# FISHERY STATISTICAL BULLETIN OF SOUTHEAST ASIA 2011





Southeast Asian Fisheries Development Center

© 2013	F1 1 D 1 10 1 (2-2-2-2)
	r Fisheries Development Center (SEAFDEC)
	asetsart Post Office, Bangkok 10903, Thailand ed. No part of this book may be reproduced or transmitted in any form or by any
	ic or mechanical, including photocopying, recording or by any information storage
	item, without permission in writing from the copywriter.
ia retirevai sys	terri, without permission in writing from the sopywhite.
SN 0857-748X	

## **FOREWORD**

The Resolution on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020 adopted in June 2011, stipulated the need to "strengthen knowledge/science-based development and management of fisheries through enhancing the national capacity in the collection and sharing of fisheries data and information". Guided by such proviso and considering relevant requirements in the Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2020 also adopted in June 2011, SEAFDEC has continued to implement relevant programs that include the compilation of fishery statistics for planning and management of fisheries in the Southeast Asian region. An activity under one such program is the annual publication of the Fishery Statistical Bulletin for the South China Sea Area, which SEAFDEC has sustained since 1976 until the present.

Through the compilation and publication of the fishery statistics of the Southeast Asian region, SEAFDEC hopes to be able to provide a general picture of the status and trend of the region's fisheries and aquaculture production on an annual basis, and also provide the readers with a glimpse of not only the region's significant contribution to the global food fish basket but also of the region's efforts to improve fisheries management for the sustainability of the fisheries sector. For example, while the fishery production of Southeast Asia in 2010 accounted for 18.8% of the global fishery production, in 2011 the region's contribution increased for 6.7% from that of 2010. This increase is mainly due to the increasing effort of the Southeast Asian countries to attain increased production by improving fisheries management and minimizing the impacts of fishing and culture operations on the health of the ecosystem. With this change in paradigm, SEAFDEC is sure to see a much more improved fishery production from the Southeast Asian region in the years to come. Although SEAFDEC produced in 2012 the 130-page Southeast Asian State of Fisheries and Aquaculture (SEASOFIA) but since it would not be practical to publish SEASOFIA on an annual basis, it was therefore agreed that in the interim, SEAFDEC would publish the annual Fishery Statistical Bulletin of Southeast Asia which would be used as one of the sources of information for the periodic publication of SEASOFIA.

While supporting the efforts of the countries to provide timely inputs for the Bulletin, SEAFDEC promotes the streamlined and harmonized standards and systems of compiling the necessary data. However, it appears that SEAFDEC has not completely succeeded in fully inculcating such standards in the region as a whole, since some form of assistance is still needed by certain countries to enable them to completely improve their systems. Organizations and agencies collaborating with SEAFDEC in this endeavour are therefore encouraged to provide the necessary support and assistance to such countries, whose inadequacies could be gleaned from this issue of the Bulletin. At any rate, SEAFDEC will continue to enhance the awareness of the countries in the region on the utilization of fishery information for improved fisheries planning and management, by compiling the fishery statistics and data of Southeast Asia and sustaining the publication of the Fishery Statistical of Southeast Asia on an annual basis.

Nevertheless, while recognizing that SEAFDEC would not be able to do the task of compiling the necessary information alone, it is spreading its wings of collaboration not only with national agencies responsible for the collection and compilation of fishery statistics in the Southeast Asian region but also with other organizations and agencies involved in the compilation of the said information. As in the past and present issues of the Bulletin, the concerned national agencies have provided the necessary data and information, and SEAFDEC hopes that such endeavour would be continued in the future. Specifically, SEAFDEC is very grateful to the staff of these agencies for their unrelenting effort in providing SEAFDEC with the necessary data and information for this 2011 Bulletin. SEAFDEC also looks forward to an enhanced "cooperation" in the future for better fishery statistics and data that will go into the succeeding issues of the Bulletin.

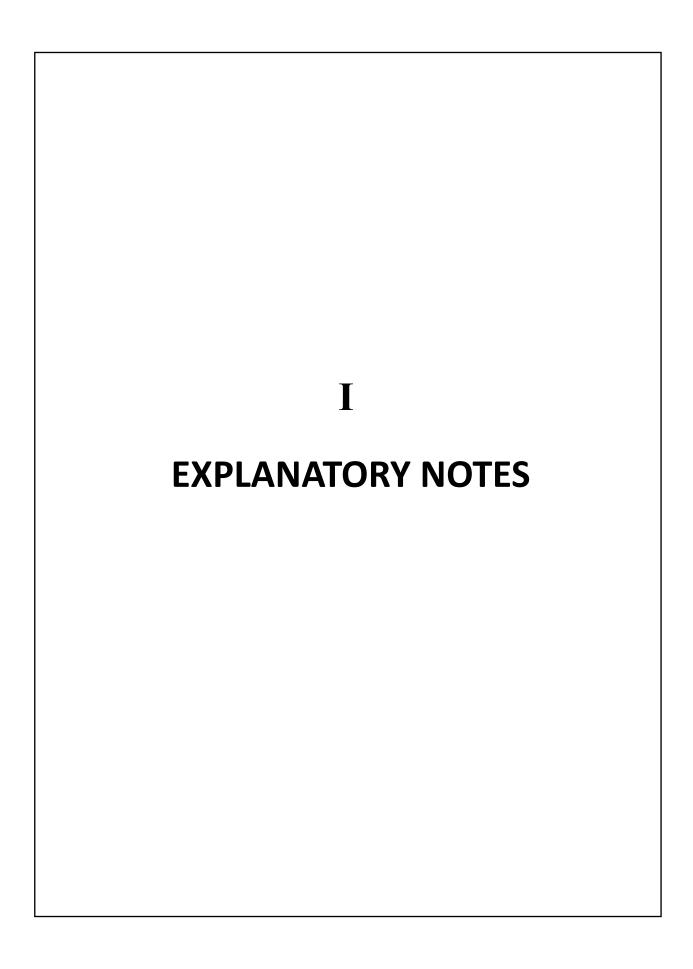
Chumnarn Pongsri Secretary-General Southeast Asian Fisheries Development Center

# **CONTENTS**

ı	EXP	LANATORY NOTES	
	1.	GENERAL NOTES	i
	1.2 1.3 1.4 1.5 <b>2.</b> 2.1 2.2	Data Resource	
		Statistics on Aquaculture  2.3.3 Statistics on Fish Price	
	APF	PENDICES	
	1. 2. 3. 4. 5.	Classification of Fishing Areas  Classification of Small-scale and Commercial Fisheries  List of Aquatic Animals and Plants  Classification of Fishing Gears  Classification of Fishing Boats  Classification of Fishers and Farmers	xiv xvi xviii xxi
II	SU	MMARY 2011	
	STA	TISTICAL SUMMARY	3
Ш	STA	TISTICAL TABLES 2011	
	1.	ANNUAL SERIES OF FISHERY PRODUCTION	19
	1.1	Total Production	19 19 19
	1.2	Marine Fishery Production	20 20 20

1 2	Inland Fishom	Draduction	21
1.3	· ·	Production	
		ntitye.	
	1.5.2 vara		
1.4	Aquaculture P	roduction	22
	1.4.1 In Quai	ntity	22
	1.4.2 In Value	e	22
2.	FISHERY PRO	DUCTION BY SUB-SECTOR	24
2.1	In Quantity		24
2.2	In Value		25
3.	MARINE CAP	TURE FISHERY STATISTICS	26
3.1	Number of Fis	hing Boats by Type and Tonnage	26
3.2	Number of Fis	hing Units by Size of Boat	28
	3.2.1	Brunei Darussalam	_
	3.2.2	Indonesia	29
	3.2.3	Malaysia	30
	3.2.4	Myanmar	31
	3.2.5	Singapore	32
	3.2.6	Thailand	
3.3	Marine Captu	re Fishery Production by Species and by Fishing Area	34
	3.3.1	In Quantity	34
	3.3.2	In Value	_
3.4	Capture Produ	uction by Type of Fishing Gear and by Species	72
	3.4.1	Brunei Darussalam	72
	3.4.2	Malaysia	78
	3.4.3	Myanmar	
	3.4.4	Singapore	88
4.	INLAND CAP	TURE FISHERY STATISTICS	90
4 1	Inland Cantur	e Fishery Production by Species and by Fishing Area	90
	4.1.1	In Quantity	90
	4.1.2	In Value	94
<u>4</u> 2	Inland Fishery	Production by Type of Water Bodies	98
-τ.∠	4.2.1	In Quantity	98
	4.2.2	In Value	98
	7.4.4	TUIVC	20

5.	AQUACULTU	RE STATISTICS	100
5.1	Aquaculture	Production by Species and by Fishing Area	100
	5.1.1	In Quantity	100
	5.1.2	In Value	106
5.2	Aquaculture	Production by Species of Ornamental Fishes	112
	5.2.1	In Quantity	112
	5.2.2	In Value	116
5.3	Seed Product	ion from Aquaculture	118
	5.3.1	Brunei Darussalam	118
	5.3.2	Indonesia	119
	5.3.3	Malaysia	120
	5.3.4	Myanmar	121
	5.3.5	Singapore	121
6.	PRICE OF FRE	SH FISH	122
6.1	Producer Pric	te for Capture Fishery Production by Species	122
7.	FISHERS		132
7.1	Number of Fi	shers by Working Status	132



#### I. EXPLANATORY NOTES

#### 1. GENERAL NOTES

#### 1.1 Data Sources

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.

## 1.2 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.

#### 1.3 Time Reference

The Fishery Statistical Bulletin of Southeast Asia has been 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, the latest data available may be given, provided that the year to which the data belongs indicated in the space provided.

#### 1.4 Unit of Measurement

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

- Fishery production statistics in quantity are reported in metric tons, except ornamental fish and reptiles which are reported in piece/number
- Fishery production statistics in value are reported in US\$ 1,000
- Fish prices are reported in US\$/kg

## 1.5 Standard Symbols and Abbreviations

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

... = Not available

– = Magnitude zero or not applicable

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

MT = Metric Tons

US\$ 1,000 = 1,000 dollars in U.S. currency

No. = Number Q = Quantity V = Value ij EXPLANATORY NOTES

## 2. NOTES ON STATISTICS

#### 2.1 Statistical Coverage

Fishery Statistical Bulletin of Southeast Asia covers the fishery statistics on Production; Fishing Units; Fishing Boats; Fishers; and Fish Price. Production (landings) covers fishes, crustaceans, mollusks, and other aquatic animals and plants taken for all purposes (capture fisheries and aquaculture) by all types and classes of fishing units and aquaculture activities operating in marine, brackishwater and freshwater areas, in appropriate geographical categories.

## 2.2 Geographical Coverage

The data also cover all production by commercial and small-scale fisheries and aquaculture activities in freshwater, brackishwater and marine water designated by FAO Fishing Area 57 (Indian Ocean, Eastern), 71 (Pacific, Western Central), 61 (Pacific, Northwest), and 04 (Asia, Inland Water). Countries and sub-areas to be used in marine fishery statistics are established in consistent with the FAO Fishing Areas (see detail description in *Appendix 1*).

# 2.3 Fishery Structure and Sub-sectors

In line with the structure of fisheries in the Southeast Asian region, the statistics are divided into two main sectors, *i.e.* Capture Fishery and Aquaculture. Capture means an economic activity to catch or collect aquatic organisms which grow naturally in public waters and which do not belong to the property of any person, whereas culture means an economic activity to rear the young aquatic organisms such as fry, fingerings, oyster seeds, etc., to commercial size. Unlike capture, aquatic organisms under culture operations belong to the property of a specific person or a group of specific persons who manage them until they grow to commercial size.

## 2.3.1 Statistics on Capture Fishery

With concerns in the different environment of fishery resources and other components of capture fishery, the statistics compiled under this section are classified into two sectors, namely Marine Capture Fishery and Inland Capture Fishery. Statistics on production or catch, fishing gears, fishing boats, fishing units, fishers, etc., should be collected and compiled under each sector.

#### 2.3.1.1 Marine Capture Fishery

#### a. Coverage and Definition

Marine capture fishery is divided into two sub-sectors: small-scale fishery (including subsistence artisanal/traditional fishery) and commercial fishery. As it is impossible to establish common definition of these two categories in the region, the national distinction between small-scale and commercial fisheries of countries in the region is given in *Appendix 2*. The data for marine capture fishery exclude sport fishing, recreation, and research.

#### b. Marine Capture Production

The statistics for marine production represent the statistics on catches and landings of marine and brackishwater species of aquatic organisms, killed, caught, trapped or collected for all commercial, industrial, and subsistence purposes. The statistics in terms of quantity will be used to assess the stock of the marine organisms, to disclose the size of a fishing industry as a whole, and to be used as index showing the status and trend of a fishing industry by annual series of fisheries industry in monetary terms to adequately compare the economic size of the fisheries industry with those of other industries.

#### **b.1** Unit of Measurement

## 1) Production in quantity

Production in quantity represents the weight equivalent of the landing. Production in quantity should be reported in metric tons, except those expressed in numbers or in kilograms. If production is reported in kilograms, this should be

EXPLANATORY NOTES iii

converted into metric tons estimated by rounding off to the nearest hundredths. The production of ornamental fish and reptiles should be reported in numbers.

There are many instances where the catches on board fishing vessels are gutted, filleted, salted, dried, etc., or reduced to meals, oil, etc. The data on the landing of such species and products require conversion by accurate yield rates (conversion factors) to establish the live weight equivalents (nominal catches) at the time of their capture.

#### 2) Production in value

Production in value represents the products' value equivalent of the landing (average monthly weighted value, where available). It is generally estimated by multiplying the quantity of production by the producers' price. In reporting production in value, the amount reported in the national currencies should be converted to US\$.

## **b.2 Statistics on Marine Capture Production**

# 1) Production by species

Marine capture production covers production from all kinds of commercial and small-scale fisheries broken down by species (at the species, genus, family or higher taxonomic levels) into statistical categories called species items.

The standard statistical list of marine species is developed in consistent with the 'International Standard Statistical Classification of Aquatic Animals and Plants' (ISSCAAP) with two-digit group code. Statistics on marine species items or group items or group should be reported by referring to the FAO English name, taxonomic code in 10 digits, interagency 3-alpha code, and national/local name. Please refer to *Appendix 3* for the ISSCAAP and the regional list of aquatic animals and plants.

## 2) Production by type of fishing gear

The production classified under commercial and small-scale fisheries, where possible, should be further classified into detailed types of fishing gear for each category.

To complete the statistics on production by type of fishing gear, the Regional Classification of Fishing Gear developed in consistent with the CWP-International Standard Statistical Classification of Fishing Gear (ISSCFG) is shown as *Appendix 4*.

# c. Fishing Boats

Fishing boats can also be called in various terms as fishing vessels, fishing fleets, or fishing crafts. Fishing boat means any vessel, boat, ship of other craft that is equipped and used for fishing or in support of such activity. Statistics on fishing boats will be used to clarify the amount of capital invested in a fishery corresponding to the size of fishing boat. Such statistics can also be used as inputs for the economic analysis and measure of the material input productivity of fishing industry, and as a rough indication of the fishing effort considering the size of the fishing boat.

## c.1 Coverage of Fishing Boats

The statistics should cover annual data of fishing boats in marine areas. All boats used in fishing, whether registered with the government or not, should be included.

# c.2 Classification of Fishing Boats

Based on the characteristics of marine capture fishery in the Southeast Asian region, one fishing boat can operate various types of fishing gear as well as catching many target species.

The regional classification of fishing boats is therefore developed separately from the Coordinating Working Party on Fishery Statistics (CWP) in order to present the specificity of the fisheries situation of the region. In compiling the

iv EXPLANATORY NOTES

statistics on fishing boats and fishing units for marine capture fisheries in the region, the Regional Classification of Fishing Boats by Type of Boats has been developed as shown in *Appendix 5*.

Tonnage is expressed uniformly in gross ton. When a unit other than gross tons is used to measure the size of the boat, this should be converted into gross tons. Although the method of measurement of the tonnage of fishing boats varies from country to country, statistics should be based on national measurement standards.

#### d. Fishing Units

Fishing unit means the smallest unit in 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.

A fishing boat may be counted as two or more fishing units on the same year if it uses different kinds of fishing gears in separate seasons. For instance, in cases where a fishing boat operates trawl fishing half a year and gill net fishing during the other half of the year, the fishing boat is regarded as two fishing units. Fishing units are generally counted by type of fishing gear. The statistics on fishing unit is mainly used to consider the limitation of the number of fishing units for fisheries management.

## d.1 Coverage of Fishing Units

The statistics should cover the annual data of fishing units operated in marine and coastal areas. Fishing units operating without boats or non-powered boats are excluded.

#### d.2 Classification of Fishing Units

Fishing units are classified by type and size of fishing boats as well as major types of fishing gear. In cases where a fishing unit operates more than one fishing boats such as the pair trawl and two-boat purse seine, the size is represented by the tonnage of the major single fishing boat from among the boats employed. The type of fishing gear is based on the national classifications. In order to facilitate reporting of the statistics on fishing units, please refer to *Appendix 4* for the details.

#### e. Fishers

#### e.1 Coverage of Fishers

The statistics on fishers are generally obtained from the Marine Fishery Census of the Member Countries. The statistics should cover all commercial and subsistence fishers operating in marine and brackishwater areas for catching and landing of all aquatic animals.

#### e.2 Classification of Fishers

Statistics on the number of fishers by sub-sectors of fisheries and working status should be based on the following two main categories: full-time fishers and part-time fishers. For the detailed classification of the fishers, please refer to *Appendix 6*.

- (a) Full-time fishers: fishers who spend all of their working time in fishing.
- (b) Part-time fishers: fishers who spend part of their working time in fishing.

## 2.3.1.2 Inland Capture Fishery

# a. Coverage and Definition

Inland Capture Fishery refers to any activity involving the catching or collection of aquatic organisms, which grow naturally in inland water bodies for economic, livelihoods and food security purposes. The statistics cover the annual data of commercial and subsistence operations for catching and collecting, and landing production of all aquatic animals in freshwater areas.

EXPLANATORY NOTES v

The statistics on inland capture fishery cover all productions and the people involves in fishing designated by FAO Fishing Area 04.

#### b. Inland Capture Production

The statistics for inland capture production present the catch of freshwater species of aquatic organisms that are killed, caught, trapped or collected for all commercial and subsistence purposes.

## b.1 Unit of Measurement

#### 1) Production in quantity

Production in quantity represents the weight equivalent of aquatic organisms caught and collected in inland water bodies. Production in quantity should be reported in metric tons, except those expressed in numbers. If production is reported in kilograms, this should be converted into metric tons estimated by rounding off to the nearest hundredths.

## 2) Production in value

Production in value represents an estimation of the value equivalent at the first point of sale, indicating seasonal variations in the average total value where available, with estimations including aquatic products caught and collected for subsistence and household purposes. In reporting production in value, the amount reported in national currencies should be converted to US\$.

## **b.2 Statistics on Inland Capture Production**

#### 1) Production by species

Inland capture production covers all aquatic animals and plants in inland waters broken down by species (at the species, genus, family or higher taxonomic levels) into statistical categories called species items. The standard statistical list of freshwater species is developed in consistent with the 'International Standard Statistical Classification of Aquatic Animals and Plants' (ISSCAAP). The statistics of freshwater species items or groups should be reported using the same format as that for marine species. The regional standard statistical list of aquatic species is given in *Appendix 3*.

# 2) Production by type of water bodies

Statistics on production from inland capture fishery should be presented in accordance with the following types of 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) Floodplains/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

# 3) Production by type of fisheries

Inland fishery is quite diverse in its involvement of different groups of people, the scale of operation and the types of gear/boat used, as well as in its seasonal variation. As available records would allow, the statistics under the Framework should try to reflect such variations.

- (a) Categories of scale:
  - Commercial
  - Family/small-scale
  - · Household occasional fishing

vi EXPLANATORY NOTES

- (b) Categories of application/seasonality/licensing:
  - Fishing lots/Leasable fisheries and other types of licensed fisheries and/or areas for (commercial) fishing
  - Dai fisheries (term used to exemplify the national/regional importance of specific type of fisheries)
  - Community fisheries and other rights/based fisheries at village level
  - "On farm" fishing, fishing in rice fields, etc.
- (c) Categories of equipment/gear/boat:
  - Set nets/traps
  - Gear operated from boats
  - Mobile gear/hand line/hooks/etc.

#### c. Fishers

## c.1 Coverage of Fishers

The statistics on fishers for inland capture fishery are generally obtained from the respective National Fishery Census (or Agricultural Census). Statistics on fishers cover fishers engaged in inland capture fishery while persons operate fishing in marine area as well as any type of aquaculture should be excluded.

#### c.2 Classification of Fishers

Fishers in this section are mostly rural people who, in one way or another, seasonally or the whole year, full-time or part-time, are involved in activities related to the catch and collection of aquatic organisms in inland water bodies. Some of the information/statistics related to household occasional fishing could also be found in other sources of statistics that are available at fisheries agencies.

As far as possible, the relative involvement of people in fishing should be reported to reflect the importance of inland fisheries to the countries, whether nationally, locally, seasonally as well as for rural livelihood in general. Fishers/people involved in fishing could be classified into:

- (a) Full-time fishers
- (b) Part-time fishers (including seasonally full-time fishers)
- (c) Occasional fishing by household members (which could be a daily exercise)

# 2.3.2 Statistics on Aquaculture

# a. Coverage and Definition

Aquaculture means the farming of aquatic organisms including fish, mollusks, crustaceans, echinoderms, and aquatic plants. Farming implies some forms of intervention in the rearing process to enhance production, such as regular stocking, feeding and protection from predators. Farming also implies individual or cooperate ownership of or rights resulting from contractual arrangements to the stock being cultivated primarily for livelihood and business activities. For statistics purposes, aquatic organisms harvested by an individual or corporation, which has owned them throughout their rearing period, contribute to aquaculture; whereas aquatic organisms exploited by the public as a common property resources, with or without appropriate licenses, are the capture fisheries.

Considering the different ecology and resources in aquaculture, the statistics on aquaculture could be classified into three sub-sectors, namely: mariculture, brackishwater culture, and freshwater culture. The distinction between these categories should be based on culture environment where the aquatic organism is farmed or cultivated. Considering aquaculture production, some aquatics species can be cultured in various environments, *e.g.* Java barb, tilapia, milkfish, etc., its production then could be reported in more than one sub-sector.

EXPLANATORY NOTES vii

#### 1) Mariculture

The farming or growing-out of aquatic animals/plants takes place in full seawater. This includes the culture of groupers, milkfish and other marine fishes in sea cages offshore or in coral reef coves; abalone and giant clams in coral reefs; seaweeds in longlines along the sea coasts; oysters in longlines.

#### 2) Brackishwater culture

The farming or growing-out of aquatic animals/plants takes place in estuaries, river mouths, mangrove lagoons or in ponds with seawater. This includes culture of groupers and other fishes in cages; milkfish and penaeid shrimps in ponds; mud crab in pens in mangroves; oysters, mussels and other bivalves in estuaries.

#### 3) Freshwater culture

The farming or growing-out of aquatic animals/plants takes place in lakes, reservoirs, rivers, rice fields, small farm impoundments or in freshwater ponds. This includes culture of carps, tilapias and other freshwater fish species in reservoirs, lake cages, and ponds; catfishes in ponds; freshwater prawns in ponds.

## b. Aquaculture Production

#### b.1 Unit of Measurement

#### 1) Production in quantity

Production in quantity represents the weight at farm gate. Production in quantity should be reported in metric tons, except those expressed in numbers. If production is reported in kilograms, this should be converted into metric tons estimated by rounding off to the nearest hundredths.

## 2) Production in value

Production in value represents the producers' price at farm gate. It is generally estimated by multiplying the quantity of production by the farm gate price by species. In reporting production in value, the amount reported in the national currencies should be converted to US\$.

## b.2 Statistics on Aquaculture Production

Aquaculture production means the output of farmed aquatic organisms either for final consumption or as raw materials for transformation into other products or for trade. It includes commodities quantified by numbers rather than by weight such as ornamental fishes and hatchery outputs. The statistics on production could be classified into the following categories:

#### 1) Production by culture environment

The statistics on production should be based on the culture environment where the aquatic organism was cultivated, such as mariculture, brackishwater culture and freshwater culture. One species can be reported in more than one type of environment depending on its tolerance and the culture status in each country.

## 2) Production by species

Production from aquaculture could be broken down by species from all types of culture environments in the Southeast Asian region. The list of species is provided in *Appendix 3*.

## 3) Production by methods of culture

To facilitate aquaculture management, the production statistics should be reported by methods of culture such as ponds, pens, paddy field or paddy cum fish, etc. The definition of each method is described below:

- (a) Ponds and tanks: artificial units of varying sizes constructed above or below ground level capable of holding and interchanging water
- (b) Pens: water areas confined by net, mesh and other barriers allowing uncontrolled water column between substrate and surface; where pens and enclosures will generally enclose a relatively large volume of water

viii EXPLANATORY NOTES

(c) Cages: open or covered enclosed structures constructed with net, mesh, or any porous material allowing natural water interchange. These structures may be floated, suspended, or fixed to the substrate but still permitting water interchange from below

- (d) Paddy fields: paddy fields used for rice and aquatic organisms; rearing them in rice paddies to any marketable size
- (e) Others: methods other than the above; rafts, ropes, stakes are included in this category

#### c. Artificial Seed Production

The statistics on artificial seed production is presented in order to assess the recruitment in aquaculture and facilitate management purpose. Production could be reported by species in terms of the number of larvae, fingerlings, juveniles, etc., used that focuses on two main objectives, *i.e.* for wild stock enhancement and aquaculture practices. As part of wild stock enhancement, production covers both the number released to a controlled environment and to the wild; whereas production for aquaculture practices covers seed stocks for mariculture, brackishwater culture and freshwater culture.

#### d. Aquaculture Unit

Aquaculture unit refers to a management unit, which operates aquaculture in marine, brackishwater and freshwater areas. The term covers both economic units (companies) and households conducting activities in culturing aquatic organisms. In Southeast Asian countries, the use of this term varies from country to country, *e.g.* fishing establishments in Indonesia, farms in Singapore and Thailand.

#### e. Area under Culture

Area under culture can be referred to as the net area (water surface area) and gross area. Net area refers to the areas of the culture facilities but limited to the water surface area, whereas gross area refers to the culture facilities, including not only the water surface area but also the area of the dike surrounding the water area. For ponds and cages, the area under culture should be reported both in net area and gross area, while for the other culture methods, this could be reported only as net area. The number of culture facilities should also be reported in order to facilitate aquaculture management.

#### f. Fish Farmers

Fish farmers (or aquaculture workers) under this item, refer to persons who are engaged in aquaculture activities such as people working in farms, hatcheries, and employed in shellfish culture operations, maintenance of aquaculture facilities, water supply, feeding, etc. As the number of fish farmers engaged in aquaculture often varies according to the season such as harvesting or construction of the aquaculture facilities, only the fish farmers who are engaged full-time in aquaculture are counted in reporting the statistics on the number of fish farmers.

## 2.3.3 Statistics on Fish Price

#### a. Coverage

Statistics on fish price cover aquatic organisms in the form of fresh fish only, which includes marine and freshwater species, but excluding processed fish.

## b. Definition of Price

Statistics on price refer to products' price, considered as average weighted price which is realized at wholesale markets or in landing centers where producers sell their catches (applicable in some countries in the region). The price is determined (there) by means of auction, negotiation between producers and wholesalers and middlemen, etc., which can also be used to estimate the total production in value.

## c. Unit of Price

The products' price has been reported in US\$ per kilogram of fresh fish by species. The figure includes two digits after the decimal point by rounding off to the nearest hundredths.

EXPLANATORY NOTES ix

Appendix 1

#### **CLASSIFICATION OF FISHING 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. They are standardized in accordance with the FAO Major Fishing Areas, the boundaries of which were determined in consultation with international fishery agencies taking into account 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 inter-governmental 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 subarea that is recognized for the collection of catch and effort data for the Southeast Asian region. The data presented by Lao PDR, which is the sole landlocked country in the region, are therefore reported under Area 04 only.

## 2. Marine Fishing Areas

The marine fishing areas of the Southeast Asian countries are identified under 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-area
a) Brunei Darussalam		71	71i
b) Cambodia		71	71b
c) Indonesia		57,71	
	West Sumatra	57	57e
	South Java	57	57e
	Malacca Strait	57,71	57d, 71k
	East Sumatra	71	71k
	North Java	71	71k
	Bali-Nusa Tenggara	57	57f, 71k
	South-west Kalimantan	71	71k
	East Kalimantan	71	71k
	South Sulawesi	71	71k
	North Sulawesi	71	71k
	Maluku-Papua	71	71k

x EXPLANATORY NOTES

Countries Sub-areas for marine fishery statistics		FAO Marine Fishing Area	SEAFDEC Sub-area
d) Malaysia			
	West Coast of Peninsula Malaysia	57	57c
	East Coast of Peninsula Malaysia	71	71e
	Sarawak	71	71f
	Sabah (including Labuan)	71	71g
e) Myanmar		57	57a
f) Philippines		71	71j
	Luzon	71	71j
	Visayas	71	71j
	Mindanao	71	71j
g) Singapore		71	71h
h) Thailand		57,71	
	Gulf of Thailand	71	71a
	Indian Ocean	57	57b
i) Vietnam		61,71	
	North Vietnam	61	61a
	Central Vietnam	61	61b
	Southwest Vietnam	71	71c
	Southeast Vietnam	71	71d

## Area 57 (Indian Ocean, Eastern)

Under fishing area 57, 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.

To facilitate the reporting fishery statistics by each country, the fishing area in the Southeast Asian region can be divided into 6 sub-areas under which correspond to the existing EEZs of Myanmar, Thailand, Malaysia and Indonesia. The sub-areas under area 57 are as follow:

Sub-area 57a: Marine fishing area of Myanmar

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

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

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

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

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

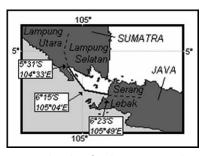
EXPLANATORY NOTES xi



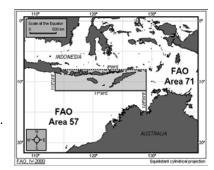
Sub-areas of the fishing area 57, Indian Ocean, Eastern

## Boundary between Area 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 longitude. The boundary is running along a rhomb 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 rhomb 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.
- 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 between Sumatra and Java



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

xii EXPLANATORY NOTES

## Area 71 (Pacific, Western Central)

Under fishing area 71, marine fishery statistics such as production, species, fishing gears, fishing vessels, 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 fishing area 71, namely Brunei Darussalam, Cambodia, Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam. To facilitate reporting fishery statistics by each country, the fishing area can be divided into 11 sub-areas, corresponding to the existing EEZ of these countries. The sub-areas under area 71 are as follows:

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

Sub-area 71b: Marine fishing area of Cambodia

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

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

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

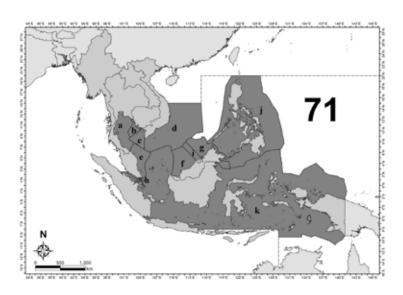
Sub-area 71h: Marine fishing area of Singapore

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

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

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

South-West Kalimantan, East Kalimantan, South Sulawesi, North Sulawesi, Maluku-Papua)



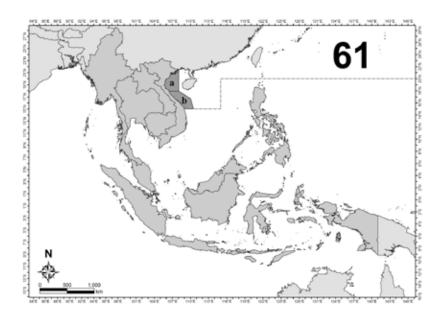
Sub-areas of the fishing area 71, Pacific, Western Central

EXPLANATORY NOTES xiii

## Area 61 (Pacific, Northwest)

Under 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 fishing area 61, which is Vietnam. The fishing area can be divided into 2 sub-areas as follows:

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



Sub-areas of the fishing area 61, Pacific, Northwest

Appendix 2

# **CLASSIFICATION OF SMALL-SCALE AND COMMERCIAL FISHERIES**

Due to different legal definitions used by each country, the following table shows the classification of small-scale and commercial fisheries of countries in the region.

Countries	Small-scale Fisheries	Commercial Fisheries
Brunei Darussalam	Small-scale/artisanal fisheries:	Trawler, seiner, long liner
	Operating in all zones but concentrating	a) <60 GT; <350 Hp operating in Zone 2
	in Zone 1 (0-3 nm)	b) 60.1-150 GT; 351-600 Hp operating in Zone 3
		c) 151-200 GT; 600-800 Hp operating in Zone 4
Cambodia	Coastal fisheries, small-scale fisheries	Commercial fisheries: more than 50 Hp
	with/without engine (from 5-50 Hp)	operating in Zone 2
	operating in Zone 1	
Indonesia	Fisheries that its operation without	a) Fisheries that its operation using outboard
	using boat, using non-power boat, using	motor size 5-30 GT or inboard motor size
	outboard motor size <5 GT, or inboard	5-30 GT
	motor size <5 GT	b) Fisheries that its operating using outboard
		motor size ≥ 30 GT
Lao PDR	-	-
Malaysia	Traditional fisheries: small-scale	Commercial fisheries: Medium and large-scale
	fisheries using traditional fishing gears	fisheries using commercial fishing gears such as
	(i.e. other than trawls and purse seines)	trawls and purse seines
	with vessel less than 40 GRT operating	a) With vessels less than 40 GRT operating in
	in all zones concentrating in Zone 1	Zone 2
		b) With vessels from 40-70 GRT operating in
		Zone 3
		c) With vessels above 70 GRT operating in
		Zone 4
Myanmar	Coastal fisheries: vessels of less than 30 ft	Industrial fisheries: vessels more than 30 ft or
	or using less than 12 Hp engine operating	using more than 12 Hp engines operating in
	in Zone 1	Zone 2
Philippines	Municipal fisheries: small-scale fisheries	Commercial fisheries:
	with vessels of less than 3 GT operating	a) Small-scale commercial fisheries: from 3.1-20
	in Zone 1 and 2	GT vessels operating in Zone 2; can also
		operate within 10.1-15 km (within Zone 1)
		if authority is granted by the concerned local
		government unit (LGU)
		b) Medium-scale commercial fisheries: from
		20.1-150 GT operating in Zone 2; can also
		operate within 10.1-15 km (within Zone 1)
		if authority is granted by the concerned local
		government unit (LGU)
		c) Large-scale commercial fisheries: more than
		150 GT operating in Zone 2
Singapore	Small-scale fisheries with vessels of less	Large-scale commercial fisheries: Inboard engine
	than 3 GT operating in Zone 1	less than 50 GT or 380 Hp operating in Zone 2
Thailand	Small-scale fisheries: vessels of less	Large-scale fisheries: vessels of more than 5 GT
	than 5 GT operating in Zone 1	operating in Zone 2
Vietnam	Small-scale fisheries: vessels with no Large-scale fisheries: vessels with engine m	
	engine and with engine but less than	than 40 Hp
	40 Hp	

EXPLANATORY NOTES xv

Fishing Zones of Countries in Southeast Asia:

Countries	Fishing Zone 1	Fishing Zone 2	Fishing Zone 3	Fishing Zone 4
Brunei Darussalam	From shore line to 3 nm	From 3 nm to 20 nm	From 20 nm to 45 nm	From 45 nm to EEZ limit
Cambodia	From shore line to 20 m depth	From 20 m depth to EEZ limit		
Indonesia	From shore line to 4 nm	From the outer limit of first fishing zone to 12 nm from shore	From the outer limit of second fishing zone to EEZ limit	
Malaysia	From shore line to 5 nm	From 5 nm to 12 nm	From 12 nm to 30 nm	From 30 nm to EEZ limit
Myanmar	From shore line to 5 nm in the northern area, 10 nm in the southern area	From outer limit of first fishing zone to EEZ limit		
Philippines	From shore line to 15 km	From 15 km to EEZ limit		
Singapore	From shore line to within Port Limits	From 12 nm to EEZ limit		
Thailand	From shore line to 12 nm	From 12 nm to EEZ limit		
Vietnam	From shore line to 30 m depth in Northern and Southern areas, to 50 m depth in Central area	From 30 to 50 m depth to the EEZ limit		

xvi EXPLANATORY NOTES

Appendix 3

## LIST OF AQUATIC ANIMALS AND PLANTS

For the statistics on production of capture fishery and aquaculture in the Southeast Asian region, broken down into species, the International Standard Statistical Classification of Aquatic Animals and Plants (ISSCAAP) developed by CWP will be used as basis to develop the Regional Standard Statistic List of Aquatic Species, which focused on the species available and distributed in the region.

For capture production, since some aquatic animals particularly diadromous species may be caught in both marine and inland waters, the statistics will be reported in two parts of capture fisheries. Regarding aquaculture production since some aquatic species can be cultured in more than one culture environment, production can then be reported based on where the species are cultured.

The ISSCAAP applied for the region is as follows:

Code	Group of Species
1	Freshwater fishes
11	Carps, barbels and other cyprinids
12	Tilapias and other cichilds
13	Miscellaneous freshwater fishes
2	Diadromous fishes
24	Shads
25	Miscellaneous diadromous fishes
3	Marine fishes
31	Flounders, halibuts, soles
33	Miscellaneous coastal fishes
34	Miscellaneous demersal fishes
35	Herring, sardines, anchovies
36	Tunas, bonitos, billfishes
37	Miscellaneous pelagic fishes
38	Sharks, rays, chimaeras
39	Marine fishes not identified
4	Crustaceans
41	Freshwater crustaceans
42	Crabs, sea-spiders
43	Lobsters, spiny-rock lobsters
45	Shrimps, prawns
47	Miscellaneous marine crustaceans
5	Mollusks
51	Freshwater mollusks
52	Abalones, winkles, conch
53	Oysters
54	Mussels
55	Scallops, pectens
56	Squids, cuttlefishes, octopuses
57	Miscellaneous marine mollusks

EXPLANATORY NOTES xvii

7	Miscellaneous aquatic animals
71	Frogs and other amphibians
72	Turtles
73	Crocodiles and alligators
76	Sea-urchins and other echinoderms
77	Miscellaneous aquatic invertebrates
8	Miscellaneous aquatic animal products
81	Pearls, mother-of pearl, shells
82	Corals
83	Sponges
9	Aquatic plants
91	Brown seaweeds
92	Red seaweeds
93	Green seaweeds
94	Miscellaneous aquatic plants

xviii EXPLANATORY NOTES

Appendix 4

## **CLASSIFICATION OF FISHING GEARS**

For the statistics on fishing units and marine capture production, brokendown into types of fishing gear, the classification of fishing gears should be used as follows:

Major Group	Minor Group	Standard Abbreviation	ISSCFG Code
1.Purse seine		PS	01.1.0
	1.1 Anchovy purse seine	-	-
	1.2 Fish purse seine	-	-
2.Seine Net		SX	02.9.0
	2.1 Boat seine	SV	02.2.0
	2.2 Beach seine	SB	02.1.0
3.Trawl		TX	03.9.0
	3.1 Beam trawl	TBB	03.1.1
	3.2 Otter board trawl	OT	03.4.9
	3.3 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
	6.1 Stationary trap	-	-
	6.2 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

## **Types of Fishing Gears and Definitions**

## 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, *i.e.*: a) one boat purse seine; b) two-boat purse seine; and c) surrounding net without a purse line. However, in term of fishery statistics, no countries in the region collect the data in such individual groups. Thus, purse seine is the only gear of surrounding net which collect data without detail in one or two-boat operations. However, countries in the region agreed to separately report production from: a) Anchovies purse seine; and b) Fish purse seine.

## 2. Seine net

A bag shaped net with two wings, normally; the wings are larger than those of trawls 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.

EXPLANATORY NOTES xix

#### 2.1 Boat seine

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 is also included herein.

#### 2.2 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 angle to the seashore and the direction of the net setting turns gradually towards the shore. After setting all the net, the towing line of the wing is laid out and the boat runs toward the shore providing 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 to catch the 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 under this group. The trawl is also sub-divided into three minor groups: a) beam trawl; b) otter board trawl; and c) pair trawl.

#### 3.1 Beam trawl

The main feature of this trawl is a beam, mostly made of iron. Its purpose is to spread the netting. Sometimes 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 principle catch of beam trawl are shrimps, therefore the mesh size is relatively small. The mesh size of beam trawl also depends on the target species.

## 3.2 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 the fish in the net's path down to the cod-end.

## 3.3 Pair trawl

Pair trawl means this 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 has been simplified, the wrap is connected directly to the sweep lines, the other is joined to a triangular iron frame at the end of Gridles from each wing of the net.

## 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 then 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 nets and not in the mesh where a combination of different types of nets are used.

#### 6. Tran

Trap referred to a gear that is set or stationed in the water for a certain period, regardless of the kind of materials used of their construction. The fish when are naturally confined in a collecting unit from which escape is prevented

xx EXPLANATORY NOTES

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.

## 6.1 Stationary trap

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

## 6.2 Portable trap

Trap is portable, designed in form of cages or basket. It can be made of 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 operated 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 seaweeds, regardless of the type of materials used for their construction. While 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. Others

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.

EXPLANATORY NOTES xxi

# Appendix 5

# **CLASSIFICATION OF FISHING BOATS**

To compile the statistics on the fishing units considering the existing fishing operations in the region, the Regional Classification of Fishing Boats by Type of Boats is referred to provide figures of the fishing vessel as follows:

Boat Type		Size of Boat
First level	Second level	Size of Boat
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

xxii EXPLANATORY NOTES

Appendix 6

# **CLASSIFICATION OF FISHERS AND FARMERS**

To compile statistics on the number of fishers by sub-sectors of fisheries and working status, the classification of fishers and farmers will be used as follows:

Main Category	Working Area	Working Status
1.Fishers (engaged in fisheries)	1.1 Marine capture fisheries	Full-time fishers
		Part-time fishers
	1.2 Inland capture fisheries	Full-time fishers
		Part-time fishers
		Occasional fishing by household members
2.Farmers (engaged in aquaculture)	2.1 Mariculture	
	2.2 Brackishwater culture	
	2.3 Freshwater culture	

#### STATISTICS SUMMARY

## AN OVERVIEW OF THE FISHERY SECTOR OF SOUTHEAST ASIA IN 2011

Fisheries and aquaculture products are globally important as primary sources of protein for many peoples in the world, most especially those in the Southeast Asian region. The Asian countries are the highest producers of fisheries and aquaculture products. In this publication, SEAFDEC provides a glimpse of the contribution of the Southeast Asian region's fisheries and aquaculture production to the world's food fish basket, through available data and statistics. Although 11 countries comprise the Southeast Asian region, namely: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Timor-Leste, Thailand, and Vietnam, the scenario depicted in this publication covers only the ten Southeast Asian countries in view of the unavailability of fishery statistics and information from Timor-Leste.

#### I. TOTAL FISHERY PRODUCTION OF SOUTHEAST ASIA

Worldwide, the trend of fishery production from both capture fisheries and aquaculture (**Table 1**) had been steadily increasing from 2007 to 2010 at an average of 2.3% but from 2010 to 2011, the annual increase was more than doubled at 5.7% with the Americas providing the highest annual increase followed by the Southeast Asian countries. This situation suggests that the initiatives of many countries in promoting the sustainable development of fisheries have started to gather tangible results. While Asia (including Southeast Asia) had been contributing considerably to the increasing world's fishery production more particularly during the past 5 years, in 2011 Asia's fishery production accounted for about 70.4% of the total global production, the highest so far. This feat actually reflects the efforts of Asian countries to adopt responsible fishing practices and promote sustainable management of their respective fisheries sector. Meanwhile, the contribution of the ten Southeast Asian countries to the world's total fishery production in 2011 was about 18.8%, an increase of 6.7% from that of 2010.

Table 1. Fishery production by continent from 2007 to 2011 (million MT)

	2007	2008	2009	2010	2011
World*	156.8	160.0	164.1	168.1	178.3
Africa	8.1	8.4	8.5	9.1	9.2
America	25.1	24.9	24.1	20.6	26.0
Asia**	80.7	82.5	85.1	89.0	92.0
Southeast Asia***	25.3	27.2	28.9	31.4	33.5
Europe	16.0	15.6	16.1	16.6	16.2
Oceania	1.6	1.4	1.4	1.4	1.4

<sup>\*</sup> Source of main data: FAO FishStat Plus-Universal Software for Fishery Statistical Time Series

Specifically, the total fishery production of the Southeast Asian region (**Table 2**) had continuously increased from 2007 to 2011 not only in terms of volume but also in value. The annual average increase from 2007 to 2011 in volume was 6.8% while in terms of value the increase was 13.4%. This means that in addition to increasing the volume, most of the commodities harvested must be of high value. Indonesia reported the highest fishery production in 2011 in terms of volume accounting for about 40.7% of the total fishery production of Southeast Asia, followed by Vietnam contributing about 16.2% and the Philippines at 14.8%. Myanmar ranked next accounting for 12.4%, Thailand by 8.6%, Malaysia by 5.0%, and Cambodia by 1.9%. Lao PDR, Singapore and Brunei Darussalam contributed the least volume to

<sup>\*\*</sup> Excludes Southeast Asia

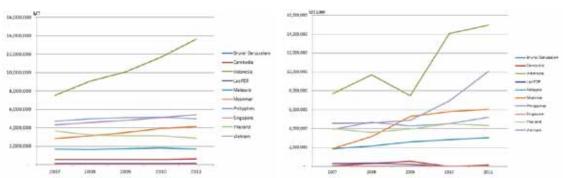
<sup>\*\*\*</sup> Source: Fishery Statistical Bulletin of Southeast Asia (SEAFDEC, 2010)

the fishery production of Southeast Asia in 2011. In terms of value, Indonesia also led the countries of Southeast Asia accounting for about 34.2% of the total value of the region's fishery production with Vietnam emerging second in terms of value contributing about 23.0%. Meanwhile, Myanmar which came in fourth in terms of volume ranked third in terms of value contributing about 13.8%, and the Philippines which ranked third in terms of production volume came in fourth in terms of value accounting for 11.8%. The trend of the fishery production of the Southeast Asian countries in 2007-2011 is shown in **Fig. 1**.

Table 2. Total fishery production of Southeast Asia (in quantity and value), 2007-2011

<b>Total Fishery Production</b>	2007	2008	2009	2010	2011
Quantity (MT)	25,302,870	27,207,826	28,917,096	31,438,435	33,487,689
Value (US\$ 1,000)	24,234,354	28,585,816	29,215,311	38,744,163	43,782,867

Fig. 1 Fishery production of the Southeast Asian countries in 2007-2011 (left in quantity; right in value)

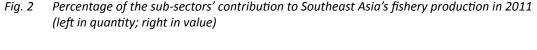


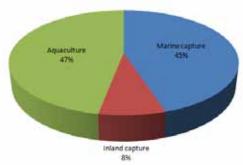
Fishery production of Southeast Asia comes from three sub-sectors, namely: marine capture fishery, inland capture fishery, and aquaculture. **Table 3** which shows the total fishery production of the region by sub-sector in 2011 indicates that the largest portion of the volume of production was derived from aquaculture accounting for approximately 47.0% followed by marine capture fishery of about 45.0% and inland capture fishery at 8.0%. It is a little different for the production value, where marine capture fishery accounted for 48.0%, aquaculture by 45.0%, and inland capture fishery by 7.0% (**Fig. 2**). While inland capture contributed the least volume and value to the region's total fishery production, but the value per unit quantity of its production at US\$ 1,103/MT came very close after that of aquaculture (US\$ 1,250/MT). This could imply that the global market must have already recognized the value of aquatic products harvested through inland capture fisheries, and is now patronizing such products.

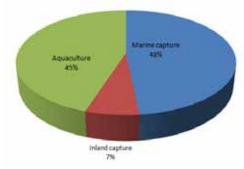
Table 3. Fishery production (in quantity and value) of Southeast Asia in 2011

Sub-sector	Quantity (MT)	Value (US\$ 1,000)	Value/Quantity (US\$/MT)
Marine capture fishery	15,095,450	21,178,765	1,403
Inland capture fishery	2,641,094	2,914,402	1,103
Aquaculture	15,751,145	19,689,700	1,250
Total	33,487,689	43,782,867*	

<sup>\*</sup> Excluded data from Cambodia, Lao PDR and Vietnam







## II. MARINE CAPTURE FISHERY PRODUCTION IN SOUTHEAST ASIA

As shown in **Table 4**, the region's production from marine capture fishery had been generally increasing from 2007 until 2011, although in terms of volume the annual average increase was minimal at 1.7% compared to 14.0% average increase in terms of value. This is in spite of the drop in production value in 2009 which must have been influenced by the steep dive of the production value of Indonesia. However, the total production value recovered in 2010 escalating by about 35.0%, which again must have been affected by the considerable increase in production value of Indonesia.

Table 4. Marine capture fishery production of Southeast Asia (in quantity and value), 2007-2011

<b>Marine Fishery Production</b>	2007	2008	2009	2010	2011
Quantity (MT)	14,056,983	13,814,368	14,140,387	14,874,445	15,095,450
Value (US\$ 1,000)	10,422,912	12,338,215	10,416,661	15,898,768	21,178,765

In 2011, Indonesia remained the largest fish producer contributing a high 35.3% to the region's total production volume from marine capture fisheries, followed by Vietnam accounting for 15.2%, Philippines (14.4%), Myanmar (14.3%), Thailand (10.8%), and Malaysia (9.1%). In terms of value, Indonesia still led the bunch of producing countries accounting for about 33.5% of the region's total production value from marine capture fisheries. Vietnam came next providing 17.9% then followed by Myanmar (16.9%), Philippines (14.2%), Malaysia (10.7%), and Thailand (6.7%). Cambodia did not provide any data on the value of its production from marine capture fisheries. A picture of the region's production from marine capture fisheries, in terms of volume in 2011, could be gleaned from **Fig. 3**.

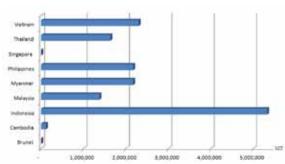


Fig. 3 Marine capture fishery production of Southeast Asia in 2011 indicating the top producing countries

By aggregating the production from marine capture fisheries by major commodity groups, it can be observed that marine fishes provided the highest production in 2011 (**Table 5**) accounting for about 87.5% while the mollusk and crustacean groups contributed 7.4% and 4.0%, respectively. Except for the crustaceans group, production of marine fishes and mollusks in 2011 had been increasing compared with that of 2010 by about 14.0% and 54.0%, respectively, while the crustacean group decreased by about 3.0% compared with the corresponding production volume in 2010.

Table 5. Production of the major commodity groups from marine capture fishery in Southeast Asia

	2007	2008	2009	2010	2011
Marine fishes	12,396,854	12,510,689	12,509,592	11,304,365	13,212,957
Crustaceans	787,943	738,780	715,624	615,705	599,454
Mollusks	841,372	524,547	490,778	516,264	1,114,730
Total marine capture fishery production (MT)	14,056,985	13,814,368	14,140,387	14,874,445	15,095,450

A comparison of the volume of the total fisheries production in 2011 with that of 2010 indicated that increase in production of the marine fishes group could have been influenced by various factors that include: Indonesia's increased production of various major commodities such as scad nei (*Decapterus* spp.) in fishing area 57¹ and 71², skipjack tuna (in 57 and 71), the stolephorus anchovies (in 57 and 71), short mackerel (*Rastrelliger brachysoma*), and frigate tuna in fishing area 57, and yellowfin tuna, goldstriped sardinella, Indian mackerel and marine fish nei in fishing area 71; Thailand's production of major marine fishes that also increased considerably, especially for *Rastrelliger* spp. and anchovies nei in fishing areas 57 and 71; and the increased production of marine fishes nei in Myanmar and Vietnam (fishing area 57).

Moreover, the decrease in production of major crustacean group in 2011 compared with that of 2010 could have been brought about by decreases in the production of the blue swimming crab of Indonesia in fishing area 57 and 71, *Scylla serrata* production of Thailand in fishing area 71, banana prawn (*Penaeus merguiensis*) production of Indonesia and Thailand (in 71), and *Penaeus monodon* production of Indonesia and Thailand in fishing areas 57 and 71. In addition, increased production of the mollusks group in 2011 from that of 2010 could have been brought about by the production of other bivalves in Vietnam (fishing area 71) and blood cockle in Indonesia (fishing area 57).

Table 6. Ten major marine species caught in the region in 2011 (left in quantity; right in value)

Common name	Quantity (MT)	Ratio (%)	Common name	Value (US\$ 1,000)	Ratio (%)	Value <sup>3</sup> per MT
Misc. fishes	5,390,438	35.71	Misc. fishes	4,362,666	20.60	809
Scad nei	652,203	4.32	Skipjack tuna	708,952	3.35	1,230
Bivalvia (clams nei)	588,979	3.90	Scad nei	640,899	3.03	983
Skipjack tuna	576,151	3.82	Common squids	552,221	2.61	2,251
Sardinellas nei	434,554	2.88	Yellowfin tuna	532,221	2.51	1,773
Short mackerel	348,039	2.31	Short mackerel	477,074	2.25	1,370
Other rastrelliger	303,076	2.01	Stolephorus anchovies	455,181	2.15	1,519
Yellowfin tuna	300,100	1.99	Other rastrelliger	449,872	2.12	1,484
Stolephorus anchovies	299,663	1.99	Banana prawn	337,522	1.59	3,563
Frigate tuna	279,572	1.85	Frigate tuna	336,669	1.59	1,204

<sup>&</sup>lt;sup>1</sup>Fishing area 57 covers the marine fishing areas of Myanmar, Thailand (Indian Ocean), Malaysia (West Coast of Peninsula Malaysia), and Indonesia (Malacca Striat, West Sumatra and South Java, Bali-Nusa Tenggara)

<sup>&</sup>lt;sup>2</sup>Fishing area 71 covers the marine fishing areas of Thailand (Gulf of Thailand), Cambodia, Vietnam (Southwest and Southest), Malaysia (East Coast of Peninsula Malaysia, Sabah, Sarawak), Singapore, Brunei Darussalam, Philippines (Luzon, Visayas, Mindanao), and Indonesia (East Sumatra, North Java, Bali-Nusa Tenggara, South-West Kalimantan, East Kalimantan, South Sulawesi, North Sulawesi, Maluku-Papua)

<sup>&</sup>lt;sup>3</sup> Value in US\$ per metric ton of production

**Table 6** shows the top ten commodities that provided sizeable contributions to Southeast Asia's total production from marine capture fisheries (by quantity and value) in 2011. While miscellaneous marine fishes contributed the highest volume of about 35.7%, the same commodity group also accounted for the highest value (20.6%). Meanwhile, scads nei which contributed about 4.3% to the total production volume was ranked the second highest producer, but was ranked as the third highest producer in terms of value, accounting for about 3.0% of the total production value.

In terms of value per metric ton of production, the data in Table 6 also suggest that the value of banana prawn is valued the highest among the commodities harvested through marine capture fisheries at US\$ 3,563/MT followed by common squids nei at US\$ 2,251/MT, yellowfin tuna at US\$ 1,773/MT, stolephorus anchovies at US\$1,519/MT, and short mackerel at US\$1,370/MT. The miscellaneous marine fishes group which contributed the highest volume in 2011 was valued the lowest at US\$ 809/MT, while scads nei which provided the second highest production in terms of volume was valued second from the lowest at US\$ 983/MT. This implies that these two groups must have harvested low-value fishes which could even possibly include trash fishes.

#### III. INLAND CAPTURE FISHERY PRODUCTION IN SOUTHEAST ASIA

Capture fishery production from inland waters has been generally increasing and its growth from 2007 to 2011 had been remarkable although it slightly declined in 2010. The region's total production from inland capture fishery in 2011 was 2,641,094 MT accounting for about 8.0% of the region's total fishery production. However, it should be recognized that compilation and reporting of production from inland capture fishery had been particularly weak and need to be improved, and the data reported so far, were found to be insufficient in terms of quantity and species composition. Moreover, in the real situation, catch of rural community members comprising the main users of the inland resources, are consumed locally and thus, are not usually reported in local or national statistics. Accordingly, figures on the total catch from inland capture fisheries provided in this publication could be considered as indicative only.

While eight countries have been reporting their respective data on production from inland capture fishery, only five countries reported the corresponding values of such production. Thus, the actual regional production trend of the inland capture fishery sector could not be established as of the moment. As the consistent top producer, Myanmar maintains stable inland catches from 2007 to 2011. The country's catch from inland capture fishery accounted for 34.9% of the country's total production from capture fishery, 28.0% of the country's total fisheries production, and 3.4% of the region's total fisheries production (**Table 7**).

Table 7. Contribution	of inland capture	fishery to total fish	nery production in 2011
-----------------------	-------------------	-----------------------	-------------------------

Country	Inland capture production (MT)	Total capture production (MT)	% of inland capture production to total capture production	Total fishery production (MT)	% of inland capture fishery production to total fishery production
Brunei Darussalam		2,154	-	2,447	-
Cambodia	445,000	559,695	79.51	1,119,390	39.75
Indonesia	368,542	5,697,179	6.47	13,626,141	2.70
Lao PDR	34,000	34,000	100	129,600	26.23
Malaysia	5,695	1,378,800	0.41	1,665,842	0.34
Myanmar	1,163,159	3,332,979	34.90	4,149,799	28.02
Philippines	193,698	2,365,468	8.19	5,034,635	3.85
Singapore		1,618	-	5,592	-
Thailand	228,500	1,862,151	12.27	2,780,085	8.22
Vietnam	202,500	2,502,500	8.09	5,432,900	3.73
Total	2,641,094	17,736,544	14.89	34,036,431	7.76

As the second highest producer, Cambodia's production volume of 445,000 MT in 2011 represented 79.5% of the country's production from total capture fisheries, 39.8% of the country's total fisheries production, and 1.3% of the region's total fisheries production. However, as mentioned elsewhere in this publication, such production volume could not be confirmed as of the moment considering that there is a need to improve the systems of collecting and compiling the fishery statistics of the country especially with regards to its production from inland capture fishery.

Furthermore, production from inland capture fisheries of Lao PDR is something to be reckoned with since the country's production from capture fisheries is derived solely from inland fisheries. In this regard, assistance is being sought from concerned agencies and organizations for the improvement of the collection and compilation systems of fishery statistics in Lao PDR in order to establish the real picture of the fisheries sector of the country. Meanwhile, production from inland capture fisheries of Myanmar, Cambodia and Vietnam in 2011 could not be analyzed in terms of species composition since species breakdown was not reported. Nevertheless, production of Indonesia as the region's third highest producer comprised mainly the striped snakehead (*Channa striata*) which accounts for about 9.9% of the country's total production from inland capture fisheries.

Next to miscellaneous fishes which provided the highest production from inland capture fisheries in 2011 (**Table 8**), striped snakehead provided the second highest production accounting for 2.7% of the region's total inland capture fisheries followed by Nile tilapia (*Oreochromis niloticus*) at 2.6%, freshwater mollusks at 2.4%, silver barb (*Barbonymus gonionotus*) at 2.1%. Nonetheless, although the reported production of giant river prawn (*Macrobrachium rosenbergii*) in 2011 was relatively low at 11,144 MT but the value per metric ton of production was the highest at US\$ 5,174/MT, followed by the Asian redtail catfish (*Mystus nemurus*) at US\$ 2,646/MT, and striped snakehead at US\$ 1,930/MT.

Table 8. Ten major inland species caught in the region in 2011 (left in quantity; right in value)

Common name	Quantity (MT)	Ratio (%)	Common name	Value (US\$ 1,000)	Ratio (%)	Value <sup>4</sup> per MT
Misc. fish	1,969,056	74.55	Misc. fish	1,921,663	65.94	976
Striped snakehead	70,715	2.68	Striped snakehead	136,493	4.68	1,930
Nile tilapia	69,334	2.63	Nile tilapia	100,540	3.45	1,450
Freshwater mollusks nei	64,117	2.43	Silver barb	67,230	2.31	1,212
Silver barb	55,474	2.10	Torpedo-shaped			
Tilapia nei	45,784	1.73	catfish nei	58,528	2.01	1,685
Common carp	42,559	1.61	Tilapia nei	57,698	1.98	1,260
Snakeskin gourami	33,160	1.26	Giant river prawn	57,656	1.98	5,174
Climbing perch	31,909	1.21	Climbing perch	56,244	1.93	1,763
Asian redtail catfish	20,005	0.76	Asian redtail catfish	52,927	1.82	2,646
	· · · · · · · · · · · · · · · · · · ·		Snakeskin gourami	33,897	1.16	1,022

#### IV. AQUACULTURE PRODUCTION OF SOUTHEAST ASIA

In 2011, the region's total production from aquaculture accounted for about 47% of the region's total fisheries production in terms of volume and 45% in terms of value. Aquaculture production comes from three environments, namely: marine, brackishwater, and freshwater.

<sup>&</sup>lt;sup>4</sup> Value in US\$ per metric ton of production

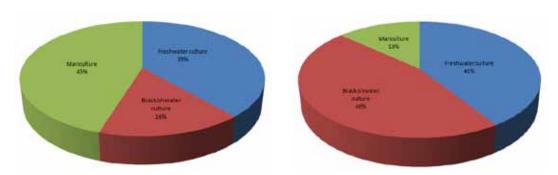


Fig. 4 Percentage of aquaculture production by sub-sector in 2011 (left in quantity; right in value)

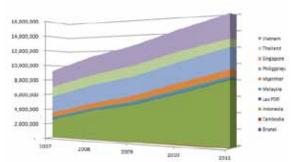
In terms of volume, aquaculture in marine areas or better known as mariculture provided 45.0% to the region's total aquaculture production while culture in brackishwater areas or brackishwater culture contributed 16.0%, and the remaining 39.0% came from freshwater culture (**Fig. 4**). However, in terms of value, freshwater culture production contributed the highest at 41.0% followed by brackishwater culture production at 46.0% and mariculture production at 13.0%.

From 2007 to 2011, Southeast Asia's total production from aquaculture steadily increased at about 12.4% per year (**Fig. 5**), the highest annual increase of about 16.5% was recorded between 2007 and 2008. This could have been a result of the sudden rise of the aquaculture production of Indonesia, the Philippines and Vietnam during the same period, which also continued to increase from 2007 until 2011. Except for the aquaculture production of Brunei Darussalam and Thailand which had been slightly decreasing since 2009, production from aquaculture of the other Southeast Asian countries continued to increase. However, production of Malaysia and Myanmar during the same period plainly decreased a little.

Indonesia as the largest producer from aquaculture in 2011, contributed 50.3% in production volume and 36.7% in production value to the region's total production from aquaculture. The country's aquaculture production comes mainly from the Eucheuma seaweeds (*Eucheuma* spp.) which accounted for about 57.3% of its aquaculture production volume. Vietnam, which was the second highest aquaculture producer of the region in 2011, provided about 18.0% to the region's total aquaculture production. The Philippines which ranked the third highest producing country in the region had aquatic plants (seaweeds) as one of its major products which accounted for 70.6% of the country's total production from aquaculture, followed by tilapia nei (*Oreochromis* spp.) at 9.9%, milkfish (*Chanos chanos*) in freshwater culture at 10.3%, and milkfish in mariculture at 4.0%.

In the case of Thailand, its major aquaculture product was the whiteleg shrimp (*Penaeus vannamei*) which accounted for 50.7% of the country's total aquaculture production, followed by Nile tilapia (*Oreochromis niloticus*) at 13.8%, catfish hybrid (*Clarias gariepinus x C. macrocephalus*) at 9.5%, green mussel (*Perna viridis*) at 8.4%, and blood cockle (*Anadara granosa*) at 4.0%. For Myanmar, its main aquaculture product was roho labeo (*Labeo rohita*) which accounted for 65.0% of the country's production from aquaculture, followed by giant tiger prawn (*Penaeus monodon*) at 6.3%, catla (*Catla catla*) at 5.6%, tilapia nei (*Oreochromis* spp.) at 4.9%, and mrigal carp (*Cirrhinus mrigala*) at 3.7%. The aquaculture production of Malaysia had decreased in 2011 compared with that of its production of 2010 which could have been brought about by decreases in the production of blood cockle (by almost 36.0%), torpedo-shaped catfishes (by almost 35.0%), and banana prawn (by almost 18.0%).

Fig 5. Trend of the aquaculture production of the Southeast Asian countries from 2007 to 2011 (MT)



In terms of value per volume of aquaculture production in 2011, Brunei Darussalam attained the highest average value at US\$ 5,703/MT followed by Singapore at US\$ 3,784/MT, Malaysia at US\$ 2,638/MT, Thailand at US\$ 2,543/MT, Vietnam at US\$ 2,144/MT, Cambodia at US\$ 1,762/MT, Indonesia at US\$ 910/MT, Myanmar at US\$ 907/MT, and the Philippines at US\$ 761/MT. It should be noted that in 2010, the average value of the aquaculture production of Brunei Darussalam was US\$ 11,760/MT while that of Singapore was US\$ 4,245/MT. Meanwhile, the value per metric ton of Lao PDR's production could not be calculated as the country's

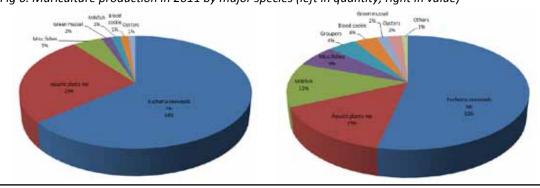
total production value in 2011 was not reported, but the value per metric ton of the country's production volume in 2009 was about US\$ 1,491/MT.

It should be recalled that in 2010, mariculture production accounted for 52.0% of the total production from aquaculture in terms of volume, while brackishwater culture production accounted for 21.0% and freshwater culture production at 27.0%. In terms of value, mariculture contributed 20.0% to the total value of the region's aquaculture production, brackishwater culture production at 49.0%, and freshwater culture production at 20.0%. This means that in 2011, production volume from mariculture increased by about 17.3% from that of 2010, which could be due to the increased production of miscellanous fishes nei in Vietnam, while those from freshwater culture and brackishwater culture had also increased. Meanwhile, the value of production from freswater culture in 2011 had increased, but the production value from mariculture and brackishwater culture had considerably decreased.

#### 4.1 Mariculture

In 2011, the region's total production from mariculture contributed about 45.0% to the region's total production in terms of volume and 13.0% to the region's total aquaculture production value. Eucheuma seaweeds (*Eucheuma* spp.) which was mainly produced by Indonesia accounted for about 64.0% of the total volume of production from mariculture, followed by the aquatic plants nei as main products of the Philippines which accounted for 26.0%, green mussel (*Perna viridis*) mainly produced by Thailand at 2.0%, milkfish as main product of the Philippines at 1.0%, blood cockle (*Anadara granosa*) as main mariculture product of Malaysia and Thailand at 1.0%, and oysters as main product of Indonesia, Malaysia and Thailand at 1.0% (**Fig. 6**).

In terms of the value, Euchema seaweeds contributed 53.0% of the total value of mariculture production followed by the aquatic plants nei which was mainly produced in the Philippines accounting for 15.0%. In addition, milkfish provided 13%, marine fishes 6.0%, groupers 4.0%, blood cockle 4.0%, green mussel 2.0%, oysters at 2.0%, and others at 1.0% to the total value of the region's mariculture production (**Fig 6**). *Fig 6. Mariculture production in 2011 by major species (left in quantity; right in value)* 



The production from mariculture by country and by species, indicated that Indonesia contributed the largest amount of aquatic plants production through the Eucheuma seaweeds (*Eucheuma* spp.), followed by the production of aquatic plants nei by the Philippines. The other countries shared the production volume of other species such as green mussels mainly produced by Thailand, blood cockle by Malaysia and Thailand, Penguin wing oyster by Indonesia, and miscellaneous fishes mainly produced by Vietnam.

For the value per volume of mariculture production in 2011, Brunei Darussalam had the highest at an average of US\$ 6,116/MT from the country's production of the highly economic species of blue shrimp (*Penaeus stylirostris*). This was followed by Singapore at US\$ 3,766/MT for the its production of groupers, Cambodia at US\$ 3,080/MT, Myanmar at US\$ 661/MT, Thailand at US\$ 511/MT, Malaysia at US\$ 457/MT, Philippines at US\$ 269/MT, and Indonesia at US\$ 245/MT.

#### 4.2 Brackishwater culture

The total production from brackishwater culture in 2011 represented about 16.0% of the region's total production from aquaculture (**Fig. 7**). Production of the whiteleg shrimp (*Penaeus vannamei*) produced by Indonesia and Thailand which accounted for about 30.0% of the region's total production from brackishwater culture. The second highest was contributed by milkfish (*Chanos chanos*) mainly contributed by Indonesia and Philippines provided the highest volume representing 29.0% of the region's total production from brackishwater, and the third highest production came from the Gracilaria seaweeds (*Gracilaria* spp.) at 25.0% contributed by Indonesia. This was followed by the giant tiger prawn (*Penaeus monodon*) at 9.0% reported by Brunei Darussalam, Indonesia, Malaysia, Philippines, Myanmar, and Thailand. In terms of the value of brackishwater culture production, the highest was provided by the whiteleg shrimp (*Penaeus vannamei*) with Thailand contributing the highest production value followed by milkfish (*Chanos chanos*) produced by the Philippines and Indonesia, and giant tiger prawn (*Penaeus monodon*) from Indonesia.

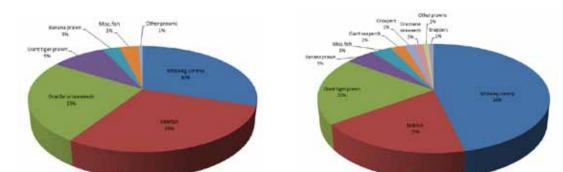


Fig 7. Brackishwater culture production in 2011 by species (left in quantity; right in value)

In terms of the average value per volume of production from brackishwater culture, from among the countries that reported their respective production value, Brunei Darussalam posted the highest at US\$ 5,597/MT through the country's production of the export commodity blue shrimp (*Penaeus stylirostris*), followed by Malaysia at US\$ 4,799/MT, Thailand at US\$ 3,627/MT, Philippines at US\$ 3,107, and Indonesia at US\$ 1,735/MT. Cambodia, Singapore, and Vietnam did not report their respective production from brackishwater culture in terms of volume and value.

#### 4.3 Freshwater culture

The region's total production from freshwater culture in 2011 accounted for about 39.0% of the region's total production from aquaculture, which had increased by about 49.0% from that of the 2010, which could have been affected by the inability of Vietnam to report its production volume in 2010. In 2011,

Vietnam was the highest producer from freshwater culture contributing about 43.0% of the region's total production from freshwater culture, followed by Indonesia at 29.5%, Myanmar at 12.5%, Thailand at 5.6%, Philippines at 4.6%, Malaysia at 2.0%, Lao PDR at 1.6%, and Cambodia at 1.1%.

While this sub-sector accounted for 41.0% of the region's total aquaculture production value, this seems to indicate that freshwater culture is emerging as a very important fishery sub-sector. This is considering that its production value in 2011 had increased by almost 23.7% compared with that of 2010, although this could have been affected by the inability of Lao PDR and Vietnam to report the corresponding values for their production volumes during 2010.

In terms of the production volume from freshwater culture by species (**Fig 8**), miscellaneous freshwater fishes accounted for 48.0% of the region's total production from freshwater culture, which was contributed mainly by Vietnam, Indonesia, Philippines, Lao PDR, Thailand, Malaysia, and Singapore. This was followed by Nile tilapia (*Oreochromis* spp.) which accounted for 12.0% and mainly contributed by Indonesia, roho labeo (*Labeo rohita*) at 9.0% contributed mainly by Myanmar, the torpedo-shaped catfish (*Clarias* spp.) at 6.0% contributed by Indonesia and Malaysia, tilapia nei (*Oreochromis* spp.) at 6.0% contributed by Myanmar and Indonesia, and common carp (*Cyprinus carpio*) also at 6.0% contributed mainly by Indonesia. For the production value, the highest contributor to the region's total production value from freshwater culture was Nile tilapia at 20.0%, followed by miscellaneous freshwater fishes (17.0%), common carp (11.0%), tilapia nei (9.0%), pangas catfishes (9.0%), torpedo-shaped catfishes (9.0%), nilem carp (9.0%), snakehead (5.0%), gourami (4.0%), catfishes hybrid (3.0%), cyprinid nei (2.0%), and giant river prawn (2.0%).

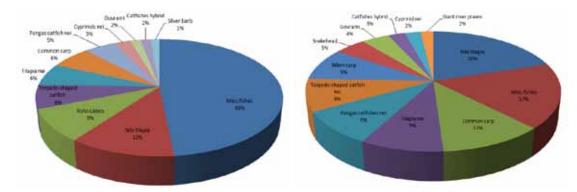


Fig 8. Freshwater culture production in 2011 by species (left in quantity; right in value)

As for the value of production from freshwater culture, Singapore presented the highest average value at US\$ 3,903/MT mainly coming from the country's production of the Indonesian snakehead (*Channa micropeltes*). This was followed by Brunei Darussalam at US\$ 3,153/MT for the production of torpedo-shaped catfishes nei (*Clarias* spp.), Indonesia at US\$ 1,917/MT, Malaysia at US\$ 1,891/MT, Cambodia at US\$ 1,712/MT, Thailand at US\$ 1,648/MT, Philippines at US\$ 1,449/MT, and Myanmar at US\$ 967/MT.

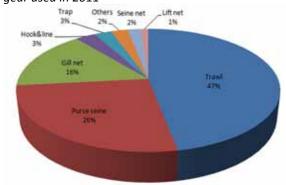
#### V. FISHING GEAR ANALYSIS

An analysis of the fishing gears used in the region in 2011 was based only from four countries that reported their respective production from marine capture fisheries by type of fishing gear, namely: Brunei Darussalam, Malaysia, Myanmar and Singapore. In this regard, the highest production by type of gear in Brunei Darussalam came from the trawls accounting for about 46.5% of the total production of all types of gears, of which miscellenaeus marine fishes contributed 44.5% to the trawl's total production. This was followed by the purse seine with the rainbow sardine (*Dussumieria acuta*) comprising almost all of the production. For Malaysia, trawls were very prominent with total production that accounted for 49.5% of

the production from all types of gears, of which trash fishes comprised 32.6% of the trawl's total production. This was followed by the purse seines contributing about 25.1% to the total production from all types of gears, of which the scads (*Decapterus* spp.) comprised 19.2% of the total production from purse seines. Gill nets came third with production of 227,002 MT or 17.1% of the production from all types of gears, where the Rastrelliger mackerels (*Rastrelliger* spp.) contributed about 31.4% to the total production from gill nets.

In the case of Myanmar, the highest catch production by gear used was provided by purse seines at 57,525 MT or 42.2% of all types of gears representing the miscellaneous marine fishes that accounted for 26.6% of the total catch using purse seines. This was followed by the trawls with total catch of 40,262 MT or 29.5% of all types of gears of which the miscellaneous marine fishes accounted for about 28% of the trawl's total production. Singapore's report on gear used was mainly from trawls at 1,256 MT of the production from all types of gears, of which Penaeus shrimps (*Penaeus* spp.) gave the highest production accounting for about 14.0% of trawl's total production.

Fig 9. Marine capture fishery production by type of gear used in 2011



**Fig 9** shows the marine capture fishery production of the Southeast Asian region by types of gear used. As the largest producing fishing gear, trawls accounted for about 47.0% of the total production from all types of gears, followed by the purse seines at about 26.0%, gill nets at 16.0%, hook and line at 3.0%, traps at 3.0%, others at 2.0%, seine net at 2.0%, and lift net at 1.0%. However, the trend on gear used in marine capture fisheries could not be properly analyzed as several countries such as Cambodia, Indonesia, Philippines, Thailand, and Vietnam did not provide the relevant information.

#### VI. NUMBER OF FISHING BOATS BY TYPE AND TONNAGE

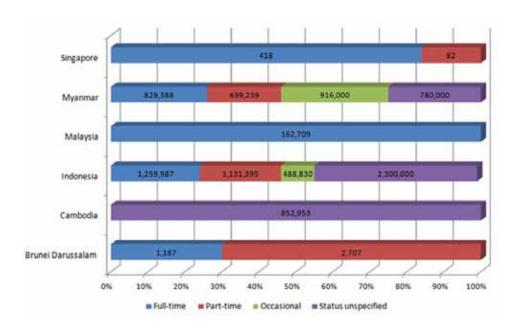
Based on the available data in 2011, Indonesia had the highest number of boats at 581,845 of which 170,938 were non-powered while 410,907 were powered boats, followed by Malaysia with 53,002 of which 2,971 were non-powered and 50,031 were powered boats. The third highest number was reported by Myanmar at 30,848 of which 15,548 were non-powered and 15,300 were powered boats, followed by Vietnam at 28,424, Thailand at 17,203, and Brunei Darussalam at 2,607 which comprised 105 non-powered and 2,502 powered boats. Meanwhile, Singapore reported that all its 39 boats were powered boats.

#### VII. NUMBER OF FISHERS BY WORKING STATUS

In 2011, Indonesia had the highest number of fishers at 5,180,212. Of this total, 46.0% were involved in marine capture fisheries, 45.0% of whom were full-time, 39.0% part-time fishers, and 16.0% were occasional fishers. In inland capture fisheries, the country had 490,040 fishers comprising 37.0% full-time; 43.0% part-time; and 20.0% occasional fishers. In aquaculture, the country had 2,300,000 representing 44.0% of the country's total fishing workforce. Myanmar had the second highest number of fishers at 3,164,627 with 43.8% in marine capture fisheries comprising 16.0% full-time, 18.0% part-time, and 66.0% occasional fishers. In inland capture fisheries, the country had 1,565,800 or 49.5% of its total fishing workforce of whom 31.0% were full-time, 19.0% were part-time, while the rest were part-time fishers. In aquaculture, the country had 211,827 or 7.0% of its total workforce of whom 58.0% were full-time and 42.0% part-time fish farmers, while the rest were occasional workers in aquaculture farms. Cambodia had the third highest number of fishers at 852,953 of whom 578,468 or 68.0% were in inland capture fishery while 195,684 or 23.0% were in aquaculture, and 78,801 or 9.0% were in unspecified areas. Malaysia had the fourth highest

number of fishers at 162,709 of whom 134,110 or 82.4% were full-time marine capture fishers while 28,599 or 17.6% were involved in aquaculture all of whom were full-time fish farmers. Singapore had 500 fishers and Brunei Darussalam 3,894 fishers (**Fig 10**). Lao PDR, Philippines, Thailand, and Vietnam did not provide information on their respective number of fishers.

Fig 10. Number of fishers by working status in 2011



#### VIII. AQUACULTURE PRODUCTION OF ORNAMENTAL FISHES

In 2011, only five countries reported their respective aquaculture production of ornamental fishes, namely: Brunei Darussalam, Indonesia, Malaysia, Myanmar and Singapore. Of these five countries, Myanmar reported the highest production in 2011 comprising mainly the gold fish (*Carassius auratus*), followed by barbus (*Puntius* spp.) and freshwater angelfish (*Pterophyllum scalare*). Indonesia came next with its highest production comprising osteichthyes, common carps, guppies, goldfish, and Siamese fighting fish. Malaysia reported that its production comprised the Poeciliids, cyprinidaes, and osteichthyes, while Singapore's production comprised only the osteichthyes, and Brunei Darussalam reported a minimal production of ornamental fishes in 2011 comprising mainly the guppies and common carps. In terms of value, the highest was for the common carp and guppies in Brunei Darussalam at US\$ 6.30/pc and US\$0.70/pc, respectively. This was followed by the cyprinidaes and poeciliids at US\$ 0.44/pc and US\$ 0.17/pc, respectively in Malaysia, and goldfish from Myanmar at US\$ 0.2/pc. Efforts should be made to improve the compilation of the data from aquaculture production of ornamental fishes considering that this is a budding industry in the fisheries sector.

#### IX. SEED PRODUCTION FOR AQUACULTURE

The need to collect information on the volume of seeds produced from the aquaculture industry was recommended in many fora as this factor has a significant role to play in enhancing the economic analysis of the aquaculture industry of the region. Thus, compilation of the said information was started in 2008 with only four countries, namely: Cambodia, Malaysia, Myanmar and Singapore providing the relevant

information. Brunei Darussalam joined in 2009 by also giving its country's report on this aspect. In 2010, Indonesia entered into the picture but information from Brunei Darussalam and Cambodia seemed to have faded away. Nevertheless, in 2011, Brunei Darussalam, Indonesia, Malaysia, Myanmar, and Singapore provided the relevant information. In this connection, efforts should be exerted to gather the said information from all the countries in Southeast Asia for the next issue of this publication, in order that the true picture of this significant niche of the aquaculture industry could be established.

#### X. ANALYSIS OF PRODUCER PRICE OF COMMODITIES FROM CAPTURE FISHERIES

Considering that different species are harvested by the capture fisheries of the countries in the region, the trend of the producer price was established only for certain species which are commonly exploited. Generally, it appears that the producer prices of several commodities harvested by some countries are higher than those of the other countries.

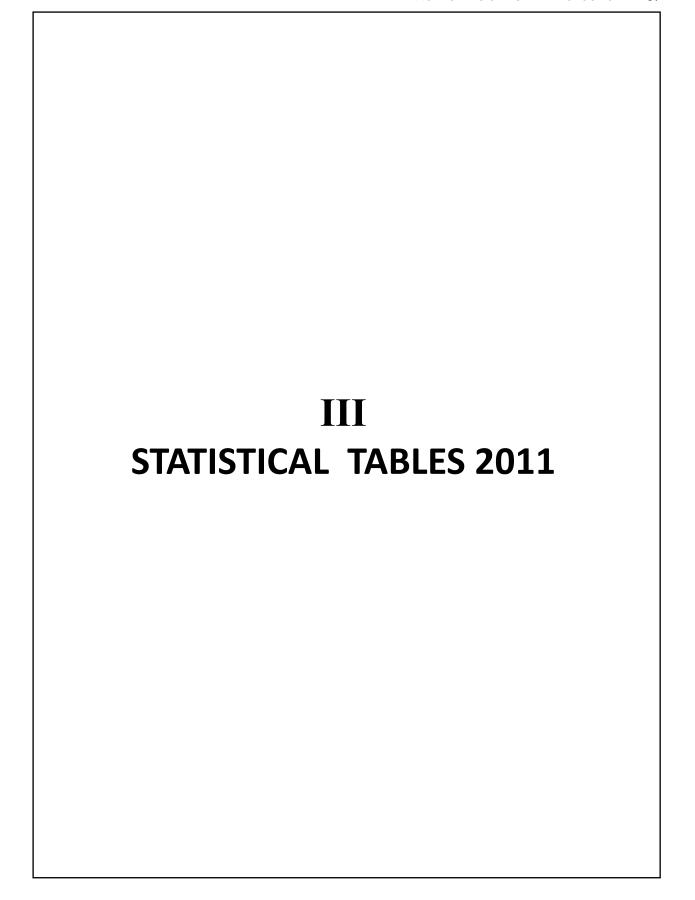
For example, the producer price of grouper nei, *Epinephelus* spp. in Indonesia in 2011 was US\$ 14.00/kg compared to the Philippines' US\$ 4.75/kg. However, for the giant river prawn (*Macrobrachium rosenbergii*) the producer price in Brunei Darussalam of US\$ 10.64/kg was higher than that of Indonesia's US\$ 6.72/kg.

Meanwhile, the producer price in 2011 of the sillago-whiting (Sillaginidae) in the Philippines was US\$ 6.02/kg compared to Thailand's US\$ 1.90/kg. For carangids nei (Carangidae), the producer price in Singapore was US\$ 6.64/kg compared to Thailand's US\$ 1.31/kg. As for threadfin breams nei (*Nemipterus* spp.), the highest price was Singapore's US\$ 6.58/kg and the lowest price was in Thailand at US\$ 1.31/kg with an average price of US\$ 3.26/kg (n=5). For yellowfin tuna, the producer price in Brunei Darussalam was US\$ 4.00/kg while the lowest price was Indonesia's US\$ 2.51/kg or an average price of US\$ 3.12/kg (n=3).

In the case of the giant tiger prawn (*Penaeus monodon*), the highest producer price was in the Philippines at US\$ 10.43/kg while the lowest was Indonesia's US\$ 5.80/kg or an average of US\$ 8.41/kg (n=3). For banana prawn (*Penaeus merguiensis*), the highest price was in Malaysia at US\$ 9.21/kg with the lowest in Indonesia at US\$ 3.97/kg and an average of US\$ 6.42/kg (n=4).

For the Indo-Pacific swamp crab (*Scylla serrata*), the highest price was in Singapore at US\$ 10.46/kg with the lowest in Indonesia at US\$ 2.90/kg for an average of US\$ 5.40/kg (n=5). In the case of the blue swimming crab (*Portunus pelagicus*), the highest price was Thailand's US\$ 5.15/kg and the lowest was in the Philippines at US\$ 2.94/kg, and an average of US\$ 4.07/kg (n=5).

As for the common squids (*Loligo* app.), the highest was Singapore's US\$ 4.78/kg while the lowest was in Brunei Darussalam at US\$ 2.13/kg with an average of US\$ 3.42/kg (n=5). As could be gleaned from the abovementioned information, the producer price trends among the countries in the region for the same commodities generally had wide variations.



		 13ITEIXI I	PRODUC		 	 	

### 1. ANNUAL SERIES OF FISHERY PRODUCTION

#### 1.1 Total Production

### 1.1.1 In Quantity

MT

Country		2007	2008	2009	2010	2011
Total	0	25,302,870	27,207,826	28,917,096	31,438,435	33,487,689
Brunei Darussalam	1	3,225	2,747	2,418	2,772	2,447
Cambodia	2	525,100	536,320	515,000	550,000	631,695
Indonesia	3	7,510,767	9,054,873	10,064,140	11,662,311	13,626,141
Lao PDR	4	91,660	93,500	105,000	113,000	129,600
Malaysia	5	1,654,221	1,639,017	1,729,002	1,806,577	1,665,842
Myanmar	6	2,808,037	3,147,605	3,491,103	3,901,979	4,149,799
Philippines	7	4,710,952	4,964,703	5,084,674	5,155,647	4,973,588
Singapore	8	8,026	5,141	5,687	5,233	5,592
Thailand	9	3,675,382	3,204,200	3,137,672	3,113,316	2,870,085
Vietnam A	10	4,315,500	4,559,720	4,782,400	5,127,600	5,432,900

Note: Α Figures in 2011 from General Statistics Office of Vietnam Website

### 1,1,2 In Value

US\$ 1,000

						224 1,000
Country		2007	2008	2009	2010	2011
Total	0	24,234,354	28,585,816	29,215,311	38,744,163	43,782,867
Brunei Darussalam	1	11,061	9,477	5,947	11,626	9,839
Cambodia A	2	58,038	317,290	533,528		126,850
Indonesia	3	7,683,427	9,700,810	7,493,133	14,085,949	14,954,948
Lao PDR	4	296,962	331,475	204,969		
Malaysia	5	1,855,326	2,163,885	2,599,980	2,821,786	3,043,037
Myanmar	6	1,862,403	3,156,405	5,283,701	5,821,638	6,065,596
Philippines	7	3,912,137	4,675,417	4,266,944	4,534,628	5,186,787
Singapore	8	23,319	17,822	19,243	25,423	24,790
Thailand	9	3,986,931	3,595,535	3,940,087	4,501,934	4,305,354
Vietnam B	10	4,544,750	4,617,700	4,867,779	6,941,179	10,065,666
		I				

Notes:

Figures in 2011 from FAO Fisheries and Aquaculture Information and Statistics Service Figures in 2011 from General Statistics Office of Vietnam Website

## 1.2 Marine Fishery Production

## 1.2.1 In Quantity

МΤ

Country		2007	2008	2009	2010	2011
Total	0	14,056,983	13,814,368	14,140,387	14,874,445	15,095,450
Brunei Darussalam	1	2,551	2,357	1,958	2,351	2,154
Cambodia	2	54,900	66,000	75,000	85,000	114,695
Indonesia	3	4,734,280	4,701,933	4,789,410	5,039,416	5,328,637
Lao PDR	4		•••	•••	•••	•••
Malaysia	5	1,381,424	1,394,531	1,391,088	1,428,881	1,373,105
Myanmar	6	1,485,740	1,679,010	1,867,510	2,048,590	2,169,820
Philippines	7	2,327,815	2,377,514	2,418,838	2,424,476	2,171,770
Singapore	8	3,522	1,623	2,121	1,732	1,618
Thailand	9	2,079,351	1,644,800	1,496,162	1,617,399	1,633,651
Vietnam A	10	1,987,400	1,946,600	2,098,300	2,226,600	2,300,000

Note: A Figures in 2011 from General Statistics Office of Vietnam Website

### 1.2.2 In Value

US\$ 1,000

Country		2007	2008	2009	2010	2011
Total	0	10,422,912	12,338,215	10,416,661	15,898,768	21,178,765
Brunei Darussalam	1	10,117	9,085	5,289	6,676	8,168
Cambodia	2	•••		110,729	•••	•••
Indonesia	3	4,867,641	4,957,293	1,686,971	6,558,115	7,099,887
Lao PDR	4					•••
Malaysia	5	1,493,332	1,690,715	1,887,588	2,015,563	2,267,800
Myanmar	6		1,585,514	3,081,391	3,400,287	3,580,203
Philippines	7	2,451,954	2,810,871	2,390,076	2,524,841	3,016,434
Singapore	8	14,269	8,560	10,450	10,559	9,751
Thailand	9	1,585,599	1,276,177	1,244,167	1,382,727	1,412,363
Vietnam A	10	•••				3,784,159

Note: A Figures in 2011 from General Statistics Office of Vietnam Website

# 1.3 Inland Fishery Production

# 1.3.1 In Quantity

ΜT

Country		2007	2008	2009	2010	2011
Total	0	2,008,301	2,329,524	2,397,273	2,377,253	2,641,094
Brunei Darussalam	1	•••	•••	•••	•••	•••
Cambodia	2	420,000	430,600	390,000	405,000	445,000
Indonesia	3	310,457	497,740	494,630	344,972	368,542
Lao PDR	4	28,410	29,200	30,000	30,900	34,000
Malaysia	5	4,283	4,353	4,469	4,545	5,695
Myanmar	6	717,640	814,740	899,430	1,002,430	1,163,159
Philippines	7	168,311	179,491	188,444	185,406	193,698
Singapore	8					•••
Thailand	9	225,600	228,600	245,500	209,800	228,500
Vietnam A	10	133,600	144,800	144,800	194,200	202,500

Note: A Figures in 2011 from General Statistics Office of Vietnam Website

## 1.3.2 In Value

US\$ 1,000

Country		2007	2008	2009	2010	2011
Total	0	985,172	2,215,437	2,834,477	2,526,476	2,914,402
Brunei Darussalam	1	•••	•••	•••	•••	•••
Cambodia	2	•••	255,500	334,845		•••
Indonesia	3	368,247	521,019	616,640	546,937	635,754
Lao PDR	4	215,708	240,334	93,168		
Malaysia	5	9,013	10,290	11,482	13,138	17,978
Myanmar	6		788,325	1,349,145	1,503,645	1,744,738
Philippines	7	125,464	145,912	155,907	174,479	185,799
Singapore	8					
Thailand	9	266,740	254,057	273,290	288,277	330,193
Vietnam	10					

## 1.4 Aquaculture Production

## 1.4.1 In Quantity

Country		2007	2008	2009	2010	2011
Total	0	9,237,586	11,063,934	12,379,436	14,186,737	15,751,145
Brunei Darussalam	1	674	390	460	421	293
Cambodia A	2	50,200	39,720	50,000	60,000	72,000
Indonesia	3	2,466,030	3,855,200	4,780,100	6,277,923	7,928,962
Lao PDR	4	63,250	64,300	75,000	82,100	95,600
Malaysia	5	268,514	240,133	333,445	373,151	287,042
Myanmar	6	604,657	653,855	724,163	850,959	816,820
Philippines	7	2,214,826	2,407,698	2,477,392	2,545,765	2,608,120
Singapore	8	4,504	3,518	3,566	3,501	3,974
Thailand	9	1,370,431	1,330,800	1,396,010	1,286,117	1,007,934
Vietnam B	10	2,194,500	2,468,320	2,539,300	2,706,800	2,930,400

Figures in 2011 from FAO Fisheries and Aquaculture Information and Statistics Service Figures in 2011 from General Statistics Office of Vietnam Website Notes: Α

### 1.4.2 In Value

US\$ 1,000

Country		2007	2008	2009	2010	2011
Total 0		12,826,273	14,032,164	15,964,173	13,377,740	19,689,700
Brunei Darussalam	1	944	392	658	4,950	1,671
Cambodia A	2	58,038	61,790	87,954		126,850
Indonesia	3	2,447,539	4,222,498	5,189,522	6,980,897	7,219,307
Lao PDR	4	81,255	91,141	111,801		
Malaysia	5	352,981	462,880	700,910	793,085	757,320
Myanmar	6	1,862,403	782,566	853,165	917,706	740,655
Philippines	7	1,334,719	1,718,634	1,720,961	1,835,308	1,984,554
Singapore	8	9,052	9,262	8,793	14,864	15,039
Thailand	9	2,134,592	2,065,301	2,422,630	2,830,930	2,562,798
Vietnam B	10	4,544,750	4,617,700	4,867,779		6,281,507

Figures in 2011 from FAO Fisheries and Aquaculture Information and Statistics Service Figures in 2011 from General Statistics Office of Vietnam Website Notes: Α

В

	FISHERY PRODUCTION BY SUB-SECTOR	23

### 2. FISHERY PRODUCTION BY SUB-SECTOR

## 2.1 In Quantity

МТ

Country		Year	Total	Marine capture fishery	Inland capture fishery
 Total	0	2011	33,487,689	15,095,450	2,641,094
Brunei Darussalam	1	2011	2,447	2,154	•••
Cambodia	2	2011	631,695	114,695	445,000
Indonesia	3	2011	13,626,141	5,328,637	368,542
Lao PDR	4	2011	129,600	0	34,000
Malaysia	5	2011	1,665,842	1,373,105	5,695
Myanmar	6	2011	4,149,799	2,169,820	1,163,159
Philippines	7	2011	4,973,588	2,171,770	193,698
Singapore	8	2011	5,592	1,618	
Thailand	9	2011	2,870,085	1,633,651	228,500
Vietnam A	10	2011	5,432,900	2,300,000	202,500

Figures in 2011 from General Statistics Office of Vietnam Website Note:

## 2.1 In Quantity (Cont'd)

ΜT

		Aquaculture								
Country		Sub-total	Mariculture	Brackishwater culture	Freshwater culture					
Total	0	15,751,145	7,122,701	2,557,150	6,071,294					
Brunei Darussalam	1	293	121	159	13					
Cambodia A	2	72,000	2,620		69,380					
Indonesia	3	7,928,962	4,605,825	1,531,456	1,791,681					
Lao PDR	4	95,600	0	0	95,600					
Malaysia	5	287,042	60,795	103,758	122,489					
Myanmar	6	816,820	3,158	51,965	761,697					
Philippines	7	2,608,120	1,992,953	336,159	279,008					
Singapore	8	3,974	3,448	0	526					
Thailand	9	1,007,934	135,481	533,653	338,800					
Vietnam B	10	2,930,400	318,300		2,612,100					

Figures in 2011 from FAO Fisheries and Aquaculture Information and Statistics Service Figures in 2011 from General Statistics Office of Vietnam Website Notes:

В

## 2.2 In Value

US\$ 1,000

Country		Year	Total	Marine capture fishery	Inland capture fishery
Total	0	2011	43,782,867	21,178,765	2,914,402
Brunei Darussalam	1	2011	9,839	8,168	
Cambodia	2	2011	126,850		•••
Indonesia	3	2011	14,954,948	7,099,887	635,754
Lao PDR	4	2011	•••	•••	•••
Malaysia	5	2011	3,043,037	2,267,800	17,918
Myanmar	6	2011	6,065,596	3,580,203	1,744,738
Philippines	7	2011	5,186,788	3,016,434	185,799
Singapore	8	2011	24,789	9,751	
Thailand	9	2011	4,305,354	1,412,363	330,193
Vietnam A	10	2011	10,065,666	3,784,159	

Note:

Figures from General Statistics Office of Vietnam Website

## 2.2 In Value (cont'd)

Α

US\$ 1,000

			Aquac	ulture	
Country		Sub-total	Mariculture	Brackishwater culture	Freshwater culture
Total	0	19,689,700	1,784,373	6,137,406	5,486,414
Brunei Darussalam	1	1,671	740	890	41
Cambodia A	2	126,850	8,070		118,780
Indonesia	3	7,219,307	1,127,599	2,657,156	3,434,552
Lao PDR	4		•••		
Malaysia	5	757,319	27,785	497,955	231,579
Myanmar	6	740,655	2,088	1,592	736,975
Philippines	7	1,984,555	535,916	1,044,438	404,200
Singapore	8	15,038	12,986		2,053
Thailand	9	2,562,798	69,189	1,935,375	558,234
Vietnam	10	6,281,507			

Notes:

Figures in 2011 from FAO Fisheries and Aquaculture Information and Statistics Service Figures in 2011 from General Statistics Office of Vietnam Website

В

26

## 3. MARINE CAPTURE FISHERY STATISTICS

## 3.1 Number of Fishing Boats by Type and Tonnage, 2011

Country, Sub-area		Year	Total	Non- powered boat	Sub-total	Out-board powered boat
Brunei Darussalam	1	2011	2,607	105	2,502	2,458
Brunei Muara	2	2011	1,712	31	1,681	1,637
Tutong	3	2011	342	50	292	292
Kuala belait	4	2011	290	13	277	277
Temburong	5	2011	263	11	252	252
Cambodia	6	2011				
Indonesia	7	2011	581,845	170,938	410,907	225,786
Malaysia	8	2011	53,002	2,971	50,031	32,790
West Coast of Peninsular	9	2011	21,914	47	21,867	14,361
East Coast of Peninsular	10	2011	9,560	5	9,555	5,400
Sabah	11	2011	15,217	2,916	12,301	9,057
Sarawak	12	2011	5,989	1	5,988	3,675
Labuan	13	2011	322	2	320	297
Myanmar	14	2011	30,848	15,548	15,300	13,823
Taninthayi	15	2011	12,001	3,637	8,364	7,922
Mon	16	2011	1,867	284	1,583	1,338
Yangon	17	2011	396	313	83	83
Rakhine	18	2011	14,209	10,556	3,653	3,550
Ayeyarwady	19	2011	2,375	758	1,617	930
Philippines	20	2011	•••	•••		•••
Singapore	21	2011	39		39	34
Thailand A	22	2011	17,203	•••	17,203	•••
Vietnam B	23	2011	28,424	•••		•••

Notes: A Figures from Thai Fishing Vessels Statistics 2011

В Figures from General Statistics Office of Vietnam Website

C Inboard powered boat 25-39.9 tons

D Inboard powered boat >40 tons Ε Inboard powered boat <10 tons

F Inboard powered boat 10-49 tons

G

Inboard powered boat >50 tons

				Powered boat				
	·		In-bo	ard powered	boat	<u> </u>	T	<del></del>
Sub- total	< 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	> 500 tons
44	•••	•••	•••	•••	44			
44		•••	•••		44			
								•••
		•••						•••
	•••	•••	•••	•••	•••	•••		•••
	•••	•••	•••	•••	•••			•••
185,121	123,748	35,877	13,201	8,936	1,801	1,204	354	•••
17,241	2,446	4,938	3,556	3,291	3,010			•••
7,506	456	2,923	1,521	1,377 C	1,229	D		
4,155	504	803	1,019	707 C	1,122	D		
3,244	867	695	637	932 C	113	D		
2,313	619	517	379	275 C	523	D		
23		•••			23	D		
1,477	5	119	274	416	663	705	12	
442		•••	•••	88	354	255		
245	5	44	66	12	118	175	2	
		•••						
103		•••	•••	48	55	120		
687		75	208	268	136	155	10	
		•••						
5	1	1		3	0			
17,203		8,770 E		5,819 F				2,614 G
•••	•••	•••	•••	•••		•••		•••

# 3.2 Number of Fishing Units by Size of Boat, 20113.2.1 Brunei Darussalam

			Out-board		In-bo	ard pow	ered boa	t		
Type of Fishing Gear	-	Total	powered	Sub-	Less than	5-9.9	10-19.9	20-49.9	50-99.9	100-199.9
			boat	total	5 tons	tons	tons	tons	tons	tons
All Purse Seines	1	15		15	•••	•••		•••	•••	
Anchovy Purse Seine	2				•••					
Fish Purse Seine	3	15		15	•••				15	•••
All Seine Nets	4								•••	
Boat Seine	5									
Beach Seine	6				•••					•••
All Trawls	7	21		21					•••	
Beam Trawl	8					•••				
Otter Board Trawl	9	21		21		•••		3	16	2
Pair Trawl	10					•••				
Lift Nets	11					•••				
All Falling Nets	12									
Anchovy Falling Net	13					•••				
Squid Falling Net	14					•••				
Gill Nets	15					•••				
All Traps	16					•••			•••	
Stationary Trap	17									
Portable Trap	18									
Hooks & Lines	19	9		9				5	4	
Push/Scoop Nets	20									
Shellfish & Seaweed Collecting Gear	21									
Others	22	2		2			•••	2	•••	

# 3.2 Number of Fishing Units by Size of Boat, 2011 3.2.2 Indonesia

			Out-board	In-board powered boat						
Type of Fishing Gear		Total	powered	Sub-	Less than	5-9.9	10-19.9	20-49.9	50-99.9	
	İ		boat	total	5 tons	tons	tons	tons	tons	
All Purse Seines	1	32,040			•••	•••	•••	•••		
Anchovy Purse Seine	2	•••		•••			•••	•••		
Fish Purse Seine	3							•••	•••	
All Seine Nets	4	73,480							•••	
Boat Seine	5	55,031							•••	
Beach Seine	6	18,449							•••	
All Trawls	7	18,451							•••	
Beam Trawl	8								•••	
Otter Board Trawl	9									
Pair Trawl	10								•••	
Lift Nets	11	51,192								
All Falling Nets	12								•••	
Anchovy Falling Net	13								•••	
Squid Falling Net	14								••	
Gill Nets	15	280,660							••	
All Traps	16								••	
Stationary Trap	17	32,355							••	
Portable Trap	18	49,486								
Hooks & Lines	19	398,752								
Push/Scoop Nets	20								••	
Shellfish & Seaweed Collecting Gear	21		•••		•••					
Others	22		•••	•••	•••			•••		

# 3.2 Number of Fishing Units by Size of Boat, 2011 3.2.3 Malaysia

1										
			Non-	Out-board		In-b	oard pov	vered boa	ıt	
Type of Fishing Gea	r	Total	powered	powered	Sub-	Less than	5-9.9	10-19.9	20-39.9	> 40
			boat	boat	total	5 tons	tons	tons	tons	tons
All Purse Seines	1	1,239	•••	9	1,230	50	59	112	211	798
Anchovy Purse Seine	2	135	•••	4	131	18	4	15	13	81
Fish Purse Seine	3	1,104	• • • • • • • • • • • • • • • • • • • •	5	1,099	32	55	97	198	717
All Seine Nets	4	687	4	72	611	6	594	10	1	
Boat Seine	5	•••		•••	•••		•••	•••	•••	•••
Beach Seine	6				•••					
All Trawls	7	6,116			6,116	72	303	1,514	2,218	2,009
Beam Trawl	8				•••					
Otter Board Trawl	9			•••	•••	•••			•••	
Pair Trawl	10			•••	•••	•••			•••	
Lift Nets	11	417	44	331	42	8	18	14	1	1
All Falling Nets	12		•••		•••					
Anchovy Falling Net	13		•••		•••					
Squid Falling Net	14				•••					
Gill Nets	15	33,726	1,375	26,588	5,763	1,545	2,879	1,033	245	61
All Traps	16	1,269	261	637	371	43	80	146	84	18
Stationary Trap	17	192	44	122	26	18	7	1		
Portable Trap	18	1,077	217	515	345	25	73	145	84	18
Hooks & Lines	19	6,254	627	3,854	1,773	506	535	441	171	120
Push/Scoop Nets	20	19			19		1	17	1	
Shellfish & Seaweed Collecting Gear	21	307	105	81	121	39	79	2	1	
Others	22	2,968	555	1,218	1,195	177	390	267	358	3

# 3.2 Number of Fishing Units by Size of Boat, 20113.2.4 Myanmar

			Non-	Out-board				In-boa	ard power	red boat		
Type of Fishing Gear		Total	powered	powered	Sub-	Less than	5-9.9	10-19.9	20-49.9	50-99.9	100-199.9	200-499.9
			boat	boat	total	5 tons	tons	tons	tons	tons	tons	tons
All Purse Seines	1	1,089	200	719	170				3	31	135	1
Anchovy Purse Seine	2											•••
Fish Purse Seine	3											•••
All Seine Nets	4	4,420	3,743	677								•••
Boat Seine	5											•••
Beach Seine	6											•••
All Trawls	7	1,050		46	1,004				52	473	469	10
Beam Trawl	8											
Otter Board Trawl	9											
Pair Trawl	10											
Lift Nets	11	344	222	122								
All Falling Nets	12	6,239	4,801	1,438								
Anchovy Falling Net	13											
Squid Falling Net	14											
Gill Nets	15	1,114	2,830	8,017	267	2	54	163	29	8	10	1
All Traps	16	4,471	3,456	918	97				76	18	3	
Stationary Trap	17											
Portable Trap	18											
Hooks & Lines	19	1,414	296	1,111	7			1	6			
Push/Scoop Nets	20											
Shellfish & Seaweed Collecting Gear	21											
Others	22	1,395		775	620	3	65	110	242	112	88	

# 3.2 Number of Fishing Units by Size of Boat, 2011 3.2.5 Singapore

			Out-board		In-bo	ard powe	red boat		_
Type of Fishing Gear		Total	powered	Sub-	Less than	5-9.9	10-19.9	20-49.9	50-99.9
			boat	total	5 tons	tons	tons	tons	tons
All Purse Seines	1	•••	•••					•••	•••
Anchovy Purse Seine	2							•••	
Fish Purse Seine	3							•••	
All Seine Nets	4						•••	•••	
Boat Seine	5						•••	•••	
Beach Seine	6	•••	•••	•••			•••	•••	
All Trawls	7	3	•••	3		•••	•••	3	
Beam Trawl	8	•••	•••	•••			•••	•••	
Otter Board Trawl	9	3		3		•••		3	
Pair Trawl	10	•••	•••	•••		•••	•••	•••	
Lift Nets	11	•••	•••			•••	•••	•••	
All Falling Nets	12	•••	•••	•••		•••	•••	•••	
Anchovy Falling Net	13	•••	•••			•••	•••	•••	
Squid Falling Net	14	•••				•••		•••	
Gill Nets	15	36	34	2	1	1	•••	•••	
All Traps	16	•••						•••	
Stationary Trap	17	•••	•••	•••		•••	•••	•••	
Portable Trap	18	•••	•••	•••			•••	•••	
Hooks & Lines	19	•••	•••			•••	•••	•••	•••
Push/Scoop Nets	20						•••	•••	
Shellfish & Seaweed Collecting Gear	21								
Others	22								

# 3.2 Number of Fishing Units by Size of Boat, 2011 3.2.6 Thailand

			Out-board		In-	board pov	vered boa	it	
Type of Fishing Gear	.	Total	powered	Sub-	Less than	5-9.9	10-19.9	20-49.9 B	> 50
			boat	total	5 tons	tons	tons	tons B	tons
All Purse Seines	1	1,498		1,498		162		502	834
Anchovy Purse Seine	2	268		268		44		121	103
Fish Purse Seine	3	1,230		1,230		118		381	731
All Seine Nets	4								•••
Boat Seine	5								
Beach Seine	6								•••
All Trawls	7	3,466		3,466		384		1,985	1,097
Beam Trawl	8	118		118		12		90	16
Otter Board Trawl	9	2,256		2,256		371		1,383	502
Pair Trawl	10	1,092		1,092		1		512	579
Lift Nets	11	274		274		57		199	18
All Falling Nets	12	3,719		3,719		1,351		2,155	213
Anchovy Falling Net	13	690		690		134		507	49
Squid Falling Net	14	3,029		3,029		1,217		1,648	164
Gill Nets	15	7,825		7,825		6,582		845	398
All Traps	16	•••				•••			•••
Stationary Trap	17	•••				•••			•••
Portable Trap	18								
Hooks & Lines	19	32		32		16		9	7
Push/Scoop Nets	20	375		375		207		122	46
Shellfish & Seaweed Collecting Gear	21		•••					•••	
Others	22	14		14		11		2	1

Notes:

Figures from Thai Fishing Vessel Statistics 2011
A Inboard powered boat < 10 tons
B Inboard powered boat 10-49 tons
C Inboard powered boat > 50 tons

# 3.3 Marine Capture Fishery Production by Species and by Fishing Area, 2011 3.3.1 In Quantity

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Anodontostoma chacunda	Chacunda gizzard shad	57		
Anodontostoma chacunda	Chacunda gizzard shad	71		
Tenualosa toli	Toli shad	57		
Tenualosa toli	Toli shad	71		
Pellona ditchela	Indian pellona	57		•••
Pellona ditchela	Indian pellona	71		
Lates calcarifer	Barramundi (= Giant seaperch)	57		
Lates calcarifer	Barramundi (= Giant seaperch)	71		
Chanos chanos	Milkfish	71		
Psettodes erumei	Indian halibut	57		
Psettodes erumei	Indian halibut	71		
Pleuronectiformes	Flatfishes nei	57		
Pleuronectiformes	Flatfishes nei	71		
Cynoglossus spp.	Tongue soles nei	57		
Cynoglossus spp.	Tongue soles nei	71		
Harpadon nehereus	Bombay-duck	57		
Harpadon nehereus	Bombay-duck	71		
Saurida tumbil	Greater lizardfish	57		
Saurida tumbil	Greater lizardfish	71		•••
Synodontidae	Lizardfishes nei	57		
Synodontidae	Lizardfishes nei	71		•••
Ariidae	Sea catfishes	57		
Ariidae	Sea catfishes	71		•••
Plotosus spp.	Eeltail catfishes	57		•••
Plotosus spp.	Eeltail catfishes	71		
Mugilidae	Mullets nei	57		
Mugilidae	Mullets nei	71		
Caesio caerulaurea	Blue and gold fusilier	57		
Caesio caerulaurea	Blue and gold fusilier	71		
Caesio cunning	Redbelly yellowtail fusilier	57		
Caesio cunning	Redbelly yellowtail fusilier	71	•••	•••
Caesionodae	Fusiliers nei	57	•••	•••
Caesionodae	Fusiliers nei	71		•••
Epinephelus merra	Honeycomb grouper	57	•••	•••
Epinephelus merra	Honeycomb grouper	71		

ndonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
2,487		5,193	•••	•••	•••	•••	
5,884		1,456	•••	1,206	23		
785			•••				
1,914			•••				
		6,399					
		3,676		1,198			
12,433		240				71	
77,898		1,120		795		15	
				278			
10,726			•••			1,064	
11,934			•••			915	
9,164		1,455					
1,451		1,204	•••	846			
		2,242	•••			2,100	
		865	•••			2,743	
1,756		499					
5,461		2,246	•••				
6,386							
15,235							
		15,491	•••			14,008	
		9,879		6,421	2	15,111	
16,891		8,514				1,786	
75,268		11,318		5,686	59	1,025	
		1,688	•••			124	
		1,352				166	
14,556		1,351				2,587	
37,136		2,238		13,883	30	2,850	
989							
16,069							
19,688							
52,126							
		22					
		552		21,257			
2,485							
1,822							

# 3.3 Marine Capture Fishery Production by Species and by Fishing Area, 2011 3.3.1 In Quantity (Cont'd)

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Epinephelus tauvina	Greasy grouper	57		•••
Epinephelus tauvina	Greasy grouper	71		
Epinephelus spp.	Groupers nei	57		
Epinephelus spp.	Groupers nei	71	•••	•••
Cephalopholis boenak	Chocolate hind	57		
Cephalopholis boenak	Chocolate hind	71		•••
Cromileptes altivelis	Humpback grouper	57		
Cromileptes altivelis	Humpback grouper	71		
Plectropomus leopardus	Leopard coral grouper	57		
Plectropomus leopardus	Leopard coral grouper	71		
Priacanthus macracanthus	Red bigeye	57		•••
Priacanthus macracanthus	Red bigeye	71	•••	•••
Pricanthus spp.	Bigeyes nei	57	•••	•••
Pricanthus spp.	Bigeyes nei	71		•••
Sillago sihama	Silver sillago	57		
Sillago sihama	Silver sillago	71		
Sillaginidae	Sillago-whitings	57	•••	•••
Sillaginidae	Sillago-whitings	71		•••
Mene maculate	Moonfish	71		
Sciaenidae	Croakers, drums nei	57		•••
Sciaenidae	Croakers, drums nei	71		•••
Lutjanus argentimaculatus	Mangrove red snapper	57	•••	•••
Lutjanus argentimaculatus	Mangrove red snapper	71	•••	
Lutjanus spp.	Snappers nei	57	•••	
Lutjanus spp.	Snappers nei	71		•••
Lutjanidae	Snappers, jobfishes nei	57		
Lutjanidae	Snappers, jobfishes nei	71		
Serranidae	Groupers, seabasses nei	57		
Serranidae	Groupers, seabasses nei	71		
Pristipomoides spp.	Sharptooth jobfishes	57		•••
Pristipomoides spp.	Sharptooth jobfishes	71		
Nemipterus spp.	Threadfin breams nei	57		•••
Nemipterus spp.	Threadfin breams nei	71		
Scolopsis spp.	Monocole breams	57		
Scolopsis spp.	Monocole breams	71		

ndonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnan
1,314							
1,022							
		1,916					
		8,043			55		
16,243							
28,665		•••			•••		
1,942							
7,287		•••			•••		
2,327							
12,155		•••			•••		
483							
494							
9,274		6,644				13,698	
29,237		11,562				20,030	
182		•••		•••	•••		
837		•••			•••		
		1,733		•••	•••	1,389	
		1,919		14,766	5	2,014	
		•••		17,219	21		
17,598		24,591		•••	•••	12,467	
60,154		13,127			26	14,058	
		1,078		•••	•••		
		8,549		•••	•••		
18,467		398			•••		
100,429		3,136			23		
		1,059				1,747	
		3,221		22,266	41	1,232	
						2,471	
				19,426		2,066	
1,180							
2,003		•••	•••	•••	•••		
16,190		19,215	•••	•••	•••	16,507	
38,693		24,300	•••	48,079	30	25,302	
		9	•••	•••	•••	248	
		1,778				448	

# 3.3 Marine Capture Fishery Production by Species and by Fishing Area, 2011 3.3.1 In Quantity (Cont'd)

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Leiognathus spp.	Ponyfishes	57		
Leiognathus spp.	Ponyfishes	71		
Leiognathidae	Ponyfishes (=Slipmouths) nei	57		
Leiognathidae	Ponyfishes (=Slipmouths) nei	71		
Plectorhinchus spp.	Sweetlips	57		
Plectorhinchus spp.	Sweetlips	71		
Pomadasys argenteus	Silver grunt	57		
Pomadasys argenteus	Silver grunt	71		
Haemulidae (=Pomodasyidae)	Grunts, sweetlips nei	57		
Haemulidae (=Pomodasyidae)	Grunts, sweetlips nei	71		
Lethrinidae	Emperors (=Scavengers) nei	57		
Lethrinidae	Emperors (=Scavengers) nei	71		
Sparidae	Porgies, seabreams nei	71		
Mullidae	Goatfishes, red mullets nei	71		
Upeneus spp.	Goatfishes	57		
Upeneus spp.	Goatfishes	71		
Gerres spp.	Mojarras nei	57		•••
Gerres spp.	Mojarras nei	71		•••
Drepane punctata	Spotted sicklefish	57		•••
Drepane punctata	Spotted sicklefish	71		•••
Cheilinius undulatus	Humphead wrasse	57		•••
Cheilinius undulatus	Humphead wrasse	71		•••
Labridae	Wrasses, hogfishes, etc. nei	57		•••
Labridae	Wrasses, hogfishes, etc. nei	71		•••
Eleutheronema tetradactylum	Four finger threadfin	57		•••
Eleutheronema tetradactylum	Four finger threadfin	71		•••
Ambassidae	Glass fishes	71		•••
Percoidei	Percoids nei	71		•••
Polynemidae	Threadfins, Tasselfishes nei	57		•••
Polynemidae	Threadfins, Tasselfishes nei	71		•••
Siganus spp.	Spinefeet nei	57		•••
Siganus spp.	Spinefeet nei	71		•••
Megalops cyprinoides	Indo-Pacific tarpon	57		•••
Megalops cyprinoides	Indo-Pacific tarpon	71		•••
Terapon spp.	Terapon perches nei	57		•••
Terapon spp.	Terapon perches nei	71		

Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
indonesia	Lao PDR	-	Myanmar	Philippines	Singapore	Inaliand	vietnam
		286					•
		2,058					•
18,454							•
65,769				61,143			•
215							•
727							•
		898					•
		2,069					•
4,644		116					•
11,487		1,160			25		•
6,830		174					•
38,370		1,159					•
				13,819			•
				30,388			•
22,346		8,022					
55,932		6,902			6		
		163					
		709		6,269			
		271					
		750		104			
504		•••					
728		•••					
		69					
		1,081		15,166			
1,067							•
7,924		•••					
		•••		1,750			
				14,961			
11,563		8,391				50	
25,342		5,015		3,887	30	515	
3,087		226					
17,635		1,537		25,700			•
·		19					•
		612		1,522			•
2,720			•••				•
5,973		•••					

# 3.3 Marine Capture Fishery Production by Species and by Fishing Area, 2011 3.3.1 In Quantity (Cont'd)

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Platax spp.	Batfishes	57		
Muraenesox cinereus	Daggertooth pike conger	57		
Muraenesox cinereus	Daggertooth pike conger	71		
Trichiurus lepturus	Largehead hairtail	57		
Trichiurus lepturus	Largehead hairtail	71		
Trichiuridae	Hairtails nei	57		
Trichiuridae	Hairtails nei	71		
Amblygaster sirm	Spotted sardinella	57		
Amblygaster sirm	Spotted sardinella	71		
Sardinella gibbosa	Goldstripe sardinella	57		
Sardinella gibbosa	Goldstripe sardinella	71		
Sardinella lemuru	Bali sardinella	57		
Sardinella lemuru	Bali sardinella	71		
Sardinella spp.	Sardinellas nei	57		
Sardinella spp.	Sardinellas nei	71		
Dussunieria acuta	Rainbow sardine	57		
Dussunieria acuta	Rainbow sardine	71		
Stolephorus spp.	Stolephorus anchovies	57		
Stolephorus spp.	Stolephorus anchovies	71		
Chirocentrus spp.	Wolf-herrings nei	57		
Chirocentrus spp.	Wolf-herrings nei	71		
Auxis thazard	Frigate tuna	57		
Auxis thazard	Frigate tuna	71		
Auxis rochei	Bullet tuna	57		
Auxis rochei	Bullet tuna	71		
Euthynnus affinis	Kawakawa	57		
Euthynnus affinis	Kawakawa	71		
Katsuwonus pelamis	Skipjack tuna	57		
Katsuwonus pelamis	Skipjack tuna	71		
Thunnus tonggol	Longtail tuna	57		
Thunnus tonggol	Longtail tuna	71		
Thunnus alalunga	Albacore tuna	57		
Thunnus alalunga	Albacore tuna	71		
Thunnus maccoyii	Southern bluefin tuna	57		
Thunnus albacares	Yellowfin tuna	57		
Thunnus albacares	Yellowfin tuna	71		

	I						ТМ
Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
				2,908			
		1,536				826	
		2,518				1,710	
		2,837				3,157	
		5,264			34	3,633	
19,675							
37,760				16,620			
824							
5,968							
39,974							•••
149,029							•••
39,364							
51,478							•••
						16,153	•••
				338,076		80,325	
3,238							
12,098				10,730			
77,327		4,911					
127,384		14,174		75,867			
3,337		1,051				2,459	
10,904		4,614		423	27	2,845	
64,304		148	•••				
79,113		3,378		132,629			
6,396							
1,231							
54,697		8,409	•••			6,890	
94,013		12,518		36,403		14,696	
81,189		86	•••				
291,305		6,187	•••	197,383	1		
38,860		13,122	•••			3,440	
78,939		14,362				11,408	
10,587			•••			12	
1,157							
1,428		•••	•••				••
35,445		38				92	
140,325		1,186		123,014			

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Thunnus obesus	Bigeye tuna	57		
Thunnus obesus	Bigeye tuna	71		
Istiophorus platypterus	Indo-Pacific sailfish	57		
Istiophorus platypterus	Indo-Pacific sailfish	71		
Istiophoridae	Marlins, sailfishes, etc. nei	57		
Istiophoridae	Marlins, sailfishes, etc. nei	71		
Makaira indica	Black marlin	57		
Makaira indica	Black marlin	71		
Makaira nigricans	Atlantic blue marlin	57		
Makaira nigricans	Atlantic blue marlin	71		
Tetrapturus audax	Striped marlin	57		
Tetrapturus audax	Striped marlin	71		
Xiphias gladius	Swordfish	57		
Xiphias gladius	Swordfish	71		
Scomberomorus commerson	Narrow-barred Spanish mackerel	57		
Scomberomorus commerson	Narrow-barred Spanish mackerel	71	•••	
Scomberomorous guttatus	Indo-Pacific king mackerel	57		
Scomberomorous guttatus	Indo-Pacific king mackerel	71		
Scomberomorus spp.	Seerfishes nei	57		
Scomberomorus spp.	Seerfishes nei	71		
Sarda orientalis	Striped bonito	57		
Sarda orientalis	Striped bonito	71		
Gobiidae	Gobies nei	71		
Acanthuridae	Surgconfishes nei	71		
Congridae	Conger eels, etc. nei	71	•••	
Atherinidae	Silversides (=Sand smells) nei	71	•••	
Tylosurus spp.	Needlefishes nei	57	•••	
Tylosurus spp.	Needlefishes nei	71		
Hemiramphus spp.	Halfbeaks nei	57	•••	
Hemiramphus spp.	Halfbeaks nei	71		
Lactarius lactarius	False trevally	57		
Lactarius lactarius	False trevally	71		
Rachycentron canadum	Cobia	57		
Rachycentron canadum	Cobia	71		

мт

ndonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
25,114		69				249	
41,311		619		9,612			
2,969							
2,603							
		18					
		427		4,228			
5,827		•••					
1,563							•
127							•
26				2,266			
423							
606							
4,721		51					
598		225		4,916			
26,087							
109,208				18,407	40		
8,513							
9,824							
		4,855				3,016	
		11,717				7,517	
649							
260							
				11,175			
				7,266			
				2,955			
				561			
3,372							
4,255				11,310			
5,820							
20,761				2,567			
4,958							
25,726		408		317			
		441					
		992		3,030			

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Decapterus russelli	Indian scad	57		
Decapterus russelli	Indian scad	71		
Decapterus spp.	Scads nei	57		
Decapterus spp.	Scads nei	71		
Scatophagus spp.	Scats	71		
Exocoetidae	Flying fishes nei	57		
Exocoetidae	Flying fishes nei	71		•••
Caranx spp.	Jacks, crevalles nei	57		
Caranx spp.	Jacks, crevalles nei	71		
Carangidae	Carangids nei	57		
Carangidae	Carangids nei	71		
Selar crumenophthalmus	Bigeye scad	57		
Selar crumenophthalmus	Bigeye scad	71		•••
Selaroides leptolepis	Yellowstripe scad	57		
Selaroides leptolepis	Yellowstripe scad	71		
Seriolina nigrofasciata	Blackbanded trevally	57		
Seriolina nigrofasciata	Blackbanded trevally	71		•••
Parastromateus niger	Black pomfret	57		
Parastromateus niger	Black pomfret	71		
Elagatis bipinnulata	Rainbow runner	57		
Elagatis bipinnulata	Rainbow runner	71		
Megalaspis cordyla	Hardtail scad	57		
Megalaspis cordyla	Hardtail scad	71		
Scomberoides spp.	Queenfishes	57		
Scomberoides spp.	Queenfishes	71		•••
Coryphaena hippurus	Dolphinfish	57		
Coryphaena hippurus	Dolphinfish	71		
Engraulidae	Anchovies, etc. nei	57		
Engraulidae	Anchovies, etc. nei	71		
Scomber australasicus	Spotted chub mackerel	57		
Scomber australasicus	Spotted chub mackerel	71		
Scomber japonicus	Chub mackerel	71		
Rastrelliger brachysoma	Short mackerel	57		
Rastrelliger brachysoma	Short mackerel	71		
Rastrelliger kanagurta	Indian mackerel	57		
Rastrelliger kanagurta	Indian mackerel	71		

ndonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
		21,765				21,064	•
		55,073				8,541	
82,374							
324,337				245,431	61		
				2,911			
3,084							
11,060				23,160			
24,615							
59,968					75		
		989	•••			14,394	
		11,571		70,111	8	26,760	•
2,909		16,530				6,798	
7,786		34,288		119,210		15,503	
64,568		1,414					
119,831		14,773					
						1,140	
						1,041	
8,327		1,639				781	
40,393		3,820				1,891	
4,019		136					
11,608		727		7,271			
20,387		18,953				10,752	
20,816		12,706		17,514		4,312	
4,407		660					
11,204		2,385		6,733			
3,470							
5,082				166			
						30,220	
						114,157	
1,329							
249							
				2,277			•
91,198							•
201,541				55,300			•
5,365						18,109	•
15,720				85,753		15,670	

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Rastrelliger spp.	Other rastrelliger mackerels	57		
Rastrelliger spp.	Other rastrelliger mackerels	71		
Pampus argenteus	pus argenteus Silver pomfret			
Pampus argenteus	Silver pomfret	71		•••
Sphyraena jello	Pickhandle barracuda	57		•••
Sphyraena jello	Pickhandle barracuda	71	•••	•••
Sphyraena barracuda	Great barracuda	57		•••
Sphyraena barracuda	Great barracuda	71		•••
Sphyraena spp.	Barracudas nei	57		
Sphyraena spp.	Barracudas nei	71		•••
Alopias spp.	Thresher sharks nei	57		
Alopias spp.	Thresher sharks nei	71		•••
Sphyrnidae	Hammerhead sharks nei	57		•••
Sphyrnidae	Hammerhead sharks nei	71		••
Squalidae	Dogfish sharks nei	57	•••	
Squalidae	Dogfish sharks nei	71	•••	•••
Lamnidae	Mackerel sharks nei	57		•••
Lamnidae	Mackerel sharks nei	71		
Carcharhinidae	Requim sharks nei	57		
Carcharhinidae	Requim sharks nei	71		••
Rhynchobatus audtraliae	Whitespotted wedgefish	57	•••	••
Rhynchobatus audtraliae	Whitespotted wedgefish	71	•••	••
Rhynobatidae	Guitarfishes, etc. nei	71	•••	••
Stromateidae	Butterfishes, pomfrets nei	57	•••	••
Stromateidae Stromateidae	Butterfishes, pomfrets nei	71	•••	•••
Dasyatidae	Stingrays, butterfly rays nei	57	•••	•••
Dasyatidae Dasyatidae	Stingrays, butterfly rays nei	71	•••	••
Rajiformes	Rays, stingrays, mantas nei	57	•••	••
Rajiformes	Rays, stingrays, mantas nei	71		
Myliobatidae	Eagle rays nei	57		
Myliobatidae	Eagle rays nei	71	•••	
Mobulidae	Mantas, devil rays nei	57		•••
Mobulidae	Mantas, devil rays nei	71		••
Clupeoidei	Clupeoids nei	57	•••	••
Clupeoidei	Clupeoids nei	71		•••

Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
		154,222				33,284	•••
		29,368			59	86,143	•.
16,960		2,335	•••			658	•.
26,007		1,903	•••			409	•.
165							••
753					42		•
1,985							•
6,447							•
						5,958	••
				9,104		6,744	
1,341		•••	•••			•••	
16,900	•••	•••	•••	•••		•••	
1,433		3,342					•
2,063		5,419					
2,642			•••			•••	•
2,404						•••	••
410						•••	• •
222	•••	•••	•••	•••	•••	•••	••
8,536						•••	•
14,528			•••				•
1,295		•••	•••			•••	•
6,488		•••	•••	•••		•••	•
1,074		•••	•••	•••		•••	•
		1,405	•••	•••		•••	•
	•••	1,630	•••	2,040	71	•••	••
8,564	•••	•••	•••	•••	•••	•••	••
24,078							••
	•••	3,911	•••			2,763	••
		9,110	•••	2,501	112	2,883	• ·
2,379		•••					•
2,526	•••	•••	•••	•••	•••	•••	••
		•••	•••	•••	•••	•••	• ·
•••	•••		•••	•••	•••	•••	•
		4,533	•••		•••	•••	• •
		32,593		537	1		

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Clupeoidei	Diadromous clupeoids nei	57		
Clupeoidei	Diadromous clupeoids nei	71		
Stomatopoda	Stomatopods nei	57		
Stomatopoda	Stomatopods nei	71		
Balistidae	Triggerfishes, durgons nei	57		
Balistidae	Triggerfishes, durgons nei	71		
Pristidae	Sawfishes	57		
Pristidae	Sawfishes	71		
Elasmobranchii	Sharks, rays, skates, etc. nei	57		
Elasmobranchii	Sharks, rays, skates, etc. nei	71		
Osteichthyes	Marine fishes nei	57		
Osteichthyes	Marine fishes nei	71	1,988	91,000
Portunus pelagicus	Blue swimming crab	57		
Portunus pelagicus	Blue swimming crab	71		
Scylla serrata	Indo-Pacific swamp crab	57		
Scylla serrata	Indo-Pacific swamp crab	71		
Panulirus spp.	Tropical spiny lobsters nei	57		
Panulirus spp.	Tropical spiny lobsters nei	71		
Scyllaridae	Slipper lobsters nei	71		
Penaeus merguiensis	Banana prawn	57		
Penaeus merguiensis	Banana prawn	71		
Penaeus monodon	Giant tiger prawn	57		
Penaeus monodon	Giant tiger prawn	71		
Penaeus latisulcatus	Western king prawn	57		
Penaeus latisulcatus	Western king prawn	71		
Penaeus semisulcatus	Green tiger prawn	57		
Penaeus semisulcatus	Green tiger prawn	71		
Penaeus spp.	Penaeus shrimps nei	57		
Penaeus spp.	Penaeus shrimps nei	71		
Metapenaeus spp.	Metapenaeus shrimps nei	57		
Metapenaeus spp.	Metapenaeus shrimps nei	71		
Metapenaeus endeavouri	Endeavour shrimp	71		
Sergestidae	Sergestid shrimps nei	57		
Sergestidae	Sergestid shrimps nei	71		
Crassostrea iredalei	Slipper cupped oyster	71		

Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam A
ilidollesia	Lauruk		Myaiiiiai	Filluppines	Siligapore	IIIallallu	Vietnani A
		27				•••	
		1,209				•••	
						42	
		•••				645	
		382					
		762					
45							
22							
		1,128				983	•.
		4,846		2,556	29	1,591	
115,963		187,816	2,169,820			199,236	
388,644		154,448		14,943	325	352,355	1,713,90
182						8,460	
837				29,273		12,122	
12,017						1,102	•
27,661				1,531	38	1,152	
4,799		17					
7,320		708		202	2		
				79	8		
33,488						3,580	
51,887						5,771	
5,308						857	
21,469				869		1,741	
		•••				1,101	
						1,395	
						772	
						1,472	
						4,489	
		•••	•••	13,260		16,218	
29,386		•••	•••		•••	2,709	
18,690				9,467		6,495	
				992		•••	
		30,764				1,175	
		5,442		18,016		6,739	
		·		119		•••	

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Crassostrea spp.	Cupped oysters nei	57		
Crassostrea spp.	Cupped oysters nei	71	•••	•••
Perna viridis	Green mussel	57		•••
Perna viridis	Green mussel	71		
Pectinidae	Scallops nei	57		••
Pectinidae	Scallops nei	71		••
Anadara granosa	Blood cockle	57		•••
Anadara granosa	Blood cockle	71		•••
Anadara spp.	Anadara clams nei	71	•••	•••
Paphia spp.	Short neck clams nei	57		•••
Paphia spp.	Short neck clams nei	71		•••
Meretrix spp.	Hard clams nei	57		•••
Meretrix spp.	Hard clams nei	71		•••
Bivalvia	Clams, etc. nei	57		••
Bivalvia	Clams, etc. nei	71		••
Crustacea	Marine crustaceans nei	57		••
Crustacea	Marine crustaceans nei	71	95	••
Brachyura	Marine crabs nei	57		•••
Brachyura	Marine crabs nei	71		4,230
Natantia	Natantian decapods nei	57		•••
Natantia	Natantian decapods nei	71	•••	8,726
Sepioteuthis lessonlana	Bigfin reef squid	57		
Sepioteuthis lessonlana	Bigfin reef squid	71		•••
Sepiidae, Sepiolidae	Cuttlefish, bobtail squids nei	57		•••
Sepiidae, Sepiolidae	Cuttlefish, bobtail squids nei	71		•••
Loligo spp.	Common squids nei	57		•••
Loligo spp.	Common squids nei	71		•••
Loliginidae, Ommastrephidae	Various squids nei	57		•••
Loliginidae, Ommastrephidae	Various squids nei	71		•••
Octopodidae	Octopuses nei	57		•••
Octopodidae	Octopuses nei	71		•••
Squiidae	Squiilids nei	71		
Mollusca	Marine molluscs nei	57		••
Mollusca	Marine molluscs nei	71	71	5,235

ndonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
73		•••	•••		•••	•••	
260							
2,438							
429				28			
265							
859				41		190	
18,049							
20,929						1,322	
				1			
						1,004	
				2		11,614	
770							
9,863							
		1,458					
		1,115		306			586,1
448							
852							
		5,327				3,474	
		7,601			82	3,303	
23,873		48,066					
67,321		24,879			176		
						2,216	
						3,659	
13,549		11,649	•••			7,637	
12,005		11,918	•••	1,608	20	16,017	
43,460		•••	•••	•••		15,809	
100,346				56,842	31	61,765	
		19,360					
		32,027					
1,576		1,026				3,848	
6,047		1,066		5,158		5,938	
				2,097			
1,246	•••	•••	•••	•••		1	
3,920						4,397	

52

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Trochus niloticus	Commercial top shell	57		
Trochus niloticus	Commercial top shell	71		
Haliotis spp.	Abalones nei	71		
Holothurioidea	Sea cucumbers nei	57		
Holothurioidea	Sea cucumbers nei	71		
Rhopilema spp.	Jellyfishes	57		•••
Rhopilema spp.	Jellyfishes	71		•••
Testudinata	Marine turtles nei	57		
Testudinata	Marine turtles nei	71		
Cephalopoda	Cephalopods nei	71		5,504
Invertebrata	Aquatic invertebrates nei	57		••
Invertebrata	Aquatic invertebrates nei	71		
Thenus orientalis	Flathead lobster	57		
Thenus orientalis	Flathead lobster	71		•••
Stronngylocentrotus spp.	Sea urchins nei	71		•••
Spongidae	Sponges	71		•••
Rhodophyceae	Red seaweeds	71		•••
-	Others	71	•••	•••

ΜT

Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
6		•••	•••	•••	•••		•••
79			•••				•••
			•••	362			
340		•••	•••				
5,428			•••	924			
23,456	•••	385	•••			105,934	
16,105		3,353		15		4,371	
493							
38							
	•••	•••	•••		•••		
1,000						1	
2,304				15		808	
						172	
						810	
				145			
	•••	•••	•••	6			
		•••		458			
			•••	1,738			

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Anodontostoma chacunda	Chacunda gizzard shad	57		
Anodontostoma chacunda	Chacunda gizzard shad	71	•••	
Tenualosa toli	Toli shad	57		
Tenualosa toli	Toli shad	71		
Pellona ditchela	Indian pellona	57		
Pellona ditchela	Indian pellona	71		
Lates calcarifer	Barramundi (= Giant seaperch)	57		
Lates calcarifer	Barramundi (= Giant seaperch)	71		
Psettodes erumei	Indian halibut	57	•••	
Psettodes erumei	Indian halibut	71		
Pleuronectiformes	Flatfishes nei	57		
Pleuronectiformes	Flatfishes nei	71		
Cynoglossus spp.	Tongue soles nei	57		
Cynoglossus spp.	Tongue soles nei	71		
Harpadon nehereus	Bombay-duck	57		
Harpadon nehereus	Bombay-duck	71		
Saurida tumbil	Greater lizardfish	57	•••	
Saurida tumbil	Greater lizardfish	71		
Synodontidae	Lizardfishes nei	57		
Synodontidae	Lizardfishes nei	71		
Ariidae	Sea catfishes	57		
Ariidae	Sea catfishes	71	•••	
Plotosus spp.	Eeltail catfishes	57	•••	
Plotosus spp.	Eeltail catfishes	71		
Mugilidae	Mullets nei	57		
Mugilidae	Mullets nei	71	•••	
Caesio caerulaurea	Blue and gold fusilier	57		
Caesio caerulaurea	Blue and gold fusilier	71	•••	
Caesio cunning	Redbelly yellowtail fusilier	57		
Caesio cunning	Redbelly yellowtail fusilier	71	•••	
Caesionodae	Fusiliers nei	57	•••	
Caesionodae	Fusiliers nei	71		
Epinephelus merra	Honeycomb grouper	57		
 Epinephelus merra	Honeycomb grouper	71		

US\$ 1,000

							US\$ 1,000
Indonesia A	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
8,888		4,578	•••				
0,000		1,347					
3,188							
3,100							
		5,977					
		5,587					
208,823		1,272					
200,023		4,266	•••		157	306	
20,390							
20,370			•••			2,885	
		2,580	•••				•••
		2,062					
12,374		4,122	•••				•••
12,371		952	•••			5,959	
5,212		278	•••				•••
3,2.2		1,962	•••				•••
9,219							
7,=.7		•••	•••				
		11,511	•••				
		5.074	•••		3	20,150	
128,613		11,678					
0,0.0		12,622	•••		123	3,601	
		6,030	•••				
•••		2,768	•••			782	
•••		2,048	•••				•••
		4,237	•••	18,433	132	9,414	•••
12,843		•••	•••				
12,013			•••				
78,089							
70,007							
		58					
		1,024		30,339			
11,933							
11,755			•••				

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Epinephelus tauvina	Greasy grouper	57		
Epinephelus tauvina	Greasy grouper	71		
Epinephelus spp.	Groupers nei	57		
Epinephelus spp.	Groupers nei	71		
Cephalopholis boenak	Chocolate hind	57		
Cephalopholis boenak	Chocolate hind	71		
Cromileptes altivelis	Humpback grouper	57		
Cromileptes altivelis	Humpback grouper	71		
Plectropomus leopardus	Leopard coral grouper	57		
Plectropomus leopardus	Leopard coral grouper	71		
Priacanthus macracanthus	Red bigeye	57		
Priacanthus macracanthus	Red bigeye	71		
Pricanthus spp.	Bigeyes nei	57		
Pricanthus spp.	Bigeyes nei	71		
Sillago sihama	Silver sillago	57		
Sillago sihama	Silver sillago	71		
Sillaginidae	Sillago-whitings	57		
Sillaginidae	Sillago-whitings	71		
Mene maculate	Moonfish	71		
Sciaenidae	Croakers, drums nei	57		
Sciaenidae	Croakers, drums nei	71		
Lutjanus argentimaculatus	Mangrove red snapper	57		
Lutjanus argentimaculatus	Mangrove red snapper	71		
Lutjanus spp.	Snappers nei	57		
Lutjanus spp.	Snappers nei	71		
Lutjanidae	Snappers, jobfishes nei	57		
Lutjanidae	Snappers, jobfishes nei	71		
Pristipomoides spp.	Sharptooth jobfishes	57		
Pristipomoides spp.	Sharptooth jobfishes	71		
Nemipterus spp.	Threadfin breams nei	57		
Nemipterus spp.	Threadfin breams nei	71		
Scolopsis spp.	Monocole breams	57	•••	
Scolopsis spp.	Monocole breams	71		
Leiognathus spp.	Ponyfishes	57		
Leiognathus spp.	Ponyfishes	71		•••

US\$ 1 000

							US\$ 1,000
Indonesia A	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
6,354							
, l							
		13,453					
		36,074			446		•••
115,290							
,							
31,762							
, ,							•••
57,696							•••
,							•••
742							•••
							•••
34,580		7,212					
- ,		9,055				19,929	
560							
		3,031					
		2,688			30	6,028	
					93		
75,306		33,337					•••
, 5,555		19,540			31	26,225	•••
		7,252					
		31,233					
296,164		1,148					
		7,753			145		
		2,103					
		10,509		51,531	255	10,960	
3,106							
2,							
72,973		36,362					•••
, 2, , , 2		42,262		82,689	197	42,498	•••
		20					
		1,861				1,070	
		308					
		2,443		69,703			

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Leiognathidae	Ponyfishes (=Slipmouths) nei	57		
Leiognathidae	Ponyfishes (=Slipmouths) nei	71		
Plectorhinchus spp.	Sweetlips	57		
Plectorhinchus spp.	Sweetlips	71		
Pomadasys argenteus	Silver grunt	57		
Pomadasys argenteus	Silver grunt	71		
Haemulidae (=Pomodasyidae)	Grunts, sweetlips nei	57		
Haemulidae (=Pomodasyidae)	Grunts, sweetlips nei	71		
Lethrinidae	Emperors (=Scavengers) nei	57		
Lethrinidae	Emperors (=Scavengers) nei	71		•••
Sparidae	Porgies, seabreams nei	71		•••
Parupeneus indicus	Indian goatfish	57		•••
Parupeneus indicus	Indian goatfish	71	•••	•••
Mullidae	Goatfishes, red mullets nei	71	•••	
Upeneus sulphureus	Sulphur goatfish	57	•••	
Upeneus sulphureus	Sulphur goatfish	71	•••	
Upeneus vittatus	Yellowstriped goatfish	57		•••
Upeneus vittatus	Yellowstriped goatfish	71		•••
Upeneus spp.	Goatfishes	57		
Upeneus spp.	Goatfishes	71		•••
Gerres spp.	Mojarras nei	57		
Gerres spp.	Mojarras nei	71		•••
Drepane punctata	Spotted sicklefish	57	•••	•••
Drepane punctata	Spotted sicklefish	71	•••	•••
Cheilinius undulatus	Humphead wrasse	57	•••	•••
Cheilinius undulatus	Humphead wrasse	71	•••	•••
Labridae	Wrasses, hogfishes, etc. nei	57	•••	•••
Labridae	Wrasses, hogfishes, etc. nei	71	•••	•••
Eleutheronema tetradactylum	Four finger threadfin	57	•••	•••
Eleutheronema tetradactylum	Four finger threadfin	71		
Polynemidae	Threadfins, Tasselfishes nei	57		
Polynemidae	Threadfins, Tasselfishes nei	71	•••	
Siganus stellatus	Orange-spotted spinefoot	57		
Siganus stellatus	Orange-spotted spinefoot	71	•••	
Siganus virgatus	Barhed spinefoot	57		
Siganus virgatus	Barhed spinefoot	71		

							US\$ 1,000
Indonesia A	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
51,446							
21,110							•••
830							
		•••					•••
	•••	3,786	•••	•••	•••	•••	•••
	•••	3,909	•••	•••	•••	•••	•••
17,254	•••	111				•••	
,	•••	3,136	•••	•••	84	•••	•••
42,917	•••	499				•••	
·	•••	4,107		•••	•••	•••	•••
•••	•••	•••	•••	21,785	•••	•••	•••
6,428	•••	•••	•••	•••	•••	•••	•••
ŕ	•••	•••	•••	•••	•••	•••	•••
	•••			42,580		•••	•••
35,936	•••					•••	•••
,	•••	•••	•••	•••	•••	•••	•••
28,292	•••					•••	•••
·	•••					•••	•••
•••		4,915					
	•••	4,584			20	•••	•••
•••	•••	305	•••	•••	•••	•••	•••
•••	•••	984					
	•••	487				•••	•••
		1,021					•••
3,908	•••	•••					•••
	•••		•••			•••	•••
	•••	140	•••			•••	•••
		2,715		21,340			•••
11,339		•••					•••
		18,035					
	•••	18,953			531	1,728	•••
25,077		•••		•••			•••
1,697							•••
Notes: A				of Indonesia 20			

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Siganus spp.	Spinefeet (=Rabbitfishes) nei	57		
Siganus spp.	Spinefeet (=Rabbitfishes) nei	71		
Megalops cyprinoides	Indo-Pacific tarpon	57		
Megalops cyprinoides	Indo-Pacific tarpon	71		
Terapon spp.	Terapon perches nei	57		
Terapon spp.	Terapon perches nei	71		
Muraenesox cinereus	Daggertooth pike conger	57		
Muraenesox cinereus	Daggertooth pike conger	71		•••
Trichiurus lepturus	Largehead hairtail	57		
Trichiurus lepturus	Largehead hairtail	71		
Trichiuridae	Hairtails nei	57		•••
Trichiuridae	Hairtails nei	71		
Amblygaster sirm	Spotted sardinella	57		
Amblygaster sirm	Spotted sardinella	71	•••	
Sardinella gibbosa	Goldstripe sardinella	57		
Sardinella gibbosa	Goldstripe sardinella	71		
Sardinella lemuru	Bali sardinella	57		
Sardinella lemuru	Bali sardinella	71		
Sardinella spp.	Sardinellas nei	71		
Dussunieria acuta	Rainbow sardine	57		
Dussunieria acuta	Rainbow sardine	71		
Stolephorus spp.	Stolephorus anchovies	57		
Stolephorus spp.	Stolephorus anchovies	71	•••	•••
Chirocentrus spp.	Wolf-herrings nei	57	•••	
Chirocentrus spp.	Wolf-herrings nei	71	•••	•••
Auxis thazard	Frigate tuna	57		•••
Auxis thazard	Frigate tuna	71	•••	
Auxis rochei	Bullet tuna	57	•••	
Auxis rochei	Bullet tuna	71	•••	•••
Euthynnus affinis	Kawakawa	57		
Euthynnus affinis	Kawakawa	71	•••	•••
Katsuwonus pelamis	Skipjack tuna	57	•••	•••
Katsuwonus pelamis	Skipjack tuna	71	•••	•••
Thunnus tonggol	Longtail tuna	57	•••	•••
Thunnus tonggol	Longtail tuna	71		•••

US\$ 1,000

							US\$ 1,000
Indonesia A	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
6,259		1,084					
0,239		2,179		41,327			
		19					
		1,056			•••		
7,709							
7,707							
		2,534					
		3,251				2,481	
		3,409	•••		•••		
		6,462			119	7,067	
55,750		•••			•••	•••	•••
33,730				24,286	•••	•••	•••
3,294					•••	•••	•••
3,274							
177,549							
177,347							
20,900							
20,700		•••					
				240,196		44,424	
10,907							
10,707				12,526			
342,816		17,896					
342,010		16,174		78,295			
20,844		3,106					
20,044		14,208			202	5,714	
138,426		370					
130,420		5,836		192,037			
10,375							
10,373		•••					
164,683		14,886					
104,003		21,838		46,204		19,895	
421,260		280					
721,200		9,058		278,349	4		
131,287		31,484					
131,207		24,893	•••			17,680	•••

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Thunnus alalunga	Albacore tuna	57		
Thunnus alalunga	Albacore tuna	71		
Thunnus maccoyii	Southern bluefin tuna	57	•••	
Thunnus maccoyii	Southern bluefin tuna	71	•••	
Thunnus albacares	Yellowfin tuna	57	•••	
Thunnus albacares	Yellowfin tuna	71	•••	
Thunnus obesus	Bigeye tuna	57	•••	
Thunnus obesus	Bigeye tuna	71	•••	
Istiophorus platypterus	Indo-Pacific sailfish	57	•••	
Istiophorus platypterus	Indo-Pacific sailfish	71	•••	
Istiophoridae	Marlins, sailfishes, etc. nei	57	•••	
Istiophoridae	Marlins, sailfishes, etc. nei	71	•••	
Makaira indica	Black marlin	57	•••	
Makaira indica	Black marlin	71	•••	
Makaira nigricans	Atlantic blue marlin	57	•••	•••
Makaira nigricans	Atlantic blue marlin	71		
Tetrapturus audax	Striped marlin	57	•••	
Tetrapturus audax	Striped marlin	71	•••	•••
Xiphias gladius	Swordfish	57	•••	•••
Xiphias gladius	Swordfish	71	•••	
Scomberomorus commerson	Narrow-barred Spanish mackerel	57	•••	
Scomberomorus commerson	Narrow-barred Spanish mackerel	71	•••	•••
Scomberomorous guttatus	Indo-Pacific king mackerel	57		
Scomberomorous guttatus	Indo-Pacific king mackerel	71	•••	•••
Scomberomorus spp.	Seerfishes nei	57	•••	•••
Scomberomorus spp.	Seerfishes nei	71	•••	
Sarda orientalis	Striped bonito	57	•••	•••
Sarda orientalis	Striped bonito	71		•••
Tylosurus spp.	Needlefishes nei	57	•••	•••
Tylosurus spp.	Needlefishes nei	71		
Hemiramphus spp.	Halfbeaks nei	57		
Hemiramphus spp.	Halfbeaks nei	71		•••
Lactarius lactarius	False trevally	57		
Lactarius lactarius	False trevally	71		
Rachycentron canadum	Cobia	57		•••
Rachycentron canadum	Cobia	71		

							US\$ 1,000
Indonesia A	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
19,087							••
17,007			•••			36	
4,602		•••	•••	•••	•••		••
,			•••				
267,594		125	•••				
		3,544		260,758		200	••
115,490		242					••
,		891	•••	22,633		467	••
6,419		•••		•••			••
, ,		•••		•••			••
		25		•••			• •
		537		•••			• •
13,758		•••		•••			••
, , , ,		•••	•••	•••			•
228		•••		•••			•
		•••		•••			•
1,208		•••		•••			••
,		•••		•••			•
10,223		42	•••	•••	•••		•
,		183		•••			•
283,219		•••		•••			•
,		•••		44,704			•
43,472		•••		•••			•
-,		•••		•••	•••		•
		21,514	•••	•••	•••		•
		51,193	•••	•••	271	31,386	••
1,160		•••	•••	•••	•••		••
,		•••	•••	•••	•••		••
6,976		•••	•••	•••	•••		••
,		•••	•••	•••	•••		••
13,911		•••	•••	•••	•••		••
ŕ		•••	•••	•••	•••		• ·
23,297		•••	•••	•••	•••		• ·
,		777	•••	•••	•••		••
		508	•••	•••	•••		••
Δ	•••	1,732	•••	•••	•••	•••	• •

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Decapterus russelli	Indian scad	57		
Decapterus russelli	Indian scad	71		
Decapterus spp.	Scads nei	57		
Decapterus spp.	Scads nei	71		•••
Exocoetidae	Flying fishes nei	57		
Exocoetidae	Flying fishes nei	71		•••
Caranx spp.	Jacks, crevalles nei	57		
Caranx spp.	Jacks, crevalles nei	71		
Carangidae	Carangids nei	57		
Carangidae	Carangids nei	71		
Selar crumenophthalmus	Bigeye scad	57		
Selar crumenophthalmus	Bigeye scad	71		
Selaroides leptolepis	Yellowstripe scad	57		•••
Selaroides leptolepis	Yellowstripe scad	71		•••
Seriolina nigrofasciata	Blackbanded trevally	71		•••
Parastromateus niger	Black pomfret	57		•••
Parastromateus niger	Black pomfret	71		•••
Elagatis bipinnulata	Rainbow runner	57		
Elagatis bipinnulata	Rainbow runner	71		
Megalaspis cordyla	Hardtail scad	57		
Megalaspis cordyla	Hardtail scad	71		
Scomberoides spp.	Queenfishes	57		
Scomberoides spp.	Queenfishes	71		•••
Coryphaena hippurus	Dolphinfish	57		•••
Coryphaena hippurus	Dolphinfish	71		
Engraulidae	Anchovies, etc. nei	71		
Scomber australasicus	Spotted chub mackerel	57		
Scomber australasicus	Spotted chub mackerel	71		
Rastrelliger brachysoma	Short mackerel	57		
Rastrelliger brachysoma	Short mackerel	71		•••
Rastrelliger kanagurta	Indian mackerel	57		
Rastrelliger kanagurta	Indian mackerel	71		•••
Rastrelliger spp.	Other rastrelliger mackerels	57	•••	•••
Rastrelliger spp.	Other rastrelliger mackerels	71		
Pampus argenteus	Silver pomfret	57	•••	•••
Pampus argenteus	Silver pomfret	71		

ndonesia A	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
		30,211					
		77,307				24,801	
222 502							
323,502				317,185	212		
40.040							
10,019				28,236			
125 462							
135,462					286		
		2,489					
		27,512		111,893	53	36,997	
11,679		29,265					
11,079		62,877		169,415		16,685	
192,065		1,853					
192,005		20,951					
		•••				9,738	
98,301		8,450					
90,301		19,746				8,304	
17,742		309					
17,742		1,268					
41,439		34,458					
41,437		20,952				11,165	
22,253		1,163					
22,233		2,649					
9,219		•••					
,,,,,,		•••					
		•••				53,142	
1,098		•••					
.,676			•••				
395,995							
2,2,,,,		•••		81,079			
29,214							
_,,_,,		•••		121,700		32,298	
		262,555					
		62,127			292	124,898	•

Notes: A Figures from Capture Fisheries Statistics of Indonesia 2011 and conversion to US\$ is based on the exchange rate used in the ASEAN Statistics Database

15,308

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Sphyraena jello	Pickhandle barracuda	57		
Sphyraena jello	Pickhandle barracuda	71		
Sphyraena barracuda	Great barracuda	57		•••
Sphyraena barracuda	Great barracuda	71		
Sphyraena spp.	Barracudas nei	57		
Sphyraena spp.	Barracudas nei	71		
Alopias spp.	Thresher sharks nei	57		
Alopias spp.	Thresher sharks nei	71		
Squalidae	Dogfish sharks nei	57		
Squalidae	Dogfish sharks nei	71		
Elasmobranchii	Sharks, rays, skates, etc. nei	57		
Elasmobranchii	Sharks, rays, skates, etc. nei	71		
Sphyrnidae	Hammerhead sharks nei	57		
Sphyrnidae	Hammerhead sharks nei	71		•••
Lamnidae	Mackerel sharks nei	57	•••	•••
Lamnidae	Mackerel sharks nei	71		•••
Carcharhinidae	Requim sharks nei	57	•••	•••
Carcharhinidae	Requim sharks nei	71		•••
Rhynchobatus audtraliae	Whitespotted wedgefish	71		•••
Rhynchobatus audtraliae	Whitespotted wedgefish	57		•••
Rhynobatidae	Guitarfishes, etc. nei	57		•••
Rhynobatidae	Guitarfishes, etc. nei	71		•••
Stromateidae	Butterfishes, pomfrets nei	57		•••
Stromateidae	Butterfishes, pomfrets nei	71		•••
Rajiformes	Rays, stingrays, mantas nei	57		
Rajiformes	Rays, stingrays, mantas nei	71		
Myliobatidae	Eagle rays nei	57		
Myliobatidae	Eagle rays nei	71		•••
Mobulidae	Mantas, devil rays nei	57		••
Mobulidae	Mantas, devil rays nei	71		•••
Clupeoidei	Clupeoids nei	57		•••
Clupeoidei	Clupeoids nei	71		•••
Clupeoidei	Diadromous clupeoids nei	57		
Clupeoidei	Diadromous clupeoids nei	71		
Stomatopoda	Stomatopods nei	71		

US\$ 1,000

							US\$ 1,000
Indonesia A	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
754							
7,291							
7,=71	•••	•••				•••	
	•••	5,918				•••	
	•••	7,353			144	17,478	
14,745	•••	•••		•••	•••	•••	•••
1 1,7 13		•••					
6,757							
0,737							
		2,047					
		5,898			114	3,582	
5,235	•••						
3,233	•••	•••				•••	
2 775	•••	•••				•••	
2,775				•••			
35.080				•••			
25,989				•••			
2 499				•••			
3,488				•••			
(2)							
626							
		18,933					
	•••	7,464			941	•••	•••
		10,701					
		12,978			484	5,720	
F 533							
5,523							
2.22		•••	•••	•••	•••		•••
8,326		•••	•••	•••	•••		•••
		3,738					
		27,759	•••	•••	4		•••
		115					
		3,554					
		•••				2,486	
	Figures from	a Cantura Fiela	wise Chatistics	of Indonesia 20		م ده ۱۱۲۲ ده می	

Notes: A

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Balistidae	Triggerfishes, durgons nei	57		
Balistidae	Triggerfishes, durgons nei	71		•••
Pristidae	Sawfishes	57		
Pristidae	Sawfishes	71	•••	•••
Osteichthyes	Marine fishes nei	57		
Osteichthyes	Marine fishes nei	71	7,038	
Portunus pelagicus	Blue swimming crab	57		
Portunus pelagicus	Blue swimming crab	71		
Scylla serrata	Indo-Pacific swamp crab	71		
Panulirus spp.	Tropical spiny lobsters nei	57		
Panulirus spp.	Tropical spiny lobsters nei	71		
Scyllaridae	Slipper lobsters nei	71		
Penaeus merguiensis	Banana prawn	57		
Penaeus merguiensis	Banana prawn	71		•••
Penaeus monodon	Giant tiger prawn	57		
Penaeus monodon	Giant tiger prawn	71		
Penaeus latisulcatus	Western king prawn	57		
Penaeus latisulcatus	Western king prawn	71		
Penaeus semisulcatus	Green tiger prawn	71		
Penaeus spp.	Penaeus shrimps nei	57		
Penaeus spp.	Penaeus shrimps nei	71		
Metapenaeus spp.	Metapenaeus shrimps nei	71		•••
Metapenaeus endeavouri	Endeavour shrimp	57		
Metapenaeus endeavouri	Endeavour shrimp	71		
Sergestidae	Sergestid shrimps nei	57		
Sergestidae	Sergestid shrimps nei	71		
Crassostrea spp.	Cupped oysters nei	57		
Crassostrea spp.	Cupped oysters nei	71		•••
Perna viridis	Green mussel	71		
Perna viridis	Green mussel	57		
Pectinidae	Scallops nei	57		•••
Pectinidae	Scallops nei	71		
Anadara granosa	Blood cockle	57		
Anadara granosa	Blood cockle	71		

US\$ 1,000

							US\$ 1,000
Indonesia A	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
		600					
		1,877					
116							
110							•••
455,782		60,241	3,580,203				•••
733,702		84,367			673	174,362	•••
111,547							
111,577				69,115		71,731	
					397	8,928	
107,205		227					
107,203		6,485			27		•••
					147		
270,142							
270,172						67,380	
149,615							
177,013						24,497	
16,348							•••
10,5 10						15,008	
						19,078	
168,892							
,.						46,374	•••
						36,034	
120,629							
,-				4,318			
		10,153					
		4,320		17,505		3,924	
468							
4,498		•••			•••		•••
, , , , , , , , , , , , , , , , , , ,							
697							
						469	
42,530							
,						906	

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Bivalvia	Clams, etc. nei	57		
Bivalvia	Clams, etc. nei	71		
Crustacea	Marine crustaceans nei	57		
Crustacea	Marine crustaceans nei	71	879	
Brachyura	Marine crabs nei	57		
Brachyura	Marine crabs nei	71		
Natantia	Natantian decapods nei	57		
Natantia	Natantian decapods nei	71		
Sepiidae, Sepiolidae	Cuttlefish, bobtail squids nei	57		
Sepiidae, Sepiolidae	Cuttlefish, bobtail squids nei	71		
Loligo spp.	Common squids nei	57		
Loligo spp.	Common squids nei	71		
Loliginidae, Ommastrephidae	Various squids nei	57		
Loliginidae, Ommastrephidae	Various squids nei	71		
Octopodidae	Octopuses nei	57		
Octopodidae	Octopuses nei	71		
Sepioteuthis lessonlana	Bigfin reef squid	71		
Mollusca	Marine molluscs nei	57		
Mollusca	Marine molluscs nei	71	251	
Trochus niloticus	Commercial top shell	57		
Trochus niloticus	Commercial top shell	71		
Holothurioidea	Sea cucumbers nei	57		
Holothurioidea	Sea cucumbers nei	71		
Rhopilema spp.	Jellyfishes	57		
Rhopilema spp.	Jellyfishes	71		
Testudinata	Marine turtles nei	57		
Testudinata	Marine turtles nei	71		
nvertebrata	Aquatic invertebrates nei	57		
nvertebrata	Aquatic invertebrates nei	71		
Paphia spp.	Short neck clams nei	71		
Thenus orientalis	Flathead lobster	71		

US\$ 1,000

Indonesia A	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
1,629		1,254					
1,029		1,241					
1,337							•••
1,337							•••
		23,654					
		22,150		•••	749	12,861	
		213,138					
		109,581			2,142		
43,870		22,938		•••			
43,670		27,861	•••	•••	93	54,761	
268,740							
200,740				107,730	148	175,948	
		68,046	•••	•••	•••		
		101,931					
10,675		1,230					
10,073		2,385				14,097	
						17,052	
6,932							
0,732						2,473	
152							
132							
35,740							
33,740							
9,943		232					
7,743		2,277		•••		3,364	
33							
33							
6,398							
0,370						716	
						5,595	
						4,019	

### 3.4 Capture Production by Type of Fishing Gear and by Species, 20113.4.1 Brunei Darussalam

			Purse Sein	e	Seine Net			
Scientific Name	FAO English Name	All purse seines	Anchovy purse seine	Fish purse seine	All seine nets	Boat seine	Beach seine	
Anodontostoma chacunda	Chacunda gizzard shad	•••						
Tenualosa toli	Toli shad							
Tenualosa macruna	Longtail shad							
Ilisha elongata	Elongate ilisha	•••					•••	
Lates calcarifer	Barramundi (=Giant seaperch)						•••	
Psettodes erumei	Indian halibut						•••	
Saurida tumbil	Greater lizardfish							
Arius thalassinus	Giant catfish							
Arius spp.	Sea catfishes nei							
Plotosus spp.	Eeltail catfishes							
Mugil cephalus	Flathead grey mullet							
Lisa spp.	Mullets							
Caesio spp.	Fusiliers							
Epinephelus spp.	Groupers nei							
Plectropomus leopardus	Leopard coralgrouper							
Priacanthus tayenus	Purple-spotted bigeye							
Plectopomus spp.	Groupers							
Sillago sihama	Silver sillago							
Johnius spp.	Croakers							
Otolithes ruber	Tigertooth croaker						•••	
Lutjanus argentimaculatus	Mangrove red snapper							
Lutjanus malabaricus	Malabar blood snapper							
Lutjanus johnii	John's snapper						•••	
Lutjanus lutjanus	Bigeye snapper							
Lutjanus vitta	Brownstripe red snapper							
Lutjanus russelli	Russell's snapper							
Lutjanus spp.	Snappers nei						•••	
Pristipomoides multidens	Goldenbanded jobfish							
Nemipterus spp.	Threadfin breams nei							
Leiognathus spp.	Ponyfishes (=Slipmouths)	1.721		1.721				
Plectorhinchus spp.	Sweetlips							
Pomadasys argenteus	Silver grunt						•••	
Pomadasys spp.	Grunts							
Lethrinus spp.	Emperors (=Scavengers) nei							

 $\mathsf{MT}$ 

															T 
	Tra	ıwl		Lift		alling Ne		Gill		Trap		Hook	Push/ Scoop	Shell fish and	
All trawls	Beam trawl	Otter board trawl	Pair trawl	Net	All falling nets	Anchovy falling net	Squid falling net	Net	All traps	Station- ary trap	Porta- ble trap	and Lines	Net	seaweed collect- ing gear	Others
0.029		0.029						1.458	0.026	0.026					
0.049		0.049													
								0.07							
								0.17							
								0.283	0.131	0.102	0.029				
15.068		15.068						0.545	0.038	0.037	0.001				
4.027		4.027													
12.658		12.658						0.119							
								3.496	0.166	0.166					
					•••		•••		0.661	0.652	0.009				
					•••				0.673	0.666	0.007				
								0.005	0.065	0.062	0.003				
0.119		0.119			•••		•••	0.829	0.565	0.565		0.12			0.691
4.234		4.234		•••	•••		•••	0.245	8.611	8.572	0.039	0.14			4.268
	<b></b>				•••				0.446	0.446		0.04			
40.441		40.441			•••			0.243			•••				
				•••	•••						•••				1.229
0.111	<b></b>	0.111			•••				0.248	0.248	•••				
16.107		16.107		•••	•••		•••	1.218	0.021	0.013	0.008				
10.045		10.045		•••	•••			2.215							
0.015		0.015			•••		•••		0.165	0.128	0.037				0.032
12.038		12.038		•••	•••			0.629	1.519	1.487	0.032				2.124
4.896		4.896						3.175	5.202	5.176	0.026				0.227
0.17		0.17		•••	•••			7.916			•••				
				•••	•••						•••				1.032
				•••	•••			0.042	0.449		0.449				
				•••	•••			0.014			•••	0.026			0.066
5.218		5.218			•••			0.063	2.973		2.973				3.986
42.782		42.782		•••	•••			6.242							0.314
39.302		39.302						10.01	0.146	0.135	0.011				
0.298		0.298						0.572	0.006	0.006					0.008
7.347		7.347						0.036	0.27	0.264	0.006				
								3.372	0.024	0.023	0.001				0.125
0.745		0.745		•••				0.464							0.037

# 3.4 Capture Production by Type of Fishing Gear and by Species, 2011 3.4.1 Brunei Darussalam (Cont'd)

			Purse Sein	е	Seine Net			
Scientific Name	FAO English Name	All purse seines	Anchovy purse seine	Fish purse seine	All seine nets	Boat seine	Beach seine	
Upeneus sulphureus	Sulphur goatfish							
Gerres spp.	Mojarras (=Silver-biddies) nei							
Drepane punctata	Spotted sicklefish							
Thalassoma spp.	Wrasses							
Eleutheronema tetradactylum	Four finger threadfin							
Polynemus spp.	Threadfins							
Siganus spp.	Spinefeet (=Rabbitfishes) nei							
Abalister stellaris	Starry triggerfish							
Muraenesox cinereus	Daggertooth pike conger							
Muraenesox spp.	Pike+congers nei							
Trichiurus lepturus	Largehead hairtail							
Amblygaster sirm	Spotted sardinella	73.937		73.937				
Sardinella gibbosa	Goldstripe sardinella	1.031		1.031				
Sardinella fimbriata	Fringescale sardinella							
Dussumieria acuta	Rainbow sardine	205.9		205.9				
Chirocentrus dorab	Dorab wolf-herring						•••	
Euthynnus affinis	Kawakawa	37.017		37.017				
Katsuwonus pelamis	Skipjack tuna	69.82		69.82			•••	
Thunnus tonggol	Longtail tuna	22.863		22.863				
Thunnus albacares	Yellowfin tuna	144.114		144.114				
Istiophorus platypterus	Indo-Pacific sailfish	0.15		0.15				
Scomberomorus commerson	Narrow-barred spanish mackerel	14.208		14.208				
Scomberomorus guttatus	Indo-Pacific king mackerel	0.65		0.65				
Tylosurus spp.	Neddlefishes nei							
Lactarius lactarius	False trevally							
Rachycentron canadum	Cobia	0.016		0.016				
Decapterus spp.	Scads nei	145.116		145.116				
Caranx sexfasciatus	Bigeye trevally	3.377		3.377				
Caranx tille	Tille trevally							
Caranx spp.	Jacks, crevalles nei	0.795		0.795				
Alectis indicus	Indian threadfish							
Gnathanodon speciosus	Golden trevally							
Atule mate	Yellowtail scad	3.792		3.792				

															MT
	Tra			Lift		alling Ne		Gill		Trap		Hook and	Push/	Shell fish and	
All trawls	Beam trawl	Otter board trawl	Pair trawl	Net	All falling nets	Anchovy falling net	Squid falling net	Net		Station- ary trap	Porta- ble trap	Lines	Net	seaweed collect- ing gear	Others
41.368		41.368						0.384							
2.413		2.413						0.17	0.187	0.124	0.063				0.04
1.112		1.112						1.958	0.001		0.001				
								0.056							
	•••			•••				0.07				1.604			
				•••				0.083	0.011	0.011		•••			
0.041		0.041						0.246	3.076	2.35	0.726	0.035			0.341
0.422		0.422						0.003	0.077	0.077					
												0.01			
0.924		0.924							0.004		0.004				
0.13		0.13						3.219							
				•••								•••			
								0.497				•••			
				•••				1.439	0.003		0.003	0.009			
								2.084							
0.01		0.01		•••				1.717				0.746			
0.02		0.02						23.50				4.608			
			•••	•••								•••			
				•••								•••			
0.416		0.416		•••				0.35				•••			
4.399		4.399		•••				6.142				2.818			0.025
4.903		4.903						0.308							
								0.004							
37.031		37.031						1.714							
0.68		0.68						0.131							0.017
4.182		4.182						0.218				2.934			
0.335		0.335						0.193	0.007		0.007	0.809			
25.35		25.35						5.917	0.6	0.04	0.56	2.529			0.352
0.489		0.489						0.005	0.001		0.001				
0.01		0.01						0.407				0.018			0.076
0.335		0.335						33.28							
					l		<u> </u>	<u> </u>	I	<u> </u>			<u> </u>	<u> </u>	<u> </u>

## 3.4 Capture Production by Type of Fishing Gear and by Species, 2011 3.4.1 Brunei Darussalam (Cont'd)

			Purse Sein	e	Seine Net			
Scientific Name	FAO English Name	All purse seines	Anchovy purse seine	Fish purse seine	All seine nets		Beach seine	
Alepes djedaba	Shrimp scad						•••	
Alepes spp.	Scads	1.37		1.37				
Selar crumenophthalmus	Bigeye scad	94.994		94.994		•••	•••	
Seriolina nigrofasciata	Blackbanded trevally					•••	•••	
Serioides leptolepis	Yellowstripe scad					•••	•••	
Parastromateus niger	Black pomfret	1.125		1.125		•••	•••	
Elagatis bipinnulata	Rainbow runner	0.512		0.512				
Megalaspis cordyla	Torpedo scad	0.747		0.747				
Scomberoides commerson	Talang queenfish	0.157		0.157				
Scomberoides spp.	Queenfish							
Rastrelliger brachysoma	Short mackerel							
Rastrelliger kanagurta	Indian mackerel	123.095		123.095				
Pampus argenteus	Silver pomfret							
Pampus spp.	Silver pomfrets nei							
Sphyraena jello	Pickhandle barracuda	0.208		0.208				
Sphyraena barracuda	Great barracuda							
Sphyraena spp.	Barracudas nei	8.02		8.02				
Carcharhinus dussumieri	Whitecheek shark	0.027		0.027				
Dasyatis spp.	Stingrays nei	0.183		0.183				
Rhynchobatus djiddens	Giant guitarfish							
Portunus pelagicus	Blue swimming crab						•••	
Scylla serrata	Indo-Pacific swamp crab						•••	
Panulirus spp.	Tropical spiny lobsters nei							
Penaeus merguiensis	Banana prawn							
Penaeus monodon	Giant tiger prawn						•••	
Penaeus semisulcatus	Green tiger prawn						•••	
Penaeus indicus	Indian white prawn							
Penaeus spp.	Penaeus shrimps nei							
Metapenaeus brevicron	Yellow shrimp							
Metapenaeus ensis	Greasyback shrimp				•••		•••	
Metapenaeus spp.	Metapenaeus shrimps nei						•••	
Sepia spp.	Cuttlefish						•••	
Loligo spp.	Common squids nei	1.719		1.719				
-	Others	28.831		28.831				

															MT
Trawl			Lift	Falling Net			Gill	Trap			Hook	Push/	Shell fish and		
All trawls	Beam trawl	Otter board trawl	Pair trawl	Net	All falling nets	Anchovy falling net	Squid falling net	Net	All traps	Station- ary trap	Porta- ble trap	and Lines	Scoop Net	seaweed collect- ing gear	
								0.034							
								0.014				3.832			
27.323		27.323		•••				7.254							
			•••	•••				0.282	0.013	0.013		•••			
0.66		0.66	•••	•••								•••			
1.343		1.343													
								0.031							
7.225		7.225						3.95				1.543			
5.689		5.689		•••				2.479							•••
			•••	•••					0.009	0.009		•••			
0.2		0.2		•••				0.079							
8.026		8.026						30.92				2.801			
0.222		0.222		•••				0.095				•••			
								0.542							
									0.003	0.003					
0.971		0.971						0.563							
15.109		15.109						0.424	0.082		0.082				
11.49		11.49						4.58				0.294			0.083
50.772		50.772		•••				7.01	0.431	0.43	0.001	0.168			
0.546		0.546		•••				0.349							0.145
3.358		3.358						3.323							
								0.013	0.084	0.071	0.013				
								0.62	0.018	0.018					0.078
19.678		19.678													
2.09		2.09													
33.386		33.386													
				•••					16.03		16.03	•••			
1.166		1.166		•••				8.4			•••	•••			
0.722		0.722		•••				0.03	3.173		3.173	•••			
32.19		32.19		•••								•••			
0.048		0.048		•••				4.124	0.189	0.189	•••	•••			
27.867		27.867						0.063							
41.414		41.414		•••				0.043				•••			
506.96		506.96		•••				0.406	1.153	1.14	0.013	0.466			4.841

## 3.4 Capture Production by Type of Fishing Gear and by Species, 2011 3.4.2 Malaysia

			Purse Sein	e	9	Seine Net	
Scientific Name	FAO English Name	All purse seines	Anchovy purse seine	Fish purse seine	All seine nets	Boat seine	Beach seine
Anodontostoma chacunda	Chacunda gizzard shad	536		536	6		
Hilsa kelee	Kelee shad				1		
Tenualosa macruna	Longtail shad						
Ilisha elongata	Elongate ilisha	1,380	326	1,054	1		
Pellona ditchela	Indian pellona	88		88		•••	•••
Lates calcarifer	Barramudi (= Giant seaperch)	2		2	7		
Cynoglossidae	Tonguefishes				2		
Pseudorhombus spp.	Flounders						
Harpadon nehereus	Bombay duck						
Saurida spp.	Lizard fishes	85		85			
Arius spp.	Sea catfishes nei	676	644	32	1,201		
Plotosus spp.	Eeltail catfishes				41		
Lisa spp.	Mullets	12		12	17		
Caesio spp.	Fusiliers	18		18	13		
Epinephelus spp.	Groupers nei	2		2	5		
Priacanthus tayenus	purple-spotted bigeye	40		40			
Sillago spp.	Sillago-whitings				2		
Otolithes rubber	Tigertooth croaker	825	802	23	4,990		
Lutjanus malabaricus	Malabar blood snapper	31		31			
Lutjanus johnii	John's snapper	8		8			
Lutjanus russelli	Russell's snapper						
Lutjanus spp.	Snappers nei	35		35			
Pristipomoides multidens	Goldenbannded jobfish	5		5			
Nemipterus spp.	Threadfin breams nei	100		100			
Scolopsis spp.	Monocole breams	4		4			
Leiognathus spp.	Ponyfishes	364	89	275			
Plectorhinchus spp.	Sweetlips	1		1			
Pomadasys spp.	Grunts						
Lethrinus spp.	Emperors	10		10			
Upeneus spp.	Goatfishes	54		54			
Gerres spp.	Mojarras nei	34			14		
Drepane punctata	Spotted sicklefish	18		18	6		
Scarus spp.	Parrot fish				74		•••
Eleutheronema tetradactylum	Four finger threadfin						

мт

															MT
	Tra	wl		Lift	F	alling Ne		Gill		Trap		Hook and	Push/ Scoop	Shell fish and seaweed	Oth are
All trawls	Beam trawl	Otter board trawl	Pair trawl	Net	All falling nets	Anchovy falling net	Squid falling net	Net	All traps	Station- ary trap	Porta- ble trap	Lines	Net	collect- ing gear	Others
1,383				20	•••			4,652	32	30	2		1		19
73		•••			•••			783			•••				20
12				•••	•••			346			•••				
2,636		•••			•••		•••	3,421	10	10	•••				24
1,095					•••			1,421			•••				
345				2	•••			382	113	47	66	496	3		9
2,124								910	15	13	2	15			42
2,166				1	•••			453	18	17	1	18			2
614								1,469	12	12					650
25,229				3	•••			53			•••				
7,102				13				8,271	191	123	67	1,764	19		296
587								1,547	80	16	64	428	8		463
320				4				3,011	64	49	15	1	4		155
145				20				50	189	30	159	128			12
3,270				4				1,056	1,128	65	1,063	4,463	1	8	21
18,140				6				10				10			
2,240								1,562				9			20
19,118								12081	130	125	5	256	74		245
2,087				52				1.666	360	34	326	2.944			
969				10	•••			411	199	46	154	887	1		1
746				4				174	87	13	74	384	2		
1,528								81	185		185	309			
2,328				5				220	94		94	1,628			
32,624								3,041	4,946	1	4,945	2,804			
1,001								335	340	2	339	107			
1,180				346				429	24	24					
718				5				133	123		123	297			
1,423				5				846	62	15	47	625	1		4
547								90	73	3	70	613			
14,658				4				6	132	17	115	69			
536				3				176	18	17	1	87			2
622				4				275	51	24	28	45			
183				1				194	126	10	117	184		5	12
34					•••			1,247	11	11	•••	130			1

# 3.4 Capture Production by Type of Fishing Gear and by Species, 2010 3.4.2 Malaysia (Cont'd)

			Purse Sein	e		Seine Net	
Scientific Name	FAO English Name	All purse seines	Anchovy purse seine	Fish purse seine	All seine nets	Boat seine	Beach seine
Polynemus spp.	Thresdfins				51		
Siganus spp.	Spinefeet (=Rabbitfishes) nei	24		24	96		
Abalister stellaris	Starry triggerfish						
Muraenesox spp.	Pike-congers nei						
Trichiurus spp.	Hairtails nei	575	136	439			
Sardinella spp.	Sardinellas nei	21,361	135	21,227			•••
Dussumieria spp.	Rainbow sardines nei	11,792	28	11,764	22		
Stolephorus spp.	Stolephorus anchovies	8,196	7,958	238	76		•••
Chirocentrus spp.	Wolf-herrings nei	42	9	33			•••
Auxis thazard, A. rochei	Frigate and bullet tunas	3,341		3,341			
Euthynnus affinis	Kawakawa	18,128		18,128	51		•••
Katsuwonus pelamis	Skipjack tuna	4,423		4,423			•••
Thunnus tonggol	Longtail tuna	20,921		20,921	285		
Thunnus albaca0res	Yellowfin tuna	343		343			
Thunnus obesus	Bigeye tuna						
Istiophorus platyterus	Indo-Pacific sailfish	10		10			•••
Makaira mazara	Indo-Pacific blue marlin	1		1			•••
Scomberomorus commerson	Narrow-barred spanish mackerel	471		471	21		
Lactarius lactarius	False trevally						
Rachycentron canadum	Cobia	8		8			
Decapterus spp.	Scad nei	64,220		64,220			
Caranx sexfasciatus	Bigeye travally	34		34	1		•••
Alectis indicus	Indian threadfish	340		340	11		
Gnathanodon speciosus	Golden trevally	16		16			
Carangoides spp.	Horse mackerel	340		340	11		
Atule mate	Yellowtail scad	3,625		3,625			
Alepes spp.	Scads	13,734		13,734			•••
Selar boops	Oxeye scad	15,659		15,659			•••
Selarroides leptolepis	Yellowstripe scad	8,211		8,211			•••
Seriolina nigrofasciata	Blackbanded trevally	4		4			
Parastromateus niger	Black pomfret	700		700			
Elagastis bipinnulata	Rainbow runner	148		148			•••
Megalaspis cordyla	Torpedo scad	19,591	2	19,589			

мт

		-			,			1	1	-				,	MT
	Tra			Lift		alling Ne		Gill Net		Trap		Hook and	Push/ Scoop	Shell fish and	
All trawls	Beam trawl	Otter board trawl	Pair trawl	Net	All falling nets	Anchovy falling net	Squid falling net	l	All traps	Station- ary trap	Porta- ble trap	Lines	Net	seaweed collect- ing gear	Others
1,412								3,875	23	22	1	357	1		16
823				6				238	407	163	245	140			27
875				10				75	34	3	31	149			
2,344								587	21		21	1,099			1
6,552				57				871	11	11		24			11
640				1,821				315	23	23		376			
478				126				55	4	4		111			
315				7,507				364	66	666					
2,162								3,435	9	7	2	10			7
2				20				158				6			
67				6				1,492	5		5	1,178			
103								1,359				388			
1,285								3,438	27		27	1,528			
1								6				874			
												688			
19								161				246			
3												5			
4,930				32				8,006	30		30	3,076			6
187								220				1			
772								84	17		17	552			
10,113				1,186				182	9		9	1,128			
148								29	9		9	156			
2,643				8				423	64	7	57	612			
24								92	23		23	49			
1,301				14				1,800	119	51	68	1,936			18
3,366				45				582				20	120		
4,436				561				1,861	141	6	135	1,943	3		3
6,250				9				295	6		6	184			
6,367				353				836	70	21	49	347	4		
1,008				13				29				42			
2,442				46				2,059	57	57	1	11	130		13
260				47				211	1		1	194			1
6,249				57				3,756	10		10	1,996			
			,												

## 3.4 Capture Production by Type of Fishing Gear and by Species, 2011 3.4.2 Malaysia (Cont'd)

			Purse Seine	<b>e</b>		Seine Net	:
Scientific Name	FAO English Name	All purse seines	Anchovy purse seine	Fish purse seine	All seine nets	Boat seine	Beach seine
Scomberoides spp.	Queenfish	48	5	43	6		•••
Rastrelliger kanagurta	Indian mackerel	31,269		31,269			•••
Rastrelliger spp.	Indian mackerels nei	36,633	42	36,591	2		
Pampus argenteus	Silver pomfret	38	32	6	369		
Pampus spp.	Silver pomfrets nei						•••
Pampus chinensis	Chinese silver pomfret	6	1	5	397		•••
Sphyraena spp.	Barracudas nei	460	2	458	62		•••
Dasyatis spp.	Stingrays nei	16		16	12		
Portunus pelagicus	Blue swimming crab	17		17	54		
Scylla serrata	Indo-Pacific swamp crab				1		
Panulirus spp.	Tropical spiny lobsters nei						•••
Thenus orientalis	Flathead lobster						
Penaeus merguiensis	Banana prawn				438		
Penaeus indicus	Indian white prawn				139		
Penaeus latisulcatus	Western king prawn						
Metapenaeus affinis	Jinga shrimp						
Metapenaeus brevicornis	Yellow shrimp				95		•••
Metapenaeus ensis	Greasyback shrimp						
Metapenaeus lysianassa	Bird shrimp	115		115	507		
Metapenaeus spp.	Metapenaeus shrimps nei				1,532		
Parapenaeopsis coromandelica	Coromandel shrimp				1		
Parapenaeopsis hardwickii	Spear shrimp						
Parapenaeopsis sculptilis	Rainbow shrimp				241		
Metapenaeopsis stridulans	Fiddler shrimp				1,530	•••	•••
Penaeus monodon	Giant tiger prawn				132		•••
							•••
Acetes spp.	Paste shrimp				358		•••
Crassostrea spp.	Cupped oysters nei						•••
Perna viridis	Green mussel					•••	
Sepia spp.	Cuttlefish	352		352	285	•••	•••
Loligo spp.	Common squids nei	2,270		2,270	223		
Platycephalus indicus	Bartail Flatfish	2		2	1		••
Thachysurus leiotetocephalus							

мТ

	Tra	wl		Lift	1	Falling No	et			Trap		Hook	Push/	Shell fish and	
All trawls	Beam trawl	Otter board trawl	Pair trawl	Net	All falling nets	Anchovy falling net	Squid falling net	Gill Net		Station- ary trap		and Lines	Scoop Net	seaweed collect- ing gear	Others
1,157		•••		194	•••			1,419	28	28		189	1		4
17,022		•••		547				11,722	46	34	12	993			
14,094								71,260					1		
1,898		•••		30	•••			1,845	35	35		4	6		13
457								878				1			17
623				32				607	2	2			5		11
6,193				278				774	31	28	4	951	1		12
7,833				37				2,803	61	42	19	2,202	4		54
5,473		•••			•••			3,372	488	72	416	50	41		1,051
58				•••				21	34	2	32	•••	7		2,261
88		•••		•••	•••			43	39		39	•••	•••	5	
542		•••		•••	•••			5				•••	•••		3
2,063				•••				7,351	9	9		3	166		191
2,677		•••		•••				5,242	14	14		3	107		118
3,104		•••		•••				82				3			673
492				•••				21				•••			52
1,817								974	45	45			246		257
419															
7,344				•••				5,511	18	18		1	1,097		1,157
4,071		•••		•••				1,069				•••	459		218
42												•••	2		6
4,400		•••		•••				129					45		126
2,950		•••		•••	•••			428				•••	106		207
2,562		•••		•••				107	1		1	•••	34		130
913								233	4	4			2		2
20,365									867	146	720		736		13881
		•••										•••		13	
		•••		•••								•••		100	
21,534				248				416	259	35	225	233	102	35	103
46,490				436				260	135	43	92	1,571			2
647								43	4		4	16			3
64				•••				61				1			59

#### 84

# 3.4 Capture Production by Type of Fishing Gear and by Species, 2011 3.4.2 Malaysia (Cont'd)

			Purse Sein	e	:	Seine Net	t
Scientific Name	FAO English Name	All purse seines	Anchovy purse seine	Fish purse seine	All seine nets	Boat seine	Beach seine
Lagocephalus sceleratus	Silverside blaasop	1		1			
Aluterus monoceros	Unicorn leatherjacket	55		55			
Ablennes hians	Flat needlefish	47	1	46	16		
Lobotes surinamensis	Atlantic tripletail						
Megalops cyprinoides	Indo-Pacific tarpon	12		12	1		
Septipinna tenuifilis	Common hairfin anchovy						
Coilia macrognathos	Goldspotted grenader anchovy				5,070		
-	Trash fish	23,369	926	22,443	15,698		
-	Mixed fish	18,809	212	18,597	297		
Sphyrna spp.	Shark	98		98	1		
Squilla mantis	-	1		1	154		
Circe scripta	Script venus						
Orbicularia orbiculata	Short-necked clam						
Bivalves/Gastropods	Other clams						
Rhopilema spp.	Jellyfish						

мт

															MT
	Trav			Lift	1	alling Ne		Cill Net		Trap		Hook and	Push/	Shell fish and	
All trawls	Beam trawl	Otter board trawl	Pair trawl	Net	All falling nets	Anchovy falling net	Squid falling net	Gill Net	,	Station- ary trap	Porta- ble trap	Lines	Scoop Net	seaweed collect- ing gear	
110								66	•••			•••	•••		
1,832				946				76	25		25	90	•••		
14								187	2	2		11			
67			•••					262	•••			42	•••		
69				6				526	17	17		1			
66								2,117	10	10		•••	•••		368
45								676	12	12					261
214,981				47				2,216	104	104		4	1,629		3,621
37,587				728				15,797	408	111	297	1,397	16		510
3,267				1				1,779	38	9	29	785	•••		7
7,840								530					30		157
56														19	
8														557	
873														946	
30								62	204	204			6		3,190

# 3.4 Capture Production by Type of Fishing Gear and by Species, 2011 3.4.3 Myanmar

			Purse Sein	<del>2</del>	:	Seine Net	
Scientific Name	FAO English Name	All purse seines	Anchovy purse seine	Fish purse seine	All seine nets	Boat seine	Beach seine
Tenualosa ilisha	Hilsa shad	439					
Ilisha elongata	Elongate ilisha	1,466					
Pseudorhombus spp.	Flounders	2,757					
Saurida spp.	Lizard fishes	2,138					
Arius spp.	Seacatfishes, Marine catfishes	2,205					
Johinius spp.	Croakers	3,804					
Chrysochir aureus	Reeve's croaker	1,023					
Lutjanus argentimaculatus	Mangrove red snapper	52					
Nemipterus spp.	Threadfin breams nei	3,647					
Pomadasys argenteus	Silver grunt	898					
Polynemus spp.	Threadfins	321					
Muraenesox cinereus	Daggertooth pike conger	1,283					
Trichiurus lepturus	Largehead hairtail	9,256					•••
Chirocentrus spp.	Wolf-herrings nei	545					
Scomberomorus guttatus	Indo-Pacific king mackerel	261					
Megalaspis cordyla	Torpedo scad	1,615					
Rastrelliger kanagurta	Indian mackerel	970					
Pampus spp.	Silver pomfrets nei	728					
Sepia spp.	Cuttlefish	587					
Loligo spp.	Common squids nei	1,595					
Ostiechthyes	Marine fishes nei	15,314					
Crustacea	Marine crustaceans nei	6,621					

МТ

	Tra			Lift		alling Ne		Gill		Trap		Hook and		Shell fish and	Othor
All trawls	Beam trawl	Otter board trawl	Pair trawl	Net	All falling nets	Anchovy falling net	Squid falling net	Net	All traps	Station- ary trap		Lines	Net	seaweed collect- ing gear	Others
323								65	186						43
1,078		•••						218	622			•••			144
2.027			•••					409	1,170						271
1,572								317	908						210
1,621								327	936						216
2,796								565	1,614						373
752								152	434						100
38								8	22						5
2,681								541	1,548						358
660								133	381						88
236								48	136						31
943								190	544						126
6,804								1,374	3,929						909
401								81	231						53
192								39	111						26
1,187								240	686						159
713			•••					144	412		•••				95
535								108	309						71
431		•••	•••				•••	87	249		•••				58
1,173								237	677						157
11,257		•••						2,273	6,500						1,503
4,867								983	2,811			•••	•••		650

## 3.4 Capture Production by Type of Fishing Gear and by Species, 20113.4.4 Singapore

			Purse Sein	e		Seine Net	
Scientific Name	FAO English Name	All purse seines	Anchovy purse seine	Fish purse seine	All seine nets	Boat seine	Beach seine
Lates calcarifer	Barramundi (=Giant seaperch)	•••					•••
Saurida spp.	Lizard fishes						
Arius spp.	Sea catfishes					•••	
Lisa spp.	Mullets						
Epinephelus spp.	Groupers nei						
Sillago spp.	Sillago whitings						
Mene maculata	Moonfish						
Pennahia spp.	Croakers						•••
Lutjanus vitta	Russell's snappers						
Lutjanus spp.	Snappers nei					•••	
Nemipterus spp.	Threadfin breams nei						
Pomydasys spp.	Grunts						•••
Upeneus spp.	Goatfishes						
Polynemus spp.	Threadfins					•••	
Trichiurus lepturus	Largehead hairtail						
Chirocentrus dorab	Dorab wolf-herring						
Chirocentrus spp.	Wolf-herrings nei						
Katsuwonus pelamis	Skipjack tuna						
Scomberomorus commerson	Narrow-barred Spanish mackerel						
Decapterus spp.	Scads nei						
Caranx sexfasciatus	Bigeye trevally						
Caranx spp.	Jacks, crevalles nei						
Parastromateus niger	Black pomfret						
Rastrelliger spp.	Indian mackerels nei						
Pampus argenteus	Silver pomfret						
Pampus chinensis	Chinese silver pomfret						
Sphyraena spp.	Barracudas nei						
Dasyatis spp.	Stingrays nei						
Portunus pelagicus	Blue swimming crab						
Scylla serrata	Indo-Pacific swamp crab						
Panulirus spp.	Tropical spiny lobsters nei						
Penaeus spp.	Panaeus shrimps nei						
Sepia spp.	Cuttlefish						
Loligo spp.	Common squids nei						

МТ

	Tra	wl		Lift	F	alling Ne	et	Gill		Trap		Hook	Push/	Shell fish and	MI
All trawls	Beam trawl	Otter board trawl	Pair trawl	Net	All falling nets	Anchovy falling net	Squid falling net	Net	All traps	Station- ary trap		and Lines	Scoop Net	seaweed collect- ing gear	Others
23		23													
2		2										•••	•••		
59		59						•••	•••				•••		
30		30							•••			•••	•••		
55		55							•••				•••		
5		5							•••			•••	•••		
21		21							•••			•••	•••		
26		26													
23		23													
41		41						•••				•••			
30		30			•••				•••			•••	•••		
25		25						•••	•••				•••		
6		6										•••			
30		30										•••			
34		34										•••			
1		1			•••			•••	•••			•••			
27		27						•••	•••			•••			
1		1					•••	•••	•••			•••	•••		
40		40	•••	•••			•••	•••	•••			•••	•••		
61		61					•••	•••	•••			•••	•••		
8		8						•••	•••			•••	•••		
75		75		•••	•••			•••	•••		•••	•••	•••		•••
29		29	•••	•••	•••		•••	•••	•••		•••	•••	•••		
59		59			•••			•••	•••			•••	•••		
12		12	•••	•••	•••			•••	•••		•••	•••	•••		•••
30		30	•••	•••	•••	•••	•••	•••	•••		•••	•••	•••	•••	•••
42		42	•••	•••	•••	•••	•••	•••	•••		•••	•••	•••	•••	•••
112		112	•••	•••	•••	•••	•••	•••	•••		•••	•••	•••		•••
82		82	•••	•••	•••	•••	•••	•••	•••		•••	•••	•••		•••
38		38		•••			•••	•••	•••		•••	•••	•••		
176		176		•••	•••		•••	•••	•••		•••	•••	•••		•••
176 20		176 20		•••	•••		•••	•••	•••		•••	•••	•••		•••
31		31		•••	•••		•••	•••	•••		•••	•••	•••		•••
31	•••	) 31	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••	•••

#### 4. INLAND CAPTURE FISHERY STATISTICS

### 4.1 Inland Capture Fishery Production by Species and by Fishing Area, 2011 4.1.1 In Quantity

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Cyprinus carpio	Common carp	04		
Labiobarbus festivus	Signal barb	04		
Osteochilus haseltii	Nilem carp	04		
Leptobarbus hoeveni	Hoven's carp	04		
Ctenopharyngodon idellus	Grass carp	04		
Hampala macrolepidota	Hampala barb	04		
Barbichthys laevis	Sucker barb	04		
Puntius bionotatus	Spotted barb	04		
Barbonymus schwanenfeldii	Tinfoil barb	04		
Barbonymus gonionotus	Silver barb	04		
Barbodes balleroides	-	04		
Cyclochelichthys armatus	-	04		
Cyclochelichthys apogon	Beardless barb	04		
Tor soro	-	04		
Tor douronensis	River carp	04		
Macrochirichthys macrochirus	-	04		
Oreochromis mossambicus	Mozambique tilapia	04		
Oreochromis niloticus	Nile tilapia	04		
Oreochromis (=Tilapia) spp.	Tilapias nei	04		
Chitala lopis	Giant featherback	04		
Kryptopterus spp.	Glass catfish	04		
Ompok bimacularus	Butter catfish	04		
Mystus nemurus	Asian redtail catfish	04		
Clarias spp.	Torpedo-shaped catfishes nei	04		
Pangasius djambal	Catfishes	04		
Pangasius spp.	Pangas catfishes nei	04		
Anguilla spp.	River eels nei	04		
Monopterus albus	Lai	04		
Anabas testudineus	Climbing perch	04		
Osphronemus goramy	Giant gourami	04		
Trichogaster pectoralis	Snakeskin gourami	04		•••
Trichogaster trichopterus	Three spot gourami	04		•••
Helostoma temminckii	Kissing gourami	04		

ΜТ

Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
11,960			•••	24,799		5,800	••
335							
5,853							
5,433							
9							
981							
20							
83							
694							
12,574						42,900	
941							
1							
605							
113							
569		•••					
44							
13,							
22,534						46,800	
				45,784			
3,185							
12,236							
4,960							
20,005							
16,739				5,491		12,500	
14,152							
						5,200	
557				867			
						300	
15,743				2,566		13,600	
2,007							
21,888				7,272		4,000	
12,771							
12,063							

## 4.1 Inland Capture Fishery Production by Species and by Fishing Area, 2011 4.1.1 In Quantity (Cont'd)

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Channa striata	Striped snakehead	04		
Channa micropeltes	Indonesian snakehead	04		
Botia macracanthus	Clown loach	04		
Rasbora argyrotaenio	Silver rasbora	04		
Puntioplites waandersi	-	04		
Pristolepis fascista	Malayan leaffish	04		
Toxotes microlepis	Smallscale archerfish	04		
Thynnichthys vailanti	-	04		
Mastacembelus erythrotaenia	Fire eel	04		
Scleropages formosus	Asian bonytongue	04		
Mystacoleucus padangensis	-	04		
Mystacoleucus marginatus	-	04		
Gobiidae	Freshwater gobies nei	04		
Osteichthyes	Freshwater fishes nei	04		445,000
Chanos chanos	Milkfish	04		
Scatophagus spp.	Scats	04		
Mystus nigriceps	-	04		
Eleotridae	Gudgeons, sleepers nei	04		
Ariidae	Sea ccatfishes nei	04		
Mugiidae	Mullets nei	04		
Natantia	Natantian decapods nei	04		
Crustacea	Freshwater crustaceans nei	04		
Mollusca	Freshwater molluscs nei	04		
Mollusca	Marine molluscs nei	04		
Macrobrachium rosenbergii	Giant river prawn	04		
Portunus pelagicus	Blue swimming crab	04		
Scylla serrata	Indo-Pacific swamp crab	04		
Palaemonidae	Freshwater prawns nei	04		
Bivalvia	Clams, etc, nei	04		
Rana spp.	Frogs	04		
Testudinata	River and lake turtles nei	04		
Invertebrate	Aquatic invertebrates nei	04		
-	Others	04		

мт

MT									
Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam A		
36,837				10,678		23,200			
8,128				•••					
12									
1,367									
3,246									
110				7,882					
186							•••		
3,405									
199									
2							•••		
15,870									
656							•••		
			•••	5,611			•••		
58,414	34,000	5,283	1,163,259			72,900	190,300		
				5,718					
•••	•••	•••	•••	198		•••	•••		
1,606	•••	•••	•••		•••	•••	•••		
2,382	•••	•••	•••	•••		•••	•••		
	•••	•••	•••	1,900	•••	•••	•••		
	•••	•••	•••	854		•••	•••		
4 540	•••	•••	•••		•••	•••	•••		
4,548	•••	•••	•••	6,340		400	42 200		
333	•••	•••	•••			400	12,200		
912	•••	•••	•••	63,205		•••	•••		
267		•••	•••			•••	•••		
9,528		•••	•••	1,616		•••	•••		
		•••		224					
	•••	•••	•••	896		•••	•••		
4,208		412	•••	•••		900	•••		
700									
2,011									
24		•••	•••	•••		•••	•••		
1,216									
			•••	1,799					

Note: A Figures from General Statistics Office of Vietnam Website

## 4.1 Inland Fishery Production by Species and by Fishing Area, 2011 4.1.2 In Value

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Cyprinus carpio	Common carp	04		•••
Ctenopharyngodon idellus	Grass carp	04		
Osteochilus haseltii	Nilem carp	04		
Leptobarbus hoeveni	Hoven's carp	04		
Hampala macrolepidota	Hampala barb	04		
Cyprinidae	Cyprinids nei	04		
Barbonymus schwanenfeldii	Tinfoil barb	04		
Barbonymus gonionotus	Silver barb	04		
Oreochromis (=Tilapia) spp.	Tilapias nei	04		•••
Oreochromis mossambicus	Mozambique tilapia	04		
Oreochromis niloticus	Nile tilapia	04		
Chitala lopis	Giant featherback	04		
Kryptopterus spp.	Glass catfish	04		
Ompok bimacularus	Butter catfish	04		
Mystus nemurus	Asian redtail catfish	04		
Clarias spp.	Torpedo-shaped catfishes nei	04		
Pangasius djambal	Catfishes	04		•••
Pangasius spp.	Pangas catfishes nei	04		
Anguilla spp.	River eels nei	04		•••
Monopterus albus	Lai	04		•••
Anabas testudineus	Climbing perch	04		
Osphronemus gouramy	Giant gourami	04		•••
Trichogaster pectoralis	Snakeskin gourami	04		
Trichogaster trichopterus	Three spot gourami	04		
Helostoma temminckii	Kissing gourami	04		
Channa striata	Striped snakehead	04		
Channa micropeltes	Indonesian snakehead	04		•••
Mastacembelus erythrotaenia	Fire eel	04		•••
Pristolepis fasciata	Malayan leaffish	04		•••
Barbodes balleroides	-	04		•••
Barbichthys laevis	Sucker barb	04		
Labiobarbus festivus	Signal barb	04		
Puntius bionotatus	Spotted barb	04		
Botia macracanthus	Clown loach	04		•••

US\$ 1,000

	US\$ 1,00						
Indonesia A	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
24,540						7,474	
17							
6,318							
14,515							
1,782							
		•••		25,081			•••
1,232		•••					
15,965		•••				51,265	•••
•••		•••		57,698			
18,240		•••					
37,433		•••				63,107	
10,510		•••					•••
25,970		•••					
9,104		•••					
52,927		•••					•••
23,661		•••		8,957		25,910	•••
32,626		•••					•••
		•••				6,145	
1,350		•••	•••	1,953	•••	•••	•••
		•••	•••	•••	•••	876	•••
35,301		•••	•••	3,068	•••	17,875	•••
4,041		•••					•••
23,112		•••	•••	5,541	•••	5,244	•••
13,074		•••	•••		•••	•••	•••
16,698		•••	•••	•••	•••	•••	•••
67,827		•••	•••	10,678	•••	57,988	•••
15,760		•••	•••	•••	•••	•••	•••
414		•••	•••		•••	•••	•••
146		•••	•••		•••		•••
1,125		•••	•••		•••		•••
42		•••					
725		•••	•••		•••		•••
136		•••	•••		•••		•••
21	•••	•••	•••		•••	•••	•••

Notes: A Figures from Capture Fisheries Statistics of Indonesia 2011 and conversion to US\$ is based on the exchange rate used in the ASEAN Statistics Database

## 4.1 Inland Capture Fishery Production by Species and by Fishing Area, 2011 4.1.2 In Value (Cont'd)

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Rasbora argyrotaenio	Silver rasbora	04		
Cyclochelichthys apogon	Beardless barb	04		
Tor soro	-	04		
Tor douronensis	River carp	04		
Toxotes microlepis	Smallscale archerfish	04		
Thynnichthys vailanti	-	04		•••
Scleropages formosus	Asian bonytongue	04		
Mystacoleucus marginatus	-	04		•••
Mystacoleucus padangensis	-	04		
Mystus nigriceps	-	04		•••
Osteichthyes	Freshwater fishes nei	04		
Chanos chanos	Milkfish	04		•••
Scatophagus spp.	Scats	04		
Ariidae	Sea catfishes nei	04		
Mugiidae	Mullets nei	04		
Gobiidae	Freshwater gobies nei	04		
Natantia	Natantian decapods nei	04		
Mollusca	Freshwater molluscs nei	04		
Mollusca	Marine molluscs nei	04		
Eleotridae	Gudgeons, sleepers nei	04		•••
Macrobrachium rosenbergii	Giant river prawn	04		•••
Portunus pelagicus	Blue swimming crab	04		•••
Palaemonidae	Freshwater prawns nei	04		•••
Crustacea	Freshwater crustaceans nei	04		•••
Bivalvia	Clams, etc, nei	04		•••
Rana spp.	Frogs	04		•••
Testudinata	River and lake turtles nei	04	•••	•••
Invertebrate	Aquatic invertebrates nei	04	•••	•••
	Others	04		

US\$ 1,000

Indonesia A	Lao PDR	Malaysia	Myanmar	Philippines	Singpaore	Thailand	Vietnam
	240 / 2/1	maiaysia	,	· ·····pp····cs	J.I.Spacic	- Triuntana	
2,724							
598							
291		•••		•••			•••
2,899							
180	•••	•••	•••	•••	•••		•••
3,820	•••	•••	•••	•••	•••		•••
4		•••					
1,817		•••					
6,484		•••					
1,796							
69,807		13,594	1,744,888	7,882		85,642	
				7,766			•••
	•••	•••		615	•••		
		•••		1,367	•••		•••
		•••		1,566			•••
		•••		7,944	•••		
	•••	•••		10,861			
262		•••			•••		
398	•••	•••					
9,387		•••					
52,508		•••		5,148			
				468			
11,269		4,324				7,834	
10,817						833	
806							
3,285							
51							
1,938							
				29,206			

Notes: A Figures from Capture Fisheries Statistics of Indonesia 2011 and conversion to US\$ is based on the exchange rate used in the ASEAN Statistics Database

## 4.2 Inland Fishery Production by Type of Water Bodies 4.2.1 In Quantiy

МТ

Water Bodies	Brunei Darussalam	Cambodia	Indonesia	Lao PDR
Total	•••	445,000	368,542	34,000
Lakes			56,007	
Rivers		•••	239,813	•••
Floodplain/rice fields			50,101	
Reservoirs		•••	18,531	•••
Others			4,090	

#### 4.2.2 In Value

US\$ 1,000

Water Bodies	Brunei Darussalam	Cambodia	Indonesia	Lao PDR
Total		•••	635,754	•••
Lakes			73,217	
Rivers		•••	453,705	•••
Floodplain/rice fields			78,944	
Reservoirs		•••	24,000	
Others		•••	5,888	•••

МТ

Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
5,695	1,163,159	193,698	•••	228,500	202,500
369					
3,021	964,441				
1,115					
618					
572	198,718		•••	•••	

US\$ 1,000

Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
17,918	1,744,738	185,799		330,193	•••
1,180					
11,969	1,446,661				
2,194					
1,481					
1,094	298,077				

#### **5. AQUACULTURE STATISTICS**

# 5.1 Aquaculture Production by Species and by Fishing Area, 2011 5.1.1 In Quantity

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia A
Cyprinus carpio	Common carp	04	0.03	1,650
Cyprinidae	Cyprinids nei	04		6,840
Labeo rohita	Roho labeo	04		
Cirrhinus mrigala	Mrigal carp	04		
Ctenopharyngodon idellus	Grass carp	04		170
Hypophthalmichthys molitrix	Silver carp	04		170
Hypophthalmichthys nobilis	Bighead carp	04		100
Leptobarbus hoeveni	Hoven's carp	04		1,800
Osteochilus hasselti	Nilem carp	04		
Barbonymus gonionotus	Silver barb	04		12,600
Catla catla	Catla	04		
Oreochromis (=Tilapia) spp.	Tilapias nei	04		
Oreochromis (=Tilapia) spp.	Tilapias nei	71		
Oreochromis mossambicus	Mozambique tilapia	04		
Oreochromis niloticus	Nile tilapia	04	2.88	2,000
Oreochromis niloticus	Nile tilapia	71		
Piaractus brachypomus	Pirapatinga	04		
Notopterus spp.	Knifefishes	04		
Mystus nemurus	Asian redtail catfish	04		
Clarias batrachus	Philippine catfish	04		
Clarias spp.	Torpedo-shaped catfishes nei	04	8.02	1,950
Pangasius pangasius	Pangas catfish	04		
Pangasius hypophthalmus	Striped catfish	04		
Pangasius spp.	Pangas catfishes nei	04	2.51	26,400
Pangasius spp.	Pangas catfishes nei	57		
Monopterus albus	Lai	04		40
Anabas testudineus	Climbing perch	04		850
Osphronemus gouramy	Giant gourami	04		
Trichogaster spp.	Gouramis	04		
Trichogaster pectoralis	Snakeskin gourami	04		7,300
Helostoma temminckii	Kissing gourami	04		
Channa striata	Striped snakedhead	04		7,300
Channa micropeltes	Indonesian snakehead	04		
Channa spp.	Snakeheads (=Murrels) nei	04		
Note: A Figures from FAO	Fisheries and Aquaculture Information	n and Statistics	Service	

мт

Vietnam	Thailand	Singapore	Philippines	Myanmar	Malaysia	Lao PDR	Indonesia
	1,875	•••	17,341	22,747	1,273		332,206
				•••			
	1,530			530,758			
	774			30,329			
	•••			15,164	1,916		
	137			9,099			
		2.00		10,615	3,929		
				•••	738		5,525
							22,575
	34,117			22,746	1,560		11,974
				45,493			
			257,383	40,185	33,543		
			2				
	112				9,526		34,256
	139,263	46.15					567,078
		42.48					
				7,582			
	3						
					2,881		198
		22.00					
			3,129	7,582	46,778		337,577
					10,892		
	15,252	35.65					
				15,164			229,267
				758			
	8						
	357						312
	2,730		173				64,252
	20						••••
	15,915			•••			2,735
				•••			4,380
	4,525		890				
	175	365.07			1,269		17,965
							6,047

### 5.1 Aquaculture Production by Species and by Fishing Area, 20115.1.1 In Quantity (Cont'd)

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia A
C. gariepinus x C. macrocephalus	Catfish, hybrid	04		
Oxyeleotris mamoratus	Marble goby	04		
Anguilla spp.	River eels nei	04		
Pisodonophis boro	Rice-paddy eel	04		
Osteichthyes	Freshwater fishes nei	04		
Chanos chanos	Milkfish	04		
Chanos chanos	Milkfish	71		
Lates calcarifer	Giant seaperch (=Barramundi)	04		
Lates calcarifer	Giant seaperch (=Barramundi)	57		
Lates calcarifer	Giant seaperch (=Barramundi)	71	70.10	140
Mugil cephalus	Flathead grey mullet	71		
Mugilidae	Mullets nei	04		
Epinephelus malabaricus	Malabar grouper	71		
Epinephelus coioides	Orange-spotted grouper	71	7.44	140
Epinephelus fuscoguttatus	Brown-marbled grouper	71		
Epinephelus tauvina	Greasy grouper	57	•••	
Epinephelus tauvina	Greasy grouper	71		
Epinephelus spp.	Groupers nei	04		
Epinephelus spp.	Groupers nei	57		
Epinephelus spp.	Groupers nei	71	5.96	
Colossoma macropomum	Black pomfret	04		
Cromileptes altivelis	Humpback grouper	71		
Plectropomus maculatus	Spotted coral grouper	71		
Lutjanus argentimaculatus	Mangroves red snapper	57		
Lutjanus argentimaculatus	Mangroves red snapper	71		
Lutjanus johnii	John's snapper	57		
Lutjanus johnii	John's snapper	71		
Lutjanus spp.	Snappers nei	71	5.96	140
Siganus spp.	Spinefeet (=Rabbitfishes) nei	04	•••	
Siganus spp.	Spinefeet (=Rabbitfishes) nei	71		
Serranidae	Groupers, seabasses nei	04	•••	
Serranidae	Groupers, seabasses nei	71	•••	
Caranx spp.	Jacks, crevalles nei	71	11.27	
Trachinotus blochii	Snubnose pompano	71	•••	
Rachycentron canadum	Cobia	71	•••	
Osteichthyes	Marine fishes nei	57		
Osteichthyes	Marine fishes nei	71	19.33	80

Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
	240131		711y a	·····pp····cs			, retirani
4 000			•••		 F 00	95.375	•
1,088	•••	22	•••	•••	5.00	67	•
415		•••	•••	•••		•••	•
				•••	2.00		
153,214	85,980	7,828		83	5.50	4,299	2,612,10
467,044		•••	•••	268,623		•••	
283	•••	•••		103,958	1.829.46	•••	
3,107				•••			
		12,792	80			1,474	
2,129		4,815			392.33	14,860	
•••				•••	307.21		
5,719					•••		
		•••			84.67	•••	
					4.11		
					44.72		
		4,058			•••		
		2,248					
2,488		•••					
			140			2,613	
8,091					10.30	570	
14,625							
		•••	•••	•••	0.04	•••	•
•••		•••	•••	•••	0.76	•••	•
•••	•••	2 402	•••	•••	0.76	•••	•
•••	•••	3,492	•••	•••		•••	•
•••	•••	1,745	•••	•••	1.51	•••	•
•••		2,805					
•••		414	•••		15.34	•••	
•••		•••		8	31.20		
•••		•••		98			
				52			
•••		•••		28			
		•••		1,036			
				25			
					46.40		
					6.04		
		1,039					
7,001		2,859		404	175.41		318,30

#### 5.1 Aquaculture Production by Species and by Fishing Area, 20115.1.1 In Quantity (Cont'd)

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia A
Macrobrachium resenbergii	Giant river prawn	04	0.2	140
Portunus spp.	Portunus swimcrabs nei	04		
Scylla serrata	Indo-Pacific swamp crab	04		
Scylla serrata	Indo-Pacific swamp crab	57		
Scylla serrata	Indo-Pacific swamp crab	71	6.78	20
Penaeus merguiensis	Banana prawn	04		
Penaeus merguiensis	Banana prawn	57		
Penaeus merguiensis	Banana prawn	71		
Penaeus vannamei	Whiteleg shrimp	04		
Penaeus vannamei	Whiteleg shrimp	57		
Penaeus vannamei	Whiteleg shrimp	71		
Penaeus monodon	Giant tiger prawn	04	•••	
Penaeus monodon	Giant tiger prawn	57		
Penaeus monodon	Giant tiger prawn	71	2.09	
Penaeus stylirostris	Blue shrimp	71	156.82	
Penaeus spp.	Penaeus shrimps nei	71	•••	100
Metapenaeus spp.	Metapenaeus shrimps nei	04	•••	
Metapenaeus spp.	Metapenaeus shrimps nei	71		
Panulirus polyphagus	Mud spiny lobster	71		
Panulirus spp.	Tropical spiny lobsters nei	71		
Crassostrea gigas	Pacific cupped oyster	71	•••	
Crassostrea spp.	Cupped oysters nei	57		
Crassostrea spp.	Cupped oysters nei	71		
Anadara granosa	Blood cockle	57	•••	
Anadara granosa	Blood cockle	71		
Perna viridis	Green mussel	57	•••	
Perna viridis	Green mussel	71	•••	1,200
Pteria penguin	Penguin wing oyster	71	•••	
-	Marine molluscs nei	71	•••	800
Rana spp.	Frogs	04	•••	70
Trionyx simensis	Soft-shell turtle	04	•••	
-	Aquatic plants nei	71	•••	
Holothuroidea	Sea cucumbers nei	71		
Eucheuma spp.	Eucheuma seaweeds nei	71		
Gracilaria spp.	Gracilaria seaweeds nei	71		
Invertebrata	Aquatic invertebrates nei	71		

Note: A Figures from FAO Fisheries and Aquaculture Information and Statistics Service

r							M
Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
617		334	4,233	9	•••	19,347	
3							
8,153			•••	15,731			
		12	1,500	•••			
		7	•••		31.84		
10,757							
		29,071	•••				
		31,251	•••			351	
246,420				1,974			
			•••	4,182		118,000	
			•••			393,443	
126,157			51,207	47,495		•••	
		3,050				630	
		4,100				1,412	
16							
				690	7.25	200	
16,194							
						100	
				68	12.77		
225							
			•••	•••	12.30		
		20				661	
		606		21,462		9,629	
		56,606				312	
		938				40,214	
		31				3,613	
		2,594		22,443	434.12	81,052	
4,849				,			
	20	•••	•••	•••	•••	1,155	
		•••	•••	•••	•••	1,764	
•••		•••	•••	1,840,833	•••		
 219	•••	•••	•••		•••	•••	
4,539,413	•••	•••	•••	•••	•••	•••	
630,788		•••	•••	•••	•••	•••	
030,766			 1,438				.

#### 5.1 Aquaculture Production by Species and by Fishing Area, 2011 5.1.2 In Value

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam A	Cambodia B
Cyprinus carpio	Common carp	04	0.12	2,475
Cyprinidae	Cyprinids nei	04		10,260
Labeo rohita	Roho labeo	04		
Cirrhinus mrigala	Mrigal carp	04		
Ctenopharyngodon idellus	Grass carp	04		255
Hypophthalmichthys molitrix	Silver carp	04		255
Hypophthalmichthys nobilis	Bighead carp	04		150
Leptobarbus hoeveni	Hoven's carp	04		2,700
Osteochilus hasselti	Nilem carp	04		
Barbonymus gonionotus	Silver barb	04		18,900
Catla catla	Catla	04		
Oreochromis (=Tilapia) spp.	Tilapias nei	04		
Oreochromis (=Tilapia) spp.	Tilapias nei	71		
Oreochromis mossambicus	Mozambique tilapia	04		
Oreochromis niloticus	Nile tilapia	04	13.28	
Oreochromis niloticus	Nile tilapia	71		3,000
Piaractus brachypomus	Pirapatinga	04		
Notopterus spp.	Knifefishes	04		
Mystus nemurus	Asian redtail catfish	04		
Clarias batrachus	Philippine catfish	04		
C. gariepinus x C. macrocephalus	Catfish, hybrid	04		
Clarias spp.	Torpedo-shaped catfishes nei	04	28	2,925
Pangasius pangasius	Pangus catfish	04		
Pangasius hypophthalmus	Striped catfish	04		
Pangasius spp.	Pangas catfishes nei	04		39,600
Monopterus albus	Lai	04		60
Anabas testudineus	Climbing perch	04		1,700
Osphronemus goramy	Giant gourami	04		
Trichogaster spp.	Gouramis	04		
Trichogaster pectoralis	Snakeskin gourami	04		18,250
Helostoma temminckii	Kissing gourami	04		
Channa striata	Striped snakehead	04		18,250
Channa micropeltes	Indonesian snakehead	04		
Channa spp.	Snakeheads (=Murrels) nei	04		
Oxyeleotris marmorata	Marble goby	04		

Notes: A Figures are based on the exchange rate used in the ASEAN Statistics Database Figures from FAO Fisheries and Aquaculture Information and Statistics Service

US\$ 1,000

US\$ 1,0	ı	<u> </u>				ľ	ĭ
Vietnam	Thailand	Singapore	Philippines	Myanmar	Malaysia	Lao PDR	Indonesia
	2,423		11,690	•••	2,622		597,971
				•••			
	1,823						
	914			•••			
					4,426		
	159						
		4			6,876		
			•••	•••	4,441		16,575
							473,707
	41,779				2,964		17,961
			362,805		75,575		
			21,725		·		
	130				16,099		37,005
	196,429	162					904,039
		104					
	4						
					11,667		556
		52					
•	138,716			•••			
•			6,598	•••	 62,215	•••	405,092
•	•••			•••	25,923		412,680
•	 14,827	138	•••	•••			
•			•••	•••	•••		
•	 19		•••	•••	•••		
•		•••	•••	•••	•••		740
•	702			•••	•••		749
•	6,266		181	•••			167,055
•	13	•••	•••	•••	•••	•••	
•	26,127		•••	•••	•••		1,914
•				•••	•••		7,884
•	11,683		1,718	•••			
	331	1,393			3,097		213,785
							9,070
•	710	100	•••	•••	279		10,122

#### 5.1 Aquaculture Production by Species and by Fishing Area, 2011 5.1.2 In Value (Cont'd)

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam A	Cambodia B
Anguilla spp.	River eels nei	04		
Pisodonophis boro	Rice-paddy eel	04		
Osteichthyes	Freshwater fishes nei	04		
Chanos chanos	Milkfish	04		
Chanos chanos	Milkfish	71		
Lates calcarifer	Giant seaperch (=Barramundi)	04		•••
Lates calcarifer	Giant seaperch (=Barramundi)	57		•••
Lates calcarifer	Giant seaperch (=Barramundi)	71	539	1,120
Mugil cephalus	Flathead grey mullet	71		•••
Mugilidae	Mullets nei	04		
Epinephelus tauvina	Greasy grouper	57		•••
Epinephelus tauvina	Greasy grouper	71		•••
Epinephelus malabaricus	Malabar grouper	71		•••
Epinephelus coioides	Orange-spotted grouper	71	63	1,120
Epinephelus fuscoguttatus	Brown-marbled grouper	71		
Epinephelus spp.	Groupers nei	04		
Epinephelus spp.	Groupers nei	57		
Epinephelus spp.	Groupers nei	71		•••
Cromileptes altivelis	Humpback grouper	71		
Plectropomus maculatus	Spotted coral grouper	71		
Colossoma macropomum	Black pomfret	04		
Lutjanus argentimaculatus	Mangroves red snapper	57		
Lutjanus argentimaculatus	Mangroves red snapper	71		
Lutjanus johnii	John's snapper	57		
Lutjanus johnii	John's snapper	71		
Lutjanus spp.	Snappers nei	71	45.82	1,120
Siganus spp.	Spinefeet (=Rabbitfishes) nei	04		
Siganus spp.	Spinefeet (=Rabbitfishes) nei	71		
Serranidae	Groupers, seabasses nei	04		
Serranidae	Groupers, seabasses nei	71		
Caranx spp.	Jacks, crevalles nei	71	87	
Trachinotus blochii	Snubnose pompano	71		
Rachycentron canadum	Cobia	71		
Osteichthyes	Marine fishes nei	57		
Osteichthyes	Marine fishes nei	71	5.26	640
Macrobrachium rosenbergii	Giant river prawn	04	0.03	1,400

Figures are based on the exchange rate used in the ASEAN Statistics Database Figures from FAO Fisheries and Aquaculture Information and Statistics Service Notes: В

							US\$ 1,0
Indonesia	Lao PDR	Malaysia	Myanmar A	Philippines A	Singapore A	Thailand A	Vietnam
1,039						•••	
		•••			15		•
153,214		12,368	736,975	21,189	86	6,113	
653,861		•••		486,401			
396		•••		219,530	3,166		
17,709		•••					
		57,181				6,228	
12,135		23,496			2,396	55,367	
					1,144		
6,291							
		37,419					
		23,694					
		•••			1,318		
		•••			51		
		•••			908		
34,838							
						22,234	
113,277		•••			197	4,526	
					3		
					14		
19,012							
		21,590					
		10,352			10		
		16,363					
		2,458			125		
		-,			218		
				443			
				158			
		•••	•••	307			•
•••	•••	•••	•••	1,495	•••		•
•••	•••	•••	•••		•••		•
•••	•••	•••	•••	•••	280	•••	•
•••	•••	•••	•••	•••	37	•••	•
•••		3,203	1 502	•••			•
15 110	•••		1,592	26 422	427		•
15,110 4,135	•••	9,218 3,027	•••	36,423 19	627	95,149	•

Figures are based on the exchange rate used in the ASEAN Statistics Database  $\,$ Note:

#### 5.1 Aquaculture Production by Species and by Fishing Area, 2011 5.1.2 in Value (Cont'd)

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam A	Cambodia B
Portunus spp.	Portunus swimcrabs nei	04		
Scylla serrata	Indo-Pacific swamp crab	04		
Scylla serrata	Indo-Pacific swamp crab	57		
Scylla serrata	Indo-Pacific swamp crab	71	0.03	100
Penaeus merguiensis	Banana prawn	04		
Penaeus merguiensis	Banana prawn	57		
Penaeus merguiensis	Banana prawn	71		
Penaeus vannamei	Whiteleg shrimp	04		
Penaeus vannamei	Whiteleg shrimp	57		
Penaeus vannamei	Whiteleg shrimp	71		
Penaeus monodon	Giant tiger prawn	04		
Penaeus monodon	Giant tiger prawn	57		
Penaeus monodon	Giant tiger prawn	71	0.03	
Penaeus stylirostris	Blue shrimp	71	890	
Penaeus spp.	Penaeus shrimps nei	71		500
Metapenaeus spp.	Metapenaeus shrimps nei	04		
Metapenaeus spp.	Metapenaeus shrimps nei	71		
Panulirus polyphagus	Mud spiny lobster	71		
Panulirus spp.	Tropical spiny lobsters nei	71		
Crassostrea gigas	Pacific cupped oyster	71		
Crassostrea spp.	Cupped oysters nei	57		
Crassostrea spp.	Cupped oysters nei	71		
Anadara granosa	Blood cockle	57		
Anadara granosa	Blood cockle	71		
Perna viridis	Green mussel	57		
Perna viridis	Green mussel	71		1,200
Pteria penguin	Penguin wing oyster	71		
-	Marine molluscs nei	71		800
Rana spp.	Frogs	04		70
Trionyx simensis	Soft-shell turtle	04		
-	Aquatic plants nei	71		
Holothuroidea	Sea cucumbers nei	71		
Eucheuma spp.	Eucheuma seaweeds nei	71		
Gracilaria spp.	Gracilaria seaweeds nei	71		
-	Others	71		

Figures are based on the exchange rate used in the ASEAN Statistics Database Figures from FAO Fisheries and Aquaculture Information and Statistics Service Notes:

							US\$ 1,000
Indonesia	Lao PDR	Malaysia	Myanmar A	Philippines A	Singapore A	Thailand A	Vietnam
16							•••
23,645				101,109			
		70					
		38			303		
44,744							
•••		111,849					
		129,087				1,726	
				7,135			
•••						446,852	
985,680	•••	•••				1,387,628	
731,711				427,318			
		22,215				3,067	
		29,722				7,156	
58							
				3,318	97	393	
42,104				•••			
•••						197	
					417		
3,055		•••		3,002			•••
•••					57		
		48				1,434	
		1,606		4,190		5,118	
		23,335				494	•••
•••	•••	658	•••	•••	•••	40,095	•••
•••	•••	16		•••	•••	3,181	•••
•••	•••	2,124		5,333	1,616	18,868	•••
 27,471	•••		•••				•••
	•••	•••	2 000	•••	•••	•••	•••
•••	•••	•••	2,088	•••	••••	2 248	•••
•••	•••	•••	•••	•••	••••	2,348	•••
•••	•••	•••		262 467		11,567	•••
	•••	•••		262,467			
2,821	•••	•••		•••	•••	•••	•••
953,277	•••	•••					•••
97,545	•••	•••					
•••	•••	•••					6,281,507

Note: Figures are based on the exchange rate used in the ASEAN Statistics Database

#### 112 AQUACULTURE STATISTICS

## 5.2 Aquaculture Production by Species of Ornamental Fishes, 20115.2.1 In Quantity

Scientific Name	FAO English Name	Brunei Darussalam	Cambodia	Indonesia 440,684
Cyprinus carpio	Common carp	10		
Cyprinidae	Carps, barbels and cyprinids			5,465
Carassius auratus	Gold fish			105,274
Pterophyllum scalar	Angel fish			32,526
Symphysodon spp.	Discus			17,045
Ancistrus spp.	Sucker			
Cichlasoma spp.	Flower horn			1,280
Astronotus ocellatus	Oscar			18,127
Peocilia reticulata	Guppy	4,750		138,558
Peocilia sphenops	Mollies			4,224
Osteoglossum ferrerai	Black arowana			824
Puntius conchonius	Rosy barb			925
Puntius spp.	Barbus			1,362
Botia macracantha	Clown loach			264
Corydoras aeneus	Bronze corydoras			12,328
Betta splendens	Siamese fighting fish			61,908
Peprillus triacanthus	Atlantic butterfish			10,318
Apteronotus albifrons	Black ghost knifefish			14,756
Danio rerio	Zebrafish			271
Paracheirodon axelrodi	Cardinal tetra			22,897
Paracheirodon innesi	Neon tetra			33,276
Hyphessobrycon sweglesi	Red phantom tetra			480
Xiphophorus maculatus	Platy			35,669
Chilaterina spp.	Rainbow			7,881
Hemigrammus bleheri	Rummy nose tetra			24,745
Puntius tetrazona	Tiger sumatra			987
Hippocampus erectus	-			87
Trichogaster lalius	Dwarf gourami			69
Macropodus chinensis	Roundtail paradisefish			1,618
Phenacogrammus interruptus	Congo tetra		•••	2,582
Anostomidae	Headstander		•••	90
Anabantids	-			
Poecilids	-			
Characins	-			

Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
		121,200				
	104,505					
		1,010,000			•••	
		151,500				
		20,200				
		80,800				
		70,700				
		10,100				
		202,000				
			•••	•••	•••	
			•••		•••	
			•••		•••	
					•••	
					•••	
					•••	
					•••	
					•••	
					•••	
					•••	
					•••	
	7,873			•••	•••	
	137,004				•••	
	9,411				•••	

### 114 AQUACULTURE STATISTICS

# 5.2 Aquaculture Production by Species of Ornamental Fishes, 2011 5.2.1 In Quantity (Cont'd)

Scientific Name	FAO English Name	Brunei Darussalam	Cambodia	Indonesia	
Cichlid	-			667	
Osteoglossids	-				
Polypteridae	-			126	
Callichthyids	-				
Cobitids	-				
Loricariidae	-				
Osteichthyes	Freshwater fishes nei			604,626	

Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
	7,164	•••	•••		•••	
	431		•••			
	363					
	184					
	2					
	41,413			107,775		

### 116 AQUACULTURE STATISTICS

## 5.2 Aquaculture Production by Species of Ornamental Fishes, 20115.2.2 In Value

Scientific Name	FAO English Name	Brunei Darussalam	Cambodia	Indonesia
Cyprinus carpio	yprinus carpio Common carp			
Cyprinidae	Carps, barbels and cyprinids			
Carassius auratus	Gold fish			
Pterophyllum scalar	Angel fish			
Symphysodon spp.	Discus			
Ancistrus spp.	Sucker			
Cichlasoma spp.	Flower horn			
Astronotus ocellatus	Oscar			
Peocilia reticulata	Guppy	3,349		
Puntius spp.	Barbus			
Anabantids	-			
Poeciliids	-			
Characins	-			
Cichlid	-			
Osteoglossids	-			
Callichthyids	-			
Cobitids	-			
Loricariidae	-			
Osteichthyes	-			

US\$ 1,000

Lao PDR	Malaysia	Myanmar	Philippines	Singpaore	Thailand	Vietnam
		5,102				
	46,205					••
		206,315	•••			
		9,568				
		6,379				
		2,976				
		7,441				••
		425				••
						••
		17,010				••
	2,516					
	23,568					
	1,517					•
	4,777					••
	95,414					
	54					•
	24					•
	1					
	5,580		•••	34,650		

## 5.3 Seed Production from Aquaculture, 20115.3.1 Brunei Darussalam

Scientific Name	FAO English Name	Total (million pcs.)	Wild Stock (million pcs.)	Aquaculture Practices (million pcs.)	No. of operational units or facilities
Clarias gariepinus	North African catfish	8,400		8,400	1
Oreochromis niloticus	Nile tilapia	66,970		66,970	1
Lates calcarifer	Barramundi (= Giant seaperch)	113,864		113,864	1
Macrobrachium rosenbergii	Giant river prawn	23,000		23,000	1
Penaeus stylirostris	Blue shrimp	28		28	1

## 5.3 Seed Production from Aquaculture, 2011 5.3.2 Indonesia

Scientific Name	Scientific Name FAO English Name		Wild Stock (million pcs.)	Aquaculture Practices (million pcs.)	No. of operational units or facilities
Chanos chanos	Milkfishes	2,486.6	0.6	2,486	
Lates calcarifer	Giant seaperch (=Barramundi)	6		6	
Penaeus monodon	Giant tiger prawn	7,531		7,531	
Penaeus merguensis	Banana prawn	1,027		1,027	
Penaeus vannamei	Whiteleg shrimp	16,080		16,080	
Cyprinus carpio	Common carp	3,366		3,366	
Barbonymus gonionotus	Silver barb	86		86	
Oreochromis niloticus	Nile tilapia	5,891.4	0.4	5,891	
Osteochillus hasselti	Nilem carp	138.7	0.2	138.5	
Osphronemus gouramy	Giant gourami	240		240	
Helostoma temminckii	Kissing gourami	36		36	
Mystus nemurus	Asian redtail catfish	6		6	
Pangasius spp.	Pangas catfishes nei	1,489		1,489	
Schuettea scalaripinnis	Eastern pomfret	120		120	
Clarias spp.	Torpedo-shaped catfishes nei	3,420		3,420	
Ophicephalus micropeltis	-	63		63	
Channa micropeltis	Indonesian snakehead	140		140	
Leptobarbus hoeveni	Hoven's carp	52		52	
Oreochromis mossambicus	Mozambique tilapia	65		65	
Macrobrachium rosenbergii	Giant rive prawn	36		36	
Anguilla spp.	River eels nei	1.7		1.7	
Ephinepelus spp.	Groupers nei	49.5		49.5	
Holoturoidea spp.	Sea cucumber	0.97		0.97	
-	Shell	3,531		3,531	
-	Lobsters	6		6	
Eucheuma spp.	Eucheuma seaweeds nei	6,414		6,414	
Scylla serrata	Indo-Pacific swamp crab	53		53	

# 5.3 Seed Production from Aquaculture, 2011 5.3.3 Malaysia

Scientific Name	Scientific Name FAO English Name		Wild Stock (million pcs.)	Aquaculture Practices (million pcs.)	No. of operational units or facilities
Puntius gonionotus	Javanese carp	8.34	1.52	6.82	T
Cyprinus carpio	Common carp	12.39		12.39	
Trichogaster pectoralis	Snakeskin gouramy	1.12		1.12	
Puntius schwanenfeldo	Schwanefeldi's Tinfoil Barb	0.89	0.42	0.47	
Oreochromis niloticus	Nile tilapia	2.39	0.02	2.37	
Oreochromis spp.	Red tilapia	118.44	0.65	117.79	
Anabas testudineus	Climbing perch	0.10	0.05	0.05	
Leptobarbus ocellatus	Hoeveni's slender carp	0.11	•••	0.11	
Clarias macrocephalus	Walking catfish	2,539.52	0.02	2,539.50	
Mystus spp.	River catfish	16.44	0.38	16.06	626
Pangasius sutchi	Striped catfish	34.58		34.58	1
Epinephelus spp.	Grouper	108.16		108.16	
Lates calcarifer	Barramundi	638.56		638.56	
Lutjanus johnii	John's snapper	30.42		30.42	
Lutjanus malabaricus	Red snapper	212.82		212.82	
Crassostrea spp.	Oysters	80.65		80.65	
Penaeus monodon	Giant tiger prawn	993.47		993.47	
Macrobrachium rosenbergii	Giant river prawn	51.52	2.00	49.52	
-	Miscellaneous	99.18	2.44	96.74	

## 5.3 Seed Production from Aquaculture, 20115.3.4 Myanmar

Scientific Name	ntific Name FAO English Name		Wild Stock (million pcs.)	Aquaculture Practices (million pcs.)	No. of operational units or facilities
Labeo rohita	Roho labeo	415.14	83.92	331.22	26
Cyprinus carpio	Common carp	51.88	14.64	37.24	26
Catla catla	Catla	9.52	0.31	9.21	26
Cirrhinus mrigala	Mrigal	2.14	0.0002	2.14	26
Ctenopharyngodon idellus	Grass carp	7.05	0.15	6.90	26
Hypophthalmichthys molitrix	Silver carp	3.64	1.45	2.19	26
Hypophthalmichthys nobilis	Bighead carp	2.27	0.30	1.97	26
Oreochromis (=Tilapia) spp.	Tilapias nei	15.51	5.74	9.77	26
Barbonymus gonionotus	Silver barb	65.42	36.25	29.17	26
Macrobrachium rosenbergii	Giant river prawn	55.75	0.07	55.68	15
Penaeus monodon	Giant tiger prawn	3.69	0.37	3.32	30

## 5.3 Seed Production from Aquaculture, 20115.3.5 Singapore

Scientific Name	FAO English Name	Total (million pcs.)	Wild Stock (million pcs.)	Aquaculture Practices (million pcs.)	No. of operational units or facilities
Lutjanus campechanus	Red snapper	195.10		195.10	Ţ
Epinephelus fuscoguttatus	Brown-marbled grouper	103.73		103.73	
Gnathanodon speciosus	Golden trevally	28.10		28.10	
Elutheronema tetradactylum	Four finger threadfin	6.09		6.09	
Lates calcarifer	Barramundi	283.15		283.15	
Epinephelus malabaricus	Malabar grouper	0.01		0.01	
Caranx ignobilis	Giant trevally	34.69		34.69	8
Trachinotus blochii	Pompano	0.26		0.26	
-	Hybrid grouper	5.08		5.08	
Oreochromis niloticus	Nile tilapia	0.01		0.01	
Oxyeleotris marmorata	Marble goby	0.05		0.05	
Lutjanus johnii	John's snapper	22		22	
Caranx sexfasciatus	Bigeye trevally	5.7		5.7	

### 6. PRICE OF FRESH FISH

### 6.1 Producer Price for Capture Fishery Production by Species, 2011

Scientific Name	FAO English Name	Brunei Darussalam	Cambodia	Indonesia
Cyprinus carpio	Common carp			1.8
Labeo rohita	Roho labeo			•••
Hypophthalmichthys nobilis	Bighead carp			
Osteochilus haseltii	Nilem carp			2.1
Leptobarbus hoeveni	Hoven's carp			3
Barbonymus gonionotus	Silver barb			1.5
Catla catla	Catla			
Oreochromis mossambicus	Mozambique tilapia			
Oreochromis niloticus	Nile tilapia			1.6
-	Ruby tilapia			
Chitala lopis	Giant featherback			
Chitala ornata	Spotted featherback			
Mystus nemurus	Asian redtail catfish			2.8
Clarias batrachus	Philippine catfish			
C. gariepinus x C. macrocephalus	Catfish, hybrid			•••
Clarias spp.	Torpedo-shaped catfishes nei			1.25
Pangasius pangasius	Pangas catfish			
Pangasius spp.	Pangas catfishes nei			1.81
Anguilla spp.	River eels nei			2.50
Macrognathus siamensis	Spotted spiny eel			•••
Anabas testudineus	Climbing perch			0.31
Osphronemus gourami	Giant gourami			2.60
Trichogaster pectoralis	Snakeskin gourami			0.70
Helostoma temminckii	Kissing gourami			1.82
Channa striata	Striped snakehead			•••
Channa micropeltes	Indonesian snakehead			11.90
Channa spp.	Snakeheads (=Murrels) nei			1.52
Oxyeleotris marmorata	Marble goby			9.30
Cirrhinus microlepis	Small scale mud carp			
Osteichthyes	Freshwater fishes nei			1.10

US\$/kg.

Т			<u> </u>			אילכט.
Lao PDR	Malaysia	Myanmar	Philippines A	Singapore	Thailand	Vietnam
	2.06	3.23			1.15	
	2.31	2.61			0.66	
	1.75			•••		
					•••	
	6.02				•••	
				•••	1.31	•••
		2.61		•••		
		1.96				
	1.69		1.69		1.38	
					2.30	
					2.33	
					2.46	
					•••	
		5.22				
					1.31	
	1.33					
	2.38	2.61			•••	
					0.66	
	2.95	•••			3.94	
					1.97	
		•••			1.97	
					1.97	
				•••	1.97	
		3.91			3.12	
	12.75					
					0.66	

Figures from Agricultural Marketing Statistics Analysis Division (AMSAD), BAS and conversion to US\$ is based on the exchange rate used in the ASEAN Statistics Database Note: Α

Scientific Name	FAO English Name	Brunei Darussalam	Cambodia	Indonesia
Anodontostoma chacunda	Chacunda gizzard shad	2.36		
Hilsa kelee	Kelee shad			
Tenualosa ilisha	Hilsa shad	2.36		
Tennulosa toli	Toli shad			
Chanos chanos	Milkfish			1.40
Lates calcarifer	Barramundi (=Giant seaperch)	5.51		5.7
Psettodes erumei	Indian halibut			
Harpodon nehereus	Bombay-duck			
Saurida tumbil	Grester lizardfish	0.39		
Saurida spp.	Lizard fishes	0.39		
Synodontidae	Lizard fishes nei			
Trachinocephalus myops	Snakefish	0.25		
Arius spp.	Sea catfishes	0.79		
Ariidae	Sea catfishes nei			
Mugilidae	Mullets nei			1.14
Caesio caerulaurea	Blue and gold fusiller	1.65		•••
Caesio cuning	Redbelly yellowtail fusiller	1.65		
Caesio spp.	Fusillers caesios nei	1.65		•••
Anyperodon leucogrammicus	Slender grouper	4.4		
Epinephelus spp.	Groupers nei	6.3		14
Cromileptes altivelis	Humpback grouper	20.12		•••
Plectropomus maculatus	Spotted coral grouper	4.25		•••
Plectropomus leopardus	Leopard coral grouper	6.3		•••
Plectropomus spp.	Grouper	6.3		
Priacanthus spp.	Bigeyes nei			
Sillaginidae	Sillago-whitings			
Mene maculata	Moonfish			
Sciaenidae	Croakers, drums nei			
Lutjanus spp.	Snappers nei			
Lutjanidae	Snapper, jobfishes nei			
Nemipterus hexodon	Ornate threadfin bream	3.93		
Nemipterus spp.	Threadfin breams nei	3.93		

US\$/kg.

Lao PDR	Malaysia	Myanmar	Philippines A	Singapore	Thailand	Vietnam
	1.02	•••		•••		
	4.09	•••				
		13.04				•••
		•••			4.89	
		•••	2.13			
	4.48	6.52		6.84	4.1	
					1.74	•••
	1.01				•••	•••
			•••			•••
	0.58		1.30			•••
				1.31		
				•••		
	1.37	2.09	•••		1.31	
			•••	2.09		
		•••		4.41	4.10	••
			•••			•••
					•••	
	1.76		1.78			
					•••	•••
	5.78		4.75	8.1	8.1	
		•••				•••
						•••
					•••	•••
				•••	•••	•••
					1.31	
		•••		6.02	1.9	•••
				4.41		
				1.20	1.15	
				6.31		
				6.23	5.31	
	1.98		2.50	6.58	1.31	
	1.70	•••	2.30	3.30	1.51	•••

Figures from Agricultural Marketing Statistics Analysis Division (AMSAD), BAS and conversion to US\$ is based on the exchange rate used in the ASEAN Statistics Database Note: Α

Scientific Name	FAO English Name	Brunei Darussalam	Cambodia	Indonesia	
Leiognathus spp.	Ponyfishes	2.13			
Haemulidae (=Pomadasydae)	Grunts, sweetlips nei				
Upeneus spp.	Indian goatfish				
Polynemidae	Threadfins, tasselfishes nei				
Trichiurus lepturus	Largehead hairtail				
Trichiurus spp.	Hairtails nei				
Amblygaster sirm	Spotted sardinella	0.71			
Sardinella brachysoma	Deepbody sardinella	0.71			
Sardinella gibbosa	Goldstripe sardinella	0.71			
Sardinella longiceps	Indian oil sardine				
Sardinella fimbriata	Fringescale sardine	0.71			
Sardinella spp.	Sardinellas nei	0.71			
Dussumieria acuta	Rainbow sardine	0.71			
Dussumieria spp.	Rainbow sardines nei	0.71			
Stolephorus spp.	Stolephorus anchovies	1.45		•••	
Chirocentrus dorab	Dorab wolf-herring				
Chirocentrus spp.	Wolf-herrings nei			•••	
Auxis thazard, Auxis rochei	Frigate and bullet tunas				
Katsuwonus pelamis	Skipjack tuna				
Thunnus tonggol	Longtail tuna			•••	
Thunnus albacares	Yellowfin tuna	4		•••	
Scomberomorus commerson	Narrow-barred Spanish mackerel				
Scomberomorus guttatus	Indo-Pacific king mackerel				
Scomberomorus cavalla	King mackerel				
Scomberomorus spp.	Seerfishes nei				
Lactarius lactarius	Flase trevally				
Rachycentroon canadum	Cobia				
Decapterus macrosoma	Shortfin scad	1.77			
Decapterus russelli	Indian scad	1.42			
Decapterus punctatus	Round scad				
Decapterus spp.	Scads nei			•••	
Caranx sexfasciatus	Bigeye trevally			•••	
Caranx spp.	Jacks, crevalles nei				

US\$/kg.

	I					US\$/ Kg.
Lao PDR	Malaysia	Myanmar	Philippines A	Singapore	Thailand	Vietnam
	1.06	•••	1.68	•••	•••	•••
				3.35		
				3.29		
				17.70	2.95	
		•••		3.51	2.13	
		•••	1.49	•••	•••	
			•••	•••		
		•••	0.83		•••	
		•••			•••	
	0.87					
		•••			•••	
	1.07	•••				
	1.40					
		•••			1.97	
				7.49		
		•••	2.04		0.98	
				4.33		
					1.97	
	2.84		2.51	•••		
			2.93			
		•••	1.82			
			3.30			
				6.77	5.51	
					10.66	
					3.28	
			1.79			
	1.53			3.48		
•••	3.45	•••	•••		•••	•••
	5.23	•••	1.89	3.82	•••	•••
	3.23	•••	1.07	3.02	•••	•••

Figures from Agricultural Marketing Statistics Analysis Division (AMSAD), BAS and conversion to US\$ is based on the exchange rate used in the ASEAN Statistics Database Note: Α

Scientific Name	FAO English Name	Brunei Darussalam	Cambodia	Indonesia	
Carangidae	Carangids nei			•••	
Clupeoidei	Clupeoids nei				
Engraulis spp.	Anchovies nei		•••		
Alectis indicus	Indian threadfish		•••		
Carangoides spp.	Horse mackerel		•••		
Gnathanodon speciosus	Golden trevally				
Atule mate	Yellowtail scad		•••		
Alepes spp.	Scads		•••	•••	
Selar crumenophthalmus	Bigeye scad		•••		
Selar boops	Oxeye scad		•••		
Selaroides leptolepis	Yellowstripe scad	2.84	•••		
Seriolina nigrofasciata	Blackbanded trevally	2.84			
Parastromatus niger	Black pomfret		•••	1.33	
Megalaspis cordyla	Hardtail scad				
Rastrelliger kanagurta	Indian mackerel	2.84			
Rastrelliger spp.	Indian mackerels nei		•••		
Stromateidae	Butterfishes, pomfrets nei				
Pampus argenteus	Silver pomfret		•••		
Sphyraena spp.	Barracudas nei		•••		
Cynoglossus spp.	Tongue soles nei				
Congridae	Conger eels		•••		
Elasmobranchii	Sharks, rays, skates, etc. nei		•••	•••	
Rajiformes	Rays, stingrays, mantas nei				
-	Spotted jawfishes				
-	Yellowtailed fusiliar				
Osteichthyes	Marine fishes nei			1.29	
Penaeus merguiensis	Banana prawn	4.96		3.97	
Penaeus vannamei	Whiteleg shrimp			4.0	
Penaeus monodon	Giant tiger prawn			5.8	
Penaeus semisulcatus	Green tiger prawn	8.51			
Penaeus indicus	Indian white prawn	4.26	•••	•••	
Penaeus latisulcatus	Western king prawn	4.26			

US\$/kg.

Lao PDR	Malaysia	Myanmar	Philippines A	Singapore	Thailand	Vietnam
		•••		6.64	1.31	
				3.85		••
		•••	1.10			•.
	2.98					
	3.21					
	3.39					
	1.81					•
	2.19					•
			1.96			•
	1.55					•
	1.50					
	2.82				5.31	
					5.67	
					0.98	
	2.25		2.05		1.74	
				4.95	1.87	
		•••		13.25		
					13.12	
				3.44	1.48	
					1.57	
					1.31	
		•••		3.94	0.98	
		•••		4.32	0.82	
					3.28	
		•••			2.53	
				2.07		
	9.21	•••			7.54	
		•••	5.99			
		10.43	9.01		•••	
		•••			10.99	•
•••	5.1	•••			•••	
	1.04	•••			5.48	

Figures from Agricultural Marketing Statistics Analysis Division (AMSAD), BAS and conversion to US\$ is based on the exchange rate used in the ASEAN Statistics Database Note: Α

Scientific Name	FAO English Name	Brunei Darussalam	Cambodia	Indonesia
Macrobrachium rosenbergii	Giant river prawn	10.64		6.72
Portunus pelagicus	Blue swimming crab	3.55		4.90
Scylla serrata	Indo-Pacific swamp crab	3.55		2.90
Loligo spp.	Common squids nei	2.13		
Palaemonidae	Freshwater prawns			
Panulirus spp.	Tropical spiny lobsters nei			
Thenus orientalis	Flathead lobster			
Metapenaeus endeavouri	Endeavour shrimp			
Metapenaeus spp.	Metapenaeus shrimps nei			2.76
Sepioteuthis lessonina	Bigfin reef squid			
Natantia	Natantia decapods nei			
Octopodidae	Octopuses nei			
Brachyura	Marine crabs nei			
Scyllaridae	Slipper lobsters nei			
Perna viridis	Green mussel			
Pectinidae	Scallops nei			
Modiolus spp.	Horse mussels nei			
Paphia spp.	Short neck clams nei			
Anadara granosa	Blood cockle			
Sepiidae/Sepiolodae	Cuttlefish, squids nei			
Pristis spp.	Sweetlips			
Scomber australasicus	Blue mackerel			
Phalacronotus bleekeri	-			
Rana spp.	Frogs			
Pteria penguin	Penguin wing oyster			14.13
Eucheuma spp.	Eucheuma seaweeds nei			0.33
Gracilaria spp.	Gracilaria seaweeds			0.32

US\$/kg.

Lao PDR	Malaysia	Myanmar	Philippines A	Singapore	Thailand	Vietnam
					•••	
	3.81		2.94		5.15	
	4.53			10.46	5.57	
	2.95		3.38	4.78	3.87	
					13.94	
				13.76		
					4.10	
			5.76			
		•••			4.62	
					4.92	
				12.17		•••
					2.07	••
				9.13		•••
				18.32		•••
					0.98	•••
					3.54	
					0.49	•••
					1.41	•••
		•••			1.41	•••
		•••		4.65	4.46	
		•••			2.46	••
					2.95	
		•••			5.97	•••
		•••			1.64	•••
		•••				

Figures from Agricultural Marketing Statistics Analysis Division (AMSAD), BAS and conversion to US\$ is based on the exchange rate used in the ASEAN Statistics Database Α Note:

### 7. FISHERS

### 7.1 Number of Fishers by Working Status, 2011

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR
Total	3,894	852,953	5,180,212	
Marine Fishery			2,390,172	
Full-time			1,079,582	
Part-time			921,405	
Occasional			389,185	
Status Unspecified			•••	
Inland Fishery		578,468	490,040	
Full-time			180,405	
Part-time			209,990	
Occasional			99,645	
Status Unspecified		578,468		
Aquaculture		195,684	2,300,000	
Full-time				
Part-time				
Occasional				
Status Unspecified		195,684	2,300,000	
Unspecified	3,894	78,801		
Full-time	1,187			
Part-time	2,707			
Occasional				
Status Unspecified		78,801		
		,50.		

Malaysia	Myanmar	Philippines	Singapore	Thailand	Vietnam
162,709	3,164,627		500		
134,110	1,387,000		60	•••	
134,110	220,000		60	•••	••
	251,000		•••	•••	••
	916,000		•••		••
			•••		••
	1,565,800		•••		••
	486,300				
	299,500				••
	780,000				
28,599	211,827		440		••
28,599	123,088		358		••
	88,739		82		•-
					•
					•
					•
					••
					•
					••
					••