# FISHERY STATISTICAL BULLETIN OF SOUTHEAST ASIA 2018





Southeast Asian Fisheries Development Center

December 2020

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#### **FOREWORD**

The Southeast Asian Fisheries Development Center (SEAFDEC) has been compiling the annual fishery statistics of the countries bordering the South China Sea Area for the "Fishery Statistical Bulletin for the South China Sea Area," which SEAFDEC produced annually since 1978. Starting in 2004, however, the coverage of the compilation was changed to include the ASEAN Member States (AMSs) only, and starting with the 2008 issue, the publication was renamed the "Fishery Statistical Bulletin of Southeast Asia."

Recognizing that the statistical data and information are useful for generating appropriate policies, actions and management approaches for the sustainable development of fisheries in the Southeast Asian region, SEAFDEC has sustained the annual publication of the "Fishery Statistical Bulletin of Southeast Asia" as a long-term program. For easy access to the information contained in the Bulletin, its contents have been strategically divided into two parts. The first part includes the summary of the statistics with an overview of the fisheries sector of Southeast Asia, which had been structured to highlight on the status and trends of fisheries in the Southeast Asian region with accompanying explanations, charts, and data tables. The second part encompasses statistical information, in the form of statistical tables that include the data on production of each fishery sector (marine capture fisheries, inland capture fisheries, and aquaculture) in terms of volume and value, data on fishing boats, producers' price, and fish workers. As the Bulletin is also meant to constitute a primary tool for policy makers, researchers, and analysts, as well as for the general public interested in the past, present and future status and trend of the fisheries of the Southeast Asian countries, SEAFDEC ensures that the data presented in the Bulletin could also be accessed electronically through the Database of Fishery Statistics in Southeast Asia.

While acknowledging that the contents and quality of the information included in the Bulletin could not be sustained without the participation and active support of the AMSs, we express our sincere gratitude to the national agencies responsible for the collection and compilation of fishery statistics in the respective AMSs, for continuously providing the necessary data and information for the Bulletin, more particularly for this 2018 Bulletin. For the succeeding issues of the Bulletin, we look forward to having a much strengthened cooperation with the AMSs for their continued effort in providing the fishery statistics and data for the Bulletin. For such efforts of the AMSs, SEAFDEC is indeed very thankful.

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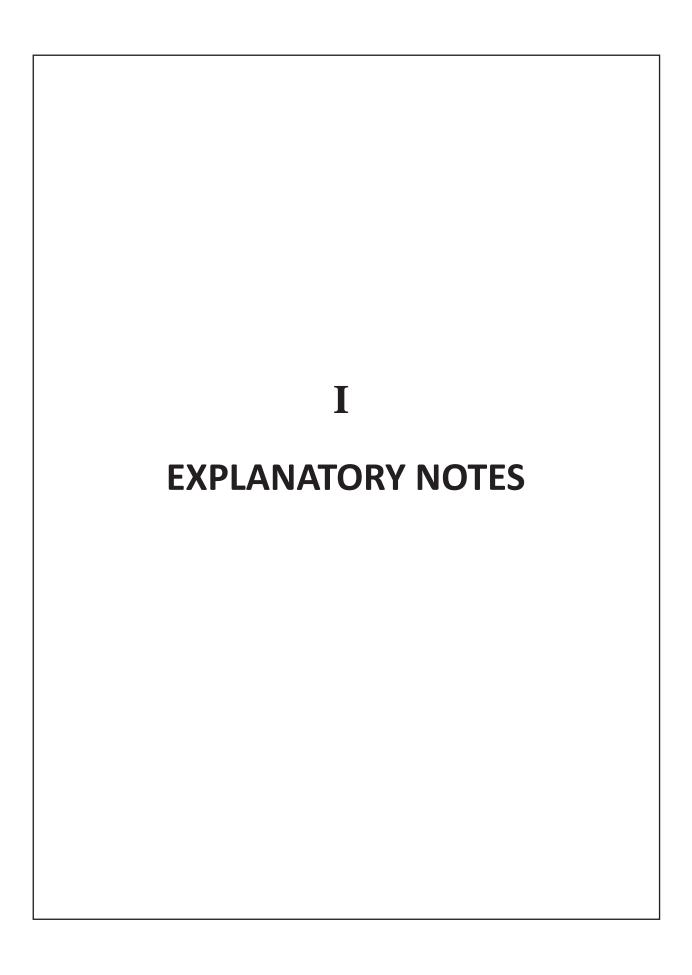
Ms. Malinee Smithrithee Secretary-General Southeast Asian Fisheries Development Center

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#### 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 pieces/numbers.
- 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 covers 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 sub-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 sub-sector.

#### 2.3.1.1 Marine Capture Fishery

#### a. Coverage and Definition

Marine capture fishery is divided into two categories: 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 excludes 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

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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 List of Aquatic Animals and Plants in Southeast Asia.

# 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

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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 trawl 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 type 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.

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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 represent 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 killed, caught, trapped or 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* and could be referred to from the List of Aquatic Animals and Plants in Southeast Asia.

# 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

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- (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, etc. 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.

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#### 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* and could be referred to from the List of Aquatic Animals and Plants in Southeast Asia.

# 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

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(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 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.

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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 boundary 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	Countries Sub-areas for marine fishery statistics		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

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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) Viet Nam		61,71	
	North Viet Nam	61	61a
	Central Viet Nam	61	61b
	Southwest Viet Nam	71	71c
	Southeast Viet Nam	71	71d

# Area 57 (Indian Ocean, Eastern)

Under fishing Area 57, 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.

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)

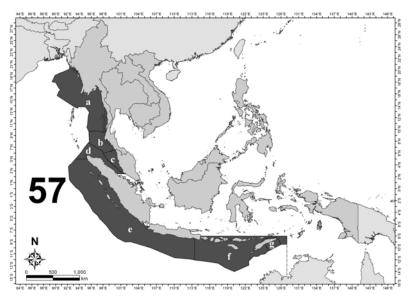
Sub-area 57c: Marine fishing area of Malaysia (West Coast of Peninsula Malaysia)

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)

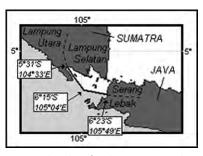
EXPLANATORY NOTES xi



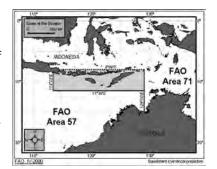
Sub-areas of the fishing Area 57, Indian Ocean, Eastern

# 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 from 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

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# 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 Viet Nam. 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 Viet Nam (Southwest Viet Nam)
Sub-area 71d: Marine fishing area of Viet Nam (Southeast Viet Nam)

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)

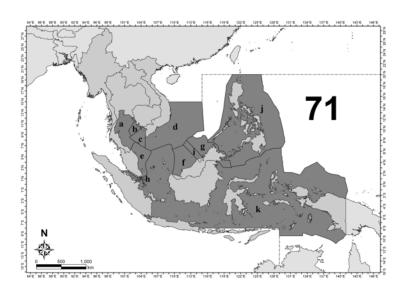
Sub-area 71h: Marine fishing area of Singapore

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)



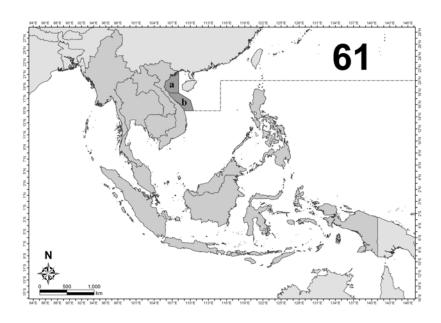
Sub-areas of the fishing Area 71, Pacific, Western Central

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# Area 61 (Pacific, Northwest)

Under fishing Area 61, the 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 is only one country identified under fishing Area 61, which is Viet Nam. The fishing area can be divided into 2 sub-areas as follows:

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



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
Viet Nam	Small-scale fisheries: vessels with no	Large-scale fisheries: vessels with engine more
	engine and with engine but less than	than 40 Hp
	40 Hp	

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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		
Viet Nam	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		

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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 Coordinating Working Party on Fishery Statistics (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 cichlids
13	Miscellaneous freshwater fishes
2	Diadromous fishes
22	River eels
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, conchs
53	Oysters
54	Mussels
55	Scallops, pectens
56	Squids, cuttlefishes, octopuses
57	Miscellaneous marine mollusks

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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			

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Appendix 4

#### **CLASSIFICATION OF FISHING GEARS**

For the statistics on fishing units and marine capture production, broken down 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.

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#### 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 are naturally confined in a collecting unit from which escape is prevented by labyrinths

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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.

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# 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 and size of boats is referred to provide figures of the fishing vessel as follows:

Type of Boat		Cina of Dank
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 GT
		5-9.9 GT
		10-19.9 GT
		20-49.9 GT
		50-99.9 GT
		100-199.9 GT
		200-499.9 GT
		More than 500 GT

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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	Sub-sectors	Working Status
	1.1 Marine capture fisheries	Full-time fishers
		Part-time fishers
1.Fishers	1.2 Inland capture fisheries	Full-time fishers
(engaged in fisheries)		Part-time fishers
		Occasional fishing by household members
	2.1 Mariculture	
2.Farmers (engaged in aquaculture)	2.2 Brackishwater culture	
(c.i.gagea iii adadeaitaic)	2.3 Freshwater culture	

#### **OVERVIEW OF THE FISHERIES SECTOR OF SOUTHEAST ASIA IN 2018**

Fish and fishery products are becoming more increasingly important as primary sources of protein for many peoples in the world, most especially for those in the Southeast Asian region. During the past decade, the region's production from capture fisheries and aquaculture had been considerably increasing, and recently, many Southeast Asian countries are among the highest producers of fish and fishery products in the world. This publication is therefore intended to provide the readers with glimpse of the increasing contribution of Southeast Asia's fishery and aquaculture production to the world's food fish basket. Based on the data and statistics provided by the Southeast Asian countries for the year 2018, the SEAFDEC Secretariat compiled and analyzed the necessary information for this publication. Of the 11 countries that comprise the Southeast Asian region, namely: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Timor-Leste, Thailand, and Viet Nam, only ten countries are covered in this publication as Timor-Leste has not yet been providing its fishery statistics and information to the SEAFDEC Secretariat.

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

From 2014 to 2018, the worldwide trend of fishery production from both capture fisheries and aquaculture (**Table 1**) had been steadily increasing at an average rate of 3.9 million MT per year or about 2.6 % annually. Countries from Asia are among the major fish producers, contributing about 51.2 % to the total fishery production during the past 5 years. In the Southeast Asian region, fishery production increased from 42.1 million MT in 2014 to 46.5 million MT in 2018 with an annual average rate of increase of 1.1 million MT or 2.5 %, while the region's total contribution to the world's total fishery production in 2018 was approximately 21.9 %. Such feat had been achieved through the intensified efforts of the governments of the Southeast Asian countries to promote responsible fishing practices and sustainable management of the fishery resources, and also because of the countries' adherence to the new paradigm of change in fisheries management which is geared towards sustainability.

Table 1. Fishery production by continent from 2014 to 2018 (million MT)\*

	2014	2015	2016	2017	2018
World	191.1	196.6	198.9	206.4	211.9
Africa	10.6	10.9	11.5	12.3	12.4
America	20.8	21.3	20.0	21.4	24.5
Asia**	99.2	101.5	103.5	107.5	108.5
Southeast Asia***	42.1	44.0	45.3	45.5	46.5
Europe	16.9	17.3	16.9	18.1	18.4
Oceania	1.5	1.6	1.7	1.6	1.6

<sup>\*</sup> Source (except for Southeast Asia): FAO FishStat Plus-Universal Software for Fishery Statistical Time Series

As shown in **Table 2**, the fishery production of Southeast Asia from 2014 to 2018 exhibited a continuously increasing trend especially in terms of volume (quantity) although the increases in terms of value were quite unstable. The annual average increase in volume from 2014 to 2018 was 2.5 %, while the annual average rate of increase of the value was about 5.6 %. However, since some countries were not able to provide the value of their respective fishery production for 2018, such figures could be indicative only. Nevertheless, the figures still imply that in addition to the increasing volume, most of the fishery commodities harvested in the region were of high value. By country, Indonesia reported the highest fishery production in 2018 in terms of volume accounting for about 49.4 % of the total fishery production of Southeast Asia, followed by

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

<sup>\*\*\*</sup> Source: Fishery Statistical Bulletin of Southeast Asia (SEAFDEC, 2020)

Viet Nam contributing about 16.7 % and Myanmar at 12.6 %. The Philippines ranked next accounting for 9.9 %, Thailand at 5.3 %, Malaysia at 3.6 %, and Cambodia at 2.0 %. The contributions of Lao PDR, Brunei Darussalam and Singapore to the fishery production of Southeast Asia in 2018 were minimal in terms of volume.

In terms of value, Indonesia accounted for about 59.7 % of the total value of the region's fishery production with Myanmar emerging second contributing about 13.7 %, and Thailand came in third contributing about 10.1 %. Meanwhile, the Philippines which ranked fourth in terms of volume and value, contributed about 9.4 %, and Malaysia which ranked fifth in terms of production volume as well as value accounted for 6.9 %. The trend of the fishery production of the Southeast Asian countries in 2014-2018 is shown in **Fig. 1**.

Table 2. Total fishery production of Southeast Asia by quantity and value (2014-2018)

<b>Total Fishery Production</b>	2014	2015	2016	2017	2018
Quantity (MT)	42,114,508	43,998,054	45,336,010	45,496,587	46,539,195
Value (US\$ 1,000)	42,722,414*	38,746,241**	41,155,302*	50,564,226*	51,811,317*

- Data not available from Cambodia, and Viet Nam
- \*\* Data not available from Cambodia, Lao PDR, and Viet Nam

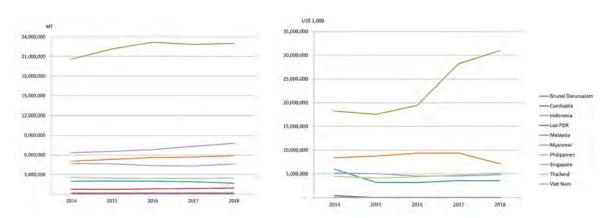


Fig. 1. Fishery production of the Southeast Asian countries in 2014-2018 (left in quantity; right in value)

The fishery production of Southeast Asia comes from three sub-sectors, namely: marine capture fisheries, inland capture fisheries, and aquaculture. By sub-sector, the total fishery production of the region in 2018 as shown in **Table 3** indicated that the largest portion of the production volume was derived from aquaculture accounting for approximately 54 % followed by marine capture fisheries at about 39 % and inland capture fisheries at 7 %. In terms of production value, marine capture fisheries accounted for 54 %, aquaculture at 38 %, and inland capture fisheries at 8 % (**Fig. 2**). While the value per metric ton of marine capture fishery products was about US\$ 1,534/MT, those from inland capture fisheries and aquaculture were about US\$ 1,233/MT and US\$ 787/MT, respectively. This implies that the global market had started to recognize the value of aquatic products harvested through inland capture fisheries, and had been patronizing such products lately.

Table 3. Fishery production by sub-sector (quantity and value) of Southeast Asia in 2018

Sub-sector	Quantity (MT)	Value * (US\$ 1,000)	Value/Quantity** (US\$/MT)
Marine capture fishery	18,330,721	28,122,606	1,534
Inland capture fishery	3,337,066	4,113.976	1,233
Aquaculture	24,871,804	19,574,735	787
Total	46,539,195	51,811,317	

<sup>\*</sup> Data not available from Cambodia, Lao PDR, and Viet Nam

<sup>\*\*</sup> Computation of price excludes corresponding quantity production from Cambodia, Lao PDR, and Viet Nam

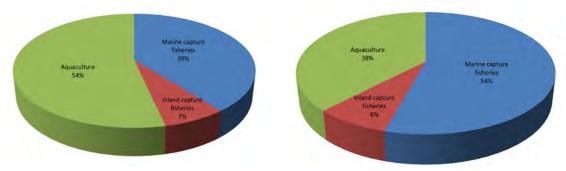


Fig. 2. Percentage of the sub-sectors' contribution to Southeast Asia's fishery production in 2018 (left in quantity; right in value)

### II. MARINE CAPTURE FISHERY PRODUCTION OF SOUTHEAST ASIA

The region's production from marine capture fisheries in 2014-2018 had been generally increasing as shown in **Table 4**. However, in terms of volume, the annual average increase was only minimal at about 2.5 %. While the production value in 2016 had increased by 2.4 % compared with that of 2015, but a drop in value from 2014 to 2015 by about 10.0 % was recorded which could have been influenced by the steep dive of the production value of Malaysia and Thailand. The increases in the total production values from 2017 to 2016 and 2018 to 2017 had been very high at about 26.8 % and 11.2 %, respectively, which could have been due to the considerable increase in the value of the production from Indonesia.

Table 4. Marine capture fishery production of Southeast Asia by quantity and value (2014-2018)

Marine Capture Fishery Production	2014	2015	2016	2017	2018
Quantity (MT)	16,583,628	16,762,393	17,027,312	17,330,277	18,330,325
Value (US\$ 1,000)	21,654,307*	19,481,510*	19,939,678*	25,292,021*	28,122,606*

<sup>\*</sup> Data not available from Cambodia and Viet Nam

In terms of quantity or volume, the total production from marine capture fisheries of the Southeast Asian countries during 2014-2018 indicated that Indonesia contributed the highest volume to the region's total production. Specifically in 2018, Indonesia's production was 6.62 million MT accounting for approximately 36.1 % of the region's total, followed by Viet Nam at 3.4 million MT (18.5 %), Myanmar at 3.1 million MT (17.2 %), and Philippines at 2.1 million MT (11.7 %). Malaysia and Thailand had also produced considerable amount of aquatic commodities from marine capture fisheries at 1.4 million MT (7.9 %) and 1.4 million MT (7.6 %), respectively. A picture of the region's production volume from marine capture fisheries in 2018 could be gleaned from **Fig. 3**.

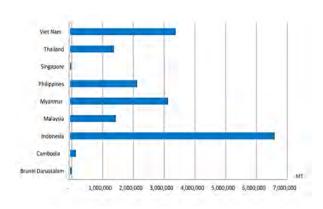


Fig. 3. Marine capture fisheries production (in quantity) of Southeast Asian countries in 2018

Although some Southeast Asian countries were not able to provide the value of their production from marine capture fisheries, the trend of the total value of the region's marine capture fishery production from 2014 to 2018 seemed to have increased corresponding to the increasing trend of the region's production volume. By country, Indonesia which led the Southeast Asian countries, accounted for about 62.7 % of the region's marine capture fishery production value in 2018, with Myanmar emerging second contributing about 11.2 %. Meanwhile, Malaysia which came in third in terms of value contributed about 9.9 %, the Philippines came in fourth at 9.2 %, and lastly, Thailand contributed about 6.8 %.

Disaggregating the 2018 production volume from marine capture fisheries by major commodity groups, marine fishes provided the highest volume (**Table 5**) accounting for about 87.1 % followed by crustaceans at 4.2 % while the mollusks, invertebrates and seaweeds contributed 3.1 %, 0.6 %, and 0.2 %, respectively. It should be noted that 4.7 % was contributed by other commodity groups which could not be appropriately classified as some countries were not able to provide their respective production volume by species. In 2018, the production volume of mollusks and seaweeds had decreased from that of 2017 by about 32.0 % and 6.1 %, respectively, but the production volume of marine fishes, crustaceans, invertebrates, and others had increased by about 7.4 %, 6.5 %, 22.2 % and 14.1 %, respectively, compared with the corresponding volume in 2016.

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

Commodity Group	2014	2015	2016	2017	2018
Marine fishes	14,553,024	14,310,200	14,726,719	14,880,726	15,974,939
Crustaceans	627,640	636,342	708,248	718,355	765,095
Molluscs	548,348	532,192	540,958	830,724	564,974
Seaweeds		78,230	41,457	47,271	44,383
Invertebrates	118,016	2,609	105,886	92,901	113,482
Others	736,600	1,202,820	904,044	760,300	867,452
Total marine capture fishery production (MT)	16,583,628	16,762,393	17,027,312	17,330,277	18,330,325

Comparing the volume of the total fishery production in 2018 with that of 2017, an increase in production of the marine fishes is obvious, which could have been influenced by various factors that include: Indonesia's increased production of various major commodities such as frigate tuna (*Auxis thazard*) from fishing area 57<sup>1</sup> and 71<sup>2</sup>, as well as kawakawa (*Euthynnus affinis*), yellowfin tuna (*Thunnus albacares*), Indo-Pacific king mackerel (*Scomberomorus guttatus*), and production of crustaceans; the Philippines's production of major marine fishes that also increased considerably, especially skipjack tuna (*Katsuwonus pelamis*), and scads *nei* (*Decapterus* spp.) from fishing area 71; and Thailand's increased production of Engraulidae from fishing area 57 and 71.

<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, Viet Nam (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, Southwest Kalimantan, East Kalimantan, South Sulawesi, North Sulawesi, Maluku-Papua)

Table 6. Economically important marine species caught in the region in 2018

Group/Species	Quantity (MT)	Percentage of total quantity of marine capture production (%)	Value (US\$1,000)*	Percentage of total value of marine capture production (%)	Value/ Quantity (US\$/MT)**
Tunas	2,075,418	11.32	4,096,571	14.57	1,974
Neritic tunas	968,247		1,669,855		1,725
Frigate tuna	296,789		410,587		1,383
Bullet tuna	28,984		39,886		1,376
Kawakawa	296,004		476,029		1,608
Longtail tuna	126,197		196,400		1,556
Narrow-barred Spanish mackerel	164,888		222,861		1,351
Indo-Pacific king mackerel	25,415		182,990		7,200
Seerfihes	29,970		141,102		4,708
Oceanic tunas	1,107,171		2,426,716		2,192
Skipjack tuna	720,356		1,145,597		1,590
Albacore tuna	5,811		16,761		2,884
Southern bluefin tuna	648		1,893		2,921
Yellowfin tuna	293,755		666,666		2,269
Bigeye tuna	86,601		271,707		3,137
Scads	788,752	4.30	1,130,807	4.02	1,434
Bigeye scad	206,720		316,767		1,532
Yellowstripe scad	105,827		167,607		1,584
Torpedo scad	99,239		160,519		1,617
Indian scad	140,654		176,200		1,253
Other scads	236,132		309,714		1,312
Mackerels	695,588	3.74	1,690,767	6.01	2,431
Spotted chub mackerel	3,111		2,146		690
Short mackerel	336,176		1,035,082		3,079
Indian mackerel	196,191		266,350		1,358
Indian mackerels <i>nei</i>	67,589		163,752		2,423
Mackerels <i>nei</i>	92,521		223,437		2,415
Anchovies	410,811	2.24	1,454,759	5.17	3,541
Stolephorus anchovies	279,920		1,363,803		4,872
Other anchovies	130,891		90,956		695
Sardines	1,016,470	5.54	856,536	3.05	843
Spotted sardinella	43,514		51,284		1,179
Goldstripe sardinella	201,635		227,964		1,131
Bali sardinella	302,305		285,550		945
Rainbow sardines	46,723		55,395		1,186
Sardinellas nei	422,293		236,343		560
Crustaceans	765,095	4.17	3,568,145	12.69	4,773
Molluscs	564,974	3.08	1,453,213	5.17	2,643
Marine fishes unidentified	7,806,209	42.59	5,456,392	19.40	1,081

<sup>\*</sup> Data not available from Cambodia, and Viet Nam
\*\* Computation of price excludes corresponding quantity production from Cambodia, and Viet Nam

Moreover, the region's production of major species such as the *Thunnus alalunga* (Albacore) decreased in 2018 compared with that of 2017 which could have been influenced by the reduced production of Indonesia and Malaysia; *Rastrelliger* spp. production also decreased in 2018 compared with that of 2017 which could have been influenced by decreased production of Malaysia and Thailand. Meanwhile, production of *Metapenaeus* spp. (*Metapenaeus* shrimps *nei*) in 2018 had increased compared with that of 2017, which could have been brought about by Indonesia's increased production from fishing areas 57 and 71.

The economically-important marine species that provided sizeable contribution to the total fishery production of Southeast Asia from marine capture fisheries (by quantity and value) in 2018 are shown in **Table 6**. The data indicate that miscellaneous marine fishes (unidentified) contributed the highest volume at about 42.59% and value at about 19.40%. Production from the tunas group contributed about 11.32% to the total production quantity and ranked the second highest, although it was ranked the highest in terms of value accounting for about 14.57% of the total production value.

The data in **Table 6** also suggest that the production value of Indo-Pacific king mackerel is valued the highest among the commodities harvested through marine capture fisheries at US\$ 7,200/MT followed by *Stolephorus* spp. (*Stolephorus* anchovies) at US\$ 4,872/MT, then crustaceans group, at US\$ 4,773/MT, *Scomberomorus* spp. (seerfishes *nei*) at US\$ 4,708/MT, *Thunnus obesus* (bigeye tuna) at US\$ 3,137/MT, *Rastrelliger brachysoma* (short mackerel) at US\$ 3,079/MT, *Thunnus maccoyii* (Southern bluefin tuna) at US\$ 2,921/MT, *Thunnus alalunga* (albacore tuna) at US\$ 2,884/MT, mollusks group at US\$ 2,643/MT, *Rastrelliger kanagurta* (Indian mackerel) at US\$ 2,423/MT, *Rastrelliger* spp. (Indian mackerels *nei*) at US\$ 2,415/MT, *Thunnus albacores* (yellowfin tuna) at US\$ 2,269/MT, *Megalaspis cordyla* (torpedo scad) at US\$ 1,617/MT, *Euthynnus affinis* (kawakawa) at US\$ 1,608/MT, *Katsuwonus pelamis* (skipjack tuna) at US\$ 1,590/MT, *Selaroides leptolepis* (yellowstripe scad) at US\$ 1,584/MT, *Thunnus tonggol* (longtail tuna) at US\$ 1,556/MT, and *Selar crumenophthalmus* (bigeye scad) at US\$ 1,532/MT. The average price of miscellaneous marine fishes (unidentified) which contributed the highest volume in 2018 was estimated at US\$ 1,081/MT, implying that this group must have generated low-value fishes that possibly include trash fishes.

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

In 2014-2018, Southeast Asia's production from inland capture fisheries had generally increased and its growth during the same period had been remarkable. The region's total production from inland capture fisheries in 2018 was 3,337,066 MT accounting for approximately 15.4 % of the region's total production from capture fisheries or 7.2 % of the region's total fishery production. It should be recognized however that the compilation and reporting of production data from inland capture fisheries had been particularly limited and need to be improved. Thus, the data so far reported could be insufficient, especially in terms of species composition. It should also be considered that in the real situation, the catch of rural community members comprising the main users of the inland resources, is consumed domestically and is usually not reported in local or national statistics. Accordingly, the data on the total catch from inland capture fisheries in this publication could be considered as indicative only.

While the Southeast Asian countries reported their respective data on production from inland capture fisheries during 2014-2018, only five countries reported the corresponding production values. Thus, the actual regional production trend of the inland capture fisheries sub-sector could not be established. At any rate, as the consistent top producer, Myanmar maintains a stable inland fishery production from 2014 to 2018 that accounted for 33.6 % of the country's total production from capture fisheries, 27.1 % of the country's total fishery production, and 3.4 % of the region's total fishery production (**Table 7**). The second

Table 7. Contribution of Southeast Asian countries' inland capture fisheries to the region's total fishery production in 2018

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		13,566	-	14,712	-
Cambodia	535,555	689,155	77.7	943,205	56.8
Indonesia	612,753	7,238,120	8.5	23,007,392	2.7
Lao PDR	70,900	70,900	100	179,100	39.6
Malaysia	6,089	1,455,066	0.4	1,672,447	0.4
Myanmar	1,594,970	4,747,110	33.6	5,877,460	27.1
Philippines	162,974	2,308,709	7.1	4,613,074	3.5
Singapore	-	1,309	-	7,011	-
Thailand	143,825	1,536,756	9.4	2,456,294	5.9
Viet Nam	210,000	3,606,700	5.8	7,768,500	2.7
Total	3,337,066	21,667,391	15.4	46,539,195	7.2

highest producer, Indonesia reported a production volume of 612,753 MT in 2018 that represented 8.5 % of the country's production from capture fisheries, 2.7 % of the country's total fishery production, and 1.3 % of the region's total fishery production.

It should be noted however that such production volumes could not be confirmed as accurate considering that most of the countries still need to improve their systems of collecting and compiling their respective fishery statistics, especially with regards to their production from inland capture fisheries.

Only three countries, namely: Indonesia, Philippines, and Thailand, had provided their respective production data from inland capture fisheries by species, while the other countries were not able to report due to inadequacy of expertise in identifying the catch by species. Capacity building in this aspect is therefore necessary to enable the countries to compile their respective inland fishery production by major groups of species. Thus, production from inland capture fisheries of Cambodia, Lao PDR, Malaysia, Myanmar, and Viet Nam in 2018 could not be analyzed in terms of species because these countries were not able to provide the breakdown of their production volume by species. Nonetheless, the production of Indonesia as the region's second highest producer was made up mainly of the striped snakehead (*Channa striata*) which accounted for about 10.6 % of the country's total production from inland capture fisheries.

Next to miscellaneous fishes which provided the highest production from inland capture fisheries accounting for 70.2 % of the region's total inland fishery production in 2018 (**Table 8**), production of striped snakehead (*Channa striata*) was the second highest at 2.6 % followed by Nile tilapia (*Oreochromis niloticus*) at 2.1 %, Asian redtail catfish (*Hemibagrus nemurus*) at 1.8 %, and silver barb (*Barbonymus gonionotus*) at 1.5 %. Production value per volume of the Asian redtail catfish (*Hemibagrus nemurus*) is valued the highest among the commodities harvested through inland capture fisheries at US\$ 2,462/MT followed by the striped snakehead (*Channa striata*) at US\$ 2,356/MT, Pangasius djambal at US\$ 1,858/MT, and Nile tilapia (*Oreochromis niloticus*) at US\$ 1,697/MT.

Table 8. Production of major inland fisheries species in Southeast Asia in 2018

Common name	Quantity (MT)	Percentage of total quantity of inland capture production (%)	Value (US\$ 1,000)*	Percentage of total value of inland capture production (%)	Value/ Quantity (US\$/MT)**
Misc. fishes	2,343,702	70.2	2,697,904	65.6	1,552
Striped snakehead	86,664	2.6	204,143	5.0	2,356
Nile tilapia	70,291	2.1	119,284	2.9	1,697
Asian redtail catfish	60,957	1.8	150,067	3.6	2,462
Silver barb	50,988	1.5	76,200	1.8	1,494
Freshwater mollusks <i>nei</i>	50,917	1.5	8,722	0.2	171
Snakeskin gourami	44,804	1.3	62,786	1.5	1,401
Tilapias <i>nei</i>	44,071	1.3	51,490	1.2	1,168
Climbing perch	43,462	1.3	72,134	1.7	1,660
Torpedo-shaped catfishes <i>nei</i>	33,910	1.0	55,478	1.3	1,636
Glass catfishes	29,873	0.9	20,938	0.5	701
Pangasius djambal	29,057	0.9	53,985	1.3	1,858

<sup>\*</sup> Data not available from Cambodia, Lao PDR, and Viet Nam

#### IV. AQUACULTURE PRODUCTION OF SOUTHEAST ASIA

In 2018, the region's total production from aquaculture accounted for about 54.0 % of the region's total fishery production in terms of volume, but only 38.0 % in terms of value. From 2014 to 2018, Southeast Asia's total production from aquaculture steadily increased at about 2.6 % per year (Fig. 4), the highest annual increase of about 7.0 % was recorded between 2014 and 2015, which could have been brought about by the sudden rise in the aquaculture production of Myanmar, and Viet Nam during the same period that also continued to increase until 2018. The aquaculture production of Brunei Darussalam and Cambodia had been slightly increasing from 2014 to 2018, while those of Indonesia, Lao PDR, and Singapore had been slightly decreasing from 2017, and that of Malaysia had decreased starting in 2014.

The production of spiny eucheuma (*Eucheuma denticulatum*) of Indonesia as the largest producer of aquaculture products in 2018, contributed 60.6 % to the production volume and 11.0 % to the production value, of the country's aquaculture production. This was followed by *Gracilaria* seaweeds (*Gracilaria* spp.) accounting for 8.5 %, Nile tilapia (*Oreochromis niloticus*) at 6.6 %, and torpedo-shaped catfishes (*Clarias* spp.) at 4.8 %. In the case of Viet Nam, as the second highest producer from aquaculture, 69.8 % of its aquaculture production came from freshwater fishes *nei* (Osteichthyes) followed by freshwater prawns *nei* which accounted for 19.4 % of the country's aquaculture production.

For the Philippines as the third highest producer from aquaculture, its main aquaculture product is the elkhorn sea moss (*Kappaphycus alvarezii*) contributing 61.0 % to the country's production from aquaculture followed by milkfish (*Chanos chanos*) accounting for 15.1 %, Nile tilapia (*Oreochromis niloticus*) at 7.3 %, and tilpia *nei* (*Oreochromis*(=Tilapia) spp.) at 3.9 %. For Myanmar, its main production from aquaculture

<sup>\*\*</sup> Computation of price excludes corresponding quantity production from Cambodia, Lao PDR, and Viet Nam

is roho labeo (*Labeo rohita*) which accounted for 48.6 % of the country's production from aquaculture followed by silver barb (*Barbonymus gonionotus*) accounting for 20.5 %, common carp (*Cyprinus carpio*) accounting for 10.7 %, and tilapias *nei* (*Oreochromis*(=Tilapia) spp.) at 3.9 %. Thailand's main aquaculture product, which is the whiteleg shrimp (*Penaeus vannamei*), accounted for 38.9 % of the country's production from aquaculture followed by Nile tilapia (*Oreochromis niloticus*) at 23.6 %, hybrid catfishes (*C. gariepinus* x *C. macrophalus*) at 11.5 %, and Barramundi (*Lates calcarifer*) at 4.3 %.

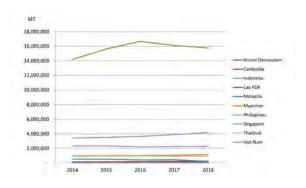


Fig 4. Trend of the aquaculture production (MT) of the Southeast Asian countries from 2014 to 2018

In terms of value per volume of aquaculture production in 2018, Singapore attained the highest average value at US\$ 7,818/MT followed by Brunei Darussalam at US\$ 7,433/MT, Malaysia at US\$ 3,509/MT, Thailand at US\$ 3,2282MT, Myanmar at US\$ 1,326/MT, Philippines at US\$ 904/MT, and Indonesia at US\$ 771/MT. Meanwhile, the value per metric ton of aquaculture production of Cambodia, Lao PDR, and Viet Nam in 2018 could not be calculated as their respective total production values were not reported.

Aquaculture production comes from three environments, namely: marine, brackishwater, and freshwater. In terms of volume, aquaculture in marine areas or mariculture provided 47.0 % to the region's total aquaculture production in 2018 while brackishwater aquaculture contributed 16.0 %, and the remaining 37.0 % came from freshwater aquaculture (**Fig. 5**). In terms of value, however, brackishwater aquaculture production value contributed the highest at 44.0 % followed by those of the freshwater aquaculture production at 41.0 % and mariculture production at 15.0 %.

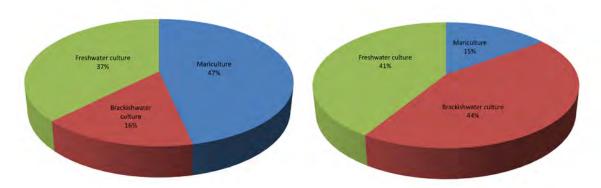


Fig. 5 Percentage of aquaculture production by sub-sector in 2018 (left by quantity: right by value)

It should be recalled that in 2017, production in terms of volume from mariculture accounted for 47.0 % of the total aquaculture production, while brackishwater culture production accounted for 15.0 % and freshwater culture production at 38.0 %. In terms of value, mariculture contributed 14.0 % to the region's total aquaculture production value, brackishwater aquaculture production at 44.0 %, and freshwater aquaculture production at 42.0 %. In 2018, the production value from brackishwater aquaculture slightly increased by 5.7 % from that of 2017 which could be due to the increased production of *Gracilaria* seaweeds (*Gracilaria* spp.) by Indonesia. Meanwhile, production from freshwater aquaculture in 2018 slightly decreased by 1.7 % compared with that of 2017, which could be due to the decreasing value of the production of Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, and Singapore. As a result, the region's production value from freshwater aquaculture also slighly decreased by 1.0 %.

#### 4.1 Mariculture

In 2018, the region's total production in terms of volume from mariculture contributed about 47.0 % to the region's total production and 15.0 % in terms of value. Farmed aquatic plants, such as the spiny eucheuma (*Eucheuma denticulatum*) and the elkhorn sea moss (*Kappaphycus alvarezii*), contributed 95.1 % to the region's total mariculture production volume. Indonesia's production of the spiny eucheuma (*Eucheuma denticulatum*) accounted for about 83.0 % of the region's total production volume from mariculture, followed by the elkhorn sea moss (*Kappaphycus alvarezii*) the main mariculture product of the Philippines which accounted for 12.1 % to the region's mariculture production. Moreover, milkfish (*Chanos chanos*) which is mainly produced by the Philippines, contributed 1.0 %, green mussels (*Perna viridis*) mainly produced by Thailand at 0.5 %, blood cockle (*Anadara granosa*) mainly produced by Malaysia and Thailand at 0.4 %, oysters group mainly produced by Thailand at 0.4 %, and shrimps mainly produced by Myanmar at 0.2 % (**Fig. 6**).

In terms of value, the spiny eucheuma (*Eucheuma denticulatum*) contributed 45.9 % to the region's total mariculture production value followed by milkfish (*Chanos chanos*) which contributed about 8.7 %, elkhorn sea moss at 6.8 %, blood cockle at 5.5 %, and shrimps that accounted for 5.2 % (**Fig. 6**). Moreover, shrimps earned the highest value per volume at US\$ 8,000/MT followed blood cockle at US\$ 3,421/MT, and milkfish at US\$ 2,131/MT. Meanwhile, the lowest value was obtained for the spiny eucheuma at US\$ 140/MT (**Table 9**).

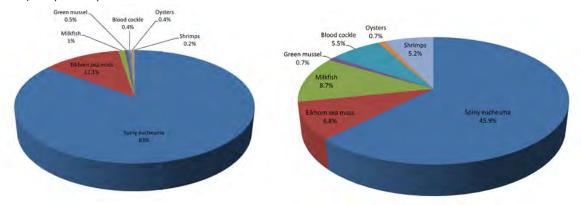


Fig 6. Mariculture production in 2018 by major species (left by quantity; right by value)

Table 9 Major mariculture species produced in the region (as of 2018)

Common name	Quantity (MT)	Percentage production of major commodities from mariculture to total mariculture production	Value (US\$ 1,000)	Percentage total value of major commodities production from mariculture to total mariculture value (%)	Value/ Quantity (US\$/MT)
Spiny Eucheuma	9,622,326	83.0	1,345,246	45.9	140
Elkhorn sea moss	1,405,413	12.1	200,158	6.8	142
Milkfish	120,127	1.0	255,955	8.7	2,131
Green mussel	61,684	0.5	21,726	0.7	352
Blood cockle	47,022	0.4	160,841	5.5	3,421
Oysters	43,214	0.4	20,091	0.7	465
Shrimps	19,042	0.2	152,335	5.2	8,000

As for value per volume of mariculture production in 2018, Brunei Darussalam posted the highest at an average of US\$ 8,361/MT from its production of the highly economical species of groupers *nei* (*Epinephelus* spp.), followed by Myanmar at US\$ 7,925/MT for shrimps, and Singapore at US\$ 7,435/MT for its production of the mud spiny lobster (*Panulirus polyphagus*). Meanwhile, the mariculture production value per volume of Thailand was at US\$ 2,080/MT, Malaysia at US\$ 1,351/MT, Philippines at US\$ 708/MT, and Indonesia at US\$ 148/MT.

#### 4.2 Brackishwater Culture

The total production from brackishwater aquaculture in 2018 represented about 16 % of the region's total production from aquaculture (**Fig. 7**). Production of *Gracilaria* seaweeds (*Gracilaria* spp.) mainly produced by Indonesia had the highest volume representing 33.7 % of the region's total production from brackishwater aquaculture. The second highest was contributed by milkfish (*Chanos chanos*) at 17.7 % mainly produced by Indonesia and the Philippines, and the third came from whiteleg shrimps (*Penaeus vannamei*) at 22.1 % mainly produced by Indonesia, Thailand, and Malaysia. Meanwhile, the giant tiger prawn (*Penaeus monodon*) contributed 5.0 % mainly from Indonesia; the group of fishes provided 2.1 %, shrimps at 1.7 %, and giant sea perch (*Lates calcarifer*) at 1.2 % mainly contributed by Thailand. In terms of value, the whiteleg shrimp (*Penaeus vannamei*) had the highest, which was provided by Indonesia, Malaysia, and Thailand, contributing 48.4 %; followed milkfish (*Chanos chanos*) from Indonesia and the Philippines at 25.5 %; giant tiger prawn (*Penaeus monodon*) from Malaysia Indonesia, Philippines and Thailand contributing 14.7 %; fishes at 5.7 %; giant sea perch (*Lates calcarifer*) from Thailand, Malaysia, and Indonesia at 3.5 %; shrimps at 1.9 %; and *Gracilaria* seaweeds (*Gracilaria* spp.) from Indonesia at 1.6 %.

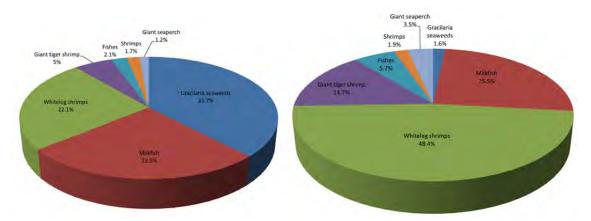


Fig. 7. Brackishwater culture production in 2018 by species (left by quantity; right by value)

In terms of average value per volume of production from brackishwater culture, considering only the countries that reported their respective production values, Singapore posted the highest at US\$ 9,004/MT followed by Brunei Darussalam at US\$ 6,983/MT, Malaysia at US\$ 5,329/MT, Thailand at US\$ 4,920/MT, Indonesia at US\$ 1,834/MT, and the Philippines at US\$ 1,190/MT. Cambodia and Viet Nam did not report their respective production value from brackishwater aquaculture. The highest value per metric ton of production was attained by the giant tiger shrimp at US\$ 6,396/MT followed by giant sea perch at US\$ 6,354/MT, fishes at US\$ 5,821/MT, whiteleg shrimps at US\$ 4,744/MT, shrimps at US\$ 2,445/MT, milkfish at US\$ 2,343/MT, and Gracilaria seaweeds which obtained the lowest value at US\$ 105/MT (**Table 10**).

Table 10 Major brackishwater species cultured in the region (as of
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Common name	Quantity (MT)	Percentage brackishwater culture production of major commodities to total brackishwater culture production	Value (US\$ 1,000)*	Percentage total value of major commodities production from brackishwater culture to total brackishwater culture value (%)	Value/ Quantity (US\$/MT)**
Gracilaria seaweeds	1,338,716	33.7	140,842	1.6	105
Milkfish	932,505	23.5	2,184,948	25.5	2,343
Whiteleg shrimps	875,997	22.1	4,156,209	48.4	4,744
Giant tiger shrimp	197,641	5.0	1,264,154	14.7	6,396
Misc. fishes	84,587	2.1	492,413	5.7	5,821
Shrimps	66,303	1.7	162,088	1.9	2,445
Giant seaperch	47,053	1.2	298,986	3.5	6,354

<sup>\*</sup> Data not available from Cambodia and Viet Nam

#### 4.3 Freshwater Culture

The region's total production from freshwater culture in 2018 accounted for about 37.0 % of the region's total production from aquaculture, a slight decrease of about 1.7% from that of the 2017 production volume. In 2017, Viet Nam was the highest producer from freshwater aquaculture contributing about 41.2 % of the region's total production from freshwater culture, followed by Indonesia at 34.0 %, Myanmar at 11.9 %, Thailand at 4.6 %, Philippines at 3.5 %, Cambodia at 2.6 %, Lao PDR at 1.2 %, and Malaysia at 1.1 %.

Having accounted for 41.0 % of the region's total aquaculture production value in 2018, the freshwater culture sub-sector had emerged as a very important fisheries sub-sector, notwithstanding the decrease of its production value by almost 10.3 % in 2018 compared with that of 2017. This information however, should not be underestimated considering that the corresponding production values from Cambodia, Lao PDR, and Viet Nam had not yet been reported.

In terms of production volume from freshwater culture by species (Fig 8), miscellaneous freshwater fishes accounted for 35.9 % of the region's total production from freshwater culture, which was mainly contributed by Viet Nam. This was followed by Nile tilapia (*Oreochromis niloticus*) which accounted for 15.4 % and contributed mainly by Indonesia, Thailand, and the Philippines, and the freshwater prawns *nei* followed at 8.7 % which was contributed mainly by Viet Nam, torpedo-shaped catfish (*Clarias* spp.) came in next at 8.5 % contributed mainly by Indonesia, common carp (*Cyprinus carpio*) at 6.6 % contributed mainly by Indonesia, and Myanmar, roho labeo (*Labeo rohita*) at 6.0% contributed mainly by Myanmar, pangas catfishes *nei* (*Pangasius* spp.) contributed mainly by Indonesia at 4.5 %, silver barb (*Barbonymus gonionotus*) accounted for 3.0 % contributed by Myanmar, tilapia *nei* (*Oreochromis* (=Tilapia) spp.) at 1.7 % contributed mainly by the Philippines, Myanmar, and Malaysia, and giant gourami (*Osphronemus goramy*) at 1.4 % mainly contributed by Indonesia.

<sup>\*\*</sup> Computation of price excludes corresponding quantity production from Cambodia and Viet Nam

On production value, the highest contributor to the region's total production value from freshwater culture in 2018 was Nile tilapia (*Oreochromis niloticus*) which accounted for 26.9 % of the region's total production from freshwater culture, followed by torpedo-shaped catfishes (13.8 %), common carp (12.7 %), roho labeo (8.4 %), pangas catfishes *nei* at 7.6 %, giant river prawn (4.3 %), giant gourami (4.0 %), tilapia *nei* (2.9 %), catfishes hybrid (1.8 %), miscellaneous fishes *nei* (1.4 %), and "pirapatinga" (red-bellied pacu, *Piaractus brachypomus* (Cuvier, 1818)) at 1.2 %. For the value per volume of major freshwater culture species, the highest was earned by the giant river prawn at US\$ 6,488/MT followed by giant gourami at US\$ 2,446/MT, common carp at US\$ 1,667/MT, tilapia *nei* at US\$ 1,489/MT, pangas catfishes *nei* at US\$ 1,470/MT, torpedo-shaped catfishes at US\$ 1,408/MT, catfishes hybrid at US\$ 1,360/MT, roho labeo at US\$ 1,217/MT, miscellaneous freshwater fishes at US\$ 1,158/MT, and "pirapatinga" at US\$ 1,071/MT (**Table 11**).

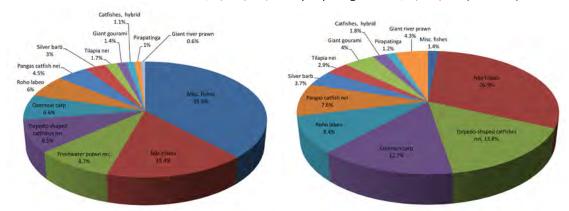


Fig. 8. Production of major freshwater culture species in 2018 (by quantity (left) and value (right))
Table 11 Major freshwater species cultured in the region (as of 2018)

Common name	Quantity (MT)	Percentage freshwater culture production of major commodities to total freshwater culture production	Value (US\$ 1,000)*	Percentage total value of major commodities production from freshwater culture to total freshwater culture value (%)	Value/ Quantity (US\$/MT)**
Misc. fishes	3,345,954	35.9	109,115	1.4	1,158
Nile tilapia	1,436,168	15.4	2,170,891	26.9	1,512
Freshwater prawns	807,850	8.7			
Torpedo-shaped catfishes	791,476	8.5	1,114,727	13.8	1,408
Common carp	613,102	6.6	1,021,831	12.7	1,667
Roho labeo	558,481	6.0	679,584	8.4	1,217
Pangas catfishes <i>nei</i>	416,116	4.5	611,781	7.6	1,470
Silver barb	281,333	3.0	296,161	3.7	1,053
Tilapias nei	160,082	1.7	238,343	2.9	1,489
Giant gourami	131,867	1.4	322,541	4.0	2,446
Catfishes, hybrid	106,201	1.1	144,473	1.8	1,360
Pirapatinga	93,332	1.0	99,938	1.2	1,071
Giant river prawn	53,257	0.6	345,524	4.3	6,488

<sup>\*</sup> Data not available from Cambodia, Lao PDR, and Viet Nam

<sup>\*\*</sup> Computation of price excludes corresponding quantity production from Cambodia, Lao PDR, and Viet Nam

Furthermore, for the value per volume of production from freshwater culture by country, Singapore presented the highest average value at US\$ 9,574/MT mainly coming from its production of the Mozambique tilapia (*O. mossambicus*). This was followed by Brunei Darussalam at US\$ 6,375/MT mainly for its production of the Nile tilapia (*Oreochromis niloticus*), Malaysia at US\$ 2,147/MT mainly for its production of torpedo-shaped catfishes *nei*, Thailand at US\$ 1,905/MT also for its production of Nile tilapia, Indonesia at US\$ 1,654/MT, Philippines at US\$ 1,465/MT, and Myanmar at US\$ 1,186/MT.

#### V. FISHING GEAR ANALYSIS

As of 2018, information on the fishing gear used in the region reflected in this Bulletin, was based on the production from marine capture fisheries by type of fishing gear as reported by three countries, namely: Brunei Darussalam, Singapore, and Thailand. The production from marine capture fisheries of the Southeast Asian region by types of gear is shown in Fig. 9. capture fisheries could not be appropriately analyzed as several countries such as Cambodia, Indonesia, Myanmar, Philippines, and Viet Nam were not able to provide the relevant information.

As the highest producing fishing gear, trawls accounted for about 45.00 % of the total production from all types of gears, followed by the purse seines at about 27.30 %,

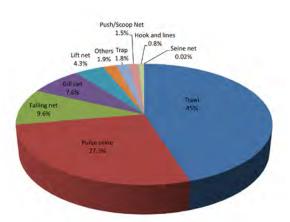


Fig 9. Marine capture fishery production by type of gear used in 2018

falling net at 9.60 %, gill nets at 7.60 %, lift net at 4.30 %, others at 1.90 %, traps at 1.80 %, push/scoop nets at 1.50 %, hook and lines at 0.80 %, and seine nets at 0.02 %. However, the trend on gear used in marine capture fisheries could not be appropriately analyzed as several countries such as Cambodia, Indonesia, Malaysia, Myanmar, Philippines, and Viet Nam were not able to provide the necssary information.

From such information, the highest production by type of gears in Brunei Darussalam was from gill nets which accounted for about 60.4 % of the total production of all types of gears, with Penaeus shrimps *nei* (*Penaeus* spp.) and shrimp scad (*Alepes djedaba*) as the main catch. This was followed by purse seines at 14.8 % catching skipjack tuna (*Katsuwonus pelamis*), hook and lines at 13.4 % catching the narrow-barred Spanish mackerel (*Scomberomorus commerson*) as the main catch.

For Thailand, trawls gave the highest production by type of gears at about 45.4 % and producing mainly trash fishes that represented about 46.4 %, marine fishes *nei* at about 9.4 %, common squids *nei* (*Loligo* spp.) about 7.8 %, and threadfin breams *nei* (*Nemipterus* spp.) about 4.6 %. Purse seines came in second contributing 27.5 % to the production from all types of gears catching scads *nei* (*Decapterus* spp.) representing about 13.6 %, Sardinellas *nei* (*Sardinella* spp.) about 11.8 %, the *Stolephorus* anchovies *nei* (*Stolephorus* spp.) about 11.2 %, and jack, crevalles *nei* (*Caranx* spp.) of about 10.8 %.

In the case of Singapore, trawls gave the highest production by type of gears at about 100.0 % with penaeid shrimps *nei* (*Penaeus* spp.) accounting for about 19.4 %, snappers *nei* (*Lutjanus* spp.) about 7.5 %, and scads *nei* (*Decapterus* spp.) of about 6.3 %.

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

This report covers only the boats that have been registered in each country of Southeast Asia, except for Cambodia and Lao PDR which did not report their respective number of registered fishing boats in 2018. Based on the data available as of 2018, Indonesia had the highest number of boats at 563,239 of which 198,353 were non-powered while 364,886 were powered boats, followed by Malaysia with 52,556 boats. The third highest number was reported by Viet Nam with 34,563 boats, followed by Myanmar with 25,105 boats, Thailand with 10,645 boats, Philippines with 6,578 boats, Brunei Darussalam with 921 boats, and Singapore with 34 boats.

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

In 2018, Indonesia had the highest number of fishers at 6,924,395 of which 60.7 % were involved in aquaculture, 32.4 % in marine capture fisheries, 6.0 % in inland capture fisheries, and 0.9 % in unspecified fishery-related activities. Malaysia had the second highest number of fishers at 151,148 with 84.8 % in marine capture fisheries, 3.1 % in inland capture fisheries, and 12.1 % in the aquaculture sector (**Fig 10**). Although minimal, Singapore and Brunei Darussalam also reported their respective numbers of fishers but Cambodia, Lao PDR, Myanmar, Philippines, Thailand, and Viet Nam were not able to provide the information on their respective numbers of fishers.

Efforts to improve the data availability and statistics in support of all efforts to compile the data and information should therefore be intensified by encouraging the countries to enhance the reporting of small-scale fisheries operations through the conduct of census and surveys using questionnaires. This would enable the countries to compile the necessary data and information on fisheries not only on the number of fishers and fish farmers but also the number of fishing vessels and gear used in fishing operations.

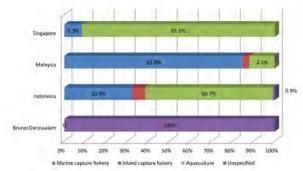


Fig 10. Percentage of fishers by working status in 2018

### **VIII. AQUACULTURE PRODUCTION OF ORNAMENTAL FISHES**

In 2018, only two countries reported their respective production from aquaculture of ornamental fishes: Myanmar and Singapore. Myanmar reported its highest production that comprised mainly the Asian barbs nei (Puntius spp.), Danio choprae, Danio erythromicron, galaxy rasbora (Danio margaritatus), moluccas brush shrimp (Atyopsis moluccensis), Garra flavatra, Danio kyathit, Schistura balteata, and sawbwa barb (Sawbwa resplendens). Although Singapore also reported its production from aquaculture of ornamental fishes but the data provided was not by species level.

In terms of value, Myanmar reported the highest value which was obtained from *Channa pulchra* at US\$ 0.69/pc followed by Burmese snakehead (*Channa harcourtbutleri*) at US\$ 0.5/pc, *Channa burmanica* at US\$ 0.33/pc, *Toxotes blythii* at US\$ 0.3/pc, *Garra flavatra* at US\$ 0.27/pc, *Botia kubotai* at US\$ 0.26/pc, and *Datnioides microlepis* at US\$ 0.25/pc. In order to have a better picture of the ornamental fish culture industry in Southeast Asia, efforts would be made to improve the compilation of data from this sub-sector considering that this is a budding industry in the region.

#### 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 plays a significant role in enhancing the economic analysis of the region's aquaculture industry. Thus, compilation of the said information was initiated by SEAFDEC in 2008

although at that time only four countries responded and provided the relevant information, *i.e.* Cambodia, Malaysia, Myanmar, and Singapore. Brunei Darussalam started to provide the necessary information in 2009, and every year thereafter until 2017 except in 2010. Cambodia started providing the necessary data in 2008 and in 2009, but did not provide the data for 2010 to 2014. Cambodia again provided the data for 2015 and 2016, but not for 2017. Indonesia started to provide the necessary data in 2010 and continued until 2014, but no data were provided for 2015 until 2017. Malaysia started providing the data in 2008, and every year thereafter until 2017. Myanmar started to provide the necessary data in 2008, and every year thereafter until 2014, and although it did not provide data for 2015 and 2016, the necessary data were provided for this current issue of the Bulletin. Singapore started to provide the necessary data in 2008 and every year thereafter until this issue of the Bulletin, except in 2014. For the subsequent issues of this Bulletin, efforts would be exerted to gather the said information from all the Southeast Asian countries, *e.g.* Lao PDR, Philippines, Thailand, and Viet Nam, would be encouraged to provide the necessary data. Once all Southeast Asian countries are able to provide the necessary data, the true picture of this significant niche of the aquaculture industry could be established.

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

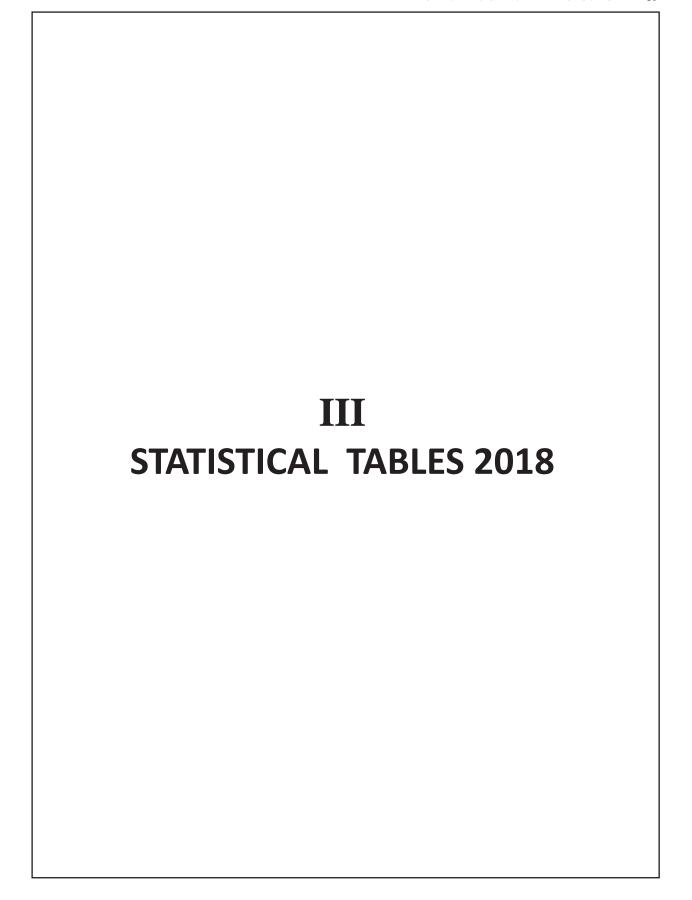
Although the commodities being harvested by the Southeast Asian countries through capture fisheries varied, the trend of the producer prices was established only for certain species which are commonly caught. Results of the analysis however indicated that the producer prices of several commodities harvested by the countries differ in each country, considering that fish prices are influenced by such factors as demand and supply, as well as the cost of production including feeds and transportation, and alternative commodities. For this current issue of the Bulletin, six Southeast Asian countries provided the necessary data related to the producer prices of commodities from their respective capture fisheries. These are: Brunei Darussalam, Malaysia, Myanmar, Philippines, Singapore, and Thailand. Efforts would be intensified to also obtain the relevant data from the other Southeast Asian countries in order to complete the Southeast Asian commodity price scenario in the future issues of the Bulletin, especially with respect to producer prices.

Meanwhile, the producer price situation in 2018 for certain economically important species of Southeast Asia shows that for inland fish species, the producer price of common carp, *Cyprinus carpio* in Myanmar was recorded at US\$ 2.34/kg while it was US\$ 1.55/kg in Thailand. For the Nile tilapia, *Oreochromis niloticus* the producer price in the Philippines was US\$ 2.20/kg compared to Thailand's US\$ 1.86/kg. For striped snakehead (*Channa striata*) in Thailand was US\$ 3.71/kg compared to Myanmar's US\$ 2.93/kg. For other freshwater prawns (Palaemonidae), the producer price in Thailand was quite high at US\$ 27.85/kg.

For marine fish species, the producer price of Barramundi (giant sea perch), *Lates calcarifer* in Brunei Darussalam was US\$ 7.10/kg compared to Myanmar's US\$ 3.08/kg. *Saurida* spp. in Singapore was priced at US\$ 2.35/kg compared to Malaysia's US\$ 0.65/kg. Grouper *nei*, *Epinephelus* spp. in Thailand costs US\$ 11.14/kg compared to US\$ 4.29/kg in Indonesia. Meanwhile, for threadfin breams *nei* (*Nemipterus* spp.), the producer price in Singapore was US\$ 5.31/kg compared to US\$ 1.32/kg in Myanmar. Threadfins and tasselfishes *nei* (Polynemidae) in Singapore was US\$ 11.49/kg compared to US\$ 4.02/kg in Thailand. Likewise, for silver pomfret (*Pampus argenteus*), the producer price in Thailand was quite high at US\$ 18.57/kg.

The producer price of the yellowfin tuna (*Thunnus albacares*) was highest in Indonesia at US\$ 3.66/kg while the lowest was in Brunei Darussalam at US\$ 1.58/kg. For the yeallowtail scad (*Atule mate*) the producer price in Brunei Darussalam was US\$ 4.48/kg while the lowest price was US\$ 1.77/kg in Indonesia.

For the blue swimming crab (*Portunus pelagicus*), the highest producer price was reported by Thailand at US\$ 9.28/kg while the lowest was US\$ 1.94/kg in Brunei Darussalam. For the giant tiger prawn (*Penaeus monodon*), the producer price in Brunei Darussalam was quite high at US\$ 12.71/kg, while cuttlefish and squids *nei* (Sepiidae) in Thailand was US\$ 6.19/kg compared to US\$ 3.58/kg in Singapore. As could be gleaned from the abovementioned information, the trends of the producer prices of the same commodities from among the countries in the region had generally wide variations.



ANNUAL SERIES	OF FISHERY PRO	DUCTION	 	 

### 1. ANNUAL SERIES OF FISHERY PRODUCTION

### 1.1 Total Production

## 1.1.1 In Quantity

MT

Country		2014	2015	2016	2017	2018
Total		42,114,508	43,998,054	45,336,010	45,496,587	46,539,195
Brunei Darussalam	1	3,947	4,353	14,114	15,427	14,712
Cambodia	2	745,310	731,889	808,550	857,018	943,205 <sup>A</sup>
Indonesia	3	20,600,772	22,154,423	23,172,872	22,850,630	23,007,392
Lao PDR	4	150,592	158,600	166,880	180,777	179,100 <sup>A</sup>
Malaysia	5	1,985,163	1,998,251	1,987,682	1,897,305	1,672,447
Myanmar	6	5,040,311	5,316,950	5,598,003	5,675,462	5,877,460
Philippines	7	4,681,418	4,645,871	4,350,761	4,312,663	4,613,074
Singapore	8	6,695	8,161	7,347	6,989	7,011
Thailand	9	2,567,800	2,429,856	2,425,901	2,386,916	2,456,294
Viet Nam	10	6,332,500	6,549,700	6,803,900	7,313,400	7,768,500 <sup>B</sup>

A Figures from FAO Fisheries and Aquaculture Information and Statistics Services B Figures from Statistical Handbook of Viet Nam 2018 Note:

### 1.1.2 In Value

US\$ 1,000

Country		2014	2015	2016	2017	2018
Total		42,722,414	38,746,241	41,155,302	50,564,226	51,811,317
Brunei Darussalam	1	17,962	20,559	50,353	55,424	44,061
Cambodia	2					
Indonesia	3	18,238,185	17,531,161	19,429,135	28,230,060	30,956,499
Lao PDR	4	421,658				
Malaysia	5	5,985,420	3,205,698	3,181,205	3,586,643	3,575,048
Myanmar	6	8,387,601	8,763,047	9,354,622	9,376,539	7,122,904
Philippines	7	5,142,892	5,054,641	4,527,093	4,551,009	4,849,394
Singapore	8	52,225	52,104	64,402	41,344	53,652
Thailand	9	4,476,471	4,119,031	4,368,492	4,723,207	5,209,759
Viet Nam	10					

A Figures from Satu Data Produksi Kelautan Dan Perikanan Tahun 2017 Note:

## 1.2 Marine Fishery Production

## 1.2.1 In Quantity

МТ

Country		2014	2015	2016	2017	2018
Total		16,583,628	16,762,393	17,027,312	17,330,277	18,330,325
Brunei Darussalam	1	3,186	3,370	13,292	13,795	13,566
Cambodia	2	120,250	100,984	126,700	121,025	153,600 <sup>A</sup>
Indonesia	3	5,967,139	6,065,060	6,070,965	6,268,109	6,625,367
Lao PDR	4	-	-	-	-	-
Malaysia	5	1,458,128	1,486,051	1,574,447	1,465,113	1,448,977
Myanmar	6	2,702,240	2,854,200	2,996,740	3,036,410	3,152,140
Philippines	7	2,131,872	2,094,346	1,994,338	1,911,006	2,145,735
Singapore	8	1,433	1,265	1,235	1,098	1,309
Thailand	9	1,488,280	1,317,217	1,275,995	1,300,421	1,392,931
Viet Nam	10	2,711,100	2,839,900	2,973,600	3,213,300	3,396,700 <sup>B</sup>

A Figures from FAO Fisheries and Aquaculture Information and Statistics Services B Figures from Statistical Handbook of Viet Nam 2018 Note:

1.2.2 In Value

US\$ 1,000

Country		2014	2015	2016	2017	2018
Total		21,654,307	19,481,510	19,939,678	25,292,021	28,122,606
Brunei Darussalam	1	9,078	9,303	46,215	44,439	35,543
Cambodia	2					
Indonesia	3	8,013,699	8,031,919	8,351,281	13,199,418 <sup>A</sup>	17,626,105
Lao PDR	4	-	-	-	-	-
Malaysia	5	4,768,077	2,382,430	2,447,329	2,774,062	2,781,682
Myanmar	6	4,458,696	4,852,140	5,094,458	5,161,897	3,152,140
Philippines	7	2,787,028	2,710,338	2,410,246	2,389,033	2,599,150
Singapore	8	9,469	9,348	8,608	7,655	9,076
Thailand	9	1,608,260	1,486,032	1,581,541	1,715,517	1,918,910
Viet Nam	10					

A Figures from Satu Data Produksi Kelautan Dan Perikanan Tahun 2017 Note:

# 1.3 Inland Fishery Production

# 1.3.1 In Quantity

MT

Country		2014	2015	2016	2017	2018
Total		3,001,099	3,058,821	3,126,166	3,226,154	3,337,066
Brunei Daussalam	1		0.02			
Cambodia	2	505,005	487,905	509,350	528,493	535,555 <sup>A</sup>
Indonesia	3	446,509	455,270	426,874	467,531	612,753
Lao PDR	4	60,237	62,635	70,915	70,900	70,900 <sup>A</sup>
Malaysia	5	6,520	5,924	5,848	5,177	6,089
Myanmar	6	1,381,030	1,463,120	1,580,670	1,590,360	1,594,970
Philippines	7	211,941	203,366	155,509	163,870	162,974
Singapore	8	-	-	-	-	-
Thailand	9	181,757	184,101	187,300	192,623	143,825
Viet Nam	10	208,100	196,500	189,700	207,200	210,000 <sup>B</sup>

Note:

- A Figures from FAO Fisheries and Aquaculture Information and Statistics Services B Figures from Statistical Handbook of Viet Nam 2018

## 1.3.2 In Value

US\$ 1,000

Country		2014	2015	2016	2017	2018
Total		3,658,538	3,520,590	3,697,183	4,018,366	4,113,976
Brunei Darussalam	1					
Cambodia	2					
Indonesia	3	721,042	724,041	774,384	1,065,343	1,170,570
Lao PDR	4	313,232				
Malaysia	5	19,441	18,353	21,570	23,926	30,578
Myanmar	6	2,071,545	2,267,836	2,450,038	2,465,058	2,472,203
Philippines	7	220,480	208,919	152,387	161,337	167,742
Singapore	8	-	-	-	-	-
Thailand	9	312,798	301,441	298,804	302,702	272,883
Viet Nam	10					

## 1.4 Aquaculture Production

# 1.4.1 In Quantity

MT

Country		2014	2015	2016	2017	2018
Total		22,529,781	24,176,840	25,182,532	24,940,156	24,871,804
Brunei Darussalam	1	761	983	822	1,632	1,146
Cambodia	2	120,055	143,000	172,500	207,500	254,050 <sup>A</sup>
Indonesia	3	14,187,124	15,634,093	16,675,033	16,114,990	15,769,272
Lao PDR	4	90,355	95,965	95,965	109,877	108,200 <sup>A</sup>
Malaysia	5	520,515	506,276	407,387	427,015	217,381
Myanmar	6	957,041	999,630	1,020,593	1,048,692	1,130,350
Philippines	7	2,337,605	2,348,159	2,200,914	2,237,787	2,304,365
Singapore	8	5,262	6,896	6,112	5,891	5,702
Thailand	9	897,763	928,538	962,606	893,872	919,538
Viet Nam	10	3,413,300	3,513,300	3,640,600	3,892,900 <sup>A</sup>	4,161,800 <sup>B</sup>

A Figures from FAO Fisheries and Aquaculture Information and Statistics Services B Figures from Statistical Handbook of Viet Nam 2018 Note:

## 1.4.2 In Value

US\$ 1,000

Country		2014	2015	2016	2017	2018
Total		17,409,569	15,726,805	17,518,441	21,253,839	19,574,735
Brunei Darussalam	1	8,884	6,165	4,138	10,985	8,518
Cambodia	2					
Indonesia	3	9,503,444	8,775,201	10,303,470	13,965,299	12,159,824
Lao PDR	4	108,426				
Malaysia	5	1,197,902	804,915	712,306	788,655	762,788
Myanmar	6	1,857,360	1,643,071	1,990,126	1,749,584	1,498,561
Philippines	7	2,135,384	2,135,384	1,964,460	2,000,639	2,082,502
Singapore	8	42,756	30,511	55,794	33,689	44,576
Thailand	9	2,555,413	2,331,558	2,488,147	2,704,988	3,017,966
Viet Nam	10					

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TIGHERI TRODUCTION DI SOD SECTOR

### 2. FISHERY PRODUCTION BY SUB-SECTOR

## 2.1 In Quantity, 2018

 $\mathsf{MT}$ 

Country		Total	Marine Capture Fishery	Inland Capture Fishery
Total		46,539,195	18,330,325	3,337,066
Brunei Darussalam	1	14,712	13,566	
Cambodia <sup>1</sup>	2	943,205	153,600	535,555
Indonesia	3	23,007,392	6,625,367	612,753
Lao PDR <sup>1</sup>	4	179,100	-	70,900
Malaysia	5	1,672,447	1,448,977	6,089
Myanmar	6	5,877,460	3,152,140	1,594,970
Philippines	7	4,613,074	2,145,735	162,974
Singapore	8	7,011	1,309	-
Thailand	9	2,456,294	1,392,931	143,825
Viet Nam <sup>2</sup>	10	7,768,500	3,396,700	210,000

1 Figures from FAO Fisheries and Aquaculture Information and Statistics Services Note:

2 Figures from Statistical Handbook of Viet Nam 2018

## 2.1 In Quantity, 2018 (cont'd)

MT

		Aquaculture					
Country		Sub-total	Mariculture	Brackishwater culture	Freshwater culture		
Total		24,871,804	11,585,905	3,968,380	9,317,519		
Brunei Darussalam	1	1,146	413	724	9		
Cambodia <sup>1</sup>	2	254,050	1,810	13,630	238,610		
Indonesia	3	15,769,272	9,601,972	2,997,350	3,169,950		
Lao PDR <sup>1</sup>	4	108,200	-	-	108,200		
Malaysia	5	217,381	18,431	97,681	101,269		
Myanmar	6	1,130,350	23,458	-	1,106,892		
Philippines	7	2,304,365	1,553,997	427,770	322,598		
Singapore	8	5,702	4,621	227	854		
Thailand	9	919,538	78,203	415,498	425,837		
Viet Nam²	10	4,161,800	303,000	15,500	3,843,300		

1 Figures from FAO Fisheries and Aquaculture Information and Statistics Services2 Figures from Statistical Handbook of Viet Nam 2018 Note:

## 2.2 In Value, 2018

US\$ 1,000

Country		Total	Marine Capture Fishery	Inland Capture Fishery
Total		51,811,317	28,122,606	4,113,976
Brunei Darussalam	1	44,061	35,543	•••
Cambodia	2			
Indonesia	3	30,956,499	17,626,105	1,170,570
Lao PDR	4		-	•••
Malaysia	5	3,575,048	2,781,682	30,578
Myanmar	6	7,122,904	3,152,140	2,472,203
Philippines	7	4,849,394	2,599,150	167,742
Singapore	8	53,652	9,076	-
Thailand	9	5,209,759	1,918,910	272,883
Viet Nam	10			

# 2.2 In Value, 2018 (cont'd)

US\$ 1,000

			Aquac	culture	
Country		Sub-total	Mariculture	Brackishwater culture	Freshwater culture
Total		19,574,735	2,930,972	8,577,553	8,066,210
Brunei Darussalam	1	8,518	3,453	5,014	51
Cambodia	2			•••	
Indonesia	3	12,159,824	1,418,891	5,496,728	5,244,205
Lao PDR	4		-	-	
Malaysia	5	762,788	24,899	520,505	217,384
Myanmar	6	1,498,561	185,917	-	1,312,644
Philippines	7	2,082,502	1,100,797	509,164	472,541
Singapore	8	44,576	34,356	2,044	8,176
Thailand	9	3,017,966	162,659	2,044,098	811,209
Viet Nam	10				

## 3. MARINE CAPTURE FISHERY STATISTICS

## 3.1 Number of Fishing Boats by Type and Gross Tonnage, 2018

Country, Sub-area		Total	Non- powered boat	Sub-total	Out-board powered boat
Brunei Darussalam	1	921	69	852	796
Brunei Muara	2	637	25	612	556
Kuala Belait	3	88	28	60	60
Tutong	4	78	6	72	72
Temburing	5	118	10	108	108
Cambodia	6				
Indonesia <sup>1</sup>	7	563,239	198,353	364,886	183,608
Malaysia <sup>2</sup>	8	52,556			
West Coast of Peninsular	9	18,153			
East Coast of Peninsular	10	10,731			
Sabah	11	16,866			
Sarawak	12	6,531			
Labuan	13	275			
Myanmar	14	25,105	6,802	18,303	15,084
Taninthayi	15	12,140	3,058	9,082	7,647
Mon	16	1,561	66	1,495	1,174
Yangon	17	1,774	244	1,530	562
Rakhine	18	7,296	2,999	4,297	4,288
Ayeyarwady	19	2,334	435	1,899	1,413
Philippines	20	6,578		6,578	
Singapore	24	34		34	26
Thailand	25	10,645		10,645	
Gulf of Thailand	26	8,692		8,692	
Indian Ocean	27	1,953		1,953	
Viet Nam <sup>3</sup>	28	34,563			

Notes: 1 Figures from Statistics of Marine and Coastal Resources 2019

<sup>2</sup> Figures from Annual Fisheries Statistics 2018 of Malaysia

<sup>3</sup> Figures from Statistical Handbook of Viet Nam 2018

				vered boat				
			In-board	d powered bo	oat	<del></del>	<del>-</del>	
Sub- total	< 5 GT	5-9.9 GT	10-19.9 GT	20-49.9 GT	50-99.9 GT	100-199.9 GT	200-499.9 GT	≥ 500 GT
56	-	-	-	24	25	1	6	
56	-	-	-	24	25	1	6	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
181,278								
3,219		59	331	981	765	1,041	42	
1,435	• • •	2	86	496	408	432	11	
321		41	88	163	29			
968				39	289	609	31	
9			3	6				
486	•••	16	154	277	39			
6,578		1,339	1,670	2,042	653	546	225	1
8			1	6	1			
10,645	40	266	2,623	4,357	2,696	642	21	
8,692	39	220	2,163	3,618	2,121	525	6	
1,953	1	46	460	739	575	117	15	

Notes: A In-board powered boat 25-39.9 GT B In-board powered boat >40 GT

# $\begin{array}{l} {\rm 3.2\;Number\;of\;Fishing\;Units\;by\;Size\;of\;Boat,\;2018} \\ {\rm 3.2.1\;Brunei\;Darussalam} \end{array}$

l			1									
			Non-	Out-board					d power			1
Type of Fishing Gea	r	Total	powered	powered	Sub-	<5 GT	5-9.9				100-199.9	200-499.9
			boat	boat	total	<b>\</b> 0 0.	GT	GT	GT	GT	GT	GT
All Purse Seines	1	13	-	-	13	-			- 1	1 10	)	- 2
Anchovy Purse Seine	2	-	-	-	-	-			-		-	
Fish Purse Seine	3	13	-	-	13	-			- 1	1 10	)	- 2
All Seine Nets	4	-		-	-	-		-	-		-	
Boat Seine	5	-		-	-	-			-		-	
Beach Seine	6	-		-	-	-		-	-		-	
All Trawls	7	19	-	-	19	-		-	- 6	5 12	2	1 -
Beam Trawl	8	-	-	-	-	-		-	-		-	
Otter Board Trawl	9	19	-	-	19	-		-	- 6	5 12	2	1 -
Pair Trawl	10	-		-	-	-			-		-	
Lift Nets	11	1	1	-	-	-			-		-	
All Falling Nets	12	106	31	75	-	-			-		-	
Anchovy Falling Net	13				-	-			-		-	
Squid Falling Net	14				-	-			-		-	
Gill Nets	15	1,297	68	1,229	-	-			-		-	
All Traps	16	181	11	163	7	-			- 6	5 1		
Stationary Trap	17	10	) -	10	-	-			-		-	
Portable Trap	18	171	11	153	7	-		-	- 6	5 1		
Hooks & Lines	19	246	6	232	8	-			_ 4	4 -	-	- 4
Push/Scoop Nets	20	5	5 2	3	-	-			-		-	
Shellfish & Seaweed Collecting Gears	21	-		-	-	-		-	-		-	
Others	22	-	-	-	-	-			-		-	

Many types of fishing gears could be used in one boat The calculation of data is based on unit of fishing gears Notes:

# 3.2 Number of Fishing Units by Size of Boat, 2018 3.2.2 Indonesia

			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 GT	GT	GT	GT	GT
All Purse Seines	1	115,107							
Anchovy Purse Seine	2								
Fish Purse Seine	3								
All Seine Nets	4	67,893							
Boat Seine	5	55,449							
Beach Seine	6	12,444							
All Trawls	7	34,888							
Beam Trawl	8								
Otter Board Trawl	9								
Pair Trawl	10								
Lift Nets	11	35,852							
All Falling Nets	12	14,969							
Anchovy Falling Net	13								
Squid Falling Net	14								
Gill Nets	15	217,012							
All Traps	16	50,961							
Stationary Trap	17								
Portable Trap	18								
Hooks & Lines	19	278,163							
Push/Scoop Nets	20								
Shellfish & Seaweed Collecting Gears	21								
Others	22	9,209							

Figures from Statistics of Marine and Coastal Resources 2019 Notes:

# 3.2 Number of Fishing Units by Size of Boat, 2018 3.2.3 Myanmar

32

			Non-	Out-board				In-board	l powere	ed boat		
Type of Fishing Gea	ır	Total	powered	powered	Sub-	F 0.T	5-9.9	10-19.9	20-49.9	50-99.9	100-199.9	200-499.9
			boat	boat	total	<5 GT	GT	GT	GT	GT	GT	GT
All Purse Seines	1	849		519	330			19	117	64	124	6
Anchovy Purse Seine	2											
Fish Purse Seine	3											
All Seine Nets	4	1,072	493	579								
Boat Seine	5											
Beach Seine	6											
All Trawls	7	1,401			1,401				. 58	493	820	30
Beam Trawl	8											
Otter Board Trawl	9											
Pair Trawl	10											
Lift Nets	11											
All Falling Nets	12	1,482		1,091	391		2	61	283	45	·	
Anchovy Falling Net	13											
Squid Falling Net	14											
Gill Nets	15	8,907	728	7,792	387		40	168	166	11	1	1
All Traps	16	9,078	5,581	3,383	114			2	2 69	41	2	
Stationary Trap	17											
Portable Trap	18											
Hooks & Lines	19	943		920	23		6	12	2 4	1		
Push/Scoop Nets	20											
Shellfish & Seaweed Collecting Gears	21									•••		
Others	22	1,373		800	573		17	75	276	107	93	5

# 3.2 Number of Fishing Units by Size of Boat, 2018 3.2.4 Philippines

			Out-board				In-k	oard po	wered b	oat		
Type of Fishing Gea	r	Total	powered	Sub-	<5 GT	5-9.9	10-19.9	20-49.9	50-99.9	100-199.9	200-499.9	> 500
		l'	boat	total	<5 G1	GT	GT	GT	GT	GT	GT	GT
All Purse Seines	1	497		497		. 1	15	67	133	183	48	50
Anchovy Purse Seine	2	0	0	0	0	0	0	0	0	C	0	0
Fish Purse Seine	3	497	•••	497		. 1	15	67	133	183	48	50
All Seine Nets	4	25		25	5	6	12	2 1	0	1	0	0
Boat Seine	5											
Beach Seine	6											
All Trawls	7	414		414	32	175	108	84	15			
Beam Trawl	8											
Otter Board Trawl	9											
Pair Trawl	10											
Lift Nets	11											
All Falling Nets	12											
Anchovy Falling Net	13											
Squid Falling Net	14											
Gill Nets	15	204		204	92	82	! 11	19				
All Traps	16											
Stationary Trap	17											
Portable Trap	18											
Hooks & Lines	19	1,198		1,198	57	296	462	325	56	2		
Push/Scoop Nets	20	49		49	7	21	17	3	1			
Shellfish & Seaweed Collecting Gears	21											
Others	22	3,436		3,436	174	414	711	1,188	373	346	177	53

# $3.2\ \mbox{Number}$ of Fishing Units by Size of Boat, 2018 $3.2.5\ \mbox{Singapore}$

			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 GT	GT	GT	GT	GT
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	7		7				6	1
Beam Trawl	8								
Otter Board Trawl	9	7		7				6	1
Pair Trawl	10								
Lift Nets	11								
All Falling Nets	12								
Anchovy Falling Net	13								
Squid Falling Net	14								
Gill Nets	15	27	26	1			1		
All Traps	16								
Stationary Trap	17								
Portable Trap	18								
Hooks & Lines	19								
Push/Scoop Nets	20								
Shellfish & Seaweed Collecting Gears	21								
Others	22								

# 3.2 Number of Fishing Units by Size of Boat, 2018 3.2.6 Thailand

			Non-	Out-board				In-board	powere	d boat		
Type of Fishing Gea	ır	Total	powered	powered	Sub-	ГОТ	5-9.9	10-19.9	20-49.9	50-99.9	100-199.9	200-499.9
			boat	boat	total	<5 GT	GT	GT	GT	GT	GT	GT
All Purse Seines	1	1,064			1,064	3	13	43	168	535	295	7
Anchovy Purse Seine	2	195			195	-	3	21	59	57	54	1
Fish Purse Seine	3	869			869	3	10	22	109	478	241	6
AII Seine Nets	4											
Boat Seine	5											
Beach Seine	6											
All Trawls	7	3,601			3,601	17	140	311	1,206	1,589	328	10
Beam Trawl	8	452			452	-	11	52	270	115	4	-
Otter Board Trawl	9	2,023			2,023	17	127	259	826	681	103	10
Pair Trawl	10	1,126			1,126	-	2	-	110	793	221	-
Lift Nets	11	41			41	-	-	8	22	11	-	-
All Falling Nets	12	2,048			2,048	-	-	558	1,155	326	7	2
Anchovy Falling Net	13	598			598	-	-	82	298	213	5	-
Squid Falling Net	14	1,450			1,450	-	-	476	857	113	2	2
Gill Nets	15	905			905	-	3	329	399	160	12	2
All Traps	16	1,169			1,169	-	-	479	608	81	1	-
Stationary Trap	17					-	-					-
Portable Trap	18					-	-					-
Hooks & Lines	19	9,122			9,122	14	174	2,185	3,870	2,284	577	18
Push/Scoop Nets	20	126			126	-	3	47	64	12	-	-
Shellfish & Seaweed Collecting Gears	21											
Others	22	2,329			2,329	41	171	1,074	1,019	24	-	-

# 3.3 Marine Capture Fishery Production by Species and by Fishing Area, 2018 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		
Clupeoidei	Diadromous clupeoids nei	57	-	-
Clupeoidei	Diadromous clupeoids nei	71		
Lates calcarifer	Barramundi (=Giant seaperch)	57	-	-
Lates calcarifer	Barramundi (=Giant seaperch)	71		
Psettodes erumei	Indian halibut	57	-	-
Psettodes erumei	Indian halibut	71	11	
Chanos chanos	Milkfish	71		
Cynoglossidae	Tonguefishes	57	-	-
Cynoglossidae	Tonguefishes	71		
Pleuronectiformes	Flatfishes <i>nei</i>	57	-	-
Pleuronectiformes	Flatfishes <i>nei</i>	71		
Megalops cyprinoides	Indo-Pacific tarpon	57	-	-
Megalops cyprinoides	Indo-Pacific tarpon	71		
Harpadon nehereus	Bombay-duck	57	-	-
Harpadon nehereus	Bombay-duck	71		
Saurida tumbil	Greater lizardfish	57	-	-
Saurida tumbil	Greater lizardfish	71		
Synodontidae	Lizardfishes <i>nei</i>	57	-	-
Synodontidae	Lizardfishes <i>nei</i>	71	26	
Ariidae	Sea catfishes <i>nei</i>	57	-	-
Ariidae	Sea catfishes <i>nei</i>	71	110	
Plotosus spp.	Eeltail catfishes	57	-	-
Plotosus spp.	Eeltail catfishes	71		
Mugilidae	Mullets <i>nei</i>	57	-	-
Mugilidae	Mullets <i>nei</i>	71		
Caesionidae	Fusiliers <i>nei</i>	57	-	-
Caesionidae	Fusiliers <i>nei</i>	71		

МТ

Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
1,796	-	9,259		-	-		
13,713	-	3,474	-	1,118			
219	-			-	-		
574	-		-				
	-	15,637		-	-		
	-	5,827	-	805			
	-	25		-	-		
	-	1,941	-				
9,737	-	1,286		-	-	105	
78,212	-	1,345	-	520	42	146	
9,604	-			-	-	73	
11,840	-		-			268	
	-		-	211			
	-	3,604		-	-	162	
	-	827	-			3,815	
5,062	-	3,469		-	-		
1,902	-	1,462	-	619			
	-	78		-	-		
	-	513	-	1,036			
2,367	-	226		-	-		
1,708	-	3,474	-				
4,351	-			-	-		
10,564	-		-				
	-	34,825		-	-	9,111	
	-	13,114	-	4,161		13,400	
13,881	-	13,764		-	-	568	
95,255	-	11,499	-	4,165	80	208	
	-	1,490		-	-	587	
	-	974	-			819	
19,354	-	3,811		-	-	232	
56,728	-	1,856	-	12,749	7	1,745	
15,881	-	19		-	-		
78,410	-	783	-	15,555	12		

# 3.3 Marine Capture Fishery Production by Species and by Fishing Area, 2018 3.3.1 In Quantity (Cont'd)

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Epinephelus merra	Honeycomb grouper	57	-	-
Epinephelus merra	Honeycomb grouper	71		
Epinephelus tauvina	Greasy grouper	57	-	-
Epinephelus tauvina	Greasy grouper	71		
Epinephelus spp.	Groupers nei	57	-	-
Epinephelus spp.	Groupers nei	71	443	
Cephalopholis boenak	Chocolate hind	57	-	-
Cephalopholis boenak	Chocolate hind	71		
Cromileptes altivelis	Humpback grouper	57	-	-
Cromileptes altivelis	Humpback grouper	71		
Plectropomus leopardus	Leopard coralgrouper	57	-	-
Plectropomus leopardus	Leopard coralgrouper	71		
Priacanthus macracanthus	Red bigeye	57	-	-
Priacanthus macracanthus	Red bigeye	71		
Priacanthus spp.	Bigeyes <i>nei</i>	57	-	-
Priacanthus spp.	Bigeyes <i>nei</i>	71	30.87	
Sillago sihama	Silver sillago	57	-	-
Sillago sihama	Silver sillago	71		
Sillaginidae	Sillago-whitings	57	-	-
Sillaginidae	Sillago-whitings	71		
Mene maculata	Moonfish	71		
Sciaenidae	Croakers, drums nei	57	-	-
Sciaenidae	Croakers, drums nei	71	47	
Lutjanus argentimaculatus	Mangrove red snapper	57	-	-
Lutjanus argentimaculatus	Mangrove red snapper	71		
Lutjanus spp.	Snappers <i>nei</i>	57	-	-
Lutjanus spp.	Snappers <i>nei</i>	71		
Lutjanidae	Snappers, jobfishes <i>nei</i>	57	-	-
Lutjanidae	Snappers, jobfishes nei	71	241	
Serranidae	Groupers, seabasses nei	57	-	-
Serranidae	Groupers, seabasses nei	71		
Pristipomoides spp.	Jobfishes nei	57	-	-
Pristipomoides spp.	Jobfishes <i>nei</i>	71		

Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
1,655	-			-	-		-
8,383	-		-				• • •
6,217	-			-	-		
13,602	-		-				• • •
	-	1,589		-	-		
	-	7,657	-		24		
15,757	-			-	-		
53,953	-		-				• • •
4,251	-			-	-		
9,715	-		-				• • •
2,878	-			-	-		
38,974	-		-				• • •
82	-			-	-		-
165	-		-				
8,377	-	2,825		-	-	4,463	
20,811	-	12,679	-			9,891	
836	-			-	-		
1,201	-		-				• • •
	-	730		-	-	369	
	-	1,247	-	11,211	0.4	675	
	-		-	10,518	23		• • •
28,683	-	29,172		-	-		
62,795	-	14,399	-		54		• • •
	-	3,106		-	-		
	-	10,252	-				
19,675	-	391		-	-		
117,516	-	5,326	-		98		
	-	228		-	-	4,216	
	-	4,359	-	14,365	4	4,633	
	-			-	-	2,524	
	-		-	17,671		2,824	
1,278	-			-	-		
5,629	_		-				

# 3.3 Marine Capture Fishery Production by Species and by Fishing Area, 2018 3.3.1 In Quantity (Cont'd)

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Nemipterus spp.	Threadfin breams nei	57	-	-
Nemipterus spp.	Threadfin breams nei	71	325	
Scolopsis spp.	Monocle breams	57	-	-
Scolopsis spp.	Monocle breams	71		
Leiognathus spp.	Ponyfishes(=Slipmouths)	57	-	-
Leiognathus spp.	Ponyfishes(=Slipmouths)	71	299	
Leiognathidae	Ponyfishes(=Slipmouths) nei	57	-	-
Leiognathidae	Ponyfishes(=Slipmouths) nei	71		
Plectorhinchus spp.	Sweetlips, rubberlips <i>nei</i>	57	-	-
Plectorhinchus spp.	Sweetlips, rubberlips <i>nei</i>	71		
Pomadasys argenteus	Silver grunt	57	-	-
Pomadasys argenteus	Silver grunt	71		
Haemulidae (=Pomodasyidae)	Grunts, sweetlips nei	57	-	-
Haemulidae (=Pomodasyidae)	Grunts, sweetlips nei	71	40	
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	26	
Gerres spp.	Mojarras(=Silver-biddies) nei	57	-	-
Gerres spp.	Mojarras(=Silver-biddies) nei	71		
Drepane punctata	Spotted sicklefish	57	-	-
Drepane punctata	Spotted sicklefish	71		
Cheilinus undulatus	Humphead wrasse	57	-	-
Cheilinus undulatus	Humphead wrasse	71		
Labridae	Wrasses, hogfishes, etc. nei	57	-	-
Labridae	Wrasses, hogfishes, etc. nei	71		
Eleutheronema tetradactylum	Fourfinger threadfin	57	-	-
Eleutheronema tetradactylum	Fourfinger threadfin	71		
Ambassidae	Glassfishes	71		
Percoidei	Percoids <i>nei</i>	71		
Polynemidae	Threadfins, Tasselfishes <i>nei</i>	57	-	-
Polynemidae	Threadfins, Tasselfishes nei	71		

 $\mathsf{MT}$ 

Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
17,706	-	18,968		-	-	9,272	
70,075	-	27,053	-	36,343	29	26,724	
	-	7		-	-	1,658	
	-	1,651	-			6,045	
	-	6,924		-	-		
	-	2,681	-		5		
31,457	-			-	-		
72,269	-		-	47,951			
273	-			-	-		
2,537	-		-				
	-	1,566		-	-		
	-	2,412	-				
2,921	-	28		-	-		
8,70	-	1,797	-		32		
5,725	-	93		-	-		
57,308	-	1,316	-				
	-		-	9,744			
	-		-	24,996			
27,584	-	6,280		-	-		
56,221	-	12,969	-		9		
	-	155		-	-		
	-	1,637	-	4,631			
	-	606		-	-		
	-	1,304	-	80			
14	-			-	-		
443	-		-				
	-	76		-	-		
	-	2,380	-	13,216			
825	-			-	-		
9,347	-		-				
	-		-	1,160			
	-		-	10,044			
23,247	-	8,703		-	-	86	
42,374	-	9,306	-	2,531	41	1,045	

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Siganus spp.	Spinefeet(=Rabbitfishes) nei	57	-	-
Siganus spp.	Spinefeet(=Rabbitfishes) nei	71		
Terapon spp.	Terapon perches nei	57	-	-
Terapon spp.	Terapon perches nei	71		
Gobiidae	Gobies nei	71		
Acanthocybium solandri	Wahoo	57	-	-
Acanthuridae	Surgeonfishes nei	71		
Platax spp.	Batfishes	71		
Scatophagus spp.	Scats	71		
Balistidae	Triggerfishes, durgons nei	57	-	-
Balistidae	Triggerfishes, durgons nei	71		
Muraenesox cinereus	Daggertooth pike conger	57	-	-
Muraenesox cinereus	Daggertooth pike conger	71		
Trichiurus lepturus	Largehead hairtail	57	-	-
Trichiurus lepturus	Largehead hairtail	71	2	
Trichiuridae	Hairtails <i>nei</i>	57	-	-
Trichiuridae	Hairtails <i>nei</i>	71		
Congridae	Conger eels, etc. 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 <i>nei</i>	57	-	-
Sardinella spp.	Sardinellas <i>nei</i>	71		
Dussumieria acuta	Rainbow sardine	57	-	-
Dussumieria acuta	Rainbow sardine	71		
Stolephorus spp.	Stolephorus anchovies nei	57	-	-
Stolephorus spp.	Stolephorus anchovies nei	71		
Chirocentrus dorab	Dorab wolf-herring	57	-	-
Chirocentrus dorab	Dorab wolf-herring	71		
Chirocentrus spp.	Wolf-herrings nei	57	-	-
Chirocentrus spp.	Wolf-herrings <i>nei</i>	71		

ndonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
6,065	-	90		-	-		
50,155	-	1,336	-	23,628	7		
3,602	-			-	-		
9,602	-		-				
	-		-	8,518			
41	-			-	-		
	-		-	4,774			
	-		-	2,393			
	-		-	1,949			
	-	120		-	-		
	-	477	-				
	-	3,789		-	-	420	
	-	4,311	-			2,250	
	-	8,886		-	-	1,420	
	-	9,471	-		31	5,390	
44,939	-			-	-		
35,313	-		-	13,554			
	-		-	2,766			
3,242	-			-	-		
40,272	-		-				
20,770	-			-	-		
180,865	-		-				
12,438	-			-	-		
30,733	-		-	259,134			
	-			-	-	8,198	
	-		-	350,830		63,265	
3,225	-			-	-		
38,602	-		-	4,896			
84,938	-	5,594		-	-		
121,755	-	18,909	-	48,723			
	-			-	-		
	-		-				
3,955	-	2,515		-	-		
6,572	-	3,899	-	281	44		

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Engraulidae	Anchovies, etc. nei	57	-	-
Engraulidae	Anchovies, etc. nei	71		
Clupeoidei	Clupeoids nei	57	-	-
Clupeoidei	Clupeoids nei	71		
Gymnosarda unicolor	Dogtooth tuna	57	-	-
Sarda orientalis	Striped bonito	57	-	-
Sarda orientalis	Striped bonito	71		
Scomberomorus commerson	Narrow-barred Spanish mackerel	57	-	-
Scomberomorus commerson	Narrow-barred Spanish mackerel	71		
Scomberomorus guttatus	Indo-Pacific king mackerel	57	-	-
Scomberomorus guttatus	Indo-Pacific king mackerel	71		
Scomberomorus spp.	Seerfishes <i>nei</i>	57	-	-
Scomberomorus spp.	Seerfishes nei	71	564	
Auxis thazard	Frigate tuna	57	-	-
Auxis thazard	Frigate tuna	71	495	
Auxis rochei	Bullet tuna	71		
Euthynnus affinis	Kawakawa	57	-	-
Euthynnus affinis	Kawakawa	71	20	
Katsuwonus pelamis	Skipjack tuna	57	-	-
Katsuwonus pelamis	Skipjack tuna	71	1,442	
Thunnus tonggol	Longtail tuna	57	-	-
Thunnus tonggol	Longtail tuna	71	4	
Thunnus alalunga	Albacore	57	-	-
Thunnus maccoyii	Southern bluefin tuna	57	-	-
Thunnus albacares	Yellowfin tuna	57	-	-
Thunnus albacares	Yellowfin tuna	71	538	
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. <i>nei</i>	71		
Makaira indica	Black marlin	57	-	-
Makaira indica	Black marlin	71		

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Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
	-			-	-	19,477	
	-		-			111,414	
4,068	-	14,609		-	-		
16,191	-	26,343	-	371			
1,364	-			-	-		
737	-			-	-		
737	-		-				
45,542	-			-	-		
102,667	-		-	16,679			
14,094	-			-	-		
11,321	-		-				
	-	7,235		-	-	1,588	
	-	10,119	-		54	10,409	
66,453	-	424		-	-		
115,693	-	1,808	-	111,916			
28,984	-		-				
44,808	-	10,686		-	-	8,726	
168,136	-	13,375	-	36,993		13,261	
86,469	-	19		-	-		
362,502	-	11,549	-	258,375			
26,396	-	3,636		-	-	4,827	
47,622	-	26,808	-			16,904	
5,604	-	207		-	-		
648	-			-	-		
24,388	-	124		-	-		
172,837	-	1,430	-	94,437			
23,584	-	86		-	-		
30,986	-	811	-	31,135			
1,170	-			-	-		
6,017	-		-				
	-	102		-	-		
	-	271	-				
1,975	-			-	-		
521	_		_				

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Makaira nigricans	Blue marlin	57	-	-
Makaira nigricans	Blue marlin	71		
Tetrapturus audax	Striped marlin	57	-	-
Tetrapturus audax	Striped marlin	71		
Tetrapturus angustirostris	Shortbill spearfish	57	-	-
Xiphias gladius	Swordfish	57	-	-
Xiphias gladius	Swordfish	71		
Atherinidae	Silversides (=Sand smells) nei	71		
Tylosurus spp.	Needlefishes <i>nei</i>	57	-	-
Tylosurus spp.	Needlefishes <i>nei</i>	71		
Hemiramphidae	Halfbeaks nei	57	-	-
Hemiramphidae	Halfbeaks nei	71		
Lactarius lactarius	False trevally	57	-	-
Lactarius lactarius	False trevally	71	68	
Rachycentron canadum	Cobia	57	-	-
Rachycentron canadum	Cobia	71		
Decapterus russelli	Indian scad	57	-	-
Decapterus russelli	Indian scad	71		
Decapterus spp.	Scads <i>nei</i>	57	-	-
Decapterus spp.	Scads <i>nei</i>	71		
Exocoetidae	Flyingfishes <i>nei</i>	57	-	-
Exocoetidae	Flyingfishes <i>nei</i>	71		
Caranx spp.	Jacks, crevalles nei	57	-	-
Caranx spp.	Jacks, crevalles nei	71		
Carangidae	Carangids <i>nei</i>	57	-	-
Carangidae	Carangids <i>nei</i>	71	429	
Parastromateus niger	Black pomfret	57	-	-
Parastromateus niger	Black pomfret	71		
Elagatis bipinnulata	Rainbow runner	57	-	-
Elagatis bipinnulata	Rainbow runner	71		
Gnathanodon speciosus	Golden trevally	71		
Megalaspis cordyla	Torpedo scad	57	-	
Megalaspis cordyla	Torpedo scad	71		
Selar crumenophthalmus	Bigeye scad	57	-	
Selar crumenophthalmus	Bigeye scad	71		

Viet Nam	Thailand	Singapore	Philippines	Myanmar	Malaysia	Lao PDR	Indonesia
		-	-			-	599
			1,402	-		-	1,847
		-	-			-	571
				-		-	245
		-	-			-	1
		-	-		113	-	1,909
			3,000	-	497	-	694
			487	-		-	
		-	-			-	4,000
			8,463	-		-	12,337
		-	-			-	4,464
			2,082	-		-	35,349
		-	-			-	9,058
			129	-	315	-	14,361
		-	-		148	-	
			1,493	-	1,354	-	
	33,494	-	-	• • •	29,936	-	
	22,832			-	54,392	-	
		-	-	• • •		-	2,430
		82	176,988	-		-	56,632
		-	-	•••		-	3,948
			15,689	-		-	23,243
		-	-	•••		-	24,674
		30		-		-	101,371
	9,010	-		•••	948	-	
	64,607	28	51,918	-	10,865	-	
	200	-	-	•••	2,786	-	12,847
	6,699			-	5,002	-	42,912
		-	- 4 405	• • •	183	-	3,358
			4,195	-	787	-	8,920
	7 212			-	23,788	-	 25 427
	7,212	-	- 10 110	•••	11,134	-	25,437
	16,144		13,110	-	10 /75	-	26,203
	10,794 13,967	-	- 110,925	-	18,675 32,202	-	7,424 12,733

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Selaroides leptolepis	Yellowstripe scad	57	-	-
Selaroides leptolepis	Yellowstripe scad	71		
Seriolina nigrofasciata	Blackbanded trevally	57	-	-
Seriolina nigrofasciata	Blackbanded trevally	71		
Scomberoides spp.	Queenfishes	57	-	-
Scomberoides spp.	Queenfishes	71		
Coryphaena hippurus	Common dolphinfish	57	-	-
Coryphaena hippurus	Common dolphinfish	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		
Rastrelliger spp.	Indian mackerels nei	57	-	-
Rastrelliger spp.	Indian mackerels nei	71	1,119	
Scombridae	Mackerels <i>nei</i>	57	-	-
Scombridae	Mackerels <i>nei</i>	71		
Pampus argenteus	Silver pomfret	57	-	-
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	44	
Stromateidae	Butterfishes, pomfrets nei	57	-	-
Stromateidae	Butterfishes, pomfrets nei	71		
Squalidae	Dogfish sharks <i>nei</i>	71		
Alopias spp.	Thresher sharks nei	57	-	-
Alopias spp.	Thresher sharks nei	71		
Lamnidae	Mackerel sharks, porbeagles nei	57	-	-
Lamnidae	Mackerel sharks, porbeagles nei	71		
Prionace glauca	Blue shark	57	-	-

Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
23,324	-	3,788		-	-		
68,396	-	10,319	-				
-	-			-	-	92	
	-		-			124	
4,945	-	952		-	-		
16,136	-	3,190	-	3,947			
3,702	-			-	-		
10,652	-		-	108			
1,251	-			-	-		
1,086	-		-				
	-		-	775			
105,795	-			-	-		
199,228	-		-	31,153			
10,628	-			-	-	15,626	
74,091	-		-	56,687		39,160	
	-	27,738		-	-	6,348	
	-	21,077	-			11,307	
	-	90,863		-	-		
	-	1,658	-				
21,840	-	4,330		-	-	240	
26,057	-	2,523	-			151	
1,080	-			-	-		
371	-		-				
6,895	-			-	-		
21,548	-		-				
	-			-	-	4,426	
	-	6,771	-	6,065	25	9,889	
	-	2,168		-	-		
	-	1,416	-	1,302	49		
4,199	-		-				
4,340	-			-	-		
167	-		-				
1,049	-			-	-		
201	-		-				
17,780	-			_	-		

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia <sup>1</sup>
Carcharhinidae	Requiem sharks nei	57	-	-
Carcharhinidae	Requiem sharks <i>nei</i>	71		
Sphyrnidae	Hammerhead sharks, etc. nei	57	-	-
Sphyrnidae	Hammerhead sharks, etc. nei	71		
Pristidae	Sawfishes	57	-	-
Pristidae	Sawfishes	71		
Rhynchobatus australiae	Whitespotted wedgefish	57	-	-
Rhynchobatus australiae	Whitespotted wedgefish	71		
Rhynobatidae	Guitarfishes, etc. nei	57	-	-
Rhynobatidae	Guitarfishes, etc. nei	71		
Rajiformes	Rays, stingrays, mantas <i>nei</i>	57	-	-
Rajiformes	Rays, stingrays, mantas <i>nei</i>	71	89	
Dasyatidae	Stingrays, butterfly rays nei	57	-	-
Dasyatidae	Stingrays, butterfly rays nei	71		
Myliobatidae	Eagle rays <i>nei</i>	57	-	-
Myliobatidae	Eagle rays <i>nei</i>	71		
Mobulidae	Mantas, devil rays <i>nei</i>	57	-	-
Mobulidae	Mantas, devil rays <i>nei</i>	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	5,719	121,100
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		
Brachyura	Marine crabs <i>nei</i>	57	-	-
Brachyura	Marine crabs <i>nei</i>	71	0.76	
Panulirus spp.	Tropical spiny lobsters nei	57	-	-
Panulirus spp.	Tropical spiny lobsters nei	71	0.11	
Thenus orientalis	Flathead lobster	57	-	-
Thenus orientalis	Flathead lobster	71		
Scyllaridae	Slipper lobsters <i>nei</i>	71		

1 Figures from FAO Fisheries and Aquaculture Information and Statistics Services Note:

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							MT
Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam <sup>1</sup>
16	-			-	-		-
13,123	-		-				
1,596	-			-	-		-
12	-		-				
224	-			-	-		-
65	-		-				
827	-			-	-		-
21,214	-		-				
205	-			-	-		-
462	-		-				
2,653	-	4,265		-	-	589	-
31,188	-	7,728	-	1,781	56	1,554	
4,524	-			-	-		-
28,413	-		-				
2,903	-			-	-		-
3,998	-		-				
2,026	-			-	-		-
5,857	-		-				
	-	855		-	-	62	-
	-	5,631	-	1,941	12	367	
133,073	-	190,970	3,152,140	-	-	118,948	-
977,932	-	121,636	-	12,678	85	332,129	2,639,800
21,115	-			-	-	4,886	-
84,161	-		-	33,483		21,554	
21,382	-			-	-	137	-
24,395	-		-	1,122	16	145	
	-	7,448		-	-	2,328	-
	-	7,887	-		4	3,612	
524	-			-	-		-
8,779	-	794	-	163	0.10		
	-			-	-	79	-
	-		-			795	
	-		-	53	1.90		

Note: 1 Figures from Statistical Handbook of Viet Nam 2018

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia <sup>1</sup>
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 <i>nei</i>	71	1,368	
Metapenaeus endeavouri	Endeavour shrimp	71		
Metapenaeus spp.	Metapenaeus shrimps <i>nei</i>	57	-	-
Metapenaeus spp.	Metapenaeus shrimps <i>nei</i>	71		
Sergestidae	Sergestid shrimps <i>nei</i>	57	-	-
Sergestidae	Sergestid shrimps <i>nei</i>	71		
Stomatopoda	Stomatopods <i>nei</i>	57	-	-
Stomatopoda	Stomatopods nei	71		
Crustacea	Marine crustaceans nei	57	-	-
Crustacea	Marine crustaceans nei	71	0.29	17,450
Haliotis spp.	Abalones nei	71		
Crassostrea iredalei	Slipper cupped oyster	71		
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		
Andara spp.	Andara clams <i>nei</i>	71		
Meretrix spp.	Hard clams nei	57	-	-
Meretrix spp.	Hard clams nei	71		
Paphia spp.	Short neck clams nei	71		

Note: 1 Figures from FAO Fisheries and Aquaculture Information and Statistics Services

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Indonesia	Lee DDD	Malayaia	Museman	Dhilinnings	Cinnanana	Theilend	Viet News1
Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam <sup>1</sup>
24,645	-			-	-	1,319	
72,857	-		-			4,892	•••
8,992	-			-	-	68	
20,818	-		-	715		283	
	-			-	-	38	
	-		-			627	
	-			-	-	463	
	-		-			629	
	-			-	-	958	
	-		-	12,302		11,801	
	-		-	676			
11,276	-			-	-	290	
53,553	-		-	7,350		6,574	
	-	35,320		-	-		
	-	10,456	-	11,835		20,848	
	-			-	-	49	
	-		-			2,084	
37	-			-	-		
1,911	-		-				
	-		-	217			
	-		-	77			
12	_			-	_		
7,499	_		-				• •
1,847	_			-	_		
11,079	_		-	21			
	_				_	43	
185	_		-	39		1,874	
18,750	_	•••		-	_		
19,776	_	•••	···			 158	
	-	•••	_	1	•••		
378		• • •		'	• • • • • • • • • • • • • • • • • • • •	•••	••
940	-	•••	•••	-	-	•••	
	-		-		•••	0.044	
	-		-	1		9,044	•••

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia <sup>1</sup>
Bivalvia	Clams, etc. nei	57	-	
Bivalvia	Clams, etc. <i>nei</i>	71		
Natantia	Natantian decapods <i>nei</i>	57	-	
Natantia	Natantian decapods <i>nei</i>	71		
Sepioteuthis lessoniana	Bigfin reef squid	57	-	
Sepioteuthis lessoniana	Bigfin reef squid	71		
Sepiidae, Sepiolidae	Cuttlefish, bobtail squids nei	57	-	
Sepiidae, Sepiolidae	Cuttlefish, bobtail squids nei	71	36	
Loligo spp.	Common squids nei	57	-	
Loligo spp.	Common squids nei	71		
Loliginidae, Ommastrephidae	Various squids <i>nei</i>	57	-	
Loliginidae, Ommastrephidae	Various squids <i>nei</i>	71	28	
Octopodidae	Octopuses <i>nei</i>	57	-	
Octopodidae	Octopuses <i>nei</i>	71		
Squiidae	Squiilids <i>nei</i>	71		
Mollusca	Marine molluscs nei	57	-	
Mollusca	Marine molluscs nei	71		15,05
Trochus niloticus	Commercial top	57	-	
Trochus niloticus	Commercial top	71		
Holothurioidea	Sea cucumbers nei	57	-	
Holothurioidea	Sea cucumbers nei	71		
Strongylocentrotus spp.	Sea urchins nei	71		
Rhopilema spp.	Jellyfishes <i>nei</i>	57	-	
Rhopilema spp.	Jellyfishes <i>nei</i>	71		
Testudinata	Marine turtles <i>nei</i>	57	-	
Testudinata	Marine turtles <i>nei</i>	71		
Invertebrata	Aquatic invertebrates nei	57	-	
Invertebrata	Aquatic invertebrates nei	71		
Rhodophyceae	Red seaweeds	57	-	
Rhodophyceae	Red seaweeds	71		
-	Others	71		

Note: 1 Figures from FAO Fisheries and Aquaculture Information and Statistics Services

MT

							MT
Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam¹
•••	-	3,175		-	-		-
	-	3,385	-	205			
20,628	-	40,882		-	-		-
87,121	-	28,861	-		254		
	-			-	-	791	-
	-		-			6,776	
14,728	-	10,397		-	-	2,787	-
12,363	-	9,569	-	1,201	33	11,012	
49,370	-			-	-	14,914	-
128,592	-		-	47,327	42	66,964	
	-	24,534		-	-		-
	-	24,296	-				
888	-	495		-	-	547	-
8,670	-	400	-	3,474		7,450	
	-		-	1,504			
414	-			-	-	45	-
9,173	-		-			12,351	
1	-			-	-		-
48	-		-				
514	-			-	-		-
3,689	-	432	-	746			
	-		-	141			
22,380	-	975		-	-	47,993	-
11,713	-	13,175	-	11		7,779	
1	-			-	-		-
1,003	-		-				
31,283	-			-	-	456	-
80,007	-		-			1,737	
22,854	-			-	-		-
21,529	-		-				
	-		-				756,900

Note: 1 Figures from Statistical Handbook of Viet Nam 2018

### $3.3\ \text{Marine}$ Capture Fishery Production by Species and by Fishing Area, 2018 $3.3.2\ \text{In Value}$

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		
Clupeoidei	Diadromous clupeoids nei	57	-	-
Clupeoidei	Diadromous clupeoids nei	71		
Lates calcarifer	Barramundi(=Giant seaperch)	57	-	-
Lates calcarifer	Barramundi(=Giant seaperch)	71		
Psettodes erumei	Indian halibut	57	-	-
Psettodes erumei	Indian halibut	71	20	
Cynoglossidae	Tonguefishes	57	-	-
Cynoglossidae	Tonguefishes	71		
Pleuronectiformes	Flatfishes <i>nei</i>	57	-	-
Pleuronectiformes	Flatfishes <i>nei</i>	71		
Megalops cyprinoides	Indo-Pacific tarpon	57	-	-
Megalops cyprinoides	Indo-Pacific tarpon	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 <i>nei</i>	71	14	
Ariidae	Sea catfishes <i>nei</i>	57	-	-
Ariidae	Sea catfishes <i>nei</i>	71	119	
Plotosus spp.	Eeltail catfishes	57	-	-
Plotosus spp.	Eeltail catfishes	71		
Mugilidae	Mullets <i>nei</i>	57	-	-
Mugilidae	Mullets <i>nei</i>	71		
Caesionidae	Fusiliers <i>nei</i>	57	-	_
Caesionidae	Fusiliers <i>nei</i>	71		
Epinephelus merra	Honeycomb grouper	57	-	-
Epinephelus merra	Honeycomb grouper	71		

US\$ 1 000

Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
2,201	-	6,868		-	-		
16,802	-	6,214	-				
512	-			-	-		
3,144	-		-				
	-	13,840		-	-		
	-	12,314	-				
	-	158		-	-		
	-	6,023	-				
42,483	-	4,477		-	-	489	
341,257	-	4,148	-		318	680	
12,525	-			-	-	139	
16,360	-		-			495	
	-	5,153		-	-	242	
	-	942	-			5,528	
6,347	-	10,290		-	-		
2,385	-	2,791	-				
	-	69		-	-		
	-	683	-				
2,515	-	117		-	-		
1,815	-	3,416	-				
3,940	-			-	-		
9,567	-		-				
	-	33,745		-	-	7,122	
	-	7,817	-			10,472	
25,913	-	21,050		-	-	1,266	
177,814	-	12,720	-		204	499	
	-	5,736		-	-	1,721	
	-	1,757	-			2,403	
30,648	-	4,803		-	-	621	
89,833	-	3,440	-	15,705	30	4,766	
30,157	-	43		-	-		
148,894	-	1,201	-	27,021	52		
4,682	-			-	-		
23,582	-		-				

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	1,982	
Cephalopholis boenak	Chocolate hind	57	-	-
Cephalopholis boenak	Chocolate hind	71		
Cromileptes altivelis	Humpback grouper	57	-	-
Cromileptes altivelis	Humpback grouper	71		
Plectropomus leopardus	Leopard coralgrouper	57	-	-
Plectropomus maculatus	Spotted coralgrouper	71		
Priacanthus spp.	Bigeyes <i>nei</i>	57	-	-
Priacanthus spp.	Bigeyes <i>nei</i>	71	1	
Sillago sihama	Silver sillago	57	-	-
Sillago sihama	Silver sillago	71		
Sillaginidae	Sillago-whitings	57	-	-
Sillaginidae	Sillago-whitings	71		
Mene maculata	Moonfish	71		
Sciaenidae	Croakers, drums nei	57	-	-
Sciaenidae	Croakers, drums nei	71	110	
Lutjanus argentimaculatus	Mangrove red snapper	57	-	-
Lutjanus argentimaculatus	Mangrove red snapper	71		
Lutjanus spp.	Snappers nei	57	-	-
Lutjanus spp.	Snappers <i>nei</i>	71		
Lutjanidae	Snappers, jobfishes nei	57	-	-
Lutjanidae	Snappers, jobfishes nei	71	3,132	
Serranidae	Groupers, seabasses nei	57	-	-
Serranidae	Groupers, seabasses nei	71		
Pristipomoides spp.	Jobfishes nei	57	-	-
Pristipomoides spp.	Jobfishes nei	71		
Nemipterus spp.	Threadfin breams nei	57	-	-
Nemipterus spp.	Threadfin breams <i>nei</i>	71	953	
Scolopsis spp.	Monocle breams	57	-	-
Scolopsis spp.	Monocle breams	71		
Leiognathus spp.	Ponyfishes(=Slipmouths)	57	-	-
Leiognathus spp.	Ponyfishes(=Slipmouths)	71	481	

ndonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nan
26,510	-			-	-		
36,124	-		-				
	-	9,186		-	-		
	-	28,335	-		200		
49,894	-			-	-		
170,838	-		-				
15,108	-			-	-		
34,524	-		-				
11,784	-			-	-		
159,596	-		-				
12,880	-	2,848		-	-	3,879	
31,998	-	12,502	-			8,637	
821	-			-	-		
1,180	-		-				
	-	2,488		-	-	984	
	-	1,921	-		1.8	1,752	
	-		-		107		
167,687	-	50,434		-	-	1,592	
367,115	-	23,838	-		171	11,463	
	-	16,561		-	-		
	-	35,796	-				
119,792	-	947		-	-		
715,514	-	8,358	-		564		
	-	646		-	-	13,797	
	-	8,837	-	36,920	12	15,181	
	-			-	-	12,283	
	-		-	87,519		13,048	
1,791	-			-	-		
7,891	-		-				
76,442	-	52,639		-	-	11,276	
302,532	-	49,316	-	83,618	208	32,277	
	-	5		-	-	1,905	
	-	1,832	-			6,402	
	-	5,127		-	-		
	-	2,633	-		18		

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Leiognathidae	Ponyfishes(=Slipmouths) nei	57	-	-
Leiognathidae	Ponyfishes(=Slipmouths) <i>nei</i>	71		
Plectorhinchus spp.	Sweetlips, rubberlips <i>nei</i>	57	-	-
Plectorhinchus spp.	Sweetlips, rubberlips <i>nei</i>	71		
Pomadasys argenteus	Silver grunt	57	-	-
Pomadasys argenteus	Silver grunt	71		
Haemulidae (=Pomodasyidae)	Grunts, sweetlips nei	57	-	-
Haemulidae (=Pomodasyidae)	Grunts, sweetlips nei	71	74	
Lethrinidae	Emperors(=Scavengers) nei	57	-	-
Lethrinidae	Emperors(=Scavengers) nei	71		
Sparidae	Porgies, seabreams nei	71		
Mullidae	Goatfishes, red mullets <i>nei</i>	71		
Upeneus spp.	Goatfishes	57	-	-
Upeneus spp.	Goatfishes	71	22	
Gerres spp.	Mojarras(=Silver-biddies) nei	57	-	-
Gerres spp.	Mojarras(=Silver-biddies) nei	71		
Drepane punctata	Spotted sicklefish	57	-	-
Drepane punctata	Spotted sicklefish	71		
Cheilinus undulatus	Humphead wrasse	57	-	-
Cheilinus undulatus	Humphead wrasse	71		
Labridae	Wrasses, hogfishes, etc. <i>nei</i>	57	-	-
Labridae	Wrasses, hogfishes, etc. nei	71		
Eleutheronema tetradactylum	Fourfinger threadfin	57	-	-
Eleutheronema tetradactylum	Fourfinger threadfin	71		
Polynemidae	Threadfins, Tasselfishes <i>nei</i>	57	-	-
Polynemidae	Threadfins, Tasselfishes <i>nei</i>	71		
Siganus spp.	Spinefeet(=Rabbitfishes) nei	57	-	-
Siganus spp.	Spinefeet(=Rabbitfishes) nei	71		
Terapon spp.	Terapon perches nei	57	-	-
Terapon spp.	Terapon perches <i>nei</i>	71		
Acanthocybium solandri	Wahoo	57	-	-
Balistidae	Triggerfishes, durgons <i>nei</i>	57	-	-
Balistidae	Triggerfishes, durgons <i>nei</i>	71		

US\$ 1,000

US\$ 1							
Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
60,087	-			-	-		-
138,041	-		-	56,843			
379	-			-	-		-
3,523	-		-				
	-	8,686		-	-		-
	-	4,188	-				
3,909	-	75		-	-		-
11,870	-	5,383	-		127		
9,753	-	219		-	-		
97,621	-	3,732	-				
	-		-	20,087			•••
	-		-	42,052			
49,009	-	4,398		-	-		
99,889	-	9,022	-		33		
	-	222		-	-		
	-	1,631	-				
	-	1,166		-	-		
	-	1,624	-				
51	-			-	-		
1,614	-		-				
	-	168		-	-		
	-	4,641	-	20,253			
868	-			-	-		
9,827	-		-				
69,325	-	40,964		-	-	250	
126,361	-	28,692	-		649	3,096	
9,918	-	92		-	-		
82,019	-	2,134	-	43,168	30		
4,614	-			-	-		
12,299	-		-				
100	-			-	-		
	-	268		-	-		
	-	882	-				•••

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Muraenesox cinereus	Daggertooth pike conger	57	-	-
Muraenesox cinereus	Daggertooth pike conger	71		
Trichiurus lepturus	Largehead hairtail	57	-	-
Trichiurus lepturus	Largehead hairtail	71	0.48	
Trichiuridae	Hairtails <i>nei</i>	57	-	-
Trichiuridae	Hairtails <i>nei</i>	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 <i>nei</i>	57	-	-
Sardinella spp.	Sardinellas <i>nei</i>	71		
Dussumieria acuta	Rainbow sardine	57	-	-
Dussumieria acuta	Rainbow sardine	71		
Stolephorus spp.	Stolephorus anchovies nei	57	-	-
Stolephorus spp.	Stolephorus anchovies nei	71		
Chirocentrus dorab	Dorab wolf-herring	57	-	-
Chirocentrus dorab	Dorab wolf-herring	71		
Chirocentrus spp.	Wolf-herrings <i>nei</i>	57	-	-
Chirocentrus spp.	Wolf-herrings <i>nei</i>	71		
Engraulidae	Anchovies, etc. nei	57	-	-
Engraulidae	Anchovies, etc. nei	71		
Clupeoidei	Clupeoids nei	57	-	-
Clupeoidei	Clupeoids nei	71		
Gymnosarda unicolor	Dogtooth tuna	57	-	-
Gymnosarda unicolor	Dogtooth tuna	71		
Sarda orientalis	Striped bonito	57	-	-
Sarda orientalis	Striped bonito	71		
Scomberomorus commerson	Narrow-barred Spanish mackerel	57	-	-
Scomberomorus commerson	Narrow-barred Spanish mackerel	71		
Scomberomorus guttatus	Indo-Pacific king mackerel	57	-	-
Scomberomorus guttatus	Indo-Pacific king mackerel	71		

US\$ 1,000

Viet Nam	Thailand	Singapore	Philippines	Myanmar	Malaysia	Lao PDR	Indonesia
	464	-	-		5,428	-	
	2,487			-	9,211	-	
	1,635	-	-			-	22,250
	6,244	142		-		-	10,599
		-	-			-	60,647
			23,946	-		-	47,515
		-	-			-	3,821
				-		-	47,463
		-	-			-	23,504
				-		-	204,461
		-	-			-	43,229
			135,504	-		-	106,817
	5,271	-	-			-	
	41,338		189,734	-		-	
		-	-			-	3,868
			5,230	-		-	46,297
		-	-		29,202	-	511,984
			51,568	-	37,139	-	733,910
	2,614	-	-			-	
	5,228	277		-		-	
		-	-		10,051	-	6,977
				-	11,160	-	11,593
	13,550	-	-			-	
	77,406			-		-	
		-	-		21,152	-	4,277
				-	20,923	-	17,023
		-	-			-	9,397
				-		-	63,842
		-	-			-	848
				-		-	848
		-	-			-	143,919
			45,409	-		-	33,532
		-	-			-	26,937
				-		-	156,053

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Scomberomorus spp.	Seerfishes nei	57	-	-
Scomberomorus spp.	Seerfishes <i>nei</i>	71	2,084	
Auxis thazard	Frigate tuna	57	-	-
Auxis thazard	Frigate tuna	71	1,273	
Auxis rochei	Bullet tuna	71		
Euthynnus affinis	Kawakawa	57	-	-
Euthynnus affinis	Kawakawa	71	27	
Katsuwonus pelamis	Skipjack tuna	57	-	-
Katsuwonus pelamis	Skipjack tuna	71	1,725	
Thunnus tonggol	Longtail tuna	57	-	37,971
Thunnus tonggol	Longtail tuna	71	7	68,506
Thunnus alalunga	Albacore	57	-	-
Thunnus albacares	Yellowfin tuna	57	-	-
Thunnus albacares	Yellowfin tuna	71	654	
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	Blue marlin	57	-	-
Makaira nigricans	Blue marlin	71		
Tetrapturus audax	Striped marlin	57	-	-
Tetrapturus audax	Striped marlin	71		
Tetrapturus angustirostris	Shortbill spearfish	57	-	-
Tetrapturus angustirostris	Shortbill spearfish	71		
Xiphias gladius	Swordfish	57	-	-
Xiphias gladius	Swordfish	71		
Tylosurus spp.	Needlefishes nei	57	-	-
Tylosurus spp.	Needlefishes nei	71		
Hemiramphus spp.	Halfbeaks nei	57	-	-
Hemiramphus spp.	Halfbeaks nei	71		

US\$ 1,000

Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
	-	40,566		-	-	7,220	
	-	43,524	-		341	47,368	
83,839	-	771		-	-		
156,053	-	2,490	-	166,161			
39,886	-		-				
75,110	-	21,332		-	-	9,351	
281,844	-	25,719	-	46,935		15,710	
155,292	-	35		-	-		
651,028	-	10,022	-	327,495			
7,342	-			-	-	7,138	
50,436	-		-			25,000	
15,683	-	1,078		-	-		
58,233	-	1,069		-	-		
412,690	-	3,293	-	190,727			
71,630	-	611		-	-		
94,115	-	1,355	-	103,997			
2,050	-			-	-		
10,544	-		-				
	-	317		-	-		
	-	257	-				
4,833	-			-	-		
1,276	-		-				
1,229	-			-	-		
3,788	-		-				
1,060	-			-	-		
454	-		-				
2	-			-	-		
3	-		-				
4,122	-	183		-	-		
1,498	-	539	-				
6,224	-			-	-		
19,195	-		-				
9,321	-			-	-		
73,814	-		-				

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Lactarius lactarius	False trevally	57	-	-
Lactarius lactarius	False trevally	71	88	
Alepes djedaba	Shrimp scad	57	-	-
Alepes djedaba	Shrimp scad	71		
Decapterus russelli	Indian scad	57	-	-
Decapterus russelli	Indian scad	71		
Decapterus spp.	Scads <i>nei</i>	57	-	-
Decapterus spp.	Scads <i>nei</i>	71		
Exocoetidae	Flyingfishes nei	57	-	-
Exocoetidae	Flyingfishes <i>nei</i>	71		
Caranx spp.	Jacks, crevalles nei	57	-	-
Caranx spp.	Jacks, crevalles nei	71		
Carangidae	Carangids nei	57	-	-
Carangidae	Carangids nei	71	1,087	
Parastromateus niger	Black pomfret	57	-	-
Parastromateus niger	Black pomfret	71		
Elagatis bipinnulata	Rainbow runner	57	-	-
Elagatis bipinnulata	Rainbow runner	71		
Megalaspis cordyla	Torpedo scad	57	-	-
Megalaspis cordyla	Torpedo scad	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		
Scomberoides spp.	Queenfishes	57	-	-
Scomberoides spp.	Queenfishes	71		
Coryphaena hippurus	Common dolphinfish	57	-	-
Coryphaena hippurus	Common dolphinfish	71		
Scomber australasicus	Spotted chub mackerel	57	-	-
Scomber australasicus	Spotted chub mackerel	71		***
Rastrelliger brachysoma	Short mackerel	57	-	-
Rastrelliger brachysoma	Short mackerel	71		

US\$ 1,000

Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
26,516	-			-	-		
42,039	-	795	-				
	-	230		-	-		
	-	2,511	-				
	-	42,277		-	-		
	-	80,315	-				
3,359	-			-	-		
78,290	-		-	227,733	333		
4,329	-			-	-		
25,488	-		-	21,308			
165,352	-						
679,335	-		-	-	-		
	-	3,760		-	-	11,333	
	-	26,648	-	99,918	96	81,009	
39,072	-	14,947		-	-	739	
130,510	-	25,516	-			24,818	
4,272	-	493		-	-		
11,347	-	1,029	-				
35,657	-	46,142		-	-	8,498	
36,731	-	15,777	-			17,714	
7,806	-	38,082		-	-	12,287	
13,387	-	64,563	-	164,709		15,933	
37,000	-	5,035		-	-		
108,500	-	17,072	-				
	-			-	-	437	
	-		-			592	
17,362	-	1,876		-	-		
56,653	-	3,695	-				
5,842	-			-	-		
16,811	-		-				
1,149	-			-	-		
997	-		-				
341,341	-			-	-		
642,799	-		-	50,942			

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Rastrelliger kanagurta	Indian mackerel	57	-	-
Rastrelliger kanagurta	Indian mackerel	71		
Rastrelliger spp.	Indian mackerels nei	57	-	-
Rastrelliger spp.	Indian mackerels nei	71	3,775	
Scombridae	Mackerels <i>nei</i>	57	-	-
Scombridae	Mackerels <i>nei</i>	71		
Pampus argenteus	Silver pomfret	57	-	-
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 <i>nei</i>	57	-	-
Sphyraena spp.	Barracudas <i>nei</i>	71	41	
Stromateidae	Butterfishes, pomfrets <i>nei</i>	57	-	-
Stromateidae	Butterfishes, pomfrets nei	71		
Squalidae	Dogfish sharks <i>nei</i>	57	-	-
Alopias spp.	Thresher sharks nei	57	-	-
Alopias spp.	Thresher sharks nei	71		
Lamnidae	Mackerel sharks, porbeagles nei	57	-	-
Lamnidae	Mackerel sharks, porbeagles nei	71		
Prionace glauca	Blue shark	57	-	-
Carcharhinus longimanus	Oceanic whitetip shark	57	-	-
Carcharhinus longimanus	Oceanic whitetip shark	71		
Sphyrnidae	Hammerhead sharks, etc. nei	57	-	-
Sphyrnidae	Hammerhead sharks, etc. nei	71		
Pristidae	Sawfishes	57	-	-
Pristidae	Sawfishes	71		
Rhynchobatus australiae	Whitespotted wedgefish	57	-	-
Rhynchobatus australiae	Whitespotted wedgefish	71		
Rhynobatidae	Guitarfishes, etc. nei	57	-	-
Rhynobatidae	Guitarfishes, etc. nei	71		
Rajiformes	Rays, stingrays, mantas nei	57	-	-
Rajiformes	Rays, stingrays, mantas nei	71	65	

US\$ 1,000

Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
11,173	-			-	-	25,312	
77,896	-		-	88,688		63,281	
	-	83,506		-	-	11,283	
	-	47,218	-			17,973	
	-	219,771		-	-		
	-	3,666	-				
57,000	-	40,956		-	-	2,034	
68,006	-	17,367	-			1,379	
1,249	-			-	-		
429	-		-				
37,467	-			-	-		
117,085	-		-				
	-	4,791		-	-		
	-	8,073	-				
	-	43,390		-	-		
	-	7,809	-		566		
6,320	-			-	-		
9,438	-			-	-		
363	-		-				
1,103	-			-	-		
212	-		-				
25,366	-			-	-		
23	-			-	-		
18,433	-		-				
6,809	-			-	-		
51	-		-		101		
232	-			-	-		
67	-		-				
1,440	-			-	-		
36,915	-		-				
177	-			-	-		
400	-		-				
4,860	-	10,287		-	-		
57,136	-	13,579	-				

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Dasyatidae	Stingrays, butterflys rays <i>nei</i>	57	-	-
Dasyatidae	Stingrays, butterflys rays nei	71		
Myliobatidae	Eagle rays <i>nei</i>	57	-	-
Myliobatidae	Eagle rays <i>nei</i>	71		
Mobulidae	Mantas, devil rays <i>nei</i>	57	-	-
Mobulidae	Mantas, devil rays <i>nei</i>	71		
Elasmobranchii	Sharks, rays, skates, etc. <i>nei</i>	57	-	-
Elasmobranchii	Sharks, rays, skates, etc. <i>nei</i>	71		
Osteichthyes	Marine fishes <i>nei</i>	57	-	-
Osteichthyes	Marine fishes <i>nei</i>	71	10,652	
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		
Brachyura	Marine crabs <i>nei</i>	57	-	-
Brachyura	Marine crabs <i>nei</i>	71	1.11	
Panulirus spp.	Tropical spiny lobsters <i>nei</i>	57	-	-
Panulirus spp.	Tropical spiny lobsters <i>nei</i>	71		
Thenus orientalis	Flathead lobster	57	-	-
Thenus orientalis	Flathead lobster	71		
Scyllaridae	Slipper lobsters <i>nei</i>	71	2.16	
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 <i>nei</i>	57	-	_
Penaeus spp.	Penaeus shrimps nei	71	7,083	
Metapenaeus endeavouri	Endeavour shrimp	71		
Metapenaeus spp.	Metapenaeus shrimps <i>nei</i>	57	-	-
Metapenaeus spp.	Metapenaeus shrimps <i>nei</i>	71		

US\$ 1,000

Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
8,623	-			-	-		
54,155	-		-				
12,950	-			-	-		
17,838	-		-				
3,580	-			-	-		
10,351	-		-				
	-	1,318		-	-	113	
	-	6,868	-		49	673	
233,261	-	69,062	3,152,140	-	-	61,562	
1,714,199	-	55,906	-		233	159,377	
146,807	-			-	-	29,953	
585,145	-		-	104,355		137,126	
79,127	-			-	-		
90,274	-		-				
	-	37,208		-	-	8,484	
	-	31,775	-		26	17,119	
2,830	-	7		-	-		
47,440	-	12,015	-		3		
	-			-	-	399	
	-		-			3,839	
	-		-		19		
143,671	-			-	-	11,420	
424,731	-		-			41,934	
36,503	-			-	-	835	
84,509	-		-			3,039	
	-			-	-	181	
	-		-			2,544	
	-			-	-	5,041	
	-		-			6,824	
	-			-	-	1,566	
	-		-			21,989	
	-		-	3,019			
36,846	-			-	-	1,304	
174,989	-		-			28,234	

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Sergestidae	Sergestid shrimps <i>nei</i>	57	-	-
Sergestidae	Sergestid shrimps <i>nei</i>	71		
Stomatopoda	Stomatopods <i>nei</i>	57	-	-
Stomatopoda	Stomatopods <i>nei</i>	71		
Crustacea	Marine crustaceans nei	57	-	-
Crustacea	Marine crustaceans nei	71	0.69	
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		
Meretrix spp.	Hard clams <i>nei</i>	57	-	-
Meretrix spp.	Hard clams <i>nei</i>	71		
Paphia spp.	Short neck clams nei	71		
Trochus niloticus	Commercial top	57	-	-
Trochus niloticus	Commercial top	71		
Bivalvia	Clams, etc. nei	57	-	-
Bivalvia	Clams, etc. <i>nei</i>	71		
Natantia	Natantian decapods nei	57	-	-
Natantia	Natantian decapods <i>nei</i>	71		
Sepioteuthis lessoniana	Bigfin reef squid	57	-	-
Sepioteuthis lessoniana	Bigfin reef squid	71		
Sepiidae, Sepiolidae	Cuttlefish, bobtail squids nei	57	-	-
Sepiidae, Sepiolidae	Cuttlefish, bobtail squids nei	71	35	
Loligo spp.	Common squids nei	57	-	-
Loligo spp.	Common squids nei	71		
Loliginidae, Ommastrephidae	Various squids <i>nei</i>	57	-	-
Loliginidae, Ommastrephidae	Various squids <i>nei</i>	71	36	
Octopodidae	Octopuses <i>nei</i>	57	-	-
Octopodidae	Octopuses <i>nei</i>	71		

US\$ 1,000

Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
	-	25,504		-	-		-
	-	9,089	-	11,561		10,812	
	-			-	-	200	-
	-		-			11,339	
74	-			-	-		
3,852	-		-				
22	-			-	-		
13,809	-		-				
2,060	-			-	-		
12,357	-		-				
	-			-	-	103	
266	-		-			4,451	
17,464	-			-	-		
18,419	-		-			566	
497	-			-	-		
1,235	-		-				
	-		-			17,698	
1	-			-	-		
34	-		-				
	-	6,083		-	-		
	-	5,645	-				
145,059	-	236,441		-	-		
612,642	-	128,949	-		3,243		
	-			-	-	2,214	
	-		-	•••		18,876	
31,769	-	27,550		-	-	9,599	
26,668	-	27,294	-		161	37,949	
106,469	-			-	-	68,834	
277,311	-		-	107,023	219	300,794	
	-	111,232		-	-		
	-	96,172	-				
2,283	-	990		-	-	2,525	
22,292	-	548	-			31,678	

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Mollusca	Marine molluscs nei	57	-	-
Mollusca	Marine molluscs <i>nei</i>	71		
Holothurioidea	Sea cucumbers <i>nei</i>	57	-	-
Holothurioidea	Sea cucumbers <i>nei</i>	71		
Rhopilema spp.	Jellyfishes <i>nei</i>	57	-	-
Rhopilema spp.	Jellyfishes <i>nei</i>	71		
Testudinata	Marine turtles <i>nei</i>	57	-	-
Testudinata	Marine turtles <i>nei</i>	71		
Invertebrata	Aquatic invertebrates nei	57	-	-
Invertebrata	Aquatic invertebrates nei	71		

US\$ 1,000

Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
683	-			-	-	8	-
15,149	-		-			26,063	
1,917	-			-	-		-
13,763	-	2,142	-				
73,363	-	936		-	-	5,199	-
38,394	-	7,767	-			843	
8	-			-	-		-
8,437	-		-				
130,826	-			-	-		-
334,593	-		-				
	-						
	-						
	-						
	-						
	-						
	-						
	-						
	-						
	-						
	-						
	-						

## 3.4 Capture Production by Type of Fishing Gear and by Species, 2018 3.4.1 Brunei Darussalam

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			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
Anodontostoma chacunda	Chacunda gizzard shad						
Lates calcarifer	Barramundi (=Giant seaperch)						
Psettodes erumei	Indian halibut						
Saurida spp.	Lizardfish nei						
Arius thalassinus	Giant catfish						
Arius spp.	Sea catfishes <i>nei</i>						
Plotosus spp.	Eeltail catfishes						
Caesio spp.	Fusiliers caesio nei						
Epinephelus spp.	Groupers nei						
Priacanthus macracanthus	Red bigeye	0.056		0.056			
Priacanthus tayenus	Purple-spotted bigeye						
Johnius spp.	Croakers						
Otolithes ruber	Tigertooth croaker						
Lutjanus argentimaculatus	Mangrove red snapper						
Lutjanus sebae	Emperor red snapper						
Lutjanus johnii	John's snapper						
Lutjanus lutjanus	Bigeye snapper						
Lutjanus malabaricus	Malabar blood snapper						
Lutjanus russelli	Russell's snapper						
Lutjanus spp.	Snappers <i>nei</i>						
Pristipomoides spp.	Jobfishes nei						
Nemipterus spp.	Threadfin breams <i>nei</i>						
Leiognathus spp.	Ponyfishes (=Slipmouths)	0.05		0.05			
Pomadasys argenteus	Silver grunt						
Pomadasys spp.	Grunts <i>nei</i>						
Lethrinus spp.	Emperors(=Scavengers) nei						
Upeneus sulphureus	Sulphur goatfish						
Gerres spp.	Mojarras(=Silver-biddies) nei						
Drepane punctata	Spotted sicklefish						
Eleutheronema tetradactylum	Four finger threadfin						
Siganus spp.	Spinefeet (=Rabbitfishes) nei	0.056		0.056			
Abalister stellaris	Starry triggerfish						

 $\mathsf{MT}$ 

	Tra	wl			F		et			Trap		Hook	Push/	Shell fish and	
All trawls	Beam trawl	Otter board trawl	Pair trawl	Lift Net	All falling nets	Anchovy falling net	Squid falling net	Gill Net	AII traps	Station- ary trap	Porta- ble trap	and Lines	Scoop Nets	seaweed collect- ing gears	Others
								816							
0.01		0.01							0.93	0.93					
10.46		10.46													
25.90		25.90													
9.60		9.60													
								100.65							
									1.287	1.287					
0.016		0.016										52.63			
5.371		5.371						50.78	258.42	0.77	257.65	128.48			
30.816		30.816													
6.697		6.697							0.09	0.09					
2.214		2.214						38.25							
0.056		0.056							0.251	0.251		1.3			
												0.07			
								2.33	169.84	0.056	169.78				
0.01		0.01						394.81				96.11			
0.164		0.164						57.59	189.02		189.02	299.71			
								9.29	7.404	7.404					
3.102		3.102										0.7			
2.762		2.762										43.56			
53.703		53.703						146.57				128.35			
24.334		24.334						273.12	0.745	0.745					
								24.91	0.026	0.026					
15.141		15.141										0.46			
0.773		0.773						44.09							
26.47		26.47													
0.929		0.929							0.107	0.107					
2.459		2.459						4.56				4.09			
												11.37			
0.222		0.222						2.03	94.378	7.578	86.8				
1.078		1.078						6.03	0.54		0.54				

# 3.4 Capture Production by Type of Fishing Gear and by Species, 2018 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
Muraenesox cinereus	Daggertooth pike conger						
Trichiurus lepturus	Largehead hairtail						
Amblygaster sirm	Spotted sardinella	51.135		51.135			
Sardinella gibbosa	Goldstripe sardinella	2.391		2.391			
Dussumieria acuta	Rainbow sardine	61.922		61.922	18.96	18.96	
Chirocentrus dorab	Dorab wolf-herring						
Auxis thazard, A. rochei	Frigate and bullet tunas	40.513		40.513			
Euthynnus affinis	Kawakawa	4.159		4.159			
Katsuwonus pelamis	Skipjack tuna	1,033.33		1,033.33			
Thunnus tonggol	Longtail tuna	19.719		19.719			
Thunnus albacares	Yellowfin tuna	5.712		5.712			
Istiophorus platypterus	Indo-Pacific sailfish						
Scomberomorus commerson	Narrow-barred Spanish mackerel	2.49		2.49			
Scomberomorus guttatus	Indo-Pacific king mackerel	1.59		1.59			
Lactarius lactarius	False trevally						
Rachycentron canadum	Cobia						
Decapterus spp.	Scads nei	129.533		129.533	74.91	74.91	
Caranx sexfasciatus	Bigeye trevally						
Caranx tille	Tille trevally	0.026		0.026			
Caranx spp.	Jacks, crevalles nei	6.195		6.195			
Alectis indicus	Indian threadfish						
Gnathanodon speciosus	Golden trevally						
Alepes djedaba	Shrimp scad						
Alepes spp.	Scads nei	0.019		0.019			
Atule mate	Yellowtail scad	1.085		1.085			
Selar crumenophthalmus	Bigeye scad	40.762		40.762			
Selaroides leptolepis	Yellowstripe scad	0.113		0.113	78.86	78.86	
Parastromateus niger	Black pomfret	0.145		0.145			
Elagatis bipinnulata	Rainbow runner						
Megalaspis cordyla	Torpedo scad	9.523		9.523			
Scomberoides commerson	Talang queenfish	0.483		0.483			

	Tra	awl			F	alling Ne	<u></u>			Trap			<b>.</b> /	Shell	IVII
		Otter	<u> </u>	Lift Net		Anchovy		Gill Net				Hook and	Push/ Scoop	fish and seaweed	Others
All trawls	Beam trawl	board trawl	Pair trawl	ivet	All falling nets	falling net	Squid falling net	Net	All traps	Station- ary trap	Porta- ble trap	Lines	Nets	collect- ing gears	Others
2.865		2.865													
1.7		1.7													
								110.55							
0.165		0.165						317				137.67			
0.223		0.223						355.15				62.58			
												0.01			
0.01		0.01													
2.425		2.425						225.74				148.65			
1.942		1.942													
55.808		55.808						11.17							
0.426		0.426						2.71							
3.331		3.331						1.8				62.84			
0.153		0.153							3.595	3.595					
0.161		0.161										11.61			
23.174		23.174						1.18				83.99			
1.774		1.774													
0.227		0.227													
								1063.5				16.78			
0.318		0.318													
27.518		27.518						4.31				2.5			
												313.89			
0.781		0.781						2.34							
								0.97							
0.549		0.549						461.4				108.53			
13.339		13.339						169.31							
		1	ı							!		1			

## 3.4 Capture Production by Type of Fishing Gear and by Species, 2018 $3.4.1\ Brunei\ Darussalam\ (Cont'd)$

			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
Rastrelliger brachysoma	Short mackerel						
Rastrelliger kanagurta	Indian mackerel	57.35		57.35	83.62	83.62	
Rastrelliger spp.	Indian mackerels nei						
Pampus argenteus	Silver pomfret						
Pampus chinensis	Chinese silver pomfret						
Sphyraena jello	Pickhandle barracuda						
Sphyraena spp.	Barracudas nei	531.766		531.766			
Dasyatis spp.	Stingrays nei						
Rhynchobatus djiddensis	Giant guitarfish						
Portunus pelagicus	Blue swimming crab						
Panulirus spp.	Tropical spiny lobsters nei						
Thenus orientalis	Flathead lobster						
Penaeus merguiensis	Banana prawn						
Penaeus monodon	Giant tiger prawn						
Penaeus semisulcatus	Green tiger prawn						
Penaeus spp.	Penaeus shrimps nei						
Metapenaeus ensis	Greasyback shrimp						
Metapeneaus brevicornis	Yellow shrimp						
Sepia spp.	Cuttlefish						
Loligo spp.	Common squids nei	1.561		1.561			

 $\mathsf{MT}$ 

	Tra	wl		Lift	F	alling Ne	et	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	AII traps	Station- ary trap	and Lines	Scoop Nets	seaweed collect- ing gears	Others
								185.82			 			
								872.2			 100.58			
5.032		5.032									 			
								166.94			 			
0.155		0.155									 			
0.191		0.191									 			
26.728		26.728						13.23			 			
52.727		52.727						32.49			 2.88			
1.292		1.292									 			
0.76		0.76									 			
											 1.90			
0.286		0.286									 			
15.655		15.655									 			
1.058		1.058									 			
17.583		17.583									 			
0.201		0.201						2,230			 			
17.898		17.898									 			
0.035		0.035									 			
35.918		35.91									 			
25.23		25.23									 0.1			

## 3.4 Capture Production by Type of Fishing Gear and by Species, 2018 $3.4.2 \ \mathrm{Singapore}$

			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
Lates calcarifer	Barramundi(=Giant seaperch)						
Arius spp.	Sea catfishes nei						
Valamugil spp.	Mullets						
Pterocaesio spp.	Fusiliers						
Epinephelus spp.	Groupers nei						
Sillago spp.	Sillago-whitings						
Mene maculata	Moonfish						
Pennahia spp.	Croakers						
Lutjanus spp.	Snappers <i>nei</i>						
Pristipomoides spp.	Jobfishes nei						
Nemipterus spp.	Threadfin breams nei						
Leiognathus spp.	Ponyfishes(=Slipmouths)						
Pomydasys spp.	Grunts <i>nei</i>						
Parupeneus spp.	Goatfishes nei						
Polynemus spp.	Threadfins nei						
Siganus spp.	Spinefeet(=Rabbitfishes) nei						
Trichiurus lepturus	Largehead hairtail						
Chirocentrus spp. Scomberomorus commerson	Wolf-herrings <i>nei</i> Narrow-barred Spanish						
Decapterus spp.	mackerel Scads <i>nei</i>						
Caranx spp.	Jacks, crevalles nei						
Parastromateus niger	Black pomfret						
Scomberoides spp.	Queenfishes nei						
<i>Sphyraena</i> spp.	Barracudas nei						
Carcharhinus amblyrhynchos	Grey reef shark						
Dasyatis spp.	Stingrays nei						
Osteichthyes	Marine fishes nei						
Portunus pelagicus	Blue swimming crab						
Scylla serrata	Indo-Pacific swamp crab						
Panulirus spp.	Tropical spiny lobsters nei						
Scyllaridae	Slipper Lobster nei						
Penaeus spp.	Penaeus shrimps nei						
Sepia spp.	Cuttlefishes <i>nei</i>						
Loligo spp.	Common squids nei						

MT Shell Trawl Falling Net Trap Push/ Hook fish and Lift Gill Net and Scoop seaweed Others AII Anchovy falling Squid falling Otter Net Pair ΑII Station-Beam Porta-Lines Nets collect-All trawls falling board trawl trawl traps ary trapble trap trawl nets net` net ing gears 41.99 41.99 ... . . . 79.6 79.6 . . . 6.6 6.6 . . . 11.6 11.6 23.75 23.75 . 0.44 0.44 23.1 23.1 . . . . . . . . . . . . 53.5 53.5 97.73 97.73 . . . 4 28.69 28.69 5 5 31.7 31.7 8.95 8.95 . . . 41.29 41.29 6.6 6.6 . . . . . . . . . 30.64 30.64 . . . 44.3 44.3 . . . . . . . . . . . . . . . 54.31 54.31 81.64 81.64 30.3 30.3 48.8 48.88 27.5 27.5 . . . 25.1 25.1 12.25 12.25 . . . . . . . . . 55.9 55.9 84.54 84.54 3.52 3.52 . . . 16.2 16.2 . . . 0.15 0.15 1.9 1.9 253.8 253. 32.8 32.8 41.5 41.5

## 3.4 Capture Production by Type of Fishing Gear and by Species, 2018 $3.4.3\ \mbox{Thailand}$

		SEAFDEC	ı	Purse Sein	е	5	Seine Ne	t
Scientific Name	FAO English Name	Sub-areas	All purse seines	Anchovy purse seine	Fish purse seine	All seine nets	Boat seine	Beach seine
Lates calcarifer	Barramudi (=Giant seaperch)	57b						
Lates calcarifer	Barramudi (=Giant seaperch)	71a						
Pleuronectiformes	Flatfishes <i>nei</i>	57b	11		11			
Pleuronectiformes	Flatfishes <i>nei</i>	71a	122	1	121			
Psettodes erumei	Indian halibut	57b						
Psettodes erumei	Indian halibut	71a						
Saurida spp.	Lizard fishes	57b	467	1	466			
Saurida spp.	Lizard fishes	71a	1,343	20	1,323			
Arius spp.	Sea catfishes <i>nei</i>	57b						
Arius spp.	Sea catfishes <i>nei</i>	71a	5		5			
Plotosus spp.	Eeltail catfishes	57b	2		2			
Plotosus spp.	Eeltail catfishes	71a	9		9			
Lisa spp.	Mullets <i>nei</i>	57b						
Lisa spp.	Mullets <i>nei</i>	71a	63		63			
Priacanthus spp.	Bigeyes nei	57b	386		386			
Priacanthus spp.	Bigeyes nei	71a	710	43	667			
Sillago spp.	Sillago-whitings	57b	3		3			
Sillago spp.	Sillago-whitings	71a	2		2			
Sciaenidae	Croakers, drums nei	57b	10		10			
Sciaenidae	Croakers, drums nei	71a	680	13	667			
Lutjanus spp.	Snappers nei	57b	1,287	58	1,229			
Lutjanus spp.	Snappers nei	71a	762		762			
Nemipterus spp.	Threadfin breams nei	57b	36		36			
Nemipterus spp.	Threadfin breams nei	71a	112	1	111			
Scolopsis spp.	Monocole breams	57b	9		9			
Scolopsis spp.	Monocole breams	71a	36	2	34			
Polynemus spp.	Threadfins nei	57b						
Polynemus spp.	Threadfins <i>nei</i>	71a	10		10			
Trichiurus spp.	Hairtails <i>nei</i>	57b	107		107			
Trichiurus spp.	Hairtails <i>nei</i>	71a	1,076	31	1,045			
Sardinella spp.	Sardinellas <i>nei</i>	57b	5,707	76	5,631			
Sardinella spp.	Sardinellas <i>nei</i>	71a	39,420	1,474	37,946			

 $\mathsf{MT}$ 

								1				1	1	01 11	
	Tra	wl		Lift	F	alling Ne	et	Gill		Trap		Hook	Push/	Shell fish and	
AII trawls	Beam trawl	Otter board trawl	Pair trawl	Net	All falling nets	Anchovy falling net	Squid falling net	Net	AII traps	Station- ary trap	Porta- ble trap	and Lines	Scoop Nets	seaweed collect- ing gears	Others
								42.75	48.94		48.94	10.87			2.60
								73.91	0.98		0.98	62.82			8.57
132		123	9					13.91	0.83		0.83	4.31			0.21
3,321	1,204	1,340	777		13	13		348.5	0.41		0.41	9.94			
43		29	14					26.72	0.31		0.31	3.20			
238	51	152	35					25.11	1.58		1.58	2.92			
8,521		6,790	1,731		1	1		122.33							
9,7580.	49	6,485	3,224		97	97		2,156	0.47		0.47	44.55			
272		60	212		8	8		285.13				2.8			
47	27	2	18					95.44	11.23		11.23	22.99			26.65
374		204	170					139.39	67.06		67.06	4.49			
515	76	167	272					50.88	35.11		35.11	208.91			
12		10	2					198	9.31		9.31	5.37			7.36
287	4	16	267		22		22	1,181				0.15	0.05		191.02
4,050		2,337	1,713		22	22		2.73				2.56			
8,278	11	3,564	4,703		107	91	16	783.09				5.70			7.15
46		33	13		17	17		289.4	13.50		13.50				
142	31	57	54					477.48	0.28		0.28	53.56			
857		281	576					405.7	7.59		7.59	85.07			
8,626	642	935	7,049		38	36	2	1,289	3.76		3.76	29.41			24.98
2,683		1,570	1,113		33	33		54.88	58.60		58.60	96.94			2.67
2,554	16	640	1,898		377	376	1	113.13	771.2		771.15	55.61			
8,560		6,151	2,409		3	3		519.44	14.68		14.68	137.84			1.18
20,448	269	11,387	8,792	8	57	6	51	3,535.4	2,408		2,408	139.92	10		5.30
1,263		871	392		5	5		274.62	5.75		5.75	4.37			96.24
4,225	83	3,580	562		17	15	2	1461.9	271.1		271.1	20.9			12.72
47		13	34					32.58	1.04		1.04	3.78			1.18
357		19	338					677.2	0.05		0.05	1.30			
1,294		733	561					16.51				2.00			
3,992	3	1,309	2,680		36.26	35	1.26	265.5				20.01			0.20
944		96	848		551	551		985.1				7.35			3.30
11,546	15	1 075	10,456	5	4 195 7	3,790.2	105 13	8018 2	0.25		0.25	16.64			63.58

## 3.4 Capture Production by Type of Fishing Gear and by Species, 2018 3.4.3 Thailand (Cont'd)

		SEAFDEC	ı	Purse Sein	е	S	Seine Ne	t
Scientific Name	FAO English Name	Sub-areas	All purse seines	Anchovy purse seine	Fish purse seine	All seine nets	Boat seine	Beach seine
Stolephorus spp.	Stolephorus anchovies	57b	4,143	3,972	171			
Stolephorus spp.	Stolephorus anchovies	71a	38,909	38,617	292			
Chirocentrus spp.	Wolf-herrings nei	57b	213	3	210			
Chirocentrus spp.	Wolf-herrings nei	71a	242	1	241			
Euthynnus affinis	Kawakawa	57b	8,699		8,699			
Euthynnus affinis	Kawakawa	71a	10,297	272	10,025			
Thunnus tonggol	Longtail tuna	57b	4,798		4,798			
Thunnus tonggol	Longtail tuna	71a	15,278	34	15,244			
Scomberomorus commerson	Narrow-barred Spanish mackerel	57b	380	13	367			
Scomberomorus commerson	Narrow-barred Spanish mackerel	71a	1,062	18	1,044			
Decapterus spp.	Scads nei	57b	30,672	31	30,641			
Decapterus spp.	Scads nei	71a	21,466	179	21,287			
Caranx spp.	Jacks, crevalles nei	57b	5,105	544	4,561			
Caranx spp.	Jacks, crevalles nei	71a	36,401	501	35,540			
Selar crumenophthalmus	Bigeye scad	57b	9,099	33	9,066			
Selar crumenophthalmus	Bigeye scad	71a	10,630	167	10,463			
Parastromateus niger	Black pomfret	57b	93		93			
Parastromateus niger	Black pomfret	71a	2,717	2	2,715			
Megalaspis cordyla	Torpedo scad	57b	3,598	27	3,571			
Megalaspis cordyla	Torpedo scad	71a	10,051	58	9,993			
Scomberoides spp.	Queenfishes <i>nei</i>	57b	7		7			
Scomberoides spp.	Queenfishes nei	71a	2		2			
Rastrelliger kanagurta	Indian mackerel	57b	13,355	23	13,332			
Rastrelliger kanagurta	Indian mackerel	71a	22,755	725	22,030			
Rastrelliger spp.	Indian mackerels <i>nei</i>	57b	1,843	50	1,793			
Rastrelliger spp.	Indian mackerels nei	71a	5,876	22	5,854			
Pampus spp.	Silver pomfrets nei	57b	184		184			
Pampus spp.	Silver pomfrets nei	71a	14		14			
<i>Sphyraena</i> spp.	Barracudas nei	57b	2,154	8	2,146			
<i>Sphyraena</i> spp.	Barracudas nei	71a	4,484	162	4,322			
Dasyatis spp.	Stingrays <i>nei</i>	57b						
Dasyatis spp.	Stingrays <i>nei</i>	71a	8		8			

															MT
	Tra	wl		Lift	F	alling Ne	et	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	AII traps	Station- ary trap	Porta- ble trap	and Lines	Scoop Nets	seaweed collect- ing gears	Others
842		199	643		14,474	14,474		16.17							1.46
2,928	1	312	2,615	4,174	65,380	65,098	282	22.60							
1,152		521	631		2	1	1	160.5	0.07		0.07	5.25			3.16
2,357	5	517	1,835		5	5		357.6				8.60			3.38
					12	8	4	2.87				11.75			
					1,005	958	47	1,864				94.76			
					6	6		4.21				18.46			
					116	103	13	1455.7				53.27			1.61
786		278	508					147.46	2.89		2.89	271.23			
3,807	17	493	3,297		44.16	13	31.16	4191.8	0.33		0.33	1279.2			24.48
2,752		501	2,251		68	67	1	0.10	2.0		2.0				
662	2	197	463		664	639	25	39.88							
2,897		670	2,227		667	622	45	315.29				22.55			2.84
22,504	62	1,876	20,566	34	3,292.3	2,855.2	437.1	2696.2	0.83		0.83	35.57			3.25
1,541		627	914		118	78	40	9.57	0.14		0.14	25.90			
2,102	12	408	1,682		852.1	784.1	68	365.7	0.31		0.31	17.06			0.06
103		9	94		1		1	2.94							
2,877	4	313	2,560	798	28.82	10	18.82	276.08	0.24		0.24	0.33			1.76
1,876		558	1,318		203	203		931.76	30.66		30.66	555.15			18.19
2,432	7	709	1,716		1,345.7	1,210	135.7	1694.1	81.76		81.76	539.02			0.10
78		60	18					0.19				0.72			5.81
102		35	67					19.51	0.15		0.15	0.03			0.42
1,514		396	1,118		99	97	2	499.7	0.76		0.76	10.90			146.81
6,780	21	711	6,048		993	975	18	8626.4				5.41			0.10
546		91	455	0.03	573	573		3219.7	0.10		0.10	0.77			165.38
2,350	3	180	2,167		352.95	337.83	15.12	2,722	1.44		1.44	1.20			3.32
44		19	25					12.28							
89		11	78		1		1	43.65	3.05		3.05				
2,138		1,141	997		94	93	1	14.34				25.73			
4,543	7	1,590	2,946	1	587	557.13	30.47	199.32				74.25			0.04
441		366	75					143.49	0.22		0.22	4.15			
1,469	401	740	328					44.16	2.05		2.05	28.58			2.05

## 3.4 Capture Production by Type of Fishing Gear and by Species, 2018 3.4.3 Thailand (Cont'd)

		SEAFDEC	1	Purse Sein	е	S	Seine Ne	t
Scientific Name	FAO English Name	Sub-areas	All purse seines	Anchovy purse seine	Fish purse seine	All seine nets	Boat seine	Beach seine
Congridae	Conger eels, etc. nei	57b						
Congridae	Conger eels, etc. nei	71a	33		33			
Epinephelus spp.	Groupers nei	57b	5		5			
Epinephelus spp.	Groupers nei	71a	5		5			
Elasmobranchii	Sharks, rays, skates, etc.	57b						
Elasmobranchii	Sharks, rays, skates, etc.	71a						
Osteichthyes	Marine fishes <i>nei</i>	57b	13,463	22	13,441			
Osteichthyes	Marine fishes <i>nei</i>	71a	25,174	348	24,826			
Portunus spp.	Blue swimming crabs <i>nei</i>	57b						
Portunus spp.	Blue swimming crabs nei	71a	5		5			
Scylla serrata	Indo-Pacific swamp crab	57b						
Scylla serrata	Indo-Pacific swamp crab	71a						
Thenus orientalis	Flathead lobster	57b	1		1			
Thenus orientalis	Flathead lobster	71a	3	1	2			
Penaeus merguiensis	Banana prawn	57b						
Penaeus merguiensis	Banana prawn	71a						
Penaeus monodon	Giant tiger prawn	57b						
Penaeus monodon	Giant tiger prawn	71a						
-	Other shrimps	57b	7		7			
-	Other shrimps	71a	41	8	33			
-	Mantis shrimp	57b						
-	Mantis shrimp	71a	57		57			
Sergestidae	Sergestid shrimps <i>nei</i>	71a						
Brachyura	Marine crabs <i>nei</i>	57b						
Brachyura	Marine crabs <i>nei</i>	71a	19	1	18			
Anadara granosa	Blood cockle	57b						
Anadara granosa	Blood cockle	71a						
Paphia spp.	Short neck clams <i>nei</i>	71a						
Sepia spp.	Cuttlefishes <i>nei</i>	57b	12		12			
Sepia spp.	Cuttlefishes <i>nei</i>	71a	27		27			
Loliginidae	Various squids <i>nei</i>	57b	42	1	41			
Loliginidae	Various squids <i>nei</i>	71a	75		75			

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	Tra	wl		Lift	F	alling Ne	et	Gill		Trap		Hook and	Push/	Shell fish and	Others
AII trawls	Beam trawl	Otter board trawl	Pair trawl	Net	All falling nets	Anchovy falling net	Squid falling net	Net	AII traps	Station- ary trap	Porta- ble trap	Lines	Scoop Nets	seaweed collect- ing gears	others
352		260	92					1.01				67.02			
1,588	44	1,192	352					43.16				585.86			
1,139		781	358					98.62	1,035		1,035	237.75			8.30
1,645	7	951	687	1	2		2	114.65	898.4		898.8				
50		23	27					1.55				10.20			
295	1	218	76		1		1	64.42	0.31		0.31	6.63			
16,185		9,885	6,300		295	221	74	4,128	337.2		337.2	1842.4			0.21
43,134	1,351	22,092	19,691	16	4,633.3	3,786.2	847.06	11,783	2,611		2,611	1786.2	111		727.45
433		325	108		0.06	0.06		3,285	1,152		1,152				16.16
2,875	1,809	521	545		5.45		5.45	13,286	5,323		5,323		0.01		59.5
								14.76	121.6		121.6				0.01
								55.77	88.39		88.39				1.05
72		49	23					0.64	1.11		1.11				4.31
489	75	248	166					234.15					17.01		52
86		55	31	0.01				1220.5	1.06		1.06	0.03			11.83
2,250	1,406	654	190		0.06	0.06		2636.9	1.26		1.26				3.46
63		59	4					4.68							0.01
125	75	47	3					158.45							0.09
1,493		1,415	78					247.96	1.23		1.23				0.11
16,577	3,604	11,956	1,017		6.20	6.20		744.43	1.50		1.50		2.80		2258.4
13		13						19.61	4		4				12.8
1,574	970	474	130					288.3	6.82		6.82		7.02		150.86
													20847		
769		652	117					322.5	1,236		1,236				0.71
1,276	368	526	382					2080.3	213.9		213.9		7.01		16.17
								0.02							
7	7							0.16	0.68		0.68				150.05
															9,044
2,541		1,832	709		8.32		8.32	18.63	206.7		206.7				0.05
10,162	1,213	5,571	3,378	3	335.47	4	331.47	12.97	437.7		437.7	5.07			28.89
276		89	187		20.20		20.20	107.59	335.6		335.6	9.25			
4,132	5	341	3,786		461.84	91	370.84	117.92	1,802		1,802	175.11			12.61
									_			_			

# 3.4 Capture Production by Type of Fishing Gear and by Species, 2018 3.4.3 Thailand (Cont'd)

	F10 F	SEAFDEC	F	Purse Sein	е	Seine Net		
Scientific Name	FAO English Name	Sub-areas	All purse seines	Anchovy purse seine	Fish purse seine	All seine nets	Boat seine	Beach seine
Loligo spp.	Common squids nei	57b	4,060	17	4,043			
Loligo spp.	Common squids nei	71a	5,020	33	4,987			
Octopus spp.	Octopuses nei	57b						
Octopus spp.	Octopuses nei	71a	14		14			
Pectinidae	Scallops nei	57b						
Pectinidae	Scallops nei	71a						
Mollusca	Marine molluscs <i>nei</i>	57b						
Mollusca	Marine molluscs <i>nei</i>	71a						
Rhopilema spp.	Jellyfishes <i>nei</i>	57b						
Rhopilema spp.	Jellyfishes <i>nei</i>	71a						
Invertebrata	Aquatic invertebrates <i>nei</i>	57b	15		15			
Invertebrata	Aquatic invertebrates <i>nei</i>	71a	94		94			

															MI
	Tra	wl		Lift	F	Falling Ne	et	Gill		Trap		Hook	Push/	Shell fish and	Othern
All trawls	Beam trawl	Otter board trawl	Pair trawl	Net	All falling nets	Anchovy falling net	Squid falling net	Net	AII traps	Station- ary trap	Porta- ble trap	and Lines	Scoop Nets	seaweed collect- ing gears	
9,142		3,908	5,234		1,274.7	118	1156.7	322.83	27.03		27.03	49			38.35
40,257	71	8,277	31,909	54	20,732	892	19,840	440.23	146		146	221.5			93.4
501		399	102		1		1	1.28	43.74		43.74	0.50			
1,746	72	1,237	437		107.88		107.88	72	5,104		5,104				406.01
43		40	3					0.13							
1,858	28	1,586	244					1.53							14.71
22		12	10					15.43	2.13		2.13				5.85
74	6	65	3					59.36							12,218
				47,991											0.83
				7,779											
44		44						354.61	26.52		26.52	14			1.94
413	16	234	163	0.68	12.53	4.26	8.27	29.86	109.2		109.2	5.23			1072.4

### 4. INLAND CAPTURE FISHERY STATISTICS

# 4.1 Inland Capture Fishery Production by Species and by Fishing Area, 2018 4.1.1 In Quantity

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Cyprinus carpio	Common carp	04		
Ctenopharyngodon idellus	Grass carp(=White amur)	04		
Cyclocheilichthys armatus	-	04		
Cyclocheilichthys apogon	Beardless barb	04		
Hampala macrolepidota	Hampala barb	04		
Labiobarbus festivus	Singal carp	04		
Osteochilus hasselti	Nilem carp	04		
Rasbora argyrotaenia	Silver rasbora	04		
Thynnichthys vaillanti	-	04		
Tor soro	-	04		
Leptobarbus hoeveni	Hoven's carp	04		
Barbodes balleroides	-	04		
Puntius binotatus	Spotted barbs	04		
Macrochirichthys macrochirus	Long pectoral-fin minnow	04		
Mystacoleucus padangensis	-	04		
Puntioplites waandersi	-	04		
Barbonymus schwanenfeldii	Tinfoil barb	04		
Barbonymus gonionotus	Silver barb	04		
Cyprinidae	Cyprinids <i>nei</i>	04		
Chromobotia macracanthus	Clown loach	04		
Oreochromis mossambicus	Mozambique tilapia	04		
Oreochromis niloticus	Nile tilapia	04		
Oreochromis (=Tilapia) spp.	Tilapias nei	04		
Scleropages formosus	Asian bonytongue	04		
Chitala lopis	Giant featherback	04		
Kryptopterus spp.	Glass catfishes	04		
Ompok bimaculatus	Butter catfish	04		
Mystus nigriceps	-	04		
Hemibagrus nemurus	Asian redtail catfish	04		
Pangasius djambal	-	04		
Pangasius spp.	Pangas catfishes nei	04		
Monopterus albus	Lai	04		

Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nan
15,908					-	2,105	
145					-		
652					-		
181					-		
1,502					-		
1,780					-		
9,428					-		
9,567					-		
2,033					-		
1,149					-		
5,806					-		
3,478					-		
558					-		
1,196					-		
1,364					-		
2,321					-		
3,474					-		
26,130					-	24,858	
1,583				17,671	-		
271					-		
18,650					-		
50,371					-	19,920	
				44,071	-		
62					-		
2,181					-		
29,873					-		
166					-		
8,143					-		
60,957					-		
29,057					-		
					-	3,732	
					-	817	

### 4.1 Inland Capture Fishery Production by Species and by Fishing Area, 2018 4.1.1 In Quantity (Cont'd)

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia <sup>1</sup>
Mastacembelus erythrotaenia	Fire eel	04		
Toxotes microlepis	Smallscale archerfish	04		
Anabas testudineusv	Climbing perch	04		
Clarias spp.	Torpedo-shaped catfishes nei	04		
Anguilla spp.	River eels nei	04		
Pristolepis fasciata	Malayan leaffish	04		
Osphronemus goramy	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		
Gobiidae	Freshwater gobies nei	04		
Eleotridae	Gudgeons, sleepers nei	04		
Osteichthyes	Freshwater fishes nei	04		535,005
Chanos chanos	Milkfish	04		
Scatophagus spp.	Scats	04		
Ariidae	Sea catfishes <i>nei</i>	04		
Mugiidae	Mullets nei	04		
Macrobrachium rosenbergii	Giant river prawn	04		
Portunus pelagicus	Blue swimming crab	04		
Scylla serrata	Indo-Pacific swamp crab	04		
Mollusca	Freshwater molluscs nei	04		
Palaemonidae	Freshwater prawns nei	04		
Crustacea	Freshwater crustaceans nei	04		550
Natantia	Natantia decapods 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		

Note: 1 Figures from FAO Fisheries and Aquaculture Information and Statistics Services

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					,		. IV
Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
375					-		
271					-		
36,586				2,001	-	4,875	
20,533				5,815	-	7,562	
1,084				1,604	-		
980					-		
6,469					-		
37,637				4,033	-	3,134	
18,684					-		
14,497					-		
64,995				9,666	-	12,003	
14,945					-		
				2,892	-		
2,216					-		
65,420	70,900	5,437	1,594,970	9,342	-	62,628	
				4,988	-		
				112	-		
				1,831	-		
				1,464	-		
15,455				1,311	_		
				447	-		
				909	-		
1,224				49,693	-		
12,042		652			-	965	
657					-	1,226	
7,936				5,123	-		
949					-		
502					-		
13					-		
1,298					-		
					-		210,00

Note: 1 Figures from Statistical Handbook of Viet Nam 2018

## 4.1 Inland Fishery Production by Species and by Fishing Area, 2018 $4.1.2\ \mbox{In Value}$

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Cyprinus carpio	Common carp	04		
Ctenopharyngodon idellus	Grass carp(=White amur)	04		
Cyclocheilichthys armatus	-	04		
Cyclocheilichthys apogon	Beardless barb	04		
Hampala macrolepidota	Hampala barb	04		
Labiobarbus festivus	Singal carp	04		
Osteochilus hasselti	Nilem carp	04		
Rasbora argyrotaenio	Silver rasbora	04		
Thynnichthys vaillanti	-	04		
Tor douronensis	Semah mahseer	04		
Leptobarbus hoeveni	Hoven's carp	04		
Barbodes balleroides	-	04		
Puntius binotatus	Spotted barbs	04		
Macrochirichthys macrochirus	Long pectoral-fin minnow	04		
Mystacoleucus padangensis	-	04		
Puntioplites waandersi	-	04		
Barbonymus schwanenfeldii	Tinfoil barb	04		
Barbonymus gonionotus	Silver barb	04		
Cyprinidae	Cyprinids <i>nei</i>	04		
Chromobotia macracanthus	Clown loach	04		
Oreochromis mossambicus	Mozambique tilapia	04		
Oreochromis niloticus	Nile tilapia	04		
Oreochromis(=Tilapia) spp.	Tilapias <i>nei</i>	04		
Scleropages formosus	Asian bonytongue	04		
Chitala lopis	Giant featherback	04		
Kryptopterus spp.	Glass catfishes	04		•••
Ompok bimaculatus	Butter catfish	04		
Mystus nigriceps	-	04		•••
Hemibagrus nemurus	Asian redtail catfish	04		
Pangasius djambal	-	04		
Pangasius spp.	Pangas catfishes <i>nei</i>	04		
Monopterus albus	Lai	04		
Mastacembelus erythrotaenia	Fire eel	04		

	T				1	1	US\$ 1,000
Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
29,743					-	3,439	
203					-		
1,142					-		
271					-		
2,105					-		
2,598					-		
15,297					-		
12,074					-		
664					-		
3,463					-		
18,789					-		
8,017					-		
783					-		
1,515					-		
2,279					-		
3,253					-		
4,587					-		
39,807					-	36,393	
2,219				21,744	-		
958					-		
30,393					-		
85,992					-	33,292	
				51,490	-		
87					-		
5,476					-		
20,938					-		
232					-		
9,356					-		
150,067					-		
53,985					-		
					-	5,140	
					-	2,991	
790					-		

# 4.1 Inland Capture Fishery Production by Species and by Fishing Area, 2018 4.1.2 In Value (Cont'd)

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Toxotes microlepis	Fire eel	04		
Anabas testudineus	Climbing perch	04		
Clarias spp.	Torpedo-shaped catfishes <i>nei</i>	04		
Anguilla spp.	River eels <i>nei</i>	04		
Pristolepis fasciata	Malayan leaffish	04		
Osphronemus goramy	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		
Gobiidae	Freshwater gobies <i>nei</i>	04		
Eleotridae	Gudgeons, sleepers nei	04		
Osteichthyes	Freshwater fishes <i>nei</i>	04		
Chanos chanos	Milkfish	04		
Scatophagus spp.	Scats	04		
Ariidae	Sea catfishes <i>nei</i>	04		
Mugiidae	Mullets <i>nei</i>	04		
Macrobrachium rosenbergii	Giant river prawn	04		
Portunus pelagicus	Blue swimming crab	04		
Scylla serrata	Indo-Pacific swam crab	04		
Natantia	Natantian decapods <i>nei</i>	04		
Mollusca	Freshwater molluscs <i>nei</i>	04		
Palaemonidae	Freshwater prawns <i>nei</i>	04		
Crustacea	Freshwater crustaceans <i>nei</i>	04		
Bivalvia	Clams, etc, <i>nei</i>	04		
Rana spp.	Frogs	04		
Invertebrate	Aquatic invertebrates <i>nei</i>	04		

Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
367					-		
60,853				2,741	-	8,539	
29,485				9,862	-	16,132	
2,659				3,854	-		
1,426					-		
23,358					-		
58,803				3,792	-	5,191	
26,176					-		
24,520					-		
149,001				17,950	-	37,192	
32,195					-		
				5,039	-		
4,521					-		
82,536		23,433	2,472,203	11,130	-	108,602	
				8,688	-		
				298	-		
				1,109	-		
				2,753	-		
71,263				4,896	-		
				1,529	-		
				4,855	-		
55,805				11,276	-		
4,036				4,737	-		
31,665		7,145			-	11,980	
1,842					-	3,992	
1,502					-		
1,049					-		
5,428					-		

### 4.2 Inland Fishery Production by Type of Water Bodies

### 4.2.1 In Quantiy

MT

Water Bodies	Brunei Darussalam	Cambodia <sup>1</sup>	Indonesia	Lao PDR
Total		535,555	612,753	70,900
Lakes				
Rivers				
Floodplain/rice fields				
Reservoirs				
Others				

Note: 1 Figures from FAO Fisheries and Aquaculture Information and Statistics Services

### 4.2.2 In Value

Water Bodies	Brunei Darussalam	Cambodia	Indonesia	Lao PDR
Total			1,170,570	
Lakes				
Rivers				
Floodplain/rice fields				
Reservoirs				
Others				

Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam¹
6,089	1,594,970	162,974	-	143,825	210,000
		162,974	-		
		102,771	-	44,333	
			-		
			-	27,707	
			-	71,785	

Note: 1 Figures from Statistical Handbook of Viet Nam 2018

Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
30,578	2,472,203	167,742	-	272,883	
			-		
			-	93,383	
			-		
			-	47,619	
			-	131,881	

### 5. AQUACULTURE STATISTICS

# 5.1 Aquaculture Production by Species and by Fishing Area, 2018 5.1.1 In Quantity

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia
Cyprinus carpio	Common carp	04		
Labeo rohita	Roho labeo	04		
Cirrhinus mrigala	Mrigal carp	04		
Catla catla	Catla	04		
Ctenopharyngodon idellus	Grass carp(=White amur)	04		
Hypophthalmichthys molitrix	Silver carp	04		
Hypophthalmichthys nobilis	Bighead carp	04		
Tor tambroides	Thai mahseer	04		
Osteochilus hasselti	Nilem carp	04		
Leptobarbus hoeveni	Hoven's carp	04		
Barbonymus gonionotus	Silver barb	04		
Barbonymus schwanenfeldii	Tinfoil barb	04		
Hypsibarbus spp.	-	04		
Cyprinidae	Cyprinids <i>nei</i>	04		
Oreochromis mossambicus	Mozambique tilapia	04		
Oreochromis mossambicus	Mozambique tilapia	71		
Oreochromis niloticus	Nile tilapia	04	7.72	
Oreochromis niloticus	Nile tilapia	71		
Oreochromis(=Tilapia) spp.	Tilapias <i>nei</i>	04		
Oreochromis(=Tilapia) spp.	Tilapias <i>nei</i>	57	-	-
Oreochromis(=Tilapia) spp.	Tilapias <i>nei</i>	71		
Piaractus brachypomus	Pirapatinga	04		
Hemibagrus nemurus	Asian redtail catfish	04		
Pangasianodon hypophthalmus	Striped catfish	04		
Pangasius pangasius	Pangas catfish	04		
Pangasius spp.	Pangas catfishes <i>nei</i>	04		
Clarias batrachus	Philippine catfish	04		
Clarias spp.	Torpedo-shaped catfishes nei	04		
Scortum barcoo	Barcoo grunter	04		
Monopterus albus	Lai	04		
Oxyeleotris marmorata	Marble goby	04		
Notopterus spp.	Knifefishes	04		

e Th	Singapore	pore Thailand	Viet Nar
		99	
		1,58	
		44	
5	4.85	4.85 .	
		67	
4	0.4	0.4	
7	1.47	1.47 .	
		23,12	↓ .
			↓ .
6	145.06	45.06 .	
5	69.85	69.85 216,60	2 .
-	-		
6	10.46	10.46 14,25	·   .
5	3.25	3.25 .	
7	5.7	5.7	
9	0.49	0.49	
4	64.34	64.34	∤ .

### 5.1 Aquaculture Production by Species and by Fishing Area, 2018 5.1.1 In Quantity (Cont'd)

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia <sup>1</sup>
Anabas testudineus	Climbing perch	04		
Osphronemus goramy	Giant gourami	04		
Trichogaster pectoralis	Snakeskin gourami	04		
Trichogaster spp.	Gouramis nei	04		
Helostoma temminckii	Kissing gourami	04		
Channa striata	Striped snakehead	04		
Channa micropeltes	Indonesian snakehead	04		
Channa spp.	Snakeheads(=Murrels) <i>nei</i>	04		
Clarias gariepinus x C. macrocephalus	Africa-bighead catfish, hybrid	04		
Bidyanus bidyanus	Silver perch	04		
Anguilla spp.	River eels <i>nei</i>	04		
Osteichthyes	Freshwater fishes nei	04		238,360
Osteichthyes	Freshwater fishes nei	71		
Chanos chanos	Milkfish	04		
Chanos chanos	Milkfish	57	-	-
Chanos chanos	Milkfish	71	10.9	
Lates calcarifer	Barramundi(=Giant seaperch)	04		
Lates calcarifer	Barramundi(=Giant seaperch)	57	-	-
Lates calcarifer	Barramundi(=Giant seaperch)	71	83.2	
Lateolabrax japonicus	Japanese seabass	71		
Mugil cephalus	Flathead grey mullet	71		
Mugilidae	Mullets nei	71		
Epinephelus malabaricus	Malabar grouper	71		
Epinephelus coioides	Orange-spotted grouper	71		
Epinephelus fuscoguttatus	Brown-marbled grouper	71		
Epinephelus lanceolatus	Giant grouper	71		
Epinephelus tukula	Potato grouper	71		
Epinephelus spp.	Groupers nei	57	-	-
Epinephelus spp.	Groupers nei	71	213.89	
Cromileptes altivelis	Humpback grouper	71		
Plectropomus maculatus	Spotted coralgrouper	71		
Lutjanus argentimaculatus	Mangrove red snapper	57	-	-

Note: 1 Figures from FAO Fisheries and Aquaculture Information and Statistics Services

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							M I
Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam¹
328		661				878	
130,406				94		1,367	
2,670		7				7,773	
						10	
5,474							
		69		1,182	4	1,810	
31,753		510			144.92	473	
8,824							
						106,201	
					22		
294							
73,380	108,200	336	4,598	220		15,660	2,905,200
188,071	-						
55,123	-	0.4		47,208			
	-	13,902		-	-		-
681,437	-	7,339	-	347,923	2,020.47		
		6.37					
	-		1,398			1,041	
7,775	-		-		844.42	38,237	
	-		-		13.98		
	-		-		358.67		
7,322	-		-				
	-		-		142.64		
	-		-		9.53		
	-	10.6	-		4.92		
	-		-		8.65		
	-		-		0.80		
	-	5,121		-	-	1,236	-
11,336	-	2,909	-		351.31	594	
	-		-		0.03		
	-		-		32.57		
	-	5,340		-	-		

Note: 1 Figures from Statistical Handbook of Viet Nam 2018

# 5.1 Aquaculture Production by Species and by Fishing Area, 2018 5.1.1 In Quantity (Cont'd)

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia <sup>1</sup>
Lutjanus argentimaculatus	Mangrove red snapper	71		
Lutjanus johnii	John's snapper	57	-	-
Lutjanus johnii	John's snapper	71		
Lutjanus erythropterus	Crimson snapper	71		
Lutjanus spp.	Snappers nei	71	10.8	
Eleutheronema tetradactylum	Fourfinger threadfin	71		
Bolbometopon muricatum	Green humphead parrotfish	71		
Siganus canaliculatus	White-spotted spinefoot	71		
Siganus spp.	Spinefeet(=Rabbitfishes) nei	71		
Serranidae	Groupers, seabasses nei	71		
Caranx spp.	Jacks, crevalles nei	71	7.1	
Trachinotus blochii	Snubnose pompano	57	-	-
Trachinotus blochii	Snubnose pompano	71	37.5	
Gnathanodon speciosus	Golden trevally	71		
Osteichthyes	Marine fishes <i>nei</i>	57	-	-
Osteichthyes	Marine fishes <i>nei</i>	71	50	1,810
Macrobrachium rosenbergii	Giant river prawn	04	0.96	
Cherax destructor	Yabby crayfish	04		
Portunus pelagicus	Blue swimming crab	71		
Scylla serrata	Indo-Pacific swamp crab	57	-	-
Scylla serrata	Indo-Pacific swamp crab	71		
Scylla olivacea	Orange mud crab	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		
Penaeus stylirostris	Blue shrimp	71	724.32	
Penaeus spp.	Penaeus shrimps <i>nei</i>	71		
Metapenaeus spp.	Metapenaeus shrimps <i>nei</i>	71		
Palaemonidae	Freshwater prawns <i>nei</i>	04		150
Panulirus polyphagus	Mud spiny lobster	71		

Note: 1 Figures from FAO Fisheries and Aquaculture Information and Statistics Services

							IVI I
Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam¹
	-	3,464	-		2.96		
	-	4,695		-	-		-
	-	1,907	-		34.71		
	-		-		82.19		
	-	2	-	109			
	-	35	-				
	-	85	-		50.82		
	-		-		0.84		
	-		-	304			
	-		-	477			
	-		-	3			
	-	1,680		-	-		-
	-	563	-	4	121.34		
	-		-		1.25		
	-	2,967		-	-		-
18,470	-	959	-	459	18.7	16	13,500
17,675		213	3,529	1		31,838	
		83			5.9		
	-		-		23.62		
		13		-	-		-
11,241		2	-	20,770	42.68		
	-		2,883	-	-		-
17,707	-		-	1,759		129	
21,402							
	-	8,301		-	-	62,039	-
469,517	-	27,706	-	12,527	12.6	295,894	
2,858			-				
	-	8,683	19,042	-	-	9,679	-
126,782	-	1,223	-	44,780	27.88	6,467	
	-		-				
	-		-		40.79	42	2,000
43,266	-		-	521		124	
	-						807,700
	-		-		57.76		

1 Figures from Statistical Handbook of Viet Nam 2018 Note:

# 5.1 Aquaculture Production by Species and by Fishing Area, 2018 5.1.1 In Quantity (Cont'd)

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam	Cambodia <sup>1</sup>
Panulirus spp.	Tropical spiny losters nei	71		
Crustacea	Marine crustaceans <i>nei</i>	71		1,280
Crassostrea gigas	Pacific cupped oyster	71		
Crassostrea iredalei	Slipper cupped oyster	71		
Crassostrea spp.	Cupped oysters nei	57	-	-
Crassostrea spp.	Cupped oysters nei	71		
Perna viridis	Green mussel	57	-	-
Perna viridis	Green mussel	71		
Anadara granosa	Blood cockle	57	-	-
Anadara granosa	Blood cockle	71		
Pteria penguin	Penguin wing oyster	71		
Mollusca	Marine molluscs nei	71		10,150
Polymesoda expansa	Broad geloina	71		
Rana catesbeiana	American bull frog	04		
Rana spp.	Frogs	04		
Hoplobatrachus rugulosus	East Asian bullfrog	04		
Trionyx sinensis	Chinese softshell turtle	04		
Holothuria scabra	Sandfish	71		
Holothuroidea	Sea cucumbers nei	71		
Eucheuma denticulatum	Spiny Eucheuma	71		
Gracilaria spp.	Gracilaria seaweeds	71		
Caulerpa spp.	Caulerpa seaweeds	71		
Kappaphycus alvarezii	Elkhorn sea moss	71		
-	Aquatic plants <i>nei</i>	71		2,200
Invertebrata	Aquetic invertebrates nei	57	-	-
-	Others	04		100
-	Others	71		

Note: 1 Figures from FAO Fisheries and Aquaculture Information and Statistics Services

Indonesia	Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam <sup>1</sup>
215	-	10	-	9			
	-		-				
	-		-		2.32		
	-		-	28,708			
	-	51		-	-	1,486	
	-	405	-			12,565	
	-			-	-	942	
	-	997	-	26,303	394	33,048	
	-	14,803		-	-	3	
	-	2,057	-			30,159	
50,657	-		-				
	-		-				
	-	28	-				
					516.19		
294							
						1,795	
						192	
	-	81	-				
344	-		-				
9,550,755	-		-	71,571			
1,338,617	-		-	99			
	-		-	1,218			
	-		-	1,405,413			
	-		-				
	-		136	-	-		
			***				130,400
	-		-				303,000

Note: 1 Figures from Statistical Handbook of Viet Nam 2018

## 5.1 Aquaculture Production by Species and by Fishing Area, 2018 $5.1.2\ \text{In Value}$

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam¹	Cambodia
Cyprinus carpio	Common carp	04		
Labeo rohita	Roho labeo	04		
Cirrhinus mrigala	Mrigal carp	04		
Catla catla	Catla	04		
Ctenopharyngodon idellus	Grass carp(=White amur)	04		
Hypophthalmichthys molitrix	Silver carp	04		
Hypophthalmichthys nobilis	Bighead carp	04		
Tor tambroides	Thai mahseer	04		
Osteochilus hasselti	Nilem carp	04		
Leptobarbus hoeveni	Hoven's carp	04		
Barbonymus gonionotus	Silver barb	04		
Barbonymus schwanenfeldii	Tinfoil barb	04		
Hypsibarbus spp.	-	04		
Cyprinidae	Cyprinids <i>nei</i>	04		
Oreochromis mossambicus	Mozambique tilapia	04		
Oreochromis mossambicus	Mozambique tilapia	71		
Oreochromis niloticus	Nile tilapia	04	42	
Oreochromis niloticus	Nile tilapia	71		
Oreochromis(=Tilapia) spp.	Tilapias <i>nei</i>	04		
Oreochromis(=Tilapia) spp.	Tilapias <i>nei</i>	57	-	-
Oreochromis(=Tilapia) spp.	Tilapias <i>nei</i>	71		
Piaractus brachypomus	Pirapatinga	04		
Hemibagrus nemurus	Asian redtail catfish	04		
Pangasius pangasius	Pangas catfish	04		
Pangasianodon hypophthalmus	Striped catfish	04		
Pangasius spp.	Pangas catfishes <i>nei</i>	04		
Clarias batrachus	Philippine catfish	04		
Clarias spp.	Torpedo-shaped catfishes <i>nei</i>	04		
Scortum barcoo	Barcoo grunter	04		
Monopterus albus	Lai	04		
Oxyeleotris marmorata	Marble goby	04		
Notopterus spp.	Knifefishes	04		
Anabas testudineus	Climbing perch	04		

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

US\$ 1,000

							US\$ 1,000
Indonesia	Lao PDR	Malaysia <sup>1</sup>	Myanmar	Philippines <sup>1</sup>	Singapore <sup>1</sup>	Thailand <sup>1</sup>	Viet Nam
872,458		2,637	145,178			1,558	
		19,049	658,754			1,781	•••
			48,124			652	
			39,694				
		989	27,349		49		
			20,876			875	
		4,344	9,793				
		1,002			225		
43,242							
8,321		6,896			38		
28,453		3,320	231,607			32,782	
		389					
		403					
				5,981			
17,767						11	
24,965	-		-		511		
1,599,009		12,340		245,246	325	313,972	
77,483	-		-	7,463			
		60,077	44,511	133,755			
	-	446		-	-		-
	-	1,558	-	19,983			
70,486		561	28,891				
11,816		6,349					
		41,321					
					152	12,372	
577,077			34,704				
					15		
1,056,484		49,202		9,041			
		390			105		
					4	5	
4,997		43			2,003	173	
						136	
689		1,830				2,317	

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

### 5.1 Aquaculture Production by Species and by Fishing Area, 2018 5.1.2 In Value (Cont'd)

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam <sup>1</sup>	Cambodia
Osphronemus goramy	Giant gourami	04		
Trichogaster pectoralis	Snakeskin gourami	04		
Trichogaster spp.	Gouramis nei	04		
Helostoma temminckii	Kissing gourami	04		
Channa striata	Striped snakehead	04		
Channa micropeltes	Indonesian snakehead	04		
Channa spp.	Snakeheads(=Murrels) <i>nei</i>	04		
Clarias gariepinus x C. macrocephalus	Africa-bighead catfish, hybrid	04		
Bidyanus bidyanus	Silver perch	04		
Anguilla spp.	River eels <i>nei</i>	04		
Osteichthyes	Freshwater fishes nei	04		
Osteichthyes	Freshwater fishes nei	71		
Chanos chanos	Milkfish	04		
Chanos chanos	Milkfish	71	58.69	
Lates calcarifer	Barramundi(=Giant seaperch)	04		
Lates calcarifer	Barramundi(=Giant seaperch)	57	-	-
Lates calcarifer	Barramundi(=Giant seaperch)	71	640	
Lateolabrax japonicus	Japanese seabass	71		
Mugil cephalus	Flathead grey mullet	71		
Mugilidae	Mullets <i>nei</i>	71		
Epinephelus malabaricus	Malabar grouper	71		
Epinephelus coioides	Orange-spotted grouper	71		
Epinephelus fuscoguttatus	Brown-marbled grouper	71		
Epinephelus lanceolatus	Giant grouper	71		
Epinephelus tukula	Potato grouper	71		
Epinephelus spp.	Groupers nei	57	-	-
Epinephelus spp.	Groupers nei	71	2,303	
Cromileptes altivelis	Humpback grouper	71		
Plectropomus maculatus	Spotted coralgrouper	71		
Lutjanus argentimaculatus	Mangrove red snapper	57	-	-
Lutjanus argentimaculatus	Mangrove red snapper	71		
Lutjanus johnii	John's snapper	57		

Note: 1 Figures are based on the exchange rate used in the ASEAN Statistics Database

US\$ 1,000

							US\$ 1,000
Indonesia	Lao PDR	Malaysia <sup>1</sup>	Myanmar	Philippines <sup>1</sup>	Singapore <sup>1</sup>	Thailand <sup>1</sup>	Viet Nam
319,908				65		2,569	
2,246		19				16,814	
						13	
6,523							
		274		1,951	40	4,410	
260,392		1,305			832	1,265	
16,719							
						144,473	
					440		
622							
77,149		997	5,518	338		25,114	
197,730	-		-				
77,271		1		76,158			
1,739,594	-		-	693,046	4,637		
		23					
	-	57,221	6,989	-	-		-
65,397	-	33,421	-		9,182	137,831	
	-		-		126		
	-		-		2,104		
7,698	-		-				
	-		-		2,705		
	-		-		159		
	-	153	-		81		-
	-		-		212		
	-		-		16		
	-	52		-	-	9,042	
222,480	-	31,619	-		5,342	4,254	-
	-		-		3		
	-		-		1,682		
	-	32,357		-	-		-
	-	21,202	-		34		
	-	26,463		-	-		-

Note: 1 Figures are based on the exchange rate used in the ASEAN Statistics Database

### 5.1 Aquaculture Production by Species and by Fishing Area, 2018 5.1.2 In Value (Cont'd)

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam¹	Cambodia
Lutjanus johnii	John's snapper	71		
Lutjanus erythropterus	Crimson snapper	71		
Lutjanus spp.	Snappers <i>nei</i>	71	108	
Eleutheronema tetradactylum	Fourfinger threadfin	57	-	-
Eleutheronema tetradactylum	Fourfinger threadfin	71		
Siganus canaliculatus	White-spotted spinefoot	71		
Siganus spp.	Spinefeet(=Rabbitfishes) nei	71		
Serranidae	Groupers, seabasses nei	71		
Caranx spp.	Jacks, crevalles nei	71	54.60	
Trachinotus blochii	Snubnose pompano	57	-	-
Trachinotus blochii	Snubnose pompano	71	288.46	
Gnathanodon speciosus	Golden trevally	71		
Osteichthyes	Marine fishes nei	57	-	-
Osteichthyes	Marine fishes <i>nei</i>	71		14,480
Macrobrachium rosenbergii	Giant river prawn	04	8.86	
Cherax destructor	Yabby crayfish	04		
Portunus pelagicus	Blue swimming crab	71		
Scylla serrata	Indo-Pacific swamp crab	57	-	-
Scylla serrata	Indo-Pacific swamp crab	71		
Scylla olivacea	Orange mud crab	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		
Penaeus stylirostris	Blue shrimp	71	5,014	
Penaeus spp.	Penaeus shrimps nei	71		
Metapenaeus spp.	Metapenaeus shrimps <i>nei</i>	71		
Panulirus polyphagus	Mud spiny lobster	71		
Panulirus spp.	Tropical spiny losters nei	71		

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

US\$ 1,000

034								
Indonesia	Lao PDR	Malaysia <sup>1</sup>	Myanmar	Philippines <sup>1</sup>	Singapore <sup>1</sup>	Thailand <sup>1</sup>	Viet Nam	
12,269	-		-		450			
	-		-		787			
	-	9	-	593				
	-	185		-	-		-	
	-	765	-					
	-		-		4			
	-		-	1,387				
	-		-	11,316				
	-		-	12				
	-	7,398		-	-		-	
	-	2,978	-	23	929			
	-		-		10			
	-	10,883		-	-		-	
90,621	-	5,076	-	1,189	105	38.17		
80,526	-	2,533	17,644	5		244,808		
	-	1,092			124			
	-		-		273			
		62		-	-		-	
41,284		14	-	170,313	1,091			
	-		26,552	-	-		-	
62,517	-		-	6,886		960		
96,004	-							
	-	42,762		-	-	315,707	-	
2,124,249	-	162,875	-	62,057	235	1,448,323		
15,425								
	-	61,178	152,335	-	-	74,558	-	
660,091	-	9,635	-	410,299	579	47,814		
			-					
	-		-		720	62		
83,071	-		-	2,465		393		
	-		-		3,358			
3,844	-	220	-	55				

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

### 5.1 Aquaculture Production by Species and by Fishing Area, 2018 5.1.2 In Value (Cont'd)

Scientific Name	FAO English Name	Fishing Area	Brunei Darussalam¹	Cambodia
Crassostrea iredalei	Slipper cupped oyster	71		
Crassostrea gigas	Pacific cupped oyster	71		
Crassostrea spp.	Cupped oysters nei	d oysters <i>nei</i> 57		-
Crassostrea spp.	Cupped oysters <i>nei</i>	71		
Perna viridis	Green mussel	57	-	-
Perna viridis	Green mussel	71		
Anadara granosa	Blood cockle	57	-	-
Anadara granosa	Blood cockle	71		
Pteria penguin	Penguin wing oyster	71		
Polymesoda expansa	Broad geloina	71		
Rana catesbeiana	American bull frog	04		
Rana spp.	Frogs	04		
Hoplobatrachus rugulosus	East Asian bullfrog	04		
Trionyx simensis	Soft-shell turtle	04		
Holothuria scabra	Sandfish	71		
Holothuroidea	Sea cucumbers nei	71		
Eucheuma denticulatum	Spiny Eucheuma	71		
Gracilaria spp.	Gracilaria seaweeds	71		
Caulerpa spp.	Caulerpa seaweeds	71		
Kappaphycus alvarezii	Elkhorn sea moss	71		
Invertebrata	Aquetic invertebrates nei	57	-	-

Note: 1 Figures are based on the exchange rate used in the ASEAN Statistics Database

US\$ 1,000

Indonesia	Lao PDR	Malaysia <sup>1</sup>	Myanmar	Philippines <sup>1</sup>	Singapore <sup>1</sup>	Thailand <sup>1</sup>	Viet Nam
	-		-	5,862			
	-		-		7		
	-	149		-	-	3,520	
	-	953	-			9,601	
	-			_	-	80	
	-	1,762	-	9,721	481	8,881	
	-	18,909		-	-	9	
	-	2,155	-			139,768	
31,914	-		-				
	-	28	-				
					3,825		
622							
						3,852	
						1,089	
	-	647	-				
3,018	-		-				
1,338,831	-		-	6,415			
140,830	-		-	12			
	-		-	707			
	-		-	200,158			
	-		41	_	-		

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

# **5.2** Aquaculture Production by Species of Ornamental Fishes, 2018 5.2.1 In Quantity

Scientific Name	FAO English Name	Brunei Darussalam	Cambodia	Indonesia
Akysis prashadi	Indawgyi stream catfish			
Atyopsis moluccensis	Moluccas brush shrimp			
Badis badis	Badis			
Botia histrionica	Golden zebra loach			
Botia kubotai	-			
Cepaea hortensi	White-lipped snail			
Channa burmanica	-			
Channa harcourtbutleri	Burmese snakehead			
Channa pulchra	-			
Danio albolineatus	Pearl danio			
Danio choprae	-			
Danio erythromicron	-			
Danio kerri	Blue danio			
Danio kyathit	-			
Danio margaritatus	Galaxy rasbora			
Danio feegradei	-			
Datnioides microlepis	-			
Dario hysginon	-			
Devario auropurpureus	-			
Devario browni	-			
Devario sondhii	-			
Epalzeorhynchos kalopterus	Flying fox			
Gagata cenia	Indian gagata			
Garra flavatra	-			
Garra spilota	-			
Leiodon cutcutia	-			
Macrognathus zebrinus	Zebra spiny eel			
Microdevario kubotai	-			
Microdevario nana	-			
Microrasbora rubescens	-			
Parasphaerichthys ocellatus	-			
Puntius spp.	Asian barbs <i>nei</i>			
Psammogobius biocellatus	Sleepy goby			
Sawbwa resplendens	Sawbwa barb			

1,000 pcs.

Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
		2,000				
		100,160				
		6,150				
		14,660				
		12,400				
		12,400				
		2,963				
		1,140				
		4,720				
		12,350				
		264,850				
		146,475				
		2,400				
		67,425				
		139,650				
		600				
		2,410				
		8,400				
		1,600				
		2,470				
		6,500				
		1,310				
		40				
		73,385				
		9,920				
		90				
		3,550				
		1,600				
		1,500				
		4,200				
		5,400				
		270,970				
		965				
		15,200				

# **5.2** Aquaculture Production by Species of Ornamental Fishes, 2018 5.2.1 In Quantity (Cont'd)

Scientific Name	FAO English Name	Brunei Darussalam	Cambodia	Indonesia
Schistura balteata	-			
Toxotes blythii	-			
Toxotes microlepis	Smallscale archerfish			
Trichogaster labiosa	Thick-lipped gourami			
Yunnanilus brevis	-			
Osteichthyes	Freshwater fishes nei			

1,000 pcs.

Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
		32,700				
		2,110				
		2,175				
		70				
		11,900				
				78,084		

## **5.2** Aquaculture Production by Species of Ornamental Fishes, 2018 5.2.2 In Value

Scientific Name	FAO English Name	Brunei Darussalam	Cambodia	Indonesia
Akysis prashadi	Indawgyi stream catfish			
Atyopsis moluccensis	Moluccas brush shrimp			
Badis badis	Badis			
Botia histrionica	Golden Zebra Loach			
Botia kubotai	-			
Cepaea hortensi	White-lipped snail			
Channa burmanica	-			
Channa harcourtbutleri	Burmese snakehead			
Channa pulchra	-			
Danio albolineatus	Pearl danio			
Danio choprae	-			
Danio erythromicron	-			
Danio kerri	Blue danio			
Danio kyathit	-			
Danio margaritatus	Galaxy rasbora			
Danio feegradei	-			
Datnioides microlepis	-			
Dario hysginon	-			
Devario auropurpureus	-			
Devario browni	-			
Devario sondhii	-			
Epalzeorhynchos kalopterus	Flying fox			
Gagata cenia	Indian gagata			
Garra flavatra	-			
Garra spilota	-			
Leiodon cutcutia	-			
Macrognathus zebrinus	Zebra spiny eel			
Microdevario kubotai	-			
Microdevario nana	-			
Microrasbora rubescens	-			
Parasphaerichthys ocellatus	-			
Puntius spp.	Asian barbs <i>nei</i>			
Psammogobius biocellatus	Sleepy goby			
Sawbwa resplendens	Sawbwa barb			

US\$ 1,000

Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
		300				•••
		22,123				
		615				
		1,466				
		3,230				
		1,240				
		982				
		570				
		3,270				
		1,798				
		26,745				
		17,362				
		240				
		6,782				
		26,405				
		60				
		601				
		840				
		240				
		247				
		650				
		131				
		6				
		19,586				
		1,488				
		18				
		610				
		320				• • •
		150				• • •
		420				
		540				
		30,917				
		96				•••
		1,580				•••

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## 5.2 Aquaculture Production by Species of Ornamental Fishes, 20185.2.2 In Value (Cont'd)

Scientific Name	FAO English Name	Brunei Darussalam	Cambodia	Indonesia
Schistura balteata	-			
Toxotes blythii	-			
Toxotes microlepis	Smallscale archerfish			
Trichogaster labiosa	Thick-lipped gourami			
Yunnanilus brevis	-			
Osteichthyes	Freshwater fishes nei			

US\$ 1,000

Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
		4,608				
		633				
		435				
		7				
		1,310				
		36,443				

### 5.3 Seed Production from Aquaculture, 20185.3.1 Brunei Darussalam

Scientific Name	FAO English Name	Total (million pcs.)	Wild Stock (million pcs.)	Aquaculture Practices (million pcs.)	No. of operational units or facilities
Oreochromis(=Tilapia) spp.	Tilapias <i>nei</i>	0.0762	-	0.0762	3
Siluriformes	Catfishes <i>nei</i>	0.034	-	0.034	1
Lates calcarifer	Barramundi(= Giant seaperch)	0.1629	-	0.1629	6
Lutjanus malabaricus	Malabar red Snapper	0.0004	-	0.0004	2
Epinephelus fuscoguttatus + Epinephelus lanceolatus	Hydrid grouper	0.0865	-	0.0865	3
Trachinotus auratus/T. blochii	Golden Pompano/ Snubnose Pompano	0.03	-	0.03	2
Macrobrachium rosenbergii	Giant river prawn	0.03	-	0.03	1
Penaeus stylirostris	Blue shrimp	109.96	-	109.96	1

## 5.3 Seed Production from Aquaculture, 20185.3.2 Myanmar

Scientific Name	FAO English Name	Total (million pcs.)	Wild Stock (million pcs.)	Aquaculture Practices (million pcs.)	No. of operational units or facilities
Labeo rohita	Roho labeo	434.62	64.24	370.38	27
Cyprinus carpio	Common carp	41.82	10.91	30.91	27
Catla catla	Catla	7.99	0.01	7.98	27
Cirrhinus mrigala	Mrigal carp	6.20	0	6.20	27
Ctenopharyngodon idellus	Grass carp(=White amur)	7.34	0.19	7.14	27
Hypophthalmichthys molitrix	Silver carp	6.72	0.05	6.67	27
Hypophthalmichthys nobilis	Bighead carp	3.15	0	3.15	27
Oreochromis(=Tilapia)	Tilapia <i>nei</i>	14.33	3.83	10.50	27
Pangasius spp.	Pangas catfishes <i>nei</i>	9.31	0	9.31	27
Osteichthyes	Freshwater fishes <i>nei</i>	99.69	34.63	65.06	27
Macrobrachium rosenbergii	Giant river prawn	1.14	0	1.14	1
Penaeus monodon	Giant tiger prawn	6.13	1.53	4.6	4

## **5.3 Seed Production from Aquaculture, 2018** 5.3.3 Singapore

Scientific Name	FAO English Name	Total (million pcs.)	Wild Stock (million pcs.)	Aquaculture Practices (million pcs.)	No. of operational units or facilities
Lates calcarifer	Barramundi(=Giant seaperch)	1.3	-	1.8	3
Epinephelus spp.	Groupers nei	0.210	-	0.210	4
Caranx ignobilis	Giant trevally	0.012	-	0.013	1
Lutjanus erythropterus	Crimson snapper	3.636	-	3.636	1
Mugil cephalus	Mullet	0.629	-	0.629	1
Trachinotus blochii	Snubnose pompano	0.455	-	0.455	1
Eleutheronema tetradactylum	Four finger threadfin	1.990	-	1990	1
Chanos chanos	Milkfish	7.13	-	7.22	3
Epinephelus lanceolatus	Giant grouper	0.003	-	0.003	2
Epinephelus coioides	Orange-spotted grouper	0.098	-	0.098	1
Scortum barcoo	Barcoo grunter	0.245	-	0.245	2
Lutjanus johnii	John's snapper	0.005	-	0.005	1
Macrobrachium rosenbergii	Giant river prawn	0.025	-	0.025	1
Panulirus polyphagus	Mud spiny lobster	3.690	-	3.690	1

### 6. PRICE OF FRESH FISH

### 6.1 Producer Price for Capture Fishery Production by Species, 2018

Scientific Name	FAO English Name	Brunei Darussalam	Cambodia	Indonesia	
Cyprinus carpio	Common carp				
Labeo rohita	Roho labeo				
Cirrhinus microlepis	Small scale mud carp				
Ctenopharyngodon idellus	Grass carp				
Hypophthalmichthys nobilis	Bighead carp				
Leptobarbus hoeveni	Hoven's carp				
Catla catla	Catla				
Barbonymus gonionotus	Silver barb				
Oreochromis niloticus	Nile tilapia				
Oreochromis niloticus x O. mossambicus	Red tilapia				
Oreochromis mossambicus	Mozambique tilapia				
Phalacronotus bleekeri	-				
Chitala chitala	Clown knifefish				
Notopterus notopterus	Bronze featherback				
Clarias batrachus	Philippine catfish				
Clarias nieuhofii	Freshwater catfish				
Clarias gariepinus x C. macrocephalus	Africa-bighead catfish, hybrid				
Clarias spp.	Torpedo-shaped catfishes <i>nei</i>				
Pangasius pangasius	Pangas catfish				
Pangasius spp.	Pangas catfishes <i>nei</i>				
Anguilla bicolor	River eels				
Anguilla spp.	River eels <i>nei</i>				
Mastacembelus dayi	Spotted spiny eel				
Oxyeleotris marmorata	Marble goby				
Anabas testudineus	Climbing perch				
Osphronemus goramy	Giant gourami				
Trichogaster pectoralis	Snakeskin gourami				
Channa striata	Striped snakehead				
Anodontostoma chacunda	Chacunda gizzard shad	2.11			
Hilsa kelee	Kelee shad				
Tenualosa ilisha	Hilsa shad				
Tenualosa toli	Toli shad	2.82			
Chanos chanos	Milkfish				

US\$/kg.

Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
	2.24	2.34			1.55	
		1.54			1.24	
					1.24	
	2.60					
	2.07	1.46				
	3.83					
		1.32				
		1.83			2.17	
	2.10		2.20		1.86	
		•••			2.26	
		1.46				
					7.74	
					2.48	
					2.17	
		2.20				
		2.20				
					2.48	
	1.45					
	2.20	2.56				
					1.24	
		1.46				
					4.64	
					2.48	
	9.24	•••				
					2.79	
					1.86	
					2.79	
		2.93			3.71	
	1.06					
	4.15					
		5.86				
					5.57	
			2.97			

## 6.1 Producer Price for Capture Fishery Production by Species, 2018 (Cont'd)

Scientific Name	FAO English Name	Brunei Darussalam	Cambodia	Indonesia
Lates calcarifer	Barramundi(=Giant seaperch)	7.10		
Psettodes erumei	Indian halibut			
Harpadon nehereus	Bombay-duck			
Saurida tumbil	Greater lizardfish	0.70		
Saurida spp.	-			
Arius spp.	-	1.40		
Mugilidae	Mullets <i>nei</i>			
Caesio caeruluarea	Blue and Gold fusilier	2.11		
Caesio cuning	Redbelly yellowtail fusilier			
Caesio spp.	Fusillers caesio nei	3.80		
Epinephelus coioides	Orange-spotted grouper			
Epinephelus spp.	Groupers nei	5.81		
Mene maculata	Moonfish			
Priacanthus spp.	Bigeyes nei			
Sillaginidae	Sillago-whitings			
Sciaenidae	Croakers, drums nei			
Lutjanus spp.	Snappers <i>nei</i>			
Lutjanidae	Snappers, jobfishes <i>nei</i>			
Nemipterus spp.	Threadfin breams nei	3.81		
Leiognathus spp.	Ponyfishes(=Slipmouths)	2.14		
Haemulidae (=Pomadasyidae)	Grunts, sweetlips nei			
Upeneus spp.	Goatfishes			
Polynemidae	Threadfins, tasselfishes nei			
Siganus spp.	Spinefeet <i>nei</i>			
Trichiurus lepturus	Largehead hairtail			
Amblygastern sirm	Spotted sardinella	0.70		
Sardinella gibbosa	Goldstripe sardinella	1.95		
Sardinella spp.	Sardinellas nei			
Dussumieria spp.	Rainbow sardines nei	0.16		
Stolephorus spp.	Stolephorus anchovies			
Chirocentrus dorab	Dorab wolf-herring			
Chirocentrus spp.	Wolf-herrings <i>nei</i>			

US\$/kg.

Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
	4.35	3.08		5.54	4.33	
					2.17	
	0.98	1.10				
	0.65			2.35		
1.38			1.87	1.24		
				3.31	5.57	
			4.63			
	1.67			3.28	3.09	
		3.37		6.16		•
	4.29				11.14	
				3.38		
					2.17	
				2.99	3.09	
				2.34	1.55	
				4.54		
				2.27	5.26	
	2.16	1.32	4.81	5.31	1.86	
	0.98		3.97	2.58	0.93	
				2.93	2.48	
				2.67		
				11.49	4.02	
				3.11		
				3.38	2.48	
	0.82					
	1.05					
	1.84		2.12			
					2.17	
				4.58		

# 6.1 Producer Price for Capture Fishery Production by Species, 2018 (Cont'd)

Scientific Name	FAO English Name	Brunei Darussalam	Cambodia	Indonesia
Clupeoidei	Clupeoids nei			
Thunnus albacares	Yellowfin tuna	1.58		
Katsuwonus pelamis	Skipjack tuna			
Scomberomorus spp.	Seerfishes nei			
Scomber japonicus	Chub mackerel			
Lactarius lactarius	False trevally			
Rachycentron canadum	Cobia			
Decapterus spp.	Scads nei	1.16		
Caranx sexfasciatus	Bigeye travally	2.89		
Caranx tille	Tille travally	2.44		
Caranx spp.	Jacks, crevalles nei	2.89		
Carangidae	Carangids nei			
Alectis indicus	Indian threadfish	3.20		
Carangoides spp.	-			
Atule mate	Yellowtail scad	4.48		
Gnathanodon speciosus	Golden trevally	3.97		
Alepes djedaba	Shrimp scad	3.56		
Alepes spp.	-	2.89		
Parastromateus niger	Black pomfret			
Selar crumenophthalmus	Bigeye scad	1.03		
Selar boops	Oxeye scad			
Selaroides leptolepis	Yellowstripe scad	1.81		
Seriolina nigrofasciata	Blackbanded trevally			
Megalaspis cordyla	Hardtail scad			
Rastrelliger kanagurta	Indian mackerel	2.76		
Rastrelliger spp.	Indian mackerel <i>nei</i>			
Stromateidae	Butterfishes, pomfrets nei			
Pampus argenteus	Silver pomfret			
Sphyraena spp.	Barracudas nei			
Cynoglossidae	Tonguefishes nei			
Congridae	Conger eels			
Elasmobranchii	Sharks, rays, skates, etc. nei			
Rajiformes	Rays, stingrays, mantas <i>nei</i>			

US\$/kg.

Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
				2.93		
	3.66					
				3.04		
				4.59		
					2.79	
					13.93	
					4.49	
	1.64	•••		2.98		
	3.18					
	3.19			2.83		
				2.55	1.86	
	2.63					
	3.19					
	1.77					
	2.90					
	2.59					
					8.67	
		•••				
	1.76					
					5.57	
					1.24	
			3.62		2.17	
				3.01	2.57	
				9.00		
		•••			18.57	
				2.94	1.86	
					2.17	
					2.17	
				2.92	1.55	
				3.01	1.86	

# 6.1 Producer Price for Capture Fishery Production by Species, 2018 (Cont'd)

Scientific Name	FAO English Name	Brunei Darussalam	Cambodia	Indonesia
-	Spotted jawfishes			
Osteichthyes	Marine fishes <i>nei</i>			
Portunus pelagicus	Blue swimming crab	1.94		
Scylla serrata	Indo-Pacific swamp crab			
Penaeus merguiensis	Banana prawn	6.88		
Penaeus monodon	Giant tiger prawn	12.71		
Penaeus latisulcatus	Western king prawn			
Penaeus semisulcatus	Green tiger prawn	9.91		
Penaeus spp.	Penaeus shrimps nei	6.70		
Metapenaeus spp.	Metapenaeus shrimps <i>nei</i>			
Palaemonidae	Freshwater prawns			
Panulirus spp.	Tropical spiny lobsters <i>nei</i>			
Thenus orientalis	Flathead lobster			
Loligo spp.	Common squids <i>nei</i>	1.71		
Sepioteuthis lessoniana	Bigfin reef squid			
Natantia	Natantia decapods <i>nei</i>			
Octopodidae	Octopuses nei			
Brachyura	Marine crabs <i>nei</i>			
Scyllaridae	Slipper lobsters nei			
Pectinidae	Scallops <i>nei</i>			
Perna viridis	Green mussel			
Modiolus spp.	Horse mussels <i>nei</i>			
Paphia spp.	Short neck clams nei			
Anadara granosa	Blood cockle			
Sepiidae/Sepiolodae	Cuttlefish, squids <i>nei</i>			
Rana spp.	Frogs			

US\$/ka

Lao PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nan
					5.57	
				2.90		
					9.28	
				8.90	7.74	
					9.90	
					7.74	
					10.83	
					5.57	
					27.85	
				14.40		
					7.74	
				3.86		
					7.74	
				9.36		
					4.02	
				5.37		
				7.25		
					3.71	
					1.49	
					0.93	
					1.55	
					2.48	
				3.58	6.19	
					3.09	

### 7. FISHERS

### 7.1 Number of Fishers by Working Status, 2018

	Brunei Darussalam	Cambodia	Indonesia	Lao PDR
Total	2,312		6,924,395	
Marine Capture Fishery			2,241,784	
Full-time				
Part-time				
Occasional				
Status Unspecified				
Inland Capture Fishery			412,790	
Full-time				
Part-time				
Occasional				
Status Unspecified				
Aquaculture			4,206,287	
Full-time				
Part-time				
Occasional				
Status Unspecified				
Unspecified	2,312		63,534	
Full-time	1,272			
Part-time	1,040			
Occasional				
Status Unspecified			•••	

Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
151,148			826		
128,148			69		
128,148			69		
4,703					
4,703					
18,297			757		
18,297			757		
			•••		