trawl	0		0		0								
OT	Otter Board Trawl	0		0		0								
PT	Pair trawl	0		0		0								
LN	Lift Nets	0		0		0								
FS	All Falling Nets													
	Anchovy Falling Net													
	Squid Falling Net													
GN	Gill Nets	0		0		0								
FIX	All Traps	0		0		0								
	Stationary Trap	0		0		0	[
	Portable Trap	0		0		0								
LX	Hooks & Lines	0		0		0	[
	Push/Scoop Nets	0		0		0	ļ							
	Shellfish & seaweed collecting gear	0		0		0								
MIS	Others	0		0		0								

Q8. AQ-NS 1 and 9 Forms for Reporting Statistics on Aquaculture of Fish, Crustacean, Molluscs, and Aquatic Plants (NS9) by Species, Production, Environment and Fishing Area

This questionnaire "AQ-NS 1 and 9 Forms for Reporting Statistics on Aquaculture of Fish, Crustacean, Molluscs, and Aquatic Plants (NS9) by Species, Production, Environment and Fishing Area" developed by FAO requires information on: 1) Country, 2) aquatic organism, 3) environment/area codes, and 4) quantity and price.

1. Country: Country name is to be filled in every rows of the first column.

2. Aquatic Organisms

Aquatic organisms listed in the questionnaire include fish, crustacean, molluscs, other aquatic animals and aquatic plants cultured in freshwater, coastal and marine environment. Information required in this part includes: 3-Alpha Code, Scientific Name, and FAO English Name (Column 2, 3 and 4). For the aquatic organism(s) that could be cultured in more than one Environment and Area, the row of such species should be copied to allow country to report the figure for all environments/areas.

Additional organisms could be added by Member Countries after the last row.

3. Environment and Area Codes

Followings are the codes and definition of environment codes:

Environment Codes	Represent
IN	The aquatic organisms are cultivated in freshwater environment
BW	The aquatic organisms are cultivated in brackishwater environment
MA	The aquatic organisms are cultivated in marine environment

Country is requested to fill the environment code in Column 5. In addition to environment code, Country is also requested to fill the Area code in Column 6, of which the codes are as follows:

Area Codes	Area Name
04	Asia – Inland Waters
57	Indian Ocean Eastern
71	Pacific Western Central
61	Pacific, Northwest

Note

- For aquaculture in freshwater environment, the environment code must be "IN" and the only possible area code is "04".
- For aquaculture brackishwater environment, the environment code must be "BW", while the area code could be 04, 57, 71 or 61.
- For aquaculture marine environment, the environment code must be "MA", while the area code could be 57, 71 or 61 (cannot be 04).

4. Quantity and Price

Column 7 of the questionnaire indicates the unit used for reporting: 1) the quantity ("t" = Tonnes); and 2) the related price per kilogram (intended as average price per kilogram at first sale) expressed in local currency **or** in US dollars, identified by the 3-letter ISO currency code. The number of rows containing the price/kg depends on the number of currencies utilised in the reporting. The combination of rows "Quantity & Price/kg" is repeated for each species item, environment/fishing area.

Country	3-Alpha Code	Scientific Name	FAO English Name	Environment Code	Area Code	Unit
Indonesia	TLN	Oreochromis niloticus	Nile tilapia	IN	04	Tonnes
Indonesia	TLN	Oreochromis niloticus	Nile tilapia	IN	04	IDR/Kg
Indonesia	TLN	Oreochromis niloticus	Nile tilapia	IN	04	USD/Kg
Indonesia	TLN	Oreochromis niloticus	Nile tilapia	BW	04	Tonnes
Indonesia	TLN	Oreochromis niloticus	Nile tilapia	BW	04	IDR/Kg
Indonesia	TLN	Oreochromis niloticus	Nile tilapia	BW	04	USD/Kg
Indonesia	TLN	Oreochromis niloticus	Nile tilapia	BW	71	Tonnes
Indonesia	TLN	Oreochromis niloticus	Nile tilapia	BW	71	IDR/Kg
Indonesia	TLN	Oreochromis niloticus	Nile tilapia	BW	71	USD/Kg

FAO English Name	Environment Code	Area Code	Unit	2004	2005	2006	2007	2008
Nile tilapia	IN	04	t	1700				
Nile tilapia	IN IN	04	IDR/Kg					
Nile tilapia	IN	04	USD/Kg	0.7				
Nile tilapia	BW	04	t	800				
Nile tilapia	BW	04	IDR/Kg					
Nile tilapia	BW	04	USD/Kg	0.7				

Cross-checking the figures with Q1 (Total Aquaculture Production)

To cross check the data, after completing Q8, copy Q8 into new sheet, and delete the rows of price in USD and local currency. Data should then be sorted by "Environment Code". Total culture production in inland environment (quantity and value) could be calculated by summing up the data from the Environment Code "04" (shaded in green). Total aquaculture production in brackishwater environment could be calculated by summing up the data from the Environment Code "BW" (shaded in pink). And total aquaculture production in marine environment could be calculated by summing up the data from the Environment Code "MA" (shaded in grey). These total figures should be similar to the total production from freshwater aquaculture, brackishwater aquaculture, and mariculture in Q1.

Example of cross-checking the data in Q8 with Q1:

Scientific Name	FAO English Name	Environmen t Code	Area Cod e	2006 (t)	Value (USD)	Add for Q Sum	Add for V Sum
Cyprinus carpio	Common carp	IN	04	700	111		
Ctenopharyngodon idellus	Grass carp(=White amur)	IN	04	600	222		

Leptobarbus hoeveni	Hoven's carp	IN	04	400	222		
Barbonymus gonionotus	Silver barb	IN	04	1,00 0	444		
Oreochromis (=Tilapia) spp	Tilapias nei	IN	04	2,00 0	888		
Pangasius pangasius	Pangas catfish	IN	04	5,00 0	5,555		
Oxyeleotris marmorata	Marble goby	IN	04	100	333		
Macrobrachium rosenbergii	Giant river prawn	IN	04	500	333	10,30 0	8,108
Oreochromis (=Tilapia) spp	Tilapias nei	BW	04	200	333		
Lates calcarifer	Barramundi(=Giant seaperch)	BW	57	2,00 0	888		
Lates calcarifer	Barramundi(=Giant seaperch)	BW	71	2,00 0	2,222		
Epinephelus tauvina	Greasy grouper	BW	57	1,00 0	555		
Epinephelus tauvina	Greasy grouper	BW	71	1,00 0	777		
Lutjanus argentimaculatus	Mangrove red snapper	BW	57	2,00 0	333		
Lutjanus argentimaculatus	Mangrove red snapper	BW	71	1,00 0	888		
Osteichthyes	Marine fishes nei	BW	57	800	222		
Osteichthyes	Marine fishes nei	BW	71	800	555		
Scylla serrata	Indo-Pacific swamp crab	BW	57	200	222		
Scylla serrata	Indo-Pacific swamp crab	BW	71	200	333		
Penaeus merguiensis	Banana prawn	BW	57	9,00 0	4,444		
Penaeus merguiensis	Banana prawn	BW	71	2,00 0	5,555		
Penaeus monodon	Giant tiger prawn	BW	57	5,00 0	2,222		
Penaeus monodon	Giant tiger prawn	BW	71	9,00 0	9,999	36,20 0	29,54 8
Crassostrea spp	Cupped oysters nei	MA	57	10	55		
Crassostrea spp	Cupped oysters nei	MA	71	300	444		
Perna viridis	Green mussel	MA	57	80	88		
Perna viridis	Green mussel	MA	71	7,00 0	6,666		
Anadara granosa	Blood cockle	MA	57	9,00 0	9,999		
Anadara granosa	Blood cockle	MA	71	2,00 0	3,333	18,39 0	20,58 5

Q9. Aquaculture Production of Ornamental Fish

The questionnaire on "Aquaculture Production of Ornamental Fish" aims at collecting statistics on quantity and value by: 1) Country and 2) each ornamental fish species.

1. Country: Country name is to be filled on the space above the table heading.

2. Ornamental Fish

Information required in this part includes: 3-Alpha Code, Scientific Name, and FAO English Name (Column 1, 2 and 3). The List of Aquatic Animals and Plants could be referred to in **Annex 3**.

Country is requested to report statistics in quantity (number of pieces) and value (1,000 USD).

	Ornamental	Quantity	Value		
3-Alpha Code	Scientific Name	FAO English Name	inglish Name (Pcs.) (1,00		

Q10. Seed Production from Aquaculture

Questionnaire on "Seed Production from Aquaculture" requires information on: 1) Country, 2) environment code, 3) aquatic organism, 4) quantity of seed production by objectives, 5) number of operation units.

1. Country: Country name is to be filled on the space above the table heading.

2. Environment Code

Environment code and its definition (IN, BW and MA) could be referred to in Q8. In the electronic format of questionnaire, the list of environmental code could be viewed and selected by clicking at the arrow on the right of the cell in Column 1.

3. Aquatic Organisms

Information required in this part includes: 3-Alpha Code, Scientific Name, and FAO English Name (Column 2, 3 and 4). The List of Aquatic Animals and Plants could be referred to in **Annex 14**.

4. Quantity of Seed Production by Objectives

For each aquatic organism, country is requested to report statistics on number of seeds, i.e. fingerlings, juveniles, etc. (million pcs.) in column 5. More detailed statistics, specifying number of seed produced for wild stock enhancement (column 6) or for aquaculture practices (column 7) should also be reported, if available.

5. Operation Units

Country is requested to report the number of operation units or facilities that operates artificial seed production in the country.

(Country)

			Hatchery/Nu	ursery Productio	n		
Env. Code	3-Alpha Code	Scientific Name	FAO English	Total	Wild Stock Enhancement	Aquaculture Pratices	Units
Code		Scientific ivalle	Name	(million pcs.)	(million pcs.)	(million pcs.)	Number of operation units or facilities

Q11. FISHSTAT FM: Fishers

Questionnaire "FISHSTAT FM: Fishers" was developed by FAO to collect annual statistics on number of fishers. Number of fishers (male and female) would be reported under the the following categories: 1) aquatic-life cultivation, 2) inland water fishing, 3) marine coastal water fishing, 4) marine deep-sea water fishing, 5) marine nei, and 6) subsistence.

Although FAO and SEAFDEC share statistics derived from this questionnaire, there are differences between FAO and SEAFDEC categories of fishers, as follows:

FAO categories	SEAFDEC categories
Aquatic-life cultivation	Farmers
Full-time	Full-time
Part-time	Not required
Occasional	Not required
Inland water fishing	Inland Fishers
Full-time	Full-time
Part-time	Part-time
Occasional	Occasional
Marine coastal water fishing	Marine fishers
Full-time	Full-time (coastal + deep-sea + marine nei)
Part-time	Part-time (coastal + deep-sea + marine nei)
Occasional	
Marine deep-sea water fishing	
Full-time	
Part-time	
Occasional	
Marine nei	
Full-time	
Part-time	
Occasional	
Subsistence	
Full-time	
Part-time	
Occasional	

Annex 1

CLASSIFICATION OF FISHIHG AREAS

The fishing areas of the Southeast Asian region, established for fishery statistical purposes, consist of inland and marine fishing areas, which is consistent with the definition and classification of capture fishery. These are standardized in accordance with the FAO Major Fishing Areas, the boundaries of which were determined in consultation with international fishery agencies on various considerations, including

- (i) the boundary of national regions and the natural divisions of oceans and seas;
- (ii) the boundaries of adjacent statistical fisheries bodies already established in intergovernmental conventions and treaties;
- (iii) existing national practices;
- (iv) national boundaries;
- (v) the longitude and latitude grid system;
- (vi) the distribution of the aquatic fauna; and
- (vii) the distribution of the resources and the environmental conditions within an area

1. Inland Fishing Areas

All inland waters of Southeast Asian countries are identified under the Area 04 (Asia, Inland Water). There is no sub-area for Asia (Fishing Area 04) that is recognized for the collection of catch and effort data for Southeast Asian region. The data presented of Lao PDR, which is the sole landlocked country in the region, therefore reported under the Area 04 only.

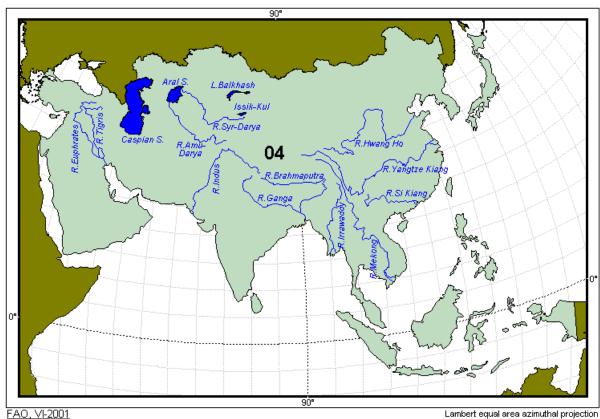


Figure 1 - Area 04, Asia-Inland Waters

2. Marine Fishing Areas

The marine fishing areas of the Southeast Asia countries are identified under the Area 57 (Indian Ocean, Eastern), Area 71 (Pacific, Western Central) and Area 61 (Pacific, Northwest). Countries and their sub-areas to be used in marine fishery statistics are as follows.

Countries	Sub-areas for marine fishery statistics	FAO Marine Fishing Area	SEAFDEC Sub-areas
1. Brunei Darussalam	-	71	71 i
2. Cambodia	-	71	71 b
3. Indonesia		57, 71	
	West Sumatra	57	57 e
	South Java	57	57 e
	Malacca Strait	57, 71	57 d, 71 k
	East Sumatra	71	71 k
	North Java	71	71 k
	Bali-Nusa Tenggara	57, 71	57 f
	South-west Kalimantan	71	71 k
	East Kalimantan	71	71 k
	South Sulawesi	71	71 k
	North Sulawesi	71	71 k
	Maluku-Papua	71	71 k
4. Malaysia		57, 71	
	West Coast of Peninsular Malaysia	57, 71	57 c
	East Coast of Peninsular Malaysia	71	71 e
	Sabah	71	71 f
	Sarawak	71	71 g
5. Myanmar	-	57	57 a
6. Philippines		71	71 j
	Luzon	71	71 j
	Visayas	71	71 j
	Mindanao	71	71 j
7. Singapore	-	71	71 h
8. Thailand		57,71	
	Gulf of Thailand	71	71 a
	Indian Ocean	57	57 b
9. Vietnam		61,71	
	North Vietnam	61	61 a
	Central Vietnam	61	61 b
	Southwest Vietnam	71	71 c
	Southeast Vietnam	71	71 d

Area 57 (Indian Ocean, Eastern)

Under the fishing area 57, the marine fishery statistics such as production, species, fishing gear, fishing vessel, fishing units, etc. will be collected and reported within the Exclusive Economic Zone⁴(EEZ) of each country. The fishing area can be divided into 6 sub-areas for the Southeast Asian region, which is corresponded to the existing EEZ of Myanmar, Thailand, Malaysia and Indonesia, and to facilitate the country in reporting fishery statistics. The sub-areas under area 57 are as follows.

Sub-area 57 a: Marine fishing area of Myanmar

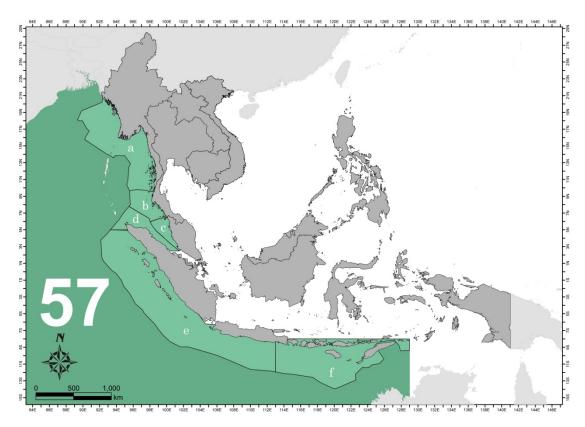
Sub-area 57 b: Marine fishing area of Thailand (Indian Ocean)

Sub-area 57 c: Marine fishing area of Malaysia (West Coast of Peninsular Malaysia)

Sub-area 57 d: Marine fishing area of Indonesia (Malacca Strait)

Sub-area 57 e: Marine fishing area of Indonesia (West Sumatra and South Java)

Sub-area 57 f: Marine fishing area of Indonesia (Bali-Nusa Tenggara)



Sub-areas of the Area 57, Indian Ocean Eastern

1. A zone under national jurisdiction (up to 200-nautical miles wide) declared in line with the provisions of 1982 United Nations convention of the Law of the Sea, with in which the coastal State has the right to explore and exploited, and the responsibility to conserve and manage, the living and non-living resources.

2. The area adjacent to a coastal state which encompasses all water between (a) the seaward boundary of that state, (b) a line on which each point is 200 nautical miles (370.40 km) from the baseline from which the territorial sea of the coastal state is measured (except when other international boundaries need to be accommodated), and (c) the maritime boundaries agreed between that state and the neighboring states.

Exclusive Economic Zone (EEZ) is

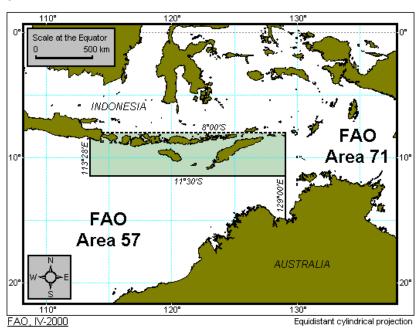
Boundary between Areas 57 and 71

- 1. At the Strait of Malacca, the areas bounded by a line commencing from East Sumatra and across the strait at 2°30′N latitude to meet the West Coast of Peninsular Malaysia.
- 2. At marine waters between Sumatra and Java, the Areas bounded by a line commencing on the coast of Sumatra at the boundary between the District of Lampung Utara and the District of Lampung Selatan at 5°31'S latitude, 104°33′E longtitude. The boundary is running along a rhumb line between Cape Tjuku Redak on the mainland of Sumatra and Cape Batu Kebucung on the Island of Tebuan to the position 6°15'S latitude, 105°04'E longitude; then along a rhumb line between Cape Parat on the Island of Panaitan and the southeastern tip of the Island of Rakarta to the western coast of Java at the boundary between the District of Lebak and the District of Serang at 6°23'S latitude, 105°49'E longitude.



Boundary line for the Area 57 and 71 at the marine waters between Sumatra and Java

3. At marine waters of Java and Bali-Nusa Tenggara, the areas bounded by a line commencing from 8°00'S latitude starting the coast of South Java at Surabaya and running east to meet at 129°00'E longitude; thence running due south until meet Northern coast of Australia. The area under the line is recognized as the fishing area 57 whereas the other above the line accepted as fishing area 71.



Boundary line for the Area 57 and 71 at the marine waters of South Java and Bali-Nusa Tenggara

Remark:	•••••	Present boundary line
		Former boundary line

Area 71 (Pacific, Western Central)

Under the fishing area 71, the marine fishery statistics such as production, species, fishing gear, fishing vessel, fishing units, etc. will be collected and reported within the Exclusive Economic Zone (EEZ) of each country. There are 8 Southeast Asian countries identified under the fishing area 71 covering Brunei Darussalam, Cambodia, Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam. The fishing area can be divided into 11 sub-areas for the region, which is corresponded to the existing EEZ of these countries to facilitate the country in reporting fishery statistics. The sub-areas under area 71 are as follows.

Sub-area 71 a: Marine fishing area of Thailand (Gulf of Thailand)

Sub-area 71 b: Marine fishing area of Cambodia

Sub-area 71 c: Marine fishing area of Vietnam (Southwest Vietnam) Sub-area 71 d: Marine fishing area of Vietnam (Southeast Vietnam)

Sub-area 71 e: Marine fishing area of Malaysia (East Coast of Peninsular Malaysia)

Sub-area 71 f: Marine fishing area of Malaysia (Sabah) Sub-area 71 g: Marine fishing area of Malaysia (Sarawak)

Sub-area 71 h: Marine fishing area of Singapore

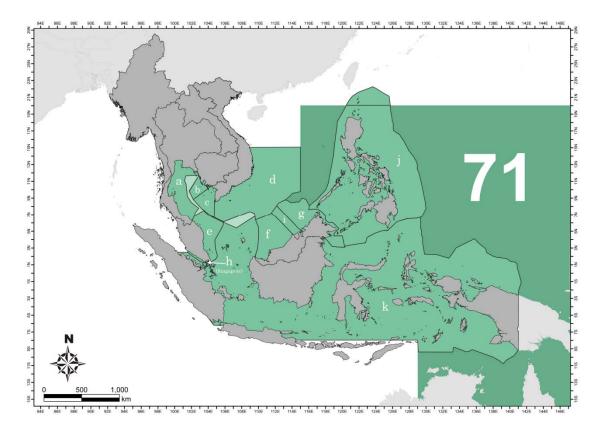
Sub-area 71 i: Marine fishing area of Brunei Darussalam

Sub-area 71 j: Marine fishing area of Philippines (Luzon, Visayas, Mindanao)

Sub-area 71 k: Marine fishing area of Indonesia (East Sumatra, North Java, Bali-Nusa

Tenggara, South-West Kalimantan, East Kalimantan, South Sulawesi, North

Sulawesi, Maluku-Papua)

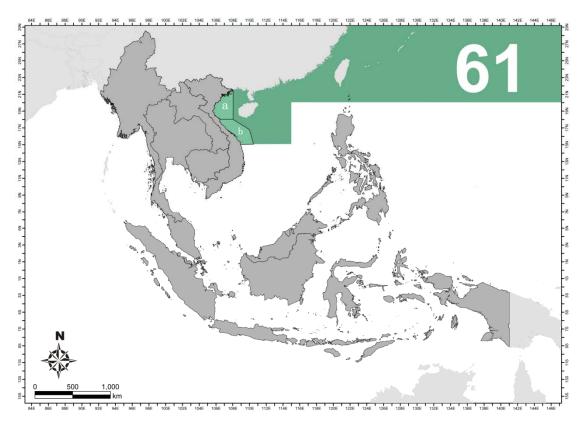


Sub-areas of the Fishing Area 71, Pacific, Western Central

Area 61 (Pacific, Northwest)

Under the fishing area 61, the marine fishery statistics such as production, species, fishing gear, fishing vessel, fishing units, etc. will be collected and reported within the Exclusive Economic Zone (EEZ) of each country. There is only one country identified under the fishing area 61, which is Vietnam. The fishing area can be divided into 2 sub-areas as follow.

Sub-area 61 a: Marine fishing area of Vietnam (North Vietnam) Sub-area 61 b: Marine fishing area of Vietnam (Central Vietnam)



Sub-areas of the Area 61, Pacific, Northwest

Annex 2

Classification of Fishing Gears

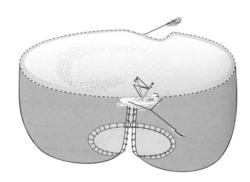
For the statistic on fishing units and marine production, breakdown into types of fishing gear,

Major Group	Minor Group	Standard	ISSCFG ¹
		Abbreviation	Code
1. Purse seine		PS	01.1.0
2. Seine Net		SX	02.9.0
	Boat seines	SV	02.2.0
	Beach seine	SB	02.1.0
3. Trawl		TX	03.9.0
	Beam trawl	TBB	03.1.1
	Otter board trawl	OT	03.4.9
	Pair trawl	PT	03.5.9
4. Lift net		LN	05.9.0
5. Gill Net		GN	07.9.1
6. Trap		FIX	08.9.0
	Stationary trap	-	-
	Portable trap	-	-
7. Hook and lines		LX	09.9.0
8. Push/Scoop net		-	-
9. Shellfish and seaweed			
collecting gear		-	
10. Others		MIS	20.0.0

Remark

TYPE OF FISHING GEAR AND DEFINITION

1. Purse seine



A net roughly rectangular in shape without a distinct bag is set vertically in water; to surround the school of fish with purse line, generally of pelagic nature.

Actually, this group of fishing gear called 'Surrounding Net', which is sub-divided into three major groups as a) one boat purse seine; b) two boat purse seine; and c) surrounding net without a purse line⁵. However, in term of fishery statistics, no countries in the region collect the data in such individual groups. Thus, purse seine is only a gear of surrounding net which collected data without detail in

one or two boat operation.

¹ International Standard Statistical Classification of Fishing Gear

2. Seine net

A bag shaped net with two wings, normally; the wings are larger than those of trawl nets. The net is pulled towards a stationary boat or onto a beach. A seine net of primitive nature sometimes does not have a bag. Insofar as the net is pulled towards a stationary boat or beach, it is included herein. The seine net is sub-divided into two minor groups: a) boat seine and b) beach seine.

Boat seine



The boat seine consists of two wings, a body and a bag, which is similar to that of trawls. Operated from a boat, they are generally used on the bottom, where they are hauled by two ropes, usually very long, set in the water so as to ensure that as many fish as possible are driven or herded towards the opening of the net. Danish seine also included herein.

Beach seine



Beach seine is a simple fishing gear; one end of the wing is held by a group of fishermen on the shore, the net is first set at right angles to the seashore and the direction of the net setting turns gradually toward the shore. After setting all the net, the towing line of the wing is paid out and the boat runs toward the shore provide that there is a certain distance between the landing and setting points. Then, from the two ends of the wings, the buoy line and the sinker line are hauled in to catch fish.

3. Trawl

A conical bag shaped-net with two or more wings, pulled by one to two boats for a period of time, to catch mainly fish or other aquatic animals that live directly on, or stay near the sea bed. When such a gear is used in mid-water with the same catching mechanism, the mid-water trawl is included herein. The trawl is also sub-divided into three minor groups: a) beam trawl; b) otter board trawl; and c) pair trawl.

Beam trawl

The main feature of this trawl is a beam, which most of them are made of iron. Its purpose is to spread the netting. Sometime a heavy beam is supported by steel shoes at each end which run over the sea bed. A ground rope and a head rope are joined together to the cement ski that works as a bobbin. The principal catch of beam trawl are shrimps, therefore the mesh size is relatively small. The mesh size of beam trawl also depends on the catch.

Otter board trawl



Otter boards are used for horizontal spreading of the net mouth. Most otter trawl nets consist of two panels; this is called a 'two-seam net'. The mouth is oval-shaped when viewed from front. Two wings stretch out to increase the swept area and to guide fish in the net's path down to the cod-end.

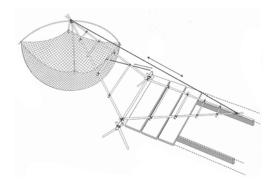
Pair trawl



each wing of the net.

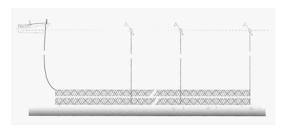
Pair trawl means to the net is towed by two boats. In pair trawling, the net mouth is kept open by outward towing of the two boats, which always try to keep the same distance between them during operation. The otter boards are not necessary, the arrangement of gear is simplified, the warp is connected directly to the sweep lines whose other and is jointed to a triangular iron frame at the end of Gridles from

4. Lift net



A sheet of net, usually square, but may sometimes be conical, is stretched by several rods, ropes, or a frame and is set either at the bottom or in mid-water for some time and them lifted to trap the fish swimming above it. Both stationary lift nets and portable lift nets are included herein.

5. Gill net



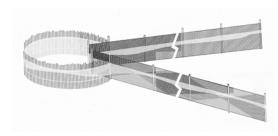
A net wall, with its lower end weighted by sinkers (or heavy net, as in drift gill net) and the upper end raise by floats, is set across the path of migrating fish. Fish trying to make their way through the net wall are gilled or entangled in the mesh. The trammel net with two to three wall nets is also included herein. The migrating fish are entangled between two layers of net and not in the mesh where a combination of different types of

nets are used.

6. Trap

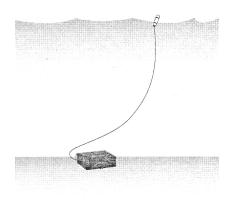
Trap referred to gear that is set or stationed in the water for a certain period, regardless of the kind of material used for their construction. The fish when caught are naturally confined in a collecting unit from which escape is prevented by labyrinths and/or retarding devices such as gorges, funnels, etc. without any active fishing operation taking place. Trap is also sub-divided into two minor groups: a) stationary trap; and b) portable trap.

Stationary trap



Considering its operation, this group of trap stationed in the water for long period at least until the end of fishing season. Most of stationary gear operated in relation to water current. Stationary trap covered bamboo stake trap, bamboo fence trap, set net, bag net, etc.

Portable trap



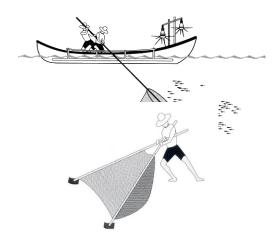
Trap is portable which designed in form of cages or basket. It can make from various materials such as wood, bamboo, metal rods, wire netting, etc. It is used with or without bait depending on the target species. Fish trap, crab trap, shrimp trap are included herein.

7. Hook and lines



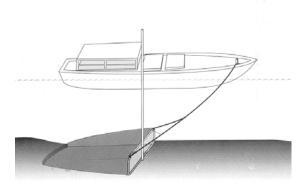
This gear generally consists of line(s) and hook(s) where natural or artificial baits are hooked to attract fish or other aquatic animals. Unbaited hook or a jig may also be used.

8. Push/Scoop net



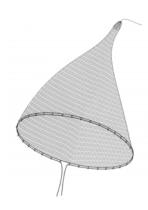
A bag net with a fixed or variable opening is operated in shallow waters or from boats. Some large scale scoop nets are operate from a motorized boat such as the boat push net.

9. Shellfish and seaweed collecting gear



All manual gears and complex devices which are used for collecting shellfish and seaweed, regardless of the type of material used for their construction. When the manual gear are operated by an individual some of the more complex devices such as cockle dredge, clam dredge, etc. need a motor boat for their operation

10. Other



This group of fishing gear covers the great variety of other fishing gears and methods which are not specified elsewhere, including cast net drive-in-net, muro ami, harpoon,etc.

List of Aquatic Animals and Plants Statistics

Annex 3

1	SSCAAP)		SEAFDEC		3 ALPHA	TAXONOMIC			
Division	Group of species		Code (O)	Code	Group of Species	CODE	CODE	FAMILY/ORDER	SCIENTIFIC NAME	FAO ENGLISH NAME
1 Freshwater	11	Carps, barbels	111	SEA 11.010	Common carp	FCP	1400200201	Cyprinidae	Cyprinus carpio	Common carp
fishes		and other		SEA 11.020	Roho labeo	LRH	1400202415	Cyprinidae	Labeo rohita	Roho labeo
		cyprinids		SEA 11.030	Mrigal carp	CMG	1400202503	Cyprinidae	Cirrhinus mrigala	Mrigal carp
				SEA 11.040	Chinese carps*	-	-	Cyprinidae	-	Chinese carps
				SEA 11.041	Grass carp	FCG	1400203501	Cyprinidae	Ctenopharyngodon idellus	Grass carp(=White amur)
				SEA 11.042	Silver carp	SVC	1400204301	Cyprinidae	Hypophthalmichthys molitrix	Silver carp
				SEA 11.043	Bighead carp	BIC	1400204302	Cyprinidae	Hypophthalmichthys nobilis	Bighead carp
				SEA 11.050	Nilem carp	FCN	1400205101	Cyprinidae	Osteochilus haselti	Nilem carp
				SEA 11.060	Isok barb	PRJ	1400205301	Cyprinidae	Probarbus jullieni	Isok barb
				SEA 11.070	Hoven's carp	FCH	1400213201	Cyprinidae	Leptobarbus hoeveni	Hoven's carp
				SEA 11.080	Silver barb	PTG	1400233501	Cyprinidae	Barbonymus gonionotus	Silver barb
				SEA 11.090	Java barb	FJB	1400216102	Cyprinidae	Puntius javanicus	Java barb
				SEA 11.100	Asian barbs	PUI	1400216103	Cyprinidae	Puntius binotatus	Spotted barb
						PUD	1400216109	Cyprinidae	Puntius orphoides	Red-cheek barb
						-	-	Cyprinidae	Puntius lateristriga	Spanner barb
						FAB	14002161xx	Cyprinidae	Puntius spp.	Asian barbs nei
			111	SEA 11.999	Misc. carps and barbs	CGO	1400201602	Cyprinidae	Carassius auratus	Goldfish
					·	-	-	Cyprinidae	Labeo chrysophekadion	Black sharkminnow
						MUC	1400202502	Cyprinidae	Cirrhinus molitorella	Mud carp
						RNM	1400202505	Cyprinidae	Cirrhinus microlepis	Small scale mud carp
						CTT	1400203001	Cyprinidae	Catla catla	Catla
						YCE	1400203601	Cyprinidae	Cyclocheilichthys enoplos	-
						YCA	1400203602	Cyprinidae	Cyclocheilichthys apogon	Beardless barb
						TCA	1400203002	Cyprinidae	Cyclocheilichthys armatus	Deardiess Daib
							1400204202	Cyprinidae	1	Hampala barb
						HML	1400204202		Hampala macrolepidota	напіраіа багб
						-	-	Cyprinidae	Labiobarbus fasciatus	 -
						-	-	Cyprinidae	Labiobarbus festivus	Singal carp
						-	-	Cyprinidae	Labiobarbus ocellatus	-
						-	-	Cyprinidae	Rasbora argyrotaenia	Silver rasbora
						-	-	Cyprinidae	Rasbora einthovenii	Brilliant rasbora
						-	-	Cyprinidae	Rasbora elegans	Twospot rasbora
						-	-	Cyprinidae	Rasbora tawarensis	-
						-	<u>-</u>	Cyprinidae	Thynnichthys vailanti	-
						TOB	1400205901	Cyprinidae	Tor tambroides	Thai mahseer

	19	SCAAP			SEAFDEC		3 ALPHA	TAXONOMIC			
	Division	Gro	oup of species	Code (O)	Code	Group of Species	CODE	CODE	FAMILY/ORDER	SCIENTIFIC NAME	FAO ENGLISH NAME
1	Freshwater	11	Carps, barbels	111	SEA 11.999	Misc. carps and barbs	-	-	Cyprinidae	Tor douronensis	River carp
	fishes		and other			(cont'd)	-	<u>-</u>	Cyprinidae	Tor soro	-
	(cont'd)		cyprinids				ARH	1400207401	Cyprinidae	Acrossocheilus hexagonolepis	Copper mahseer
			(cont'd)				-	14002128xx	Cyprinidae	Barbichthys laevis	Sucker barb
							BBR	1400212902	Cyprinidae	Barbodes balleroides	-
							BFS	1400233503	Cyprinidae	Barbonymus schwanenfeldii	Tinfoil barb
							BKC	1400214401	Cyprinidae	Mylopharyngodon piceus	Black carp
							-	-	Cyprinidae	Epalzeorhynchos kalopterus	Flying fox
							-	-	Cyprinidae	Henicorhynchus siamensis	Siamese mud carp
							-	-	Cyprinidae	Hypsibarbus sp.	-
							MCO	1400221401	Cyprinidae	Macrochirichthys macrochirus	-
							-	-	Cyprinidae	Mystacoleucus marginatus	-
							-	-	Cyprinidae	Mystacoleucus padangensis	-
							-	-	Cyprinidae	Puntioplites proctozystron	-
							OXA	1400226001	Cyprinidae	Oxygaster anomalura	-
							-	-	Cyprinidae	Parachela oxygastroides	Glass fish
							PUQ	1400229101	Cyprinidae	Puntioplites bulu	-
							-	-	Cyprinidae	Puntioplites waandersi	-
							FCY	14002xxxxx	Cyprinidae	-	Cyprinids nei
		12	Tilapias and other cichlids	121	121 SEA 12.010 SEA 12.011	Tilapias*	TLP	17059051xx	Cichlidae	Oreochromis (= Tilapia) spp.	Tilapias nei
						Mozambique tilapia	TLM	1705905101	Cichlidae	Oreochromis mossambicus	Mozambique tilapia
					SEA 12.012	Nile tilapia	TLN	1705905102	Cichlidae	Oreochromis niloticus	Nile tilapia
		13	Miscellaneous	136	SEA 13.010	Knifefishes	NCC	1280200201	Notopteridae	Chitala chitala	Clown knifefish
			freshwater				NCG	1280200202	Notopteridae	Chitala lopis	Giant featherback
			fishes				-	-	Notopteridae	Chitala blanci	Indochina featherback
							ONN	1280200302	Notopteridae	Notopterus notopterus	Bronze featherback
							FKN	12802003xx	Notopteridae	Notopterus spp.	Knifefishes
				131	SEA 13.020	Glass & butter catfish	KTA	1410705001	Siluridae	Kryptopterus apogon	Glass catfish
							-	-	Siluridae	Kryptopterus micronema	Glass catfish
						CAG	14107050XX	Siluridae	Kryptopterus spp.	Glass catfishes	
						OKB	1410705701	Siluridae	Ompok bimaculatus	Butter catfish	
					SEA 13.030	Asian redtail catfish	MYN	1410805405	Bagridae	Mystus nemurus	Asian redtail catfish
				SEA 13.040	Walking catfishes	CBT	1411803001	Clariidae	Clarias batrachus	Philippine catfish	
						CMC	1411803005	Clariidae	Clarias macrocephalus	Bighead catfish	
							-	-	Clariidae	Clarias nieuhofi	Freshwater catfish

	19	SCAAP			SEAFDEC		3 ALPHA	TAXONOMIC			
	Division	Gro	up of species	Code (O)	Code	Group of Species	CODE	CODE	FAMILY/ORDER	SCIENTIFIC NAME	FAO ENGLISH NAME
1	Freshwater	13	Miscellaneous	χ-/	SEA 13.040	Walking catfishes	СТО	14118030xx	Clariidae	Clarias spp.	Torpedo-shaped catfishes nei
	fishes		freshwater			(cont'd)	CGM	14118030xx032	Clariidae	C.gariepinus x C.macrocephalus	Catfish, hybrid
	(cont'd)		fishes		SEA 13.050	Pangasius catfishes	PGP	1413000202	Pangasiidae	Pangasius pangasius	Pangas catfish
			(cont'd)				PGS	1413000203	Pangasiidae	Pangasius hypophthalmus	Striped catfish
							PGJ	1413000204	Pangasiidae	Pangasius Iarnaudii	Spot pangasius
							PGK	1413000205	Pangasiidae	Pangasius micronemus	Shortbarbel pangasius
						-	-	Pangasiidae	Pangasius djambal	-	
							PGZ	14130002xx	Pangasiidae	Pangasius spp	Pangas catfishes nei
					SEA 13.060	Other catfishes	WAA	1410707501	Siluridae	Wallago attu	Wallago
							-	-	Siluridae	<i>Wallago</i> spp.	Wallago
							FSI	-	Siluroidei	-	Freshwater siluroids nei
							-	-	Bagridae	Mystus nigriceps	-
							-	-	Bagridae	Mystus wyckii	-
							-	-	Bagridae	Mystus spp.	-
				133	SEA 13.070	River eels	AAT	1430200203	Auguillidae	Anguilla bicolor	River eel
							ELJ	1430200204	Auguillidae	Anguilla japonica	Japanese eel
							-	-	Auguillidae	Anguilla anebulosa	River eel
							ELX	14302002xx	Auguillidae	Anguilla spp.	River eels nei
				132	SEA 13.080	Swamp eel	FLT	1680200101	Synbranchidae	Monopterus albus	Lai
				134	SEA 13.090	Climbing perch	FPC	1760500201	Anabantidae	Anabas testudineus	Climbing perch
					SEA 13.100	Giant gourami	FGG	1760900701	Osphronemidae	Osphronemus goramy	Giant qourami
				134	SEA 13.110	Gouramis*	GOM	17610013xx	Belontidae	Trichogaster spp.	Gouramis nei
					SEA 13.111	Snakeskin gourami	FGS	1761001302	Belontidae	Trichogaster pectoralis	Snakeskin gourami
					SEA 13.112	Three spot gourami	TGH	1761001303	Belontidae	Trichogaster trichopterus	Three spot gourami
					SEA 13.120	Kissing gourami	FGO	1761100601	Helostomatidae	Helostoma temminckii	Kissing gourami
				135	SEA 13.130	Snakehead	FSS	1771900103	Channidae	Channa striata	Striped snakehead
							FIS	1771900104	Channidae	Channa micropeltes	Indonesian snakehead
							-	-	Channidae	Channa lucius	Snakehead
							FSN	17719001xx	Channidae	Channa spp.	Snakeheads(=Murrels) nei
				136	SEA 13.140	Gobies	GBM	1732005101	Eleotridae	Oxyeleotris marmorata	Marble goby
							FGB	17320xxxxx	Eleotridae	Eleotridae	Gudgeons, sleepers nei
							FGX	17321xxxxx	Gobiidae	-	Freshwater gobies nei
					SEA 13.999	Misc. freshwater	-	-	Clupeidae	Clupeichthys goniognathus	Sumatran river sprat
						fishes	-	-	Osteoglossidae	Scleropages formosus	Asian bonytongue
								14005003xx	Cobitidae	Botia spp.	Loach
							BMW	1400514501	Cobitidae	Chromobotia macracanthus	Clown loach
							-	-	Balitoridae	Homaloptera spp.	River loach

	15	SCAAP		SEAFDEC			3 ALPHA CODE	TAXONOMIC CODE	FAMILY/ORDER	SCIENTIFIC NAME	FAO ENGLISH NAME
Division		Group of species		Code (O)	Code	Group of Species					
1	Freshwater	13	Miscellaneous		SEA 13.999	Misc. freshwater	-	-	Aplocheilidae	Aplocheilus panchax	Blue panchax
	fishes		freshwater			fishes	MRE	1680400401	Mastacembelidae	Macrognathus aculeatus	Lesser spiny eel
	(cont'd)		fishes			(cont'd)	MWY	1680400502	Mastacembelidae	Mastacembelus erythrotaenia	Fire eel
			(cont'd)				-	-	Sciaenidae	Nibea soldado	Soldier croaker
							-	-	Toxotidae	Toxotes microlepis	Smallscale archerfish
							BNV	1380101320	Characidae	Brycon guatemalensis	Machaca
							RIS	1705600301	Nandidae	Pristolepis fasciata	Malayan leaffish
							JTP	1190100203	Lepisosteidae	Atractosteus tropicus	Tropical gar
		<u> </u>					FRF	199xxxxxxxx001	Osteichthyes	-	Freshwater fishes nei
	l n: 1		Lau	0.404		l a	0110	4040500004	T or		To.
2	Diadromous fishes	24	Shads	2401	SEA 24.010	Shads	CHG	1210502301	Clupeidae	Anodontostoma chacunda	Chacunda gizzard shad
							HIX	1210503405	Clupeidae	Hilsa kelee	Kelee shad
							HIL	1210503801	Clupeidae	Tenualosa ilisha	Hilsa shad
							TOL	1210503804	Clupeidae	Tenualosa toli	Toli shad
							-	-	Clupeidae	Tenualosa macrura	Longtail shad
							EIL	1211200103	Pristigasteridae	Ilisha elongata	Elongate ilisha
							PEO	1211200303	Pristigasteridae	Pellona ditchela	Indian pellona
							DQX	12105018xx	Clupeidae	<i>Dorosoma</i> spp.	-
							DCX	121xxxxxxxx	Clupeidae	Clupeoidei	Diadromous clupeoids nei
				1	1		T				
		25	Miscellaneous	2402	SEA 25.010	Milk fish	MIL	1220200101	Chanidae	Chanos chanos	Milkfish
			diadromous fishes	2501	SEA 25.020	Seabass	GIP	1700116701	Centropomidae	Lates calcarifer	Barramundi(=Giant seaperch)
3	Marine fishes	31	Flounders, halibuts, soles	XXXX	SEA 31.010	Flatfish*	FLX	183xxxxxxx	Pleuronectiformes	-	Flatfishes nei
				3103	SEA 31.011	Soles	YOX	18304031xx	Cynoglossidae	Cynoglossus spp.	Tongue soles nei
							TOX	18304xxxxx	Cynoglossidae	Cynoglossidae	Tonguefishes
				3102	SEA 31.012	Halibat	HAI	1830700101	Psettodidae	Psettodes erumei	Indian halibut
				3101	SEA 31.013	Flounders	-	-	Pleuronectidae	Poecilopsetta colorata	Coloured righteye flounder
							UHA	1830805103	Paralichthyidae	Pseudorhombus arsius	Largetooth flounder
							-	18308051xx	Paralichthyidae	Pseudorhombus spp.	Flounders
		33	Miscellaneous	3303	SEA 33.010	Lizardfishes	BUC	1311600102	Synodontidae	Harpadon nehereus	Bombay-duck
			coastal fishes				LIG	1311606801	Synodontidae	Saurida tumbil	Greater lizardfish
							-	13116068xx	Synodontidae	Saurida spp.	Lizard fishes
							TCY	1311600901	Synodontidae	Trachinocephalus myops	Snakefish
							LIX	13116xxxxx	Synodontidae	-	Lizardfishes nei

	IS	SCAAP			SEAFDEC		3 ALPHA	TAXONOMIC			
	Division	Gro	up of species	Code (O)	Code	Group of Species	CODE	CODE	FAMILY/ORDER	SCIENTIFIC NAME	FAO ENGLISH NAME
3	Marine fishes	33	Miscellaneous	3301	SEA 33.020	Marine catfishes	AUX	1410200606	Ariidae	Arius thalassinus	Giant catfish
	(cont'd)		coastal fishes				-	14102006xx	Ariidae	Arius spp.	Sea catfishes, Marine catfishes
			(cont'd)				OGM	1410205801	Ariidae	Osteogeneiosus militaris	Soldier catfish
							CAX	14102xxxxx	Ariidae	-	Sea catfishes nei
				3302	SEA 33.030	Catfish eels	CAE	14106064xx	Plotosidae	Plotosus spp.	Eeltail catfishes
				3403	SEA 33.040	Mullets	MUF	1650100102	Mugilidae	Mugil cephalus	Flathead grey mullet
							LZV	1650101216	Mugilidae	Liza vaigiensis	Squaretail mullet
							LZZ	16501012xx	Mugilidae	Lisa spp.	Mullets
							VMH	1650104302	Mugilidae	Valamugil seheli	Bluespot mullet
							-	16501043xx	Mugilidae	Valamugil spp.	Mullets
							MUL	16501xxxxx	Mugilidae	-	Mullets nei
				3309	SEA 33.050	Fusiliers	-	17000111xx	Caesionidae	Pterocaesio spp.	Fusiliers
							CJC	1700011201	Caesionidae	Caesio caerulaurea	Blue and gold fusilier
							CJU	1700011202	Caesionidae	Caesio cuning	Redbelly yellowtail fusilier
							FUS	17000112xx	Caesionidae	Caesio spp.	Fusiliers caesio nei
							CJX	-	Caesionidae	Caesionidae	Fusiliers nei
				3305	SEA 33.060	Groupers	AYG	1700200201	Serranidae	Anyperodon leucogrammicus	Slender grouper
							EER	1700204211	Serranidae	Epinephelus merra	Honeycomb grouper
							EPT	1700204219	Serranidae	Epinephelus tauvina	Greasy grouper
							EEU	1700204225	Serranidae	Epinephelus guttatus	Red hind
							MAR	1700204244	Serranidae	Epinephelus malabaricus	Malabar grouper
							ENI	1700204257	Serranidae	Epinephelus coioides	Orange-spotted grouper
							EWF	1700204274	Serranidae	Epinephelus fuscoguttatus	Brown-marbled grouper
							GPX	17002042xx	Serranidae	Epinephelus spp.	Groupers nei
							CVK	1700211519	Serranidae	Cephalopholis boenak	Chocolate hind
							-	17002115xx	Serranidae	Cephalopholis spp.	Groupers
							MPV	1700212501	Serranidae	Cromileptes altivelis	Humpback grouper
							PLM	1700220801	Serranidae	Plectropomus maculatus	Spotted coralgrouper
							EMO	1700220804	Serranidae	Plectropomus leopardus	Leopard coralgrouper
							-	17002208xx	Serranidae	Plectropomus spp.	Groupers
							BSX	17002xxxxx	Serranidae	-	Groupers, seabasses nei
				3316	SEA 33.070	Bigeyes	PQY	1701102601	Priacanthidae	Priacanthus tayenus	Purple-spotted bigeye
							BIR	1701102605	Priacanthidae	Priacanthus macracanthus	Red bigeye
							BIG	17011026xx	Priacanthidae	Priacanthus spp.	Bigeyes nei
				3306	SEA 33.080	Sillagos	ILS	1701523304	Sillaginidae	Sillago sihama	Silver sillago
							-	17015233xx	Sillaginidae	Sillago spp.	Sillago-whitings

	IS	SCAAP			SEAFDEC		3 ALPHA	TAXONOMIC			
	Division	Gro	up of species	Code (O)	Code	Group of Species	CODE	CODE	FAMILY/ORDER	SCIENTIFIC NAME	FAO ENGLISH NAME
3	Marine fishes	33	Miscellaneous		SEA 33.080	Sillagos	WHS	17015xxxxx	Sillaginidae	-	Sillago-whitings
	(cont'd)		coastal fishes	XXXX	SEA 33.090	Moonfish	MOO	1702632701	Menidae	Mene maculata	Moonfish
			(cont'd)	3313	SEA 33.100	Drums & Croakers	-	17037085xx	Sciaenidae	Johnius spp.	Croakers
							LKR	1703718603	Sciaenidae	Otolithes ruber	Tigertooth croaker
							YED	1703729801	Sciaenidae	Nibea albiflora	Yellow drum
				3313	SEA 33.100	Drums & Croakers	-	17037561xx	Sciaenidae	Pennahia spp.	Croakers
							OTI	1703756201	Sciaenidae	Protonibea diacanthus	Blackspotted croaker
							CDX	17031xxxxx	Sciaenidae	-	Croakers, drums nei
				3307	SEA 33.110	Red snappers	RES	1703202702	Lutjanidae	Lutjanus argentimaculatus	Mangrove red snapper
							MAL	1703202713	Lutjanidae	Lutjanus malabaricus	Malabar blood snapper
							LUB	1703202714	Lutjanidae	Lutjanus sebae	Emperor red snapper
				3308	SEA 33.120	Other snappers	LJH	1703202707	Lutjanidae	Lutjanus johnii	John's snapper
						& jobfishes	LJL	1703202709	Lutjanidae	Lutjanus lutjanus	Bigeye snapper
							LUJ	1703202716	Lutjanidae	Lutjanus vitta	Brownstripe red snapper
							LVG	1703202756	Lutjanidae	Lutjanus goldiei	Papuan Black snapper
							SNU	1703202738	Lutjanidae	Lutjanus russelli	Russell's snapper
							SNA	17032027xx	Lutjanidae	Lutjanus spp.	Snappers nei
							LRI	1703221705	Lutjanidae	Pristipomoides multidens	Goldenbanded jobfish
							LRU	1703221707	Lutjanidae	Pristipomoides typus	Sharptooth jobfish
							LWX	17032217xx	Lutjanidae	Pristipomoides spp.	Jobfishes nei
							SNX	17032xxxxx	Lutjanidae	-	Snappers, jobfishes nei
				3310	SEA 33.130	Threadfin &	-	17033002xx	Nemipteridae	Pentapodus spp.	Whiptail
						monocle breams	NNH	1703318403	Nemipteridae	Nemipterus hexodon	Ornate threadfin bream
							THB	17033184xx	Nemipteridae	Nemipterus spp.	Threadfin breams nei
							MOB	17033230xx	Nemipteridae	Scolopsis spp.	Monocle breams
				3311	SEA 33.140	Ponyfishes	-	17035145xx	Leiognathidae	Gazza spp.	Toothpony
							POY	17035169xx	Leiognathidae	Leiognathus spp.	Ponyfishes(=Slipmouths)
							-	17035292xx	Leiognathidae	Secutor spp.	Pugnose ponyfish
							PON	17035xxxxx	Leiognathidae	-	Ponyfishes(=Slipmouths) nei
				3312	SEA 33.150	Grunts & Sweetlips	-	17036207xx	Haemulidae	Plectorhinchus spp.	Sweetlips
							GRL	1703620904	Haemulidae	Pomadasys argenteus	Silver grunt
							PKL	1703620905	Haemulidae	Pomadasys maculatus	Saddle grunt
							-	17036209xx	Haemulidae	Pomadasys spp.	Grunts
							GRX	17036xxxxx	Haemulidae	-	Grunts, Sweetlips nei
				3315	SEA 33.160	Emperors	EMP	17038xxxxx	Lethrinidae	-	Emperors(=Scavengers) nei
						•		17038172xx	Lethrinidae	Lethrinus spp.	Emperors
				3317	SEA 33.170	Seabreams	SBX	17039xxxxx	Sparidae	-	Porgies, seabreams nei

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	Division	Gro	up of species	Code (O)	Code	Group of Species	CODE	CODE	FAMILY/ORDER	SCIENTIFIC NAME	FAO ENGLISH NAME			
3	Marine fishes	33	Miscellaneous	3314	SEA 33.180	Goatfishes	-	-	Mullidae	Parupeneus indicus	Indian goatfish			
	(cont'd)		coastal fishes				-	17041200xx	Mullidae	Parupeneus spp.	Goatfishes			
			(cont'd)				UPS	1704125103	Mullidae	Upeneus sulphureus	Sulphur goatfish			
							UPI	1704125106	Mullidae	Upeneus vittatus	Yellowstriped goatfish			
							GOX	17041251xx	Mullidae	Upeneus spp.	Goatfishes			
							MUM	17041xxxxx	Mullidae	-	Goatfishes, red mullets nei			
				XXXX	SEA 33.190	Siver biddies	MOJ	17046036xx	Gerreidae	Gerres spp.	Mojarras(=Silver-biddies) nei			
					SEA 33.200	Sicklefish	SPS	1705013201	Drepanidae	Drepane punctata	Spotted sicklefish			
					SEA 33.210	Parrot fishes &	-	17063244xx	Labridae	Thalassoma spp.	Wrasses			
						Wrasses	WRA	17063xxxxxx	Labridae	-	Wrasses, hogfishes, etc. nei			
							HVM	1706311703	Labridae	Cheilinus undulatus	Humphead wrasse			
							-	17065056xx	Scaridae	Scarus spp.	Parrot fish			
				3404	SEA 33.220	Threadfins	FOT	1707700201	Polynemidae	Eleutheronema tetradactylum	Four finger threadfin			
							-	17077005xx	Polynemidae	Polynemus spp.	Threadfins			
				3319			THF	17077xxxxx	Polynemidae	-	Threadfins, tasselfishes nei			
					SEA 33.230	Rabbitfishes	SPI	17407001xx	Siganidae	Siganus spp.	Spinefeet(=Rabbitfishes) nei			
							SCN	1740700108	Siganidae	Siganus canaliculatus	White-spotted spinefoot			
							SGU	1740700109	Siganidae	Siganus guttatus	Goldlined spinefoot			
							IUG	1740700126	Siganidae	Siganus virgatus	Barhead spinefoot			
				xxxx	SEA 33.240	Spadefish	HUO	1740513701	Ephippidae	Ephippus orbis	Orbfish			
				^^^^	AAAA	XXX	^^^	SEA 33.250	Triggerfish	AJS	1901002801	Balistidae	Abalister stellaris	Starry Triggerfish
							TRF	19010xxxxx	Balistidae	Balistidae	Triggerfishes, promfrets nei			
					SEA 33.260	Indo-Pacific tarpon	TAI	1290200402	Megalopidae	Megalops cyprinoides	Indo-Pacific tarpon			
					SEA 33.270	Batfishes	BAT	17405206xx	Platycephalidae	Platax spp.	Batfishes			
					SEA 33.280	Scats	SCT	17406330xx	Scatiphagidae	Scatophagus spp.	Scats			
				3320	SEA 33.999	Misc. coast. fishes	PRC	170xxxxxxx	Percoidei	-	Percoids nei			
							FLH	17809xxxxx	Platycephalidae	Platycephalidae	Flatheads nei			
							AIB	17095xxxxx	Ambassidae	Ambassidae	Glassfishes			
				3412 S			GPA	17321xxxxx	Gobiidae	Gobiidae	Gobies nei			
							SUR	17402xxxxx	Acanthuridae	Acanthuridae	Surgeonfishes nei			
		34	Miscellaneous		SEA 34.010	Pike congers	DPC	1430901102	Muraenesocidae	Muraenesox cinereus	Daggertooth pike conger			
			demersal fishes				PCX	14309011xx	Muraenesocidae	Muraenesox spp.	Pike-congers nei			
				3408	SEA 34.020	Hair tails	LHT	1750600302	Trichiuridae	Trichiurus lepturus	Largehead hairtail			
							TCW	17506003xx	Trichiuridae	Trichiurus spp.	Hairtails nei			
							CUT	17506xxxxx	Trichiuridae	-	Hairtails, scabbardfishes nei			

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	Division	Gro	up of species	Code (O)	Code	Group of Species	CODE	CODE	FAMILY/ORDER	SCIENTIFIC NAME	FAO ENGLISH NAME
3	Marine fishes	34	Miscellaneous	XXXX	SEA 34.030	Dragonfishes	BQY	17093xxxxx	Barhydraconidae	Barhydraconidae	Dragonfishes nei
	(cont'd)		demersal fishes	XXXX	SEA 34.040	Conger eels	COX	14313xxxxx	Congridae	-	Conger eels, etc. nei
		35	Herrings,	3501	SEA 35.010	Sardines	AGS	1210500503	Clupeidae	Amblygaster sirm	Spotted sardinella
			sardines,				SDY	1210501201	Clupeidae	Sardinella brachysoma	Deepbody sardinella
			anchovies				SAG	1210501203	Clupeidae	Sardinella gibbosa	Goldstripe sardinella
							IOS	1210501204	Clupeidae	Sadinella longiceps	Indian oil sardine
							FRS	1210501208	Clupeidae	Sardinella fimbriata	Fringescale sardinella
							SAM	1210501223	Clupeidae	Sardinella lemuru	Bali sardinella
							RAS	1210502901	Clupeidae	Dussumieria acuta	Rainbow sardine
							SIX	12105012xx	Clupeidae	Sardinella spp.	Sardinellas nei,
							RWA	12105029xx	Clupeidae	Dussumieria spp.	Rainbow sardines nei
							CLU	121xxxxxxxx	Clupeidae	Clupeoidei	Clupeoids nei
				3503	SEA 35.020	Anchovies	STO	12106050xx	Engraulidae	Stolephorus spp.	Stolephorus anchovies
							ANX	12106xxxxx	Engraulidae	-	Anchovies, etc. nei
				3505	SEA 35.030	Wolf-herrings	DOB	1211100201	Chirocentridae	Chirocentrus dorab	Dorab wolf-herring
							DOS	12111002xx	Chirocentridae	Chirocentrus spp.	Wolf-herrings nei
		36	Tunas, bonitos,	3607	SEA 36.010	Frigate & bullet tunas	FRZ	17501023xx018	Scombridae	Auxis thazard, A.rochei	Frigate and bullet tunas
			billfishes				FRI	1750102301	Scombridae	Auxis thazard	Frigate tuna
							BLT	1750102303	Scombridae	Auxis rochei	Bullet tuna
				3606	SEA 36.020	Eastern little tuna	KAW	1750102406	Scombridae	Euthynnus affinis	Kawakawa
				3601	SEA 36.030	Skipjack tuna	SKJ	1750102501	Scombridae	Katsuwonus pelamis	Skipjack tuna
				3604	SEA 36.040	Longtail tuna	LOT	1750102603	Scombridae	Thunnus tonggol	Longtail tuna
				3605	SEA 36.050	Albacore tuna	ALB	1750102605	Scombridae	Thunnus alalunga	Albacore
					SEA 36.060	Southern bluefin tuna	SBF	1750102608	Scombridae	Thunnus maccoyii	Southern bluefin tuna
				3602	SEA 36.070	Yellowfin tuna	YFT	1750102610	Scombridae	Thunnus albacares	Yellowfin tuna
				3603	SEA 36.080	Bigeye tuna	BET	1750102612	Scombridae	Thunnus obesus	Bigeye tuna
				3608	SEA 36.090	Sailfish, marlin	SFA	1750300402	Istiophoridae	Istiophorus platypterus	Indo-Pacific sailfish
						& swordfish	BLZ	1750300502	Istiophoridae	Makaira mazara	Indo-Pacific blue marlin
							BLM	1750300507	Istiophoridae	Makaira indica	Black marlin
							MLS	1750300903	Istiophoridae	Tetrapturus audax	Striped marlin
							SWO	1750400301	Xiphiidae	Xiphias gladius	Swordfish
							BUM	1750300505	Istiophoridae	Makaira nigricans	Atlantic blue marlin
							SSP	1750300905	Istiophoridae	Tetrapturus angustirostris	Shortbil spearfish
							WHM	1750300904	Istiophoridae	Tetrapturus albidus	Atlantic White marlin

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	Division	Gro	oup of species	Code (O)	Code	Group of Species	CODE	CODE	FAMILY/ORDER	SCIENTIFIC NAME	FAO ENGLISH NAME
3	Marine fishes	36	Tunas, bonitos,				BIL	17503xxxxx	Istiophoridae	-	Marlins,sailfishes,etc. nei
	(cont'd)		billfishes (cont'd)	3609	SEA 36.100	Narrow-barred Spanish mackerel	СОМ	1750101503	Scombridae	Scomberomorus commerson	Narrow-barred Spanish mackerel
				3610	SEA 36.110	Indo-Pacific king mackerel	GUT	1750101504	Scombridae	Scomberomorus guttatus	Indo-Pacific king mackerel
				XXXX	SEA 36.120	Wahoo	WAH	1750101001	Scombridae	Acanthocybium solandri	Wahoo
				XXXX	SEA 36.130	Tuna-like fish	TUX	175xxxxxxx	Scombridae	Scombroidei	Tuna-like fishes nei
					SEA 36.140	Seerfishes	KGX	17501015xx	Scombridae	Scomberomorus spp.	Seerfishes nei
					SEA 36.150	Striped bonito	BIP	1750100102	Scombridae	Sarda orientalis	Striped bonito
		37 Miscellaneous	3401	SEA 37.010	Halfbeaks & needlefishes	NED	14701013xx	Belonidae	<i>Tylosurus</i> spp.	Needlefishes nei	
			pelagic fishes				HAX	14703004xx	Hemiramphidae	Hemiramphus spp.	Halfbeaks nei
						FLY	14704xxxxx	Exocoetidae	Exocoetidae	Flyingfishes nei	
						-	14704010xx	Exocoetidae	Cypselurus spp.	Flyingfishes	
				xxxx	SEA 37.020	False trevally	TRF	1701916502	Lactariidae	Lactarius lactarius	False trevally
				3405	SEA 37.030	Cobia	CBA	1702222101	Rachycentridae	Rachycentron canadum	Cobia
					SEA 37.040	Round scads	DCK	1702304302	Carangidae	Decapterus kurroides	Red tail scad
							DCC	1702304303	Carangidae	Decapterus macrosoma	Shortfin scad
							RUS	1702304308	Carangidae	Decapterus russelli	Indian scad
							MSD	1702304311	Carangidae	Decapterus macarellus	Mackerel scad
				3405	SEA 37.040	Round scads	SDX	17023043xx	Carangidae	Decapterus spp.	Scads nei
				3406	SEA 37.050	Jacks, cavallies,	NXM	1702304408	Carangidae	Caranx melampygus	Bluefin trevally
						trevallies	CXS	1702304411	Carangidae	Caranx sexfasciatus	Bigeye trevally
							NXT	1702304412	Carangidae	Caranx tille	Tille trevally
							TRE	17023044xx	Carangidae	Caranx spp.	Jacks, crevalles nei
							P00	1702304701	Carangidae	Trachinotus blochii	Snubnose pompano
						LTD	1702309005	Carangidae	Alectis indicus	Indian threadfish	
						-	17023114xx	Carangidae	Carangoides spp.	Horse mackerel	
						GLT	1702315101	Carangidae	Gnathanodon speciosus	Golden trevally	
						URU	1702346802	Carangidae	Uraspis uraspis	Whitemouth jack	
			3407	SEA 37.060	Selar scads	LSJ	1702300101	Carangidae	Alepes djedaba	Shrimp scad	
							TUM	1702300201	Carangidae	Atule mate	Yellowtail scad
							-	17023001xx	Carangidae	Alepes spp.	Scads
							BIS	1702329101	Carangidae	Selar crumenophthalmus	Bigeye scad

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	Division	Gro	up of species	Code (O)	Code	Group of Species	CODE	CODE	FAMILY/ORDER	SCIENTIFIC NAME	FAO ENGLISH NAME
3	Marine fishes	37	Miscellaneous		SEA 37.060	Selar scads	LRO	1702329102	Carangidae	Selar boops	Oxeye scad
	(cont'd)		pelagic fishes			(cont'd)	TRY	1702342201	Carangidae	Selaroides leptolepis	Yellowstripe scad
			(cont'd)				RNJ	1702342501	Carangidae	Seriolina nigrofasciata	Blackbanded trevally
				3410	SEA 37.070	Black pomfret	POB	1702309901	Carangidae	Parastromateus niger	Black pomfret
				XXXX	SEA 37.080	Rainbow runner	RRU	1702313401	Carangidae	Elagatis bipinnulata	Rainbow runner
				3408	SEA 37.090	Hardtail scad	HAS	1702317901	Carangidae	Megalaspis cordyla	Torpedo scad
				3409	SEA 37.100	Queenfishes	OBM	1702323101	Carangidae	Scomberoides commersonnianus	Talang queenfish
							OBJ	1702323104	Carangidae	Scomberoides tol	Needlescaled queenfish
							QUE	17023231xx	Carangidae	Scomberoides spp.	Queenfishes
				XXXX	SEA 37.110	Dolphinfish	DOL	1702807101	Coryphaenidae	Coryphaena hippurus	Common dolphinfish
					SEA 37.120	Mackerels*	-	-	Scombridae	Scombridae	Mackerels
					SEA 37.121	Chub mackerel	MAS	1750100201	Scombridae	Scomber japonicus	Chub mackerel
							MAA	1750100207	Scombridae	Scomber australasicus	Blue mackerel
					SEA 37.122	Short mackerel	RAB	1750101401	Scombridae	Rastrelliger brachysoma	Short mackerel
					SEA 37.123	Indian mackerel	RAG	1750101403	Scombridae	Rastrelliger kanagurta	Indian mackerel
					SEA 37.124	Other Rastrlliger mackerels	RAX	17501014xx	Scombridae	Rastrelliger spp.	Indian mackerels nei
					SEA 37.130	Pomfrets*	XPO	17603009xx	Stromateidae	Pampus spp.	Silver pomfrets nei
					SEA 37.131	Silver pomfret	SIP	1760300901	Stromateidae	Pampus argenteus	Silver pomfret
					SEA 37.132	Chinese silver pomfret	СРО	1760300902	Stromateidae	Pampus chinensis	Chinese silver pomfret
					SEA 37.133	Butterfishes	BUX	17603xxxxx	Stromateidae	Stromateidae	Butterfishes, profrets nei
				3402	SEA 37.140	Baracudas	BAC	1771000103	Sphyraenidae	Sphyraena jello	Pickhandle barracuda
							GBA	1771000107	Sphyraenidae	Sphyraena barracuda	Great barracuda
							BAR	17710001xx	Sphyraenidae	Sphyraena spp.	Barracudas nei
				XXXX	SEA 37.150	Carangids	CGX	17023xxxxx	Carangidae	Carangidae	Carangids nei
				XXXX	SEA 37.160	Silversides	SIL	16302xxxxx	Atherinidae	-	Silversides(=sand smelts) nei
		38	Sharks and	xxxx	SEA 38.010	Sharks and rays*	SKX	199XXXXXXXX054	Elasmobranchii	-	Sharks, rays, skates, etc. nei
			rays	3801	SEA 38.011	Shortfin mako	SMA	1060800201	Lamnidae	Isurus oxyrinchus	Shortfin mako
							MAK	10608002xx	Lamnidae	Isurus spp.	Mako sharks
							MSK	10608xxxxx	Lamnidae	-	Makeral sharks, porbeagles nei
					SEA 38.012	Thresher sharks	THR	10606006xx	Alopiidae	Alopias spp.	Thresher sharks nei
							ALV	1060600601	Alopiidae	Alopias vulpinus	Thresher
							PTH	1060600602	Alopiidae	Alopias pelagicus	Pelagic thresher
							BTH	1060600603	Alopiidae	Alopias superciliosus	Bigeye thresher

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	Division	Gro	oup of species	Code (O)	Code	Group of Species	CODE	CODE	FAMILY/ORDER	SCIENTIFIC NAME	FAO ENGLISH NAME
3	Marine fishes	38	Sharks and		SEA 38.013	Bamboo shark	ORR	1070401503	Hemiscylliidae	Chiloscyllium griseum	Grey bambooshark
	(cont'd)		Rays (cont'd)				ORB	1070401506	Hemiscylliidae	Chiloscyllium punctatum	Brownbanded bambooshark
							-	10704015xx	Hemiscylliidae	Chiloscyllium spp.	Bamboo shark nei
				3801	SEA 38.014	Requiem sharks	RSK	10802xxxxx	Carcharhinidae	Carcharhinidae	Requiem shark nei
							-	10802010xx	Carcharhinidae	Carcharhinus spp.	Requiem sharks
							CCP	1080201001	Carcharhinidae	Carcharhinus plumbeus	Sandbar shark
							AML	1080201002	Carcharhinidae	Carcharhinus amblyrhynchoides	Graceful shark
							CCL	1080201003	Carcharhinidae	Carcharhinus limbatus	Blacktip shark
							CCY	1080201006	Carcharhinidae	Carcharhinus amblyrhynchos	Grey reef shark
							CCF	1080201007	Carcharhinidae	Carcharhinus amboinensis	Pigeye shark
							CCD	1080201014	Carcharhinidae	Carcharhinus dussumieri	Whitecheek shark
							FAL	1080201017	Carcharhinidae	Carcharhinus falciformis	Silky shark
							CCE	1080201018	Carcharhinidae	Carcharhinus leucas	Bull shark
							CCB	1080201021	Carcharhinidae	Carcharhinus brevipinna	Spinner shark
							CCQ	1080201031	Carcharhinidae	Carcharhinus sorrah	Spottail shark
							TRB	1080202201	Carcharhinidae	Triaenodon obesus	Whitetip reef shark
							RHA	1080204002	Carcharhinidae	Rhizoprionodon acutus	Milk shark
					SEA 38.015	Hammerhead shark	SPN	10803005xx	Sphyrnidae	Sphyrna spp.	Hammerhead sharks nei
							SPL	1080300506	Sphyrnidae	Sphyrna lewini	Scalloped hammerhead
							SPK	1080300510	Sphyrnidae	Sphyrna mokarran	Great hammerhead
							SPY	10803xxxxx	Sphyrnidae	-	Hammerhead sharks nei
					SEA 38.016	Dogfish sharks	DGZ	10901007xx	Squalidae	Squalus spp.	Dogfishes nei
							DOP	1090100708	Squalidae	Squalus megalops	Shortnose spurdog
							DGX	10901xxxxx	Squalidae	-	Dogfishes Shark nei
				3802	SEA 38.020	Rays*	SRX	110xxxxxxx	Rajiformes	-	Rays, stingrays, mantas nei
					SEA 38.021	Sting ray	WST	1100500301	Dasyatidae	Dasyatis akajei	Whip stingray
							STT	11005xxxxx	Dasyatidae	-	Stringrays, butterfly rays nei
							STI	11005003xx	Dasyatidae	Dasyatis spp.	Stingrays nei
					SEA 38.022	Eagle & Manta rays	EAG	11007xxxxx	Myliobatidae	-	Eagle rays
							-	11007008xx	Myliobatidae	Myliobatis spp.	Eagle rays
							-	11007002xx	Myliobatidae	Aetobatus spp.	Eagle rays
							-	11007029xx	Myliobatidae	Aetomylaeus spp.	Eagle rays
							MAN	11008xxxxx	Mobulidae	-	Mantas, devil rays nei
							RMV	11008010xx	Mobulidae	Mobula spp.	Mobula nei
				XXXX	SEA 38.023	Guitarfishes	RCD	1100100402	Rhinobatidae	Rhynchobatus djiddensis	Giant guitarfish
							RCA	1100100401	Rhinobatidae	Rhynchobatus australiae	Whitespotted wedgefish

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	Division	Gro	oup of species	Code (O)	Code	Group of Species	CODE	CODE	FAMILY/ORDER	SCIENTIFIC NAME	FAO ENGLISH NAME
3	Marine fishes	38	Sharks and		SEA 38.023	Guitarfishes	RRY	1100101401	Rhinobatidae	Rhina ancylostoma	Bowmouth guitarfish
	(cont'd)		Rays (cont'd)			(cont'd)	GTF	1001xxxxx	Rhinobatidae	-	Guitarfishes, etc. nei
		39	Marine fishes	3902	SEA 39.010	Trashfish	-	-	-	-	Trashfish
			not identified	3901	SEA 39.999	Misc. marine fishes	MZZ	199xxxxxxx010	Osteichthyes	-	Marine fishes nei
4	Crustaceans	41	Freshwater	411	SEA 41.010	Giant river prawn	PRF	2281202307	Palaemonidae	Macrobrachium rosenbergii	Giant river prawn
			crutaceans		SEA 41.999	Misc. freshwater shrimps	-	-	Athyidae	CHG	Atyids shrimp
							-	-	Athyidae	Caradina spp.	Atyids shrimp
							PPZ	22812xxxxx045	Palaemonidae	Palaemonidae	Freshwater prawns, shrimps nei
							DCP	228xxxxxxx	Natantia	-	Natantian decapods nei
							FCX	299xxxxxxx	Crustacea	-	Freshwater crustaceans nei
		42	Crabs	4201	SEA 42.010	Swimming crab	SCD	2311100401	Portunidae	Portunus pelagicus	Blue swimming crab
							CRS	23111004xx	Portunidae	Portunus spp	Portunus swimcrabs nei
				4202	SEA 42.020	Mud crab	MUD	2311114001	Portunidae	Scylla serrata	Indo-Pacific swamp crab
					SEA 42.999	Other crab	CRA	231xxxxxxxx	Brachyura	Brachyura	Marine crabs nei
		43	Lobsters	XXXX	SEA 43.010	Lobster	NUV	2290100104	Palinuridae	Panulirus versicolor	Painted spiny lobster
							LMS	2290100105	Palinuridae	Panulirus polyphagus	Mud spiny lobster
							SLV	22901001xx	Palinuridae	Panulirus spp.	Tropical spiny lobsters nei
							THQ	2291500501	Scyllaridae	Thenus orientalis	Flathead lobster
							LOS	22915xxxxx	Scyllaridae	Scyllaridae	Slipper lobsters nei
							LOX	229xxxxxxx	Reptantia	-	Lobsters nei
		45	Shrimp and	XXXX	SEA 45.010	Banana prawn	PBA	2280100103	Panaeidae	Penaeus merguiensis	Banana prawn
			prawns		SEA 45.020	Blue shrimp	PNS	2280100110	Panaeidae	Penaeus stylirostris	Blue shrimp
					SEA 45.030	Whiteleg shrimp	PNV	2280100111	Panaeidae	Penaeus vannamei	Whiteleg shrimp
					SEA 45.040	Giant tiger prawn	GIT	2280100112	Panaeidae	Penaeus monodon	Giant tiger prawn
					SEA 45.050	Green tiger prawn	TIP	2280100120	Panaeidae	Penaeus semisulcatus	Green tiger prawn
					SEA 45.060	Indian white prawn	PNI	2280100125	Panaeidae	Penaues indicus	Indian white prawn
					SEA 45.070	King prawn	WKP	2280100128	Panaeidae	Penaeus latisulcatus	Western king prawn
					SEA 45.080	Misc. shrimp and prawn*	DCP	228xxxxxxx	Natantia	-	Natantian decapods nei
				4502	SEA 45.081	Penaeus shrimps	PEN	22801001xx	Panaeidae	Penaeus spp.	Penaeus shrimps nei
					SEA 45.082	Metapenaeus shrimps	MTJ	2280101602	Panaeidae	Metapenaeus affinis	Jinga shrimp
							MPB	2280101603	Panaeidae	Metapeneaus brevicornis	Yellow shrimp

	IS	SCAAP			SEAFDEC		3 ALPHA	TAXONOMIC			
	Division	Gro	oup of species	Code (O)	Code	Group of Species	CODE	CODE	FAMILY/ORDER	SCIENTIFIC NAME	FAO ENGLISH NAME
4	Crustaceans	45	Shrimp and	, ,			ENS	2280101606	Panaeidae	Metapenaeus endeavouri	Endeavour shrimp
	(cont'd)		prawns (cont'd)				MPE	2280101609	Panaeidae	Metapenaeus ensis	Greasyback shrimp
							MJE	2280101619	Panaeidae	Metapenaeus intermedius	Middle shrimp
							MJY	2280101621	Panaeidae	Metapeneaus lysianassa	Bird shrimp
							MET	22801016xx	Panaeidae	Metapenaeus spp.	Metapenaeus shrimps nei
				4503	SEA 45.083	Other shimps	NPI	2280101906	Panaeidae	Parapenaeopsis coromandelica	Coromandel shrimp
							NAW	2280101907	Panaeidae	Parapenaeopsis hardwickii	Spear shrimp
							NAH	2280101908	Panaeidae	Parapenaeopsis hungerfordi	Dog shrimp
							NAP	2280101912	Panaeidae	Parapenaeopsis sculptilis	Rainbow shrimp
							NIG	2280101916	Panaeidae	Parapenaeopsis gracilima	Thin shrimp
							TFV	2280104306	Panaeidae	Trachypenaeus fulvus	Brown rough shrimp
							NMY	2280106217	Panaeidae	Metapenaeopsis stridulans	Fiddler shrimp
							SOJ	2282907204	Solenoceridae	Solenocera crassicornis	Coastal mud shrimp
		47 Miscellaneous		SEA 45.084	Akiami paste shrimp	AKS	2280700903	Sergestidae	Acetes japonicus	Akiami paste shrimp	
							SHS	22807xxxxx	Sergestidae	-	Sergestid shrimps nei
				SEA 47.999	Other crustacean	SVX	225xxxxxxx	Stomatopoda	-	Stomatopods nei	
			marine		SEA 47.999		CRU	2xxxxxxxxx	Crustacea	-	Marine crustaceans nei
			crustaceans				SQY	22501xxxxx	Squillidae	-	Squillids nei
5	Molluscs	51	Freshwater	511	SEA 51.999	Misc. freshwater	HCX	31611017xx	Veneridae	<i>Meretrix</i> spp.	Hard clams nei
			molluscs			molluscs	-	-	Ampullariidae	<i>Pila</i> spp.	Snails
							MOF	399xxxxxxxx014	Mollusca	-	Freshwater molluscs nei
						T					
		52	Abalones,	XXXX	SEA 52.010	Abalone	ABX	30703001xx	Haliotidae	Haliotis spp.	Abalones nei
			winkles, conchs		SEA 52.020	Commercial top	RQN	3070400603	Trochidae	Trochus niloticus	Commercial top
								ı			
		53	Oysters	5302	SEA 53.010	Oysters	OYG	3160700801	Ostreidae	Crassostrea gigas	Pacific cupped oyster
							CSI	3160700811	Ostreidae	Crassostrea iredalei	Slipper cupped oyster
							OYC	31607008xx	Ostreidae	<i>Crassostrea</i> spp.	Cupped oysters nei
	1		1		054.54.05				1		1 .
		54	Mussels	5401	SEA 54.010	Mussels	KUK	3161000301	Mytilidae	Arcuatula arcuatula	Arcuate mussel
							MOD	31610028xx	Mytilidae	Modiolus spp.	Horse mussels nei
							MSV	3161003202	Mytilidae	Perna viridis	Green mussel

	IS	SCAAP			SEAFDEC		3 ALPHA	TAXONOMIC			
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5	Molluscs	55	Scallops,	5501	SEA 55.010	Scallops	UMP	3160800502	Pectinidae	Amusium pleuronectes	Asian moon scallop
	(cont'd)		pectens				SCX	31608xxxxx	Pectinidae	-	Scallops nei
		56	Clams, cockles,	5601	SEA 56.010	Blood cockles	BLC	3160407101	Arcidae	Anadara granosa	Blood cockle
			arkshells				BLS	31604071xx	Arcidae	Anadara spp.	Anadara clams nei
				5602	SEA 56.020	Arkshell & hard clams	HCX	31611017xx	Veneridae	<i>Meretrix</i> spp.	Hard clams nei
							PAU	3161104102	Veneridae	Paphia undulata	Undulate venus
							NCL	31611041xx	Veneridae	Paphia spp.	Short neck clams nei
					SEA 56.999	Other clams	CLX	316xxxxxxxx	Bivalvia	-	Clams, etc. nei
		57	Squids,	5701	SEA 57.010	Cuttlefishes	-	32102002xx	Sepiidae	Sepia spp.	Cuttlefish
			cuttlefishes,	5702	SEA 57.020	Squids	SQC	32104001xx	Loliginidae	Loligo spp.	Common squids nei
			octopuses	5703	SEA 57.030	Octopuses	OCZ	32109005xx	Octopodidae	Octopus spp.	Octopuses nei
					SEA 57.040	Argentine shortfin squid	SQA	3210501003	Ommastrephidae	Illex argentinus	Argentine shortfin squid
					SEA 57.999	Other squids	SQU	-	Loliginidae, Ommastrephidae	-	Various squids nei
							CEP	321xxxxxxxx	Cephalopoda	-	Cephalopod
								CTL	32102xxxxx026	Sepiidae	Sepiidae, Sepiolidae
							OCT	32109xxxxx	Octopodidae	Octopodidae	Octopuses, etc. nei
							99.	0210770000	Cotopoulado	S STOP S AT ALL S	estapassay etti men
			Miscellaneous marine molluscs	5801	SEA 58.010	Misc. marine molluscs	MOL	399xxxxxxx016	Mollusca	-	Marine molluscs nei
				1	T		1				
7	Miscellaneous	71	Frogs and other	711	SEA 71.010	Frogs	FOK	5120100119	Ranidae	Rana catesbeiana	American bull frog
	aquatic		amphibians				FRG	51201001xx	Ranidae	Rana spp.	Frogs
	animals	72	Turtles	7201	SEA 72.010	Marine turtles*	TTX	531xxxxxxxx030	Testudines	Testudinata	Marine turtles nei
					SEA 72.011	Leatherback turtle	DKK	5310100101	Cheloniidae	Dermochelys coriacea	Leatherback turtle
					SEA 72.012	Flatback turtle	FBT	5310700201	Cheloniidae	Natator depressus	Flatback turtle
					SEA 72.013	Green turtle	TUG	5310700502	Cheloniidae	Chelonia mydas	Green turtle
					SEA 72.014	Hawksbill turtle	TTH	5310701701	Cheloniidae	Eretmochelys imbricata	Hawksbill turtle
					SEA 72.015	Loggerhead turtle	TTL	5310701801	Cheloniidae	Caretta caretta	Loggerhead turtle
					SEA 72.016	Olive ridley turtle	LKV	5310701802	Cheloniidae	Lepidochelys olivacea	Olive ridley turtle
					SEA 72.020	Soft-shell turtle	TTS	5311102401	Trionychidae	Trionyx sinensis	Soft-shell turtle
							-	-	Trionychidae	<i>Trionyx</i> spp.	-
							TUL	531xxxxxxxx	Testudinata	-	River and lake turtles nei
		73	Crocodiles and	xxxx	SEA 73.010	Crocodiles	CDP	5360100301	Crocodylidae	Crocodylus porosus	Estuarine crocodile
		, 0	alligators	7,7,7,7	527, 75.510	3.33041103	CDS	5360100301	Crocodylidae	Crocodylus siamensis	Siamese crocodile
			ga.o.o				CNG	5360100302	Crocodylidae	Crocodylus novaequineae	New Guinea crocodile

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Division	Gre	oup of species	Code (O)	Code	Group of Species	CODE	CODE	FAMILY/ORDER	SCIENTIFIC NAME	FAO ENGLISH NAME
7 Miscellaneous				SEA 73.010	Crocodiles (cont'd)	-	-	Crocodylidae	Crocodylus spp.	Crocodiles
aquatic										
animals	76	Sea urchins	7601	SEA 76.010	Sea urchins	URC	69302004xx	Strongylocentrotidae	Strongylocentrotus spp.	Sea urchins nei
(cont'd)		and other		SEA 76.020	Sea cucumbers*	CUX	694xxxxxxx	Holothurioidea	-	Sea cucumbers nei
		echinoderms		SEA 76.021	Chalky cucumber	KUH	6940100201	Holothuriidae	Bohadschia marmorata	Chalky cucumber
				SEA 76.022	Leopard fish	KUW	6940100202	Holothuriidae	Bohadschia argus	Leopard fish
				SEA 76.023	Sand fish	HFC	6940100302	Holothuriidae	Holothuria scabra	Sand fish
				SEA 76.024	Black teatfish	HFN	6940100303	Holothuridae	Holothuria nobilis	Black teatfish
				SEA 76.025	Lollyfish	HFA	6940100304	Holothuridae	Holothuria atra	Lollyfish
				SEA 76.026	White teatfish	HFF	6940100305	Holothuridae	Holothuria fuscogilva	White teatfish
				SEA 76.027	Curryfish	JCV	6941400402	Stichopodidae	Stichopus variegatus	Curryfish
				SEA 76.028	Greenfish	JCC	6941400403	Stichopodidae	Stichopus chloronotus	Greenfish
				SEA 76.029	Seleka's sea cucumber	KUN	6941400405	Stichopodidae	Stichopus horrens	Selenka's sea cucumber
									· · · · · · · · · · · · · · · · · · ·	
	77	Miscellaneous	7701	SEA 77.010	Jellyfishes	JEL	61841007xx	Rhizostomidae	Rhopilema spp.	Jellyfishes
		aquatic		SEA 77.020	Aquatic invertebrates	INV	699xxxxxxx	-	Invertebrata	Aquatic invertebrates nei
		invertebrates			·					
Miscellaneous	81	Pearls,	8101	SEA 81.010	Mother-of-pearl	PTE	3160602301	Pteriidae	Pteria penguin	Penguin wing oyster
aquatic		mother-of-				-	-	Pteriidae	Pinctada spp.	Pearls
animal		Pearl, shells				OSH	31606006xx	Pteriidae	Ex Pinctada spp.	Pearl oyster shells nei
products			8102	SEA 81.020	Other shell	GSH	30705002xx	Turbinidae	Ex Turbo spp.	Turban shells nei
						MSH	399xxxxxxxx021	-	Ex Mollusca	Marine shells nei
	82	Corals	8201	SEA 82.010	Corals	CBL	619xxxxxxxx001	Non-Scleractinia	-	Soft corals nei
						CSS	619xxxxxxxx002	Scleractinia	-	Hard corals, madrepores nei
	83	Sponges	8301	SEA 83.010	Sponges	SPO	61501xxxxx	Spongidae	-	Sponges
Aquatic plants	91	Brown seaweeds	9101	SEA 91.010	Brown seaweeds	SWB	771xxxxxxx	Phaeophyceae	-	Brown seaweeds
	92	Red seaweeds	9201	SEA 91.020	Red seaweeds	EMC	7870501403	Solieriaceae	Eucheuma cottonii	Zanzibar weed
						EMI	7870501404	Solieriaceae	Eucheuma denticulatum	Spiny eucheuma
						EMA	7870500202	Solieriaceae	Kappaphycus alvarezii	Elkhorn sea moss
						GLS	78712004XX	Gracilariaceae	Gracilaria spp.	Gracilaria seaweeds
						SWR	787xxxxxxx	Rhodophyceae	-	Red seaweeds
	93	Green	9301	SEA 91.030	Green seaweeds	CAU	74105001xx	Caulerpaceae	Caulerpa spp.	Caulerpa seaweeds
		seaweeds				SWG	741xxxxxxx	Chlorophyceae	-	Green seaweeds
	94	Miscellaneous	9401	SEA 91.040	Misc. aquatic plant	APL	799xxxxxxx	Plantae aquaticae	-	Aquatic plants nei
1	l	aquatic plants	1	l			ĺ			

Remark: * Species group developed for reporting purpose in case country cannot identify individual species

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