REPUBLIC OF THE PHILIPPINES
PHILIPPINE STATISTICS AUTHORITY

Fisheries Situation Report for Major Species

January to December 2022

REPUBLIC OF THE PHILIPPINES

HIS EXCELLENCY
PRESIDENT FERDINAND ROMUALDEZ MARCOS, JR.

PHILIPPINE STATISTICS AUTHORITY

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FOREWORD

The **Fisheries Situation Report for Major Species, January to December 2022** is an annual statistical report on fisheries. It contains data on volume and value of fish production, and farmgate prices by major species.

This publication is a compilation of survey results for the four (4) fisheries subsectors, namely, commercial, municipal and inland fisheries, and aquaculture. The volume and value of production of different fish species are generated through the conduct of Quarterly Commercial Fisheries Survey (QCFS), Quarterly Municipal Fisheries Survey (QMFS), Quarterly Inland Fisheries Survey (QIFS), and Quarterly Aquaculture Survey (QAqS). Administrative-based data, sourced from the Philippine Fisheries Development Authority (PFDA), Local Government Units (LGUs), and private landing centers are also part of the compilation.

As in other publications released by the PSA, we invite our readers and data users to give comments and suggestions for further improvement of this report.

for
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Quezon City, Philippines
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TECHNICAL NOTES

I. Introduction

This Fisheries Situation Report is released every quarter, which presents the data on the volume and value of production of fisheries during the reference quarter. It contains information on the current situation by major species of the four fisheries subsectors, namely, commercial, municipal and inland fisheries, and aquaculture. The data are the results of the four (4) fisheries surveys regularly conducted by the Philippine Statistics Authority (PSA). These surveys are the following:

a. Quarterly Commercial Fisheries Survey (QCFS);
b. Quarterly Municipal Fisheries Survey (QMFS);
c. Quarterly Inland Fisheries Survey (QIFS); and
d. Quarterly Aquaculture Survey (QAqS).

The data also include compilation from administrative records of Philippine Fisheries Development Authority (PFDA), Local Government Units (LGUs), and privately-managed landing centers.

Geographic classification is based on the latest Philippine Standard Geographic Code (PSGC). The 20 major species highlighted in this report were identified based on their value of production at constant 2018 prices.

II. Data Collection

A. Surveys

1. Quarterly Commercial Fisheries Survey (QCFS)

a. Data collection procedure

The QCFS gathers data on volume of unloading of sample boats in the sample traditional landing centers of the subsector in 57 provinces. The hired Statistical Researchers (SRs) conduct the interview of sample boats in the landing center during the data collection days. The data collection is done every week during the reference quarter.

b. Survey Questionnaire

A structured survey form (QCFS Form 1) is used to collect information. The information being gathered are volume of unloading and price per kilogram of the top 31 species and those under the others category. The data items collected include sample identification, boat information, fishing effort, and fish unloading. Correspondingly, the schedule of data collection and daily information per month are recorded in the QCFS Form 1b.

2. Quarterly Municipal Fisheries Survey (QMFS)

a. Data collection procedure

The QMFS gathers data on volume of unloading of sample boats in the sample traditional landing centers of the subsector in 67 provinces. The SRs conduct interview of sample boats in the landing center during the data collection days. The data collection is done every week during the reference quarter.

b. Survey Questionnaire

A structured survey form (QMFS Form 1) is used to collect information. The information being gathered are volume of unloading and price per kilogram of the top 31 species and those under the others category. The data items collected include sample identification, boat information, fishing effort, and fish unloading. Correspondingly, the schedule of data collection and daily information per month are recorded in the QMFS Form 1b.

3. Quarterly Inland Fisheries Survey (QIFS)

a. Data collection procedure

The QIFS gathers data on volume of catch of sample inland fishing households. The SRs inquire about the monthly catch of the sample households during the reference quarter in 75 provinces. The data collection is done during second to third week of the last month of the quarter, except on the last quarter of the year where data collection is a month earlier.

b. Survey Questionnaire

QIFS Form 1 is utilized to obtain data from household head or any knowledgeable member of the sample household. The survey form captures the volume of catch and price per kilogram of the 34 inland species.

4. Quarterly Aquaculture Survey (QAqS)

a. Data collection procedure

The QAqS provides the volume and value of production for the aquaculture subsector. It covers aquafarm types in various water environment such as brackishwater fishpond, pen and cage; freshwater fishpond, pen and cage; marine pen and cage; oyster; mussel; seaweed; rice fish; and small farm reservoir (SFR). The respondents are the owner, operator and/or caretaker of the sample aquafarms. The data collection is done every second to third week of the last month of the quarter, except on the last quarter of the year where data collection is a month earlier.

b. Survey Questionnaire

Data gathered using the prescribed collection forms include volume of harvests of species cultured and price per kilogram of the aquafarm. The survey covers 17 species. The QAqS utilizes two survey forms, namely, QAqS Form 1 (Fishpond, Pen, Cage, Rice Fish, and Small Farm Reservoir) and QAqS Form 2 (Oyster, Mussel, and Seaweed).

B. Compilation of Administrative-based data from Commercial and Municipal Non-Traditional Landing Centers

1. Data collection procedure

Data collection is done on a monthly basis depending on the availability of data in the landing centers. The PSO staff and/or SR gather data from administrative records of non-traditional landing centers such as those that are managed by the Philippine Fisheries Development Authority (PFDA), Local Government Units (LGUs) and private entities for commercial subsector, and PFDA and LGUs only for municipal subsector.

2. Collection Forms

The collection forms are QCFS Form 2 and QMFS Form 2. These forms gather volume, price of fish species, and fishing ground.

III. Sampling Design

A. Quarterly Commercial Fisheries Survey (QCFS)

1. Sampling Frame

   The updated list of commercial fish landing centers serves as the sampling frame in the selection of sample landing centers. The said list was generated from the Listing of Marine Fish Landing Centers (LMFLC) which was conducted in September 2021. The enumeration unit for the survey is the landing center.

2. Sample Selection Procedure

   The selection of sample landing centers for QCFS utilizes probability proportional to size systematic sampling (PPS-Sys) where the average daily unloading (ADU) is the size measure.

   First stage : Selection of Landing Centers (PPS)
   Second stage: Selection of Boats (Systematic)

   For the first stage, the sampling rate is 25 percent of the total number of landing centers in the province with a minimum of three (3) sample landing centers. If the total boats in a landing center is greater than eight (8), eight boats are sampled. Otherwise, all boats in the landing center are sampled. The frequency of data collection is one day per week, separate for AM and PM unloadings. The sample operators can be boat operator, technician, fisherman, and/or trader.

3. Estimation Procedure

   a. Weight

   <u>PSU Weight</u>

   The PSU weight is computed using the following formula:

$$\alpha_{ij} = \frac{X}{aX_i}$$

where:

α_{ij} - PSU weight of operator *j* in LC *i*
X - total Average Daily Unloading for the province
X_i - total Average Daily Unloading for LC *i*
a - number of sample landing centers for the province

SSU Weight

The SSU weight is computed using the following formula:

$$\beta_{ijmk} = \frac{B_{ijmk}}{b_{ijmk}}$$

where:

β_{ijmk} - SSU weight of boat *j* in landing center *i* for week *k* of month *m*

B_{ijmk} - total number of sample boats in landing center *i* for week *k* of month *m*

b_{ijmk} - number of sample boats in landing center *i* for week *k* of month *m*

b. Sampling weight

Base Weight

The base weight is calculated as the product of PSU weights and SSU weights. The formula below illustrates the base weight calculation:

$$w_{ijmk} = \alpha_{ij} * \beta_{ijmk}$$

where:

w_{ijmk} - base weight of boat *j* in landing center *i* for week *k* of month *m*

α_{ij} - PSU weight of boat *j* in landing center *i*

β_{ijmk} - SSU weight of boat *j* in landing center *i* for week *k* of month *m*

Adjustment Base Weight

To take into account the data collection day and the number of fishing days per week, the base weight is adjusted as follows:

$$w'_{ijmk} = w_{ijmk} * \frac{F_{imk}}{c_{imk}}$$

where:

w'_{ijmk} - adjusted base weight of operator *j* in landing center *i* at week *k* of month *m*

w_{ijmk} - base weight of operator *j* in landing center *i* at week *k* of month *m*

F_{imk} - total number of fishing days in landing center *i* for week *k* of month *m*

c_{imk} - total number of data collection days in landing center *i* for week *k* of month *m*

Adjustment Factor

To take into account the fishing days on weeks without data collection, the adjustment formula per week is obtained as follows:

$$A_{im} = \frac{F_{im}}{f_{im}}$$

where:

$$F_{im} = \sum_{k=1}^{n_k} F_{imk} \qquad f_{im} = \sum_{k=1}^{n_k} F_{imk}\, c'_{imk}$$

A_{im} - adjustment factor for non-fishing days in month m of landing center *i*
F_{im} - total number of fishing days for month *m* of landing center *i*
f_{im} - total number of represented fishing days for month *m* of landing center *i*
F_{imk} - total number of fishing days in landing center *i* for week *k* of month *m*
c'_{imk} - total number of actual data collection days in landing center *i* for week *k* of month m (1 if with data collection, 0 otherwise)
n_k - number of weeks in month *m*

Final Weight

The final weight is then computed by obtaining the product of the adjusted base weight and the adjustment factor.

$$w_{ijmk,f} = w'_{ijmk} * A_{im}$$

where:

$w_{ijmk,f}$ - final weight of operator *j* in landing center *i* at for week *k* of month *m*
w'_{ijmk} - adjusted base weight of operator *j* in landing *i* for week *k* of month *m*
A_{im} - adjustment factor for non-fishing days of landing center *i* for month *m*

c. Estimation of Totals

The estimate of the provincial total volume of production is computed using the following formula:

$$\hat{Y}_p = \sum_{i=1}^{a} \sum_{m=1}^{3} \sum_{j=1}^{n_i} w_{ijmk,f} * y_{ijmk}$$

where:

$\hat{Y}_p$ - provincial total of fish unloadings

$w_{ijmk,f}$ - final weight of operator *j* in landing center *i* for week *k* of month *m*

y_{ijmk} - volume of production of operator *j* in landing center *i* for week *k* of month *m*

a - total number of sampled landing centers in the province

n_i - sampled number of operators in landing center *i*

The estimate of the regional total volume of production is computed using the following formula:

$$\hat{Y}_r = \sum_{p=1}^{n_p} \hat{Y}_p$$

where:

$\hat{Y}_r$ - estimate of total fish unloadings for the region

$\hat{Y}_p$ - estimate of total fish unloadings for the province

n_p - total number of provinces in the region

The estimate of the national total volume of production is computed using the following formula:

$$\hat{Y} = \sum_{r=1}^{n_r} \hat{Y}_r$$

where:

$\hat{Y}$ - estimate of total fish unloadings for the national

$\hat{Y}_r$ - estimate of total fish unloadings for the region

n_r - total number of regions in the national

B. Quarterly Municipal Fisheries Survey (QMFS).

1. Sampling Frame

The updated list of municipal fish landing centers serves as the sampling frame in the selection of sample landing centers. The said list was generated from the Listing of Marine Fish Landing Centers (LMFLC) which was conducted in September 2021.The enumeration unit for the survey is the landing center.

2. Sample Selection Procedure

The selection of sample landing centers for QMFS uses two-stage stratified sampling design with landing center serving as the primary sampling unit

(PSU) and the boats unloaded as the secondary sampling Unit (SSU). The average daily unloading (ADU) serves as the stratification variable.

First stage : Selection of Landing Centers per Stratum (Systematic)
Second stage: Selection of Boats (Systematic)

The sampling rate is 10 percent of the total number of landing centers in the province but with a minimum of 3 sample landing centers. For each sample landing center, 10 boats are selected if total boats unloaded are more than 10, but complete enumeration if total boats is 10 or less. The frequency of data collection is one day per week, separate for AM and PM unloadings. The sample operators can be boat operator, technician, fisherman, and/or trader.

3. Estimation Procedure

a. Weights

PSU Weight

The PSU weight is computed using the following formula:

$$\alpha_{hij} = \frac{A_h}{a_h}$$

where:
α_{hij} - PSU weight of boat *j* in landing center *i* at stratum *h*
A_h - total number of landing centers for the province at stratum *h*
a_h - number of sample landing centers for the province at stratum *h*

SSU Weight

The SSU weight is computed using the following formula:

$$\beta_{hijmk} = \frac{B_{hijmk}}{b_{hijmk}}$$

where:
β_{hijmk} - SSU weight of boat *j* in landing center *i* at stratum *h* for week *k* of month *m*
B_{hijmk} - total number of sample boats in landing center *i* at stratum *h* for week *k* of month *m*
b_{hijmk} - number of sample boats in landing center *i* at stratum *h* for week *k* of month *m*

b. Sampling weight

Base Weight

The base weight is calculated as the product of PSU weights and SSU weights. The formula below illustrates the base weight calculation:

$$w_{hijmk} = \alpha_{hij} * \beta_{hijmk}$$

where:

w_{hijmk} - base weight of boat *j* in landing center *i* at stratum *h* for week *k* of month *m*

α_{hij} - PSU weight of boat *j* in landing center *i* at stratum *h*

β_{hijmk} - SSU weight of boat *j* in landing center *i* at stratum *h* for week *k* of month *m*

Adjustment Base Weight

To take into account the data collection day and the number of fishing days per week, the base weight is adjusted as follows:

$$w'_{hijmk} = w_{hijmk} * \frac{F_{imk}}{c_{imk}}$$

where:

w'_{hijmk} - adjusted base weight of operator *j* in landing center *i* at stratum *h* for week *k* of month *m*

w_{hijmk} - base weight of operator *j* in landing center *i* at stratum *h* for week *k* of month *m*

F_{imk} - total number of fishing days in landing center *i* for week *k* of month *m*

c_{imk} - total number of data collection days in landing center *i* for week *k* of month *m*

Adjustment Factor

To take into account the fishing days on weeks without data collection, the adjustment formula per week is obtained as follows:

$$A_{im} = \frac{F_{im}}{f_{im}}$$

where:

$$F_{im} = \sum_{k=1}^{n_k} F_{imk}$$

$$f_{im} = \sum_{k=1}^{n_k} F_{imk}\, c'_{imk}$$

A_{im} - adjustment factor for non-fishing days in month m of landing center *i*

F_{im} - total number of fishing days for month *m* of landing center *i*

f_{im} - total number of represented fishing days for month *m* of landing center *i*

F_{imk} - total number of fishing days in landing center *i* for week *k* of month *m*

c'_{imk} - total number of actual data collection days in landing center *i* for week *k* of month m (1 if with data collection, 0 otherwise)

n_k - number of weeks in month *m*

Final Weight

The final weight is then computed by obtaining the product of the adjusted base weight and the adjustment factor.

$$w_{hijmk,f} = w'_{hijmk} * A_{im}$$

where:

$w_{hijmk,f}$ - final weight of operator *j* in landing center *i* at stratum *h* for week *k* of month *m*

w'_{hijmk} - adjusted base weight of operator *j* in landing center *i* at stratum *h* for week *k* of month *m*

A_{im} - adjustment factor for non-fishing days of landing center *i* for month *m*

c. Estimation of Totals

The estimate of the stratum and provincial total volume of production is computed using the following formula:

Stratum *h* production

$$\hat{Y}_h = \sum_{i=1}^{a_h} \sum_{m=1}^{3} \sum_{j=1}^{n_{hi}} w_{hijmk,f} * y_{hijmk}$$

Provincial total

$$\hat{Y}_p = \sum_{h=1}^{L} \hat{Y}_h$$

where:

$\hat{Y}_h$ - stratum total

$\hat{Y}_p$ - provincial total of fish unloadings

$w_{hijmk,f}$ - final weight of operator *j* in landing center *i* at stratum *h* for week *k* of month *m*

y_{hijmk} - volume of production of operator *j* in landing center *i* at stratum *h* for week *k* of month *m*

a_h - number of sample landing centers for stratum h of the province

n_{hi} - number of sample operators for landing center i in stratum h

L - total number of strata

The estimate of the regional total volume of production is computed using the following formula:

$$\hat{Y}_r = \sum_{p=1}^{n_p} \hat{Y}_p$$

where:

$\hat{Y}_r$ - estimate of total fish unloadings for the region

$\hat{Y}_p$ - estimate of total fish unloadings for the province

n_p - total number of provinces in the region

The estimate of the national total volume of production is computed using the following formula:

$$\hat{Y} = \sum_{r=1}^{n_r} \hat{Y}_r$$

where:

$\hat{Y}$ - estimate of total fish unloadings for the national

$\hat{Y}_r$ - estimate of total fish unloadings for the region

n_r - total number of regions in the national

C. Quarterly Inland Fisheries Survey (QIFS)

1. Sampling Frame

The QIFS uses the 2012 Census of Agriculture and Fisheries (CAF) as its sampling frame. The frame was used to draw sample inland fishing households for the survey. The enumeration unit for the QIFS is the inland fishing household. An inland fishing household is a household with at least one member engaged in inland fishing.

2. Sample Selection Procedure

The QIFS uses a two-stage sampling design with barangay as the primary sampling unit (PSU) and inland fishing household as the secondary sampling Unit (SSU).

Sample barangays (PSUs) are selected using probability proportional to size (PPS) with sampling rate of 10 percent. The number of inland fishing households is used as the size measure. Sample inland fishing households (SSUs) are selected using simple random sampling (SRS) for each sample barangay. The number of sample inland fishing households is 10 per barangay. For a sample barangay which has less than 10 inland fishing households, all households are taken as samples.

3. Estimation Procedure

a. Sampling weight

Base weight

The base weight (w_{ij}) of a sample household in a barangay is computed using the following formula:

$$w_{ij} = \left(\frac{X}{aX_i}\right)\left(\frac{N_i}{n_i}\right)$$

where:
w_{ij} - weight of household j in barangay i
X - total number of inland fishing hhs for the province
X_i - total number of inland fishing hhs in barangay i
a - number of sample inland fishing barangays for the province
N_i - total number of inland fishing hhs in barangay i
n_i - number of sample inland fishing hhs in barangay i

Adjustment factor

To account for non-response, the weight adjustment factor for province p (A_p) is computed as follows:

$$A_p = \frac{\sum_{i=1}^{a}\sum_{j=1}^{n_i} w_{ij}X_{1ij}}{\sum_{i=1}^{a}\sum_{j=1}^{n_i} w_{ij}X_{2ij}}$$

where:

A_p - adjustment factor for province *p*

w_{ij} - base weight of household *j* in barangay *i*

n_i - number of sample inland fishing households in barangay *i*

a - number of sample inland fishing barangays for the province

X_{1ij} - eligible status of sample inland fishing household *j* in barangay *i* (1 if eligible, 0 otherwise)

X_{2ij} - responding status of sample inland fishing household *j* in barangay *i* (1 if responding, 0 otherwise)

Final weight

The final weight (w'_{ij}) is obtained by multiplying the base weight and adjustment factor as follows:

$$w'_{ij} = w_{ij} \times A_p$$

where:

w'_{ij} - final weight of household *j* in barangay *i*

w_{ij} - base weight of household *j* in barangay *i*

A_p - adjustment factor for province *p*

b. Estimation of Totals

The estimate of the provincial total volume of production is computed using the following formula:

$$\hat{Y}_p = \sum_{i=1}^{a} \sum_{j=1}^{n_i} w'_{ij}\, y_{ij}$$

where:

$\hat{Y}_p$ - estimate of total fish catch for the province

w'_{ij} - final weight of household j in barangay i

y_{ij} - volume of fish catch of household j in barangay i

n_i - number of sample inland fishing household in barangay i

a - number of sample inland fishing barangays for the province

The estimate of the regional total volume of production is computed using the following formula:

$$\hat{Y}_r = \sum_{p=1}^{n_p} \hat{Y}_p$$

where:

$\hat{Y}_r$ - estimate of total fish catch for the region

$\hat{Y}_p$ - estimate of total fish catch for the province

n_p - total number of provinces in the region

The estimate of the national total volume of production is computed using the following formula:

$$\hat{Y} = \sum_{r=1}^{n_r} \hat{Y}_r$$

where:

$\hat{Y}$ - estimate of total fish catch for the national

$\hat{Y}_r$ - estimate of total fish catch for the region

n_r - total number of regions in the national

D. Quarterly Aquaculture Survey (QAqS).

1. Sampling Frame

   The basis for the sampling frame of QAqS is the list of aquafarms by type and environment. The said list was the result of the Updating of List of Aquaculture Farms (ULAF) conducted in 2017. The ULAF results serve as basis in updating the sampling frame for the aquaculture survey which covers aquafarm types in various water environment, namely, brackishwater fishpond, pen and cage; freshwater fishpond, pen and cage; marine pen and cage; oyster; mussel; seaweed; rice fish; and small farm reservoir (SFR).

2. Sample Selection Procedure

   The sample selection for QAqS utilizes probability proportional to size systematic sampling (PPS-Sys) method with area of aquafarm as the size measure. Sample aquafarms are selected in each domain using systematic sampling by aquafarm type. Sampling rate is 15 percent of the total number of aquafarms with five (5) aquafarms as the minimum for each aquafarm type in the province.

3. Estimation Procedure – since the aquafarm types are independent, the estimation will be done per aquafarm type.

a. Sampling Weight

Base weight

The base weight of the sample aquafarm operator i, or w_i, in the province is given by the formula:

$$w_i = \frac{X}{aX_i}$$

where:

a - number of sample aquafarm in the province
X - total aquafarm area in the province
X_i - aquafarm area of the sample aquafarm

Adjustment factor

To account for non-response, the weight adjustment factor for province *p* (A_p) is computed as follows:

$$A_p = \frac{\sum_{i=1}^{a} w_i X_{1i}}{\sum_{i=1}^{a} w_i X_{2i}}$$

where:

A_p - adjustment factor of province p
w_i - base weight of sample aquafarm i
X_{1i} - eligible status of sample aquafarm i (1 if eligible, 0 otherwise)
X_{2i} - responding status of sample aquafarm i (1 if eligible, 0 otherwise)
a - number of sample aquafarm in the province

Final weight

The final weight (w_i') of the sample aquafarm i, is obtained by multiplying the base weight and adjustment factor as follows:

$$w'_{ij} = w_{ij} \times A_p$$

where:

w_i' - final weight of sample aquafarm *i*
w_i - base weight of sample aquafarm *i*
A_p - adjustment factor for province *p*

b. Estimation of Totals

The estimate of the provincial total volume of production $\hat{Y}$ is computed using the following formula:

$$\hat{Y} = \sum_{i=1}^{a} w_i y_i$$

where:

$\hat{Y}_p$ - estimate of total harvest for the province
w_i - final weight of sample aquafarm *i*
y_i - production of aquafarm *i*
a - number of sample aquafarm in the province

The estimate of the regional total volume of production is computed using the following formula:

$$\hat{Y}_r = \sum_{p=1}^{n_p} \hat{Y}_p$$

where:

$\hat{Y}_r$ - estimate of total harvest for the region
$\hat{Y}_p$ - estimate of total harvest for the province
n_p - total number of provinces in the region

The estimate of the national total volume of production is computed using the following formula:

$$\hat{Y} = \sum_{r=1}^{n_r} \hat{Y}_r$$

where:

$\hat{Y}$ - estimate of total harvest for the national
$\hat{Y}_r$ - estimate of total harvest for the region
n_r - total number of regions in the national

IV. Concepts and Definitions of Terms

Aquaculture refers to fishery operation involving all forms of raising and culturing of fish and other fishery species in marine, brackish water, and freshwater environment. Examples are fishponds, fish pens, fish cages, mussel, oyster, seaweed farms, and hatcheries.

Aquafarms are farming facilities used in the culture or propagation of aquatic species including fish, mollusk, crustaceans, and aquatic plants for purposes of rearing to enhance production.

Brackishwater refers mixture of seawater and freshwater with salinity that varies with the tide. Examples are estuaries, mangroves, and mouths of rivers where seawater enters during high tide.

Commercial fishing refers to the catching of fish with the use of fishing boats with a capacity of more than three (3) gross tons for trade, business, or profit beyond subsistence or sports fishing.

Fishermen is a classification of workers who catch, breed, and raise fish, and cultivate other forms of aquatic life for sale or delivery on a regular basis to wholesale buyers, marketing organizations, or at markets.

Fisheries refer to all activities relating to the act or business of fishing, culturing, preserving, processing, marketing, developing, conserving, and managing aquatic resources and the fishery areas including the privilege to fish or take aquatic resources thereof (Republic Act No. 8550 otherwise known as “The Philippine Fisheries Code of 1998”).

Fisheries sector refers to the sector engaged in the production, growing, harvesting, processing, marketing, developing, conserving, and managing of aquatic resources and fishing areas.

Fishing refers to the taking of fishery species from their wild state or habitat with or without the use of fishing vessels.

Fishing boat is a type of watercraft, such as motorized/non-motorized banca, sailboat, motorboat, etc., either licensed or not, used for fishing purposes.

Fish cage refers to stationary or floating fish enclosure made of synthetic net wire/bamboo screen or other materials set in the form of inverted mosquito net (“hapa” type), with or without cover, with all sides either tied to poles staked to the water bottom or with anchored floats for aquaculture purposes.

Fishing gear is any instrument or device and its accessories utilized in taking fish and other fishery species.

Fishing grounds refer to areas in any body of water where fish and other aquatic resources congregate and become target of capture.

Fish pen is an artificial enclosure constructed within a body of water for culturing fish and fishery/aquatic resources made up of bamboo poles closely arranged in an enclosure with wooden materials, screen, or nylon netting to prevent escape of fish.

Fishpond refers to a body of water, artificial or natural, where fish and other aquatic products are cultured, raised, or cultivated under controlled conditions. This is a land-based type of aquafarm. Note that the setting-up of fish cages in ponds does not make the operation of fish cage and at the same time a fishpond.

Freshwater refers to water without salt or marine origin, such as generally found in lakes, rivers, canals, dams, reservoirs, paddy fields, and swamps.

Inland municipal fishing is the catching of fish, crustaceans, mollusks, and all other aquatic animals and plants in inland water like lakes, rivers, dams, marshes, etc. using simple gears and fishing boats, some of which are non-motorized with a capacity of three (3) gross tons or less; or fishing not requiring the use of fishing boats.

Landing center is a place where the fish catch and other aquatic products are unloaded and traded.

Marine refers to seawater outside the coastal line such as Manila Bay, Visayan Sea, etc.

Municipal fishing covers fishing operation carried out with or without the use of a boat weighing three (3) gross tons or less.

Mussel farming refers to the cultivation of mussel in suitable water area by any farming method with appropriate intents and purposes.

Oyster farming refers to the cultivation of oysters in suitable water areas by any method for production purposes.

Rice fish culture is an integrated farming system involving raising of fish in rice paddies.

Seawater refers to inshore and open waters and inland seas in which the salinity generally exceeds 20.0 percent.

Seaweed farming is the cultivation of seaweed in suitable water areas by any method with appropriate intensive care for production in commercial quantities.

Small farm reservoirs (SFR) are small bodies of water with an area of less than 10 km, e.g., small ponds, canals, irrigation canals, swamps, etc., which can be suitable for culture-based fisheries.

V. Dissemination of Results and Revision

Dissemination of Results

The quarterly fisheries estimates and Fisheries Situation Report for the year 2022 is released quarterly in the PSA Website with the following schedule:

Reference Quarter	Schedule of Release	
	Estimates for OpenStat	Fisheries Situation Report
Quarter 4 2021	28 January 2022	28 January 2022
Quarter 1 2022	16 May 2022	16 May 2022
Quarter 2 2022	15 August 2022	15 August 2022
Quarter 3 2022	15 November 2022	15 November 2022

Revision of Estimates

The PSA has adopted a policy on revision of estimates approved under the then National Statistical Coordination Board (NSCB) Resolution No.7 dated May 18, 2005. It basically informs producers and users of agricultural statistics generated by the PSA that revision of quarterly estimates on the agricultural production, prices, and related statistics be limited to the immediately preceding quarter and for the past three (3) years with quarterly breakdown to be done only during May of the current year. This happens when additional statistics and/or indicators are made available to support the change in the original data.

VI. Citation

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VII. Contact Information

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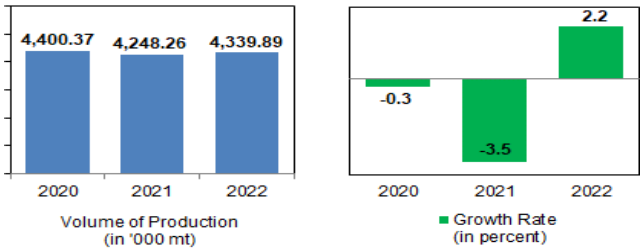
HIGHLIGHTS
Volume of Production by Subsector and Species
January to December 2022

In 2022, total fisheries production grew to 4,339.89 thousand metric tons or by 2.2 percent, from the previous year's output of 4,248.26 thousand metric tons. Increases in production were noted in marine municipal fisheries and aquaculture, while commercial and inland municipal fisheries reported setbacks during the year. (Figure 1 and Table 1)

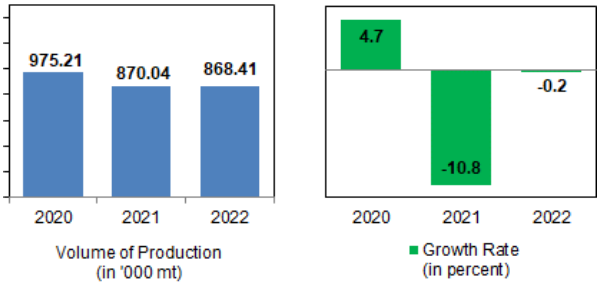
Figure 1. Volume and Annual Growth Rate of Fisheries Production Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Sources: Philippine Statistics Authority, Quarterly Commercial Fisheries Survey (QCFS), Quarterly Municipal Fisheries Survey (QMFS), Quarterly Inland Fisheries Survey (QIFS), and Quarterly Aquaculture Survey (QAqS)

The total volume of production for commercial fisheries during the year was estimated at 868.41 thousand metric tons. This indicates a decline of -0.2 percent from the output a year ago of 870.04 thousand metric tons. The subsector's share to total fisheries production in 2022 was recorded at 20.0 percent. (Figure 2 and Table 1)

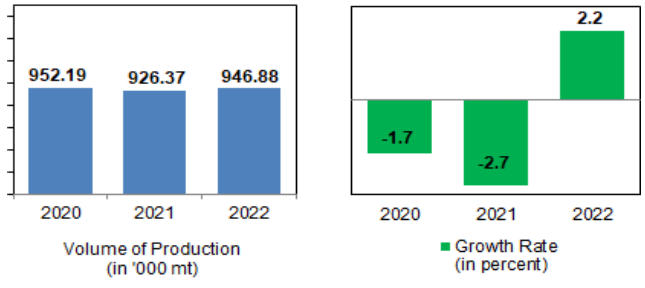
Figure 2. Volume and Annual Growth Rate of Commercial Fisheries Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Source: Philippine Statistics Authority, QCFS

The marine municipal fisheries output reached 946.88 thousand metric tons during the year. It posted an increment of 2.2 percent from its 2021 production level of 926.37 thousand metric tons. Of the total fisheries production in 2022, the subsector comprised 21.8 percent. (Figure 3 and Table 1)

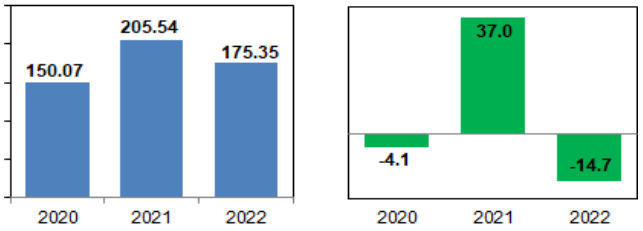
Figure 3. Volume and Annual Growth Rate of Marine Municipal Fisheries Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Source: Philippine Statistics Authority, QMFS

The inland municipal fisheries production was registered at 175.35 thousand metric tons in 2022. This volume of production during this period indicates a decrease of -14.7 percent from the 205.54 thousand metric tons output in the previous year. About 4.0 percent of the total fisheries output came from inland municipal fisheries. (Figure 4 and Table 1)

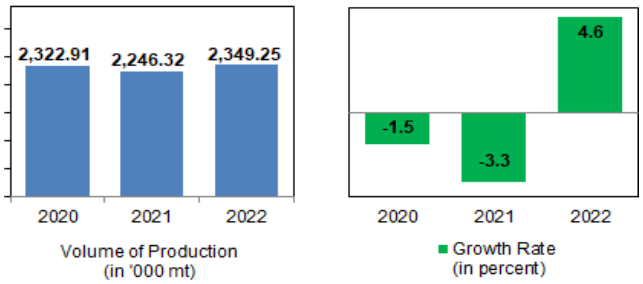
Figure 4. Volume and Annual Growth Rate of Inland Municipal Fisheries Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Source: Philippine Statistics Authority, QIFS

Moreover, the total harvests from aquaculture was estimated at 2,349.25 thousand metric tons in 2022. Compared with its 2,246.32 thousand metric tons recorded output a year ago, this exhibited a 4.6 percent increase. Aquaculture subsector constituted the biggest share of 54.1 percent to the total fisheries production in 2022. (Figure 5 and Table 1)

Figure 5. Volume and Annual Growth Rate of Aquaculture Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Source: Philippine Statistics Authority, QAqS

Of the 20 major species, the growth in the total fisheries production were primarily contributed by the increases recorded in seaweed (15.0%), skipjack (gulyasan, 5.6%), yellowfin tuna (tambakol/bariles, 14.1%), and squid (pusit, 22.9%). (Table 2)

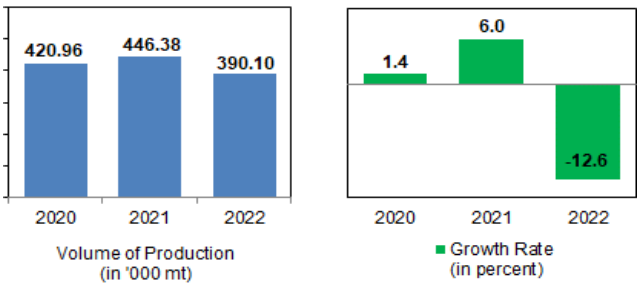
On the other hand, significant declines in production were reported in milkfish (bangus, -12.6%), bali sardinella (tamban, -12.3%), and tilapia (-10.6%). (Table 2)

Production of Major Species

1. Milkfish (Bangus)

a. Milkfish production during the period January to December 2022 was estimated at 390.10 thousand metric tons. It posted a decrease of -12.6 percent from the previous year's output of 446.38 thousand metric tons. (Figure 6 and Table 2)

Figure 6. Volume and Annual Growth Rate of Milkfish Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Sources: Philippine Statistics Authority, QIFS and QAqS

b. Of the total fisheries output, milkfish production comprised 9.0 percent in 2022. (Table 2)

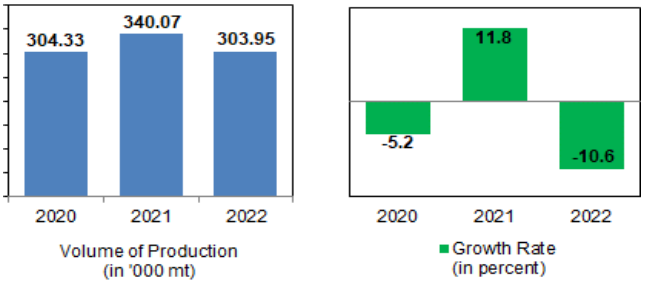
c. The gross value of milkfish production has amounted to PhP 46.59 billion at current prices in 2022. It indicates a decline of -9.6 percent from the previous year's record of PhP 51.52 billion value of production. (Table 3)

d. On average, the farmgate price per kilogram of milkfish in 2022 was quoted at PhP 119.42, which registers a 3.5 percent increment from its 2021 average farmgate price of PhP 115.42. (Table 4)

2. Tilapia

a. The estimated production of tilapia at 303.95 thousand metric tons during the year recorded a reduction of -10.6 percent from its 2021 record of 340.07 thousand metric tons. (Figure 7 and Table 2)

Figure 7. Volume and Annual Growth Rate of Tilapia Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Sources: Philippine Statistics Authority, QIFS and QAqS

b. Tilapia production accounted for 7.0 percent of the total fisheries output from January to December 2022. (Table 2)

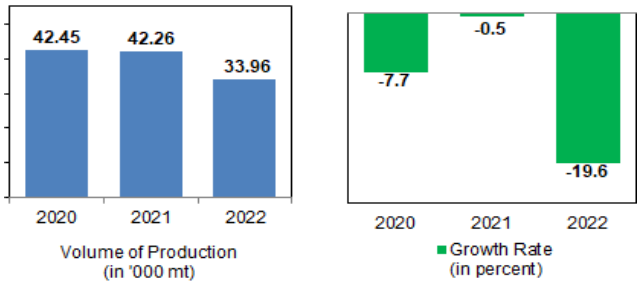
c. At current prices, the total value of tilapia production during the year 2022 was posted at PhP 25.97 billion. From its record of PhP 28.86 billion a year ago, it displayed a double-digit downturn of -10.0 percent. (Table 3)

d. In 2022, the average farmgate price of tilapia was PhP 85.43 per kilogram at the national level. It exhibited an increase of 0.7 percent from its quotation of PhP 84.86 per kilogram in 2021. (Table 4)

3. Tiger prawn (Sugpo)

a. A total of 33.96 thousand metric tons of tiger prawn were produced this year, which reflects a -19.6 percent decrease from the previous year's production of 42.26 thousand metric tons. (Figure 8 and Table 2)

Figure 8. Volume and Annual Growth Rate of Tiger Prawn Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Sources: Philippine Statistics Authority, QIFS and QAqS

b. Tiger prawn caught this year contributed 0.8 percent to the total fisheries production in the entire 2022. (Table 2)

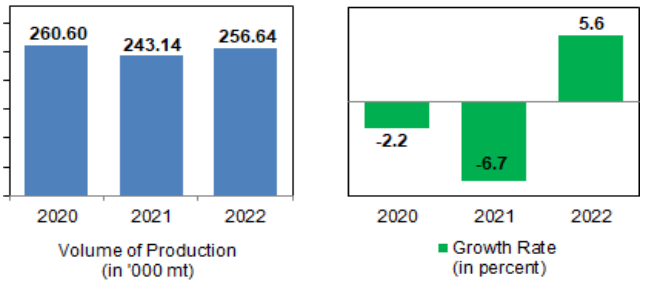
c. The gross value of tiger prawn production has amounted to PhP 17.79 billion at current prices in 2022. This registered a downtrend of -16.8 percent from the PhP 21.39 billion value in 2021. (Table 3)

d. The average farmgate price of tiger prawn at the national level for 2022 was quoted at PhP 523.94 per kilogram. This indicates a 3.5 percent increase from the previous year's average farmgate price of PhP 506.32 per kilogram. (Table 4)

4. Skipjack (Gulyasan)

a. Skipjack production in 2022 was estimated at 256.64 thousand metric tons, which posted an increase of 5.6 percent compared with the previous year's record of 243.14 thousand metric tons. (Figure 9 and Table 2)

Figure 9. Volume and Annual Growth Rate of Skipjack Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Sources: Philippine Statistics Authority, QCFS and QMFS

b. During the period, the production of skipjack contributed 5.9 percent to the total fisheries production. (Table 2)

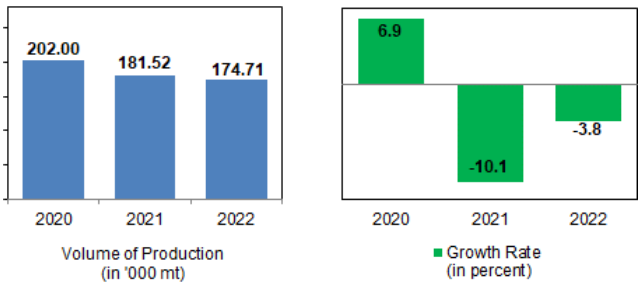
c. In 2022, the gross value of skipjack production has amounted to PhP 24.83 billion at current prices. It rose by 27.8 percent compared with the same period of last year's level of PhP 19.43 billion value of production. (Table 3)

d. At the national level, the average farmgate price per kilogram of skipjack of PhP 96.73 in 2022, went up by 21.1 percent from its average farmgate price of PhP 79.90 in 2021. (Table 4)

5. Roundscad (Galunggong)

a. A total of 174.71 thousand metric tons of roundscad were produced during the year. It recorded a decrease of -3.8 percent from the previous year's output of 181.52 thousand metric tons. (Figure 10 and Table 2)

Figure 10. Volume and Annual Growth Rate of Roundscad Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Sources: Philippine Statistics Authority, QCFS and QMFS

b. About 4.0 percent of the total fisheries production in 2022 was accounted to roundscad. (Table 2)

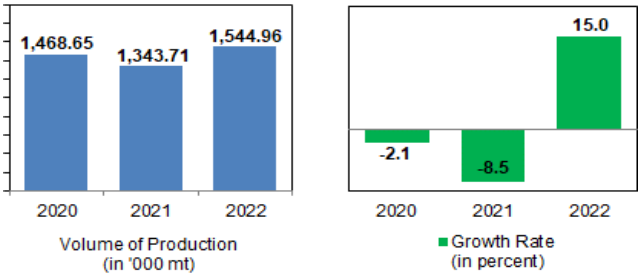
c. The value of roundscad's production at current prices for the 2022 was PhP 17.09 billion, representing a 15.1 percent increase from its PhP 14.85 billion value in 2021. (Table 3)

d. The average farmgate price for roundscad at the national level in 2022 was PhP 97.84. It increased by 19.6 percent compared with its previous year's farmgate price of PhP 81.82. (Table 4)

6. Seaweed

a. During the year, the total harvests of seaweed was estimated at 1,544.96 thousand metric tons. This indicates a 15.0 percent growth from its 2021 output of 1,343.71 thousand metric tons. (Figure 11 and Table 2)

Figure 11. Volume and Annual Growth Rate of Seaweed Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Source: Philippine Statistics Authority, QAqS

b. In 2022, around 35.6 percent of the total fisheries production accounted for the seaweed output. (Table 2)

c. At current prices, the gross value of seaweed production in 2022 has amounted to PhP 16.60 billion, which was a significant two-digit gain of 63.7 percent from its value of PhP 10.14 billion in 2021. (Table 3)

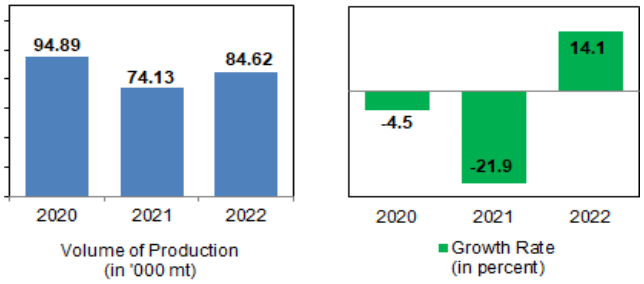
d. The average farmgate price of seaweed at the national level in 2022 was quoted at PhP 10.75 per kilogram, which considerably improved by 42.4 percent compared with its previous year's farmgate price of PhP 7.55 per kilogram. (Table 4)

7. Yellowfin tuna (Tambakol/Bariles)

a. The production of yellowfin tuna reached 84.62 thousand metric tons during the year, which posted an increment of 14.1 percent from the previous year's record of 74.13 thousand metric tons. (Figure 12 and Table 2)

b. Of the overall fisheries production in 2022, yellowfin tuna contributed 1.9 percent. (Table 2)

Figure 12. Volume and Annual Growth Rate of Yellowfin Tuna Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Sources: Philippine Statistics Authority, QCFS and QMFS

c. At current prices, yellowfin tuna production generated a gross value of PhP 13.74 billion in 2022. Compared to the previous year's record of PhP 10.27 billion, it increased by 33.8 percent. (Table 3)

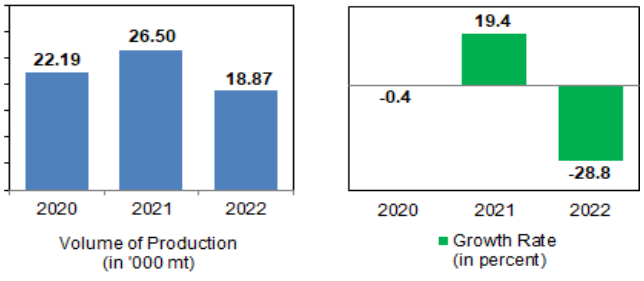
d. Yellowfin tuna's average farmgate price at the national level during this year was recorded at PhP 162.36 per kilogram, which posted an increase of 17.2 percent. In 2021, the average farmgate price per kilogram was PhP 138.51. (Table 4)

8. Mudcrab (Alimango)

a. The estimated production of mudcrab for 2022 was 18.87 thousand metric tons, indicating a decline of -28.8 percent from 2021, which had an output of 26.50 thousand metric tons. (Figure 13 and Table 2)

b. Mudcrab caught this year contributed 0.4 percent to the total annual fisheries production. (Table 2)

Figure 13. Volume and Annual Growth Rate of Mudcrab Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Sources: Philippine Statistics Authority, QIFS and QAqS

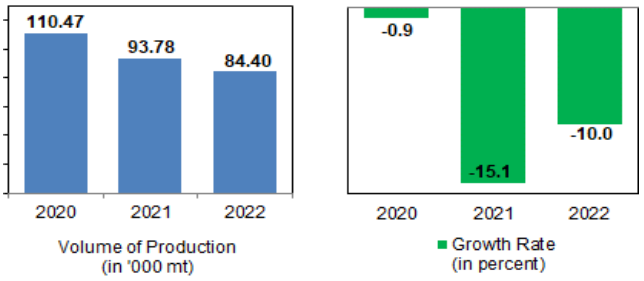
c. The gross value of mudcrab production has amounted to PhP 8.03 billion at current prices in 2022. It recorded a decrease of -35.9 percent from its gross value of PhP 12.53 billion in 2021. (Table 3)

d. On average, the farmgate price of mudcrab at the national level during this year was recorded at PhP 425.69 per kilogram. This indicates a decrease of -10.0 percent from the previous year's farmgate price of PhP 472.75 per kilogram. (Table 4)

9. Frigate tuna (Tulingan)

a. In 2022, 84.40 thousand metric tons of frigate tuna were produced, which posted a decrease of -10.0 percent from the previous year's record of 93.78 thousand metric tons. (Figure 14 and Table 2)

Figure 14. Volume and Annual Growth Rate of Frigate Tuna Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Sources: Philippine Statistics Authority, QCFS and QMFS

b. The production of frigate tuna throughout the year made up 1.9 percent of the total fisheries production. (Table 2)

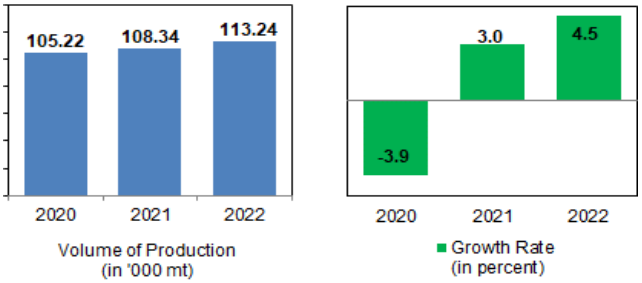
c. At current prices, the gross revenue from frigate tuna grew by 13.7 percent this year. It amounted to PhP 9.46 billion from the PhP 8.32 billion gross value in the previous year. (Table 3)

d. At the national level, the average farmgate price of frigate tuna was reported at PhP 112.10 per kilogram in 2022. In comparison with the average farmgate price of PhP 88.75 per kilogram in the previous year, this was higher by 26.3 percent. (Table 4)

10. Big-eyed scad (Matangbaka)

a. Total big-eyed scad production in 2022 was estimated at 113.24 thousand metric tons. The volume was 4.5 percent higher than last year's level of 108.34 thousand metric tons. (Figure 15 and Table 2)

Figure 15. Volume and Annual Growth Rate of Big-eyed Scad Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Sources: Philippine Statistics Authority, QCFS and QMFS

b. Of the total fisheries production, big-eyed scad contributed 2.6 percent during the year. (Table 2)

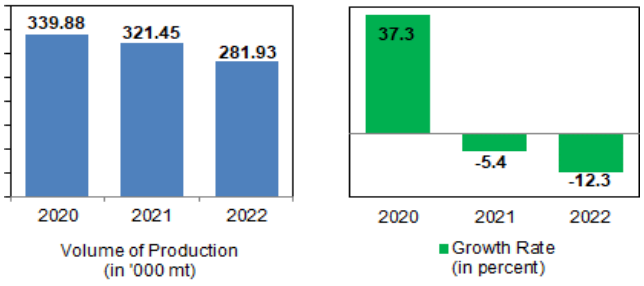
c. The total gross value of big-eyed scad in 2022 was PhP 12.72 billion. It shows an increase of 26.7 percent compared with its value of PhP 10.04 billion in 2021. (Table 3)

d. The average farmgate price of big-eyed scad in 2022 was PhP 112.29 per kilogram, which rose by 21.2 percent from its quotation of PhP 92.66 per kilogram in the previous year. (Table 4)

11. Bali sardinella (Tamban)

a. Production of bali sardinella recorded a total volume of 281.93 thousand metric tons in 2022, which posted a decrement of -12.3 percent from the previous year's output of 321.45 thousand metric tons. (Figure 16 and Table 2)

Figure 16. Volume and Annual Growth Rate of Bali Sardinella Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Sources: Philippine Statistics Authority, QCFS and QMFS

b. Of the total fisheries production, bali sardinella contributed 6.5 percent during the year. (Table 2)

c. In 2022, bali sardinella's gross value has amounted to PhP 9.90 billion at current prices, which was higher by 7.2 percent compared with its generated earnings of PhP 9.23 billion from the previous year. (Table 3)

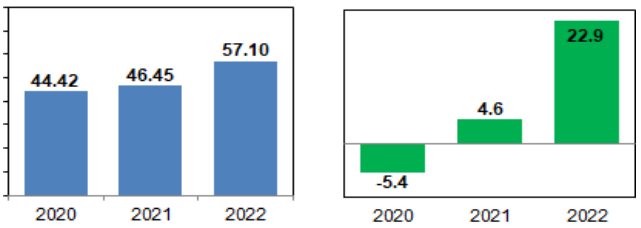
d. The average farmgate price per kilogram of bali sardinella this year has increased to PhP 35.10, which grew by 22.2 percent from its farmgate price of PhP 28.72 per kilogram in 2021. (Table 4)

12. Squid (Pusit)

a. Squid production during the year reached 57.10 thousand metric tons. It rose by 22.9 percent compared to its previous year's production of 46.45 thousand metric tons. (Figure 17 and Table 2)

b. Squid production in 2022 contributed 1.3 percent to the total fisheries production. (Table 2)

Figure 17. Volume and Annual Growth Rate of Squid Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Sources: Philippine Statistics Authority, QCFS and QMFS

c. This year, the gross value of squid was PhP 8.51 billion at current prices. It increased by 38.1 percent over the gross value of PhP 6.16 billion in 2021. (Table 3)

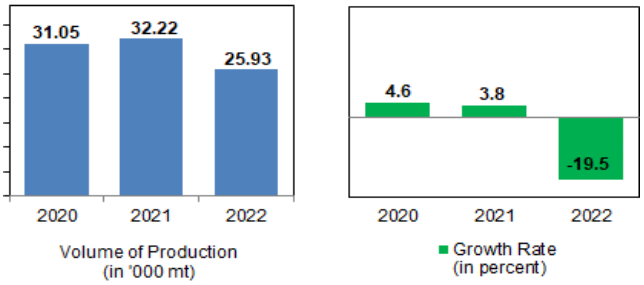
d. At the national level, the average price per kilogram of squid for 2022 was PhP 149.01, representing an increase of 12.3 percent compared with the previous year's average farmgate price of PhP 132.66 per kilogram. (Table 4)

13. Blue crab (Alimasag)

a. Blue crab production was estimated at 25.93 thousand metric tons during the year, exhibiting a decrease of -19.5 percent from its previous year's record of 32.22 thousand metric tons. (Figure 18 and Table 2)

b. During the year, blue crab output shared 0.6 percent to the total fisheries production. (Table 2)

Figure 18. Volume and Annual Growth Rate of Blue Crab Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Sources: Philippine Statistics Authority, QCFS, QMFS, and QIFS

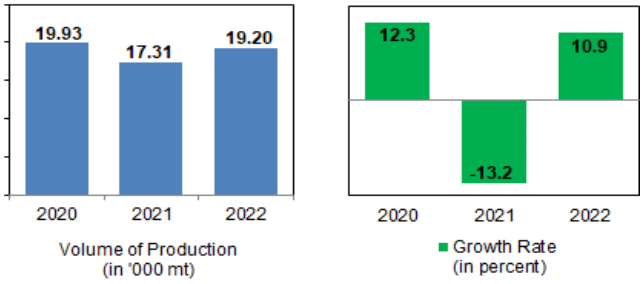
c. In 2022, the gross value of blue crab has amounted to PhP 4.73 billion at current prices. It posted a decline of -17.0 percent from its level of PhP 5.69 billion in the previous year. (Table 3)

d. The average farmgate price per kilogram of blue crab was PhP 182.31 this year, which rose by 3.2 percent compared with its quotation of PhP 176.72 per kilogram in 2021. (Table 4)

14. Bigeye tuna (Tambakol/Bariles)

a. In 2022, the total volume of bigeye tuna production was estimated at 19.20 thousand metric tons. It went up by 10.9 percent from the previous year with 17.31 thousand metric tons output. (Figure 19 and Table 2)

Figure 19. Volume and Annual Growth Rate of Bigeye Tuna Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Sources: Philippine Statistics Authority, QCFS and QMFS

b. The output of bigeye tuna contributed 0.4 percent to the total fisheries production during the year. (Table 2)

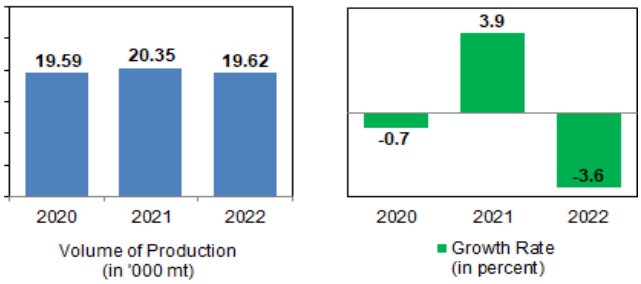
c. The gross value of bigeye tuna production has amounted to PhP 3.24 billion at current prices. The registered increment was 27.5 percent from the PhP 2.54 billion mark of the previous year. (Table 3)

d. The average farmgate price per kilogram of bigeye tuna was registered at PhP 168.75 per kilogram this year. It has exhibited an increment of 15.0 percent from the price quotation of PhP 146.77 in the previous year. (Table 4)

15. Grouper (Lapu-lapu)

a. Grouper production was registered at 19.62 thousand metric tons in 2022. This exhibited a reduction of -3.6 percent compared with the 20.35 thousand metric tons output from the previous year. (Figure 20 and Table 2)

Figure 20. Volume and Annual Growth Rate of Grouper Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Sources: Philippine Statistics Authority, QCFS, QMFS, and QAqS

b. This year, grouper production shared 0.5 percent to the total fisheries production. (Table 2)

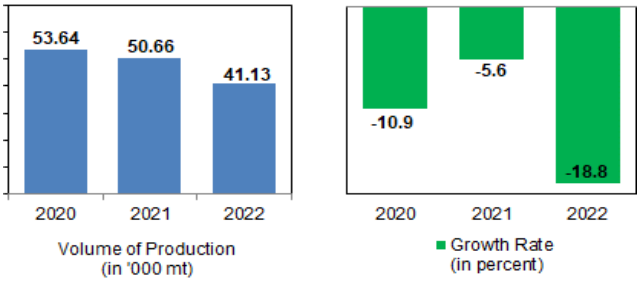
c. At current prices, grouper's value of production was PhP 4.21 billion, an increase of 9.9 percent from the previous year's mark of PhP 3.83 billion value. (Table 3)

d. In 2022, the average farmgate price of grouper was PhP 214.30 per kilogram. At the national level, this was a 14.0 percent increase compared with the previous year's price of PhP 188.00 per kilogram. (Table 4)

16. Indian mackerel (Alumahan)

a. In 2022, the volume of production of indian mackerel was estimated at 41.13 thousand metric tons. The output recorded a drop of -18.8 percent from the previous year's level of 50.66 thousand metric tons. (Figure 21 and Table 2)

Figure 21. Volume and Annual Growth Rate of Indian Mackerel Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Sources: Philippine Statistics Authority, QCFS and QMFS

b. During the period, the production of indian mackerel shared 0.9 percent to the total fisheries production. (Table 2)

c. The gross value at current prices of indian mackerel production was PhP 5.04 billion during the year. It indicates a decline of -0.02 percent compared with the reported value in 2021. (Table 3)

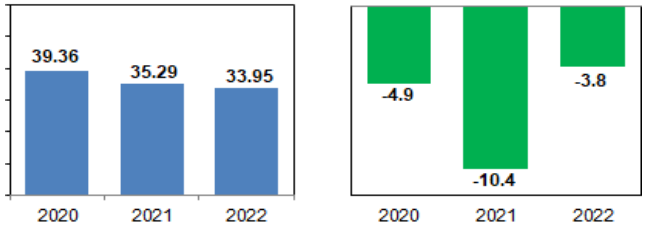
d. On average, the farmgate price of indian mackerel was recorded at PhP 122.43 per kilogram. It posted an increase of 23.1 percent from the previous year's farmgate price of PhP 99.42 per kilogram. (Table 4)

17. Threadfin bream (Bisugo)

a. In 2022, the total production of threadfin bream was estimated at 33.95 thousand metric tons. It displayed a decrease of -3.8 percent from its output of 35.29 thousand metric tons in 2021. (Figure 22 and Table 2)

b. During the year, threadfin bream contributed 0.8 percent to the total fisheries production. (Table 2)

Figure 22. Volume and Annual Growth Rate of Threadfin Bream Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Source: Philippine Statistics Authority, QCFS and QMFS

c. The gross value of threadfin bream production during the year has amounted to PhP 5.36 billion at current prices, which was 8.0 percent higher than its previous year's value of PhP 4.96 billion. (Table 3)

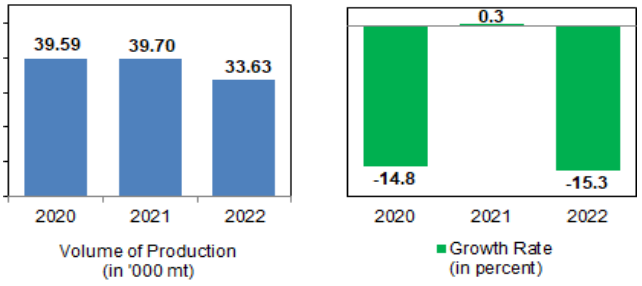
d. The average farmgate price of threadfin bream at the national level for this year was quoted at PhP 157.80 per kilogram, indicating a 12.2 percent increase from its recorded price of PhP 140.62 per kilogram in the previous year. (Table 4)

18. Slipmouth (Sapsap)

a. The volume of production of slipmouth in 2022 was recorded at 33.63 thousand metric tons. It posted a decrease of -15.3 percent from the previous year's level of 39.70 thousand metric tons. (Figure 23 and Table 2)

b. Of the total fisheries volume of production, the 0.8 percent was accounted for slipmouth production in 2022. (Table 2)

Figure 23. Volume and Annual Growth Rate of Slipmouth Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Sources: Philippine Statistics Authority, QCFS and QMFS

c. The gross value of slipmouth production has amounted to PhP 2.91 billion in 2022, which was 5.0 percent higher than the gross value of PhP 2.77 billion in the previous year. (Table 3)

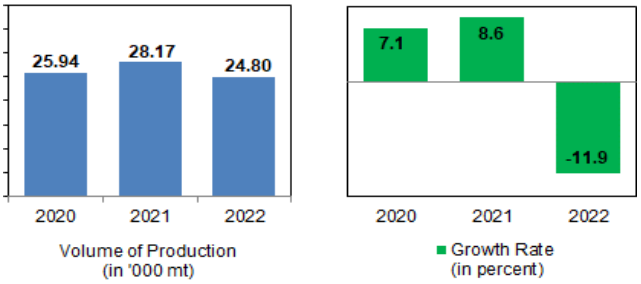
d. The average farmgate price of slipmouth in 2022 was quoted at PhP 86.59 per kilogram. It grew by 24.0 percent from its 2021 farmgate price of PhP 69.86 per kilogram. (Table 4)

19. Cavalla (Talakitok)

a. During the year, cavalla production went down to 24.80 thousand metric tons or by -11.9 percent from the 2021 production of 28.17 thousand metric tons. (Figure 24 and Table 2)

b. Among species, cavalla contributed 0.6 percent to the annual total fisheries production. (Table 2)

Figure 24. Volume and Annual Growth Rate of Cavalla Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Sources: Philippine Statistics Authority, QCFS and QMFS

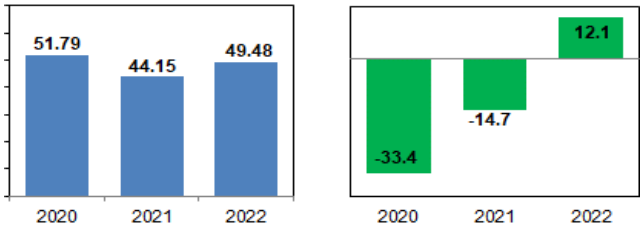
c. The 2022 cavalla production was worth PhP 3.80 billion at current prices. It posted a decrease of -11.1 percent from the 2021 value of PhP 4.27 billion. (Table 3)

d. From January to December 2022, the average farmgate price per kilogram of cavalla in the country increased to PhP 153.16 or by 1.0 percent compared with the same period last year's farmgate price of PhP 151.67 per kilogram. (Table 4)

20. Fimbriated sardines (Tunsoy)

a. In 2022, the fimbriated sardines total output reached 49.48 thousand metric tons, which recorded a significant increase of 12.1 percent from the 44.15 thousand metric tons reported production in 2021. (Figure 25 and Table 2)

Figure 25. Volume and Annual Growth Rate of Fimbriated Sardines Production, Philippines: January to December 2020 to 2022[P]



[P] - Preliminary
mt - metric ton
Sources: Philippine Statistics Authority, QCFS and QMFS

b. Fimbriated sardines production comprised 1.1 percent of the overall fisheries production in 2022. (Table 2)

c. The 2022 gross value of fimbriated sardines has amounted to PhP 2.48 billion at current prices, which grew by 35.5 percent from its 2021 value of PhP 1.83 billion. (Table 3)

d. The average farmgate price of fimbriated sardines received by fishermen from January to December 2022 was PhP 50.05 per kilogram. This registered a 20.9 percent gain from the previous year's average farmgate price per kilogram of PhP 41.40. (Table 4)

Table 1. Volume of Fisheries Production by Subsector: Philippines
January to December 2020 – 2022[P]

Subsector	Volume of Production (metric tons)			Percent Change (%)		Percent Share to Total Volume of Fisheries Production (%)
	2020	2021	2022[P]	2021/2020	2022[P]/2021	2022
Fisheries	4,400,373.01	4,248,261.40	4,339,888.55	-3.5	2.2	100.0
Commercial Fisheries	975,205.08	870,038.30	868,408.94	-10.8	-0.2	20.0
Municipal Fisheries	1,102,262.36	1,131,907.32	1,122,227.60	2.7	-0.9	25.9
Marine	952,188.62	926,368.90	946,875.91	-2.7	2.2	21.8
Inland	150,073.74	205,538.42	175,351.69	37.0	-14.7	4.0
Aquaculture	2,322,905.57	2,246,315.78	2,349,252.01	-3.3	4.6	54.1

[P] - Preliminary

Note: Percent change and percent share may yield different results when computed manually due to rounding.

Sources: Philippine Statistics Authority, Quarterly Commercial Fisheries Survey, Quarterly Municipal Fisheries Survey, Quarterly Inland Fisheries Survey, and Quarterly Aquaculture Survey

Table 2. Volume of Fisheries Production by Species: Philippines
January to December 2020 – 2022[P]

Species	Volume of Production (metric tons)			Percent Change (%)		Percent Share to Total Volume of Fisheries Production (%)
	2020	2021	2022[P]	2021/2020	2022[P]/2021	2022
Fisheries	4,400,373.01	4,248,261.40	4,339,888.55	-3.5	2.2	100.0
Milkfish (Bangus)	420,960.47	446,382.19	390,098.30	6.0	-12.6	9.0
Tilapia	304,326.59	340,071.42	303,953.10	11.8	-10.6	7.0
Tiger prawn (Sugpo)	42,453.94	42,255.64	33,960.06	-0.5	-19.6	0.8
Skipjack (Gulyasan)	260,604.21	243,136.54	256,640.47	-6.7	5.6	5.9
Roundscad (Galunggong)	202,003.85	181,516.46	174,710.58	-10.1	-3.8	4.0
Seaweed	1,468,653.26	1,343,706.55	1,544,959.98	-8.5	15.0	35.6
Yellowfin tuna (Tambakol/Bariles)	94,889.20	74,131.49	84,615.57	-21.9	14.1	1.9
Mudcrab (Alimango)	22,192.69	26,503.08	18,870.28	19.4	-28.8	0.4
Frigate tuna (Tulingan)	110,465.86	93,783.72	84,395.92	-15.1	-10.0	1.9
Big-eyed scad (Matangbaka)	105,218.42	108,339.09	113,242.56	3.0	4.5	2.6
Bali sardinella (Tamban)	339,881.01	321,448.92	281,926.40	-5.4	-12.3	6.5
Squid (Pusit)	44,415.24	46,445.02	57,097.16	4.6	22.9	1.3
Blue crab (Alimasag)	31,046.64	32,216.86	25,925.91	3.8	-19.5	0.6
Bigeye tuna (Tambakol/Bariles)	19,934.37	17,313.25	19,198.67	-13.2	10.9	0.4
Grouper (Lapu-lapu)	19,592.80	20,346.86	19,624.70	3.9	-3.6	0.5
Indian mackerel (Alumahan)	53,644.74	50,664.30	41,133.44	-5.6	-18.8	0.9
Threadfin bream (Bisugo)	39,360.01	35,286.68	33,946.09	-10.4	-3.8	0.8
Slipmouth (Sapsap)	39,586.52	39,704.63	33,634.95	0.3	-15.3	0.8
Cavalla (Talakitok)	25,942.47	28,165.55	24,803.69	8.6	-11.9	0.6
Fimbriated sardines (Tunsoy)	51,786.22	44,153.97	49,475.86	-14.7	12.1	1.1
Others	703,414.51	712,689.18	747,674.85	1.3	4.9	17.2

[P] - Preliminary

Note: Percent change and percent share may yield different results when computed manually due to rounding.

Sources: Philippine Statistics Authority, Quarterly Commercial Fisheries Survey, Quarterly Municipal Fisheries Survey, Quarterly Inland Fisheries Survey, and Quarterly Aquaculture Survey

Table 3. Value of Fisheries Production at Current Prices by Species: Philippines
January to December 2020 – 2022[P]

Species	Value of Production at Current Prices ('000 PhP)			Percent Change (%)		Percent Share to Total Volume of Fisheries Production (%)
	2020	2021	2022[P]	2021/2020	2022[P]/2021	2022
Fisheries	273,488,458.53	302,444,477.21	326,152,811.67	10.6	7.8	100.0
Milkfish (Bangus)	44,004,208.33	51,522,616.54	46,586,951.05	17.1	-9.6	14.3
Tilapia	25,504,586.98	28,858,184.55	25,965,935.61	13.2	-10.0	8.0
Tiger prawn (Sugpo)	20,597,564.86	21,394,814.75	17,793,095.73	3.9	-16.8	5.5
Skipjack (Gulyasan)	18,015,467.34	19,426,428.62	24,825,604.06	7.8	27.8	7.6
Roundscad (Galunggong)	13,832,897.40	14,851,355.18	17,093,068.52	7.4	15.1	5.2
Seaweed	10,614,121.68	10,140,723.54	16,600,713.39	-4.5	63.7	5.1
Yellowfin tuna (Tambakol/Bariles)	10,871,425.86	10,267,586.26	13,738,461.82	-5.6	33.8	4.2
Mudcrab (Alimango)	9,379,428.82	12,529,240.52	8,032,832.95	33.6	-35.9	2.5
Frigate tuna (Tulingan)	8,933,800.72	8,322,999.87	9,460,408.05	-6.8	13.7	2.9
Big-eyed scad (Matangbaka)	8,806,313.76	10,039,214.52	12,715,717.48	14.0	26.7	3.9
Bali sardinella (Tamban)	8,529,998.01	9,231,767.68	9,895,055.13	8.2	7.2	3.0
Squid (Pusit)	5,607,322.93	6,161,252.73	8,508,132.25	9.9	38.1	2.6
Blue crab (Alimasag)	4,447,468.94	5,693,337.07	4,726,612.34	28.0	-17.0	1.4
Bigeye tuna (Tambakol/Bariles)	2,540,956.75	2,541,074.62	3,239,765.26	0.0	27.5	1.0
Grouper (Lapu-lapu)	4,425,379.79	3,825,280.75	4,205,586.05	-13.6	9.9	1.3
Indian mackerel (Alumahan)	4,971,980.88	5,036,891.84	5,036,098.91	1.3	-0.02	1.5
Threadfin bream (Bisugo)	5,292,312.70	4,961,989.54	5,356,643.70	-6.2	8.0	1.6
Slipmouth (Sapsap)	2,629,279.31	2,773,768.68	2,912,610.15	5.5	5.0	0.9
Cavalla (Talakitok)	3,456,232.36	4,271,946.40	3,799,032.63	23.6	-11.1	1.2
Fimbriated sardines (Tunsoy)	1,853,298.05	1,827,861.80	2,476,415.10	-1.4	35.5	0.8
Others	59,174,413.06	68,766,141.75	83,184,071.49	16.2	21.0	25.5

[P] - Preliminary
Note: Percent change and percent share may yield different results when computed manually due to rounding.
Sources: Philippine Statistics Authority, Quarterly Commercial Fisheries Survey, Quarterly Municipal Fisheries Survey, Quarterly Inland Fisheries Survey, and Quarterly Aquaculture Survey

Table 4. Average Price by Species: Philippines, January to December 2020 – 2022[P]

Species	Average Price (PhP/Kg)			Percent Change (%)	
	2020	2021	2022[P]	2021/2020	2022[P]/2021
Fisheries					
Milkfish (Bangus)	104.53	115.42	119.42	10.4	3.5
Tilapia	83.81	84.86	85.43	1.3	0.7
Tiger prawn (Sugpo)	485.17	506.32	523.94	4.4	3.5
Skipjack (Gulyasan)	69.13	79.90	96.73	15.6	21.1
Roundscad (Galunggong)	68.48	81.82	97.84	19.5	19.6
Seaweed	7.23	7.55	10.75	4.4	42.4
Yellowfin tuna (Tambakol/Bariles)	114.57	138.51	162.36	20.9	17.2
Mudcrab (Alimango)	422.64	472.75	425.69	11.9	-10.0
Frigate tuna (Tulingan)	80.87	88.75	112.10	9.7	26.3
Big-eyed scad (Matangbaka)	83.70	92.66	112.29	10.7	21.2
Bali sardinella (Tamban)	25.10	28.72	35.10	14.4	22.2
Squid (Pusit)	126.25	132.66	149.01	5.1	12.3
Blue crab (Alimasag)	143.25	176.72	182.31	23.4	3.2
Bigeye tuna (Tambakol/ Bariles)	127.47	146.77	168.75	15.1	15.0
Grouper (Lapu-lapu)	225.87	188.00	214.30	-16.8	14.0
Indian mackerel (Alumahan)	92.68	99.42	122.43	7.3	23.1
Threadfin bream (Bisugo)	134.46	140.62	157.80	4.6	12.2
Slipmouth (Sapsap)	66.42	69.86	86.59	5.2	24.0
Cavalla (Talakitok)	133.23	151.67	153.16	13.8	1.0
Fimbriated sardines (Tunsoy)	35.79	41.40	50.05	15.7	20.9
Others	84.12	96.49	111.26	14.7	15.3

[P] - Preliminary

Note: Percent change may yield different results when computed manually due to rounding.

Sources: Philippine Statistics Authority, Quarterly Commercial Fisheries Survey, Quarterly Municipal Fisheries Survey, Quarterly Inland Fisheries Survey, and Quarterly Aquaculture Survey

PSA

Fisheries Situation Report

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