REPUBLIC OF THE PHILIPPINES
PHILIPPINE STATISTICS AUTHORITY

Fisheries Situation Report for Major Species

April to June 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, April to June 2022** is a quarterly 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.

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Quezon City, Philippines
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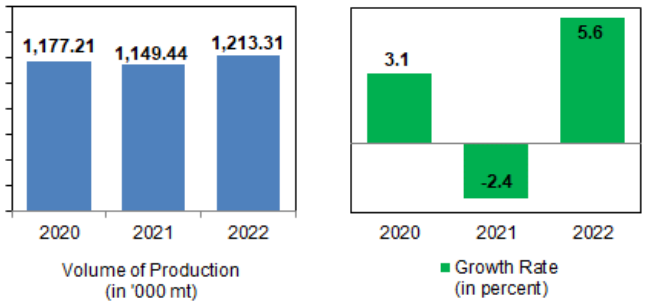
Volume of Production by Subsector and Species
April to June 2022

The total fisheries production during the second quarter of 2022 reached 1.21 million metric tons. It went up by 5.6 percent from the 1.15 million metric tons output in 2021. Increases in production during the quarter were contributed by aquaculture, commercial, and marine municipal fisheries. On the other hand, inland fisheries reported a drop in production. (Figure 1 and Table 1)

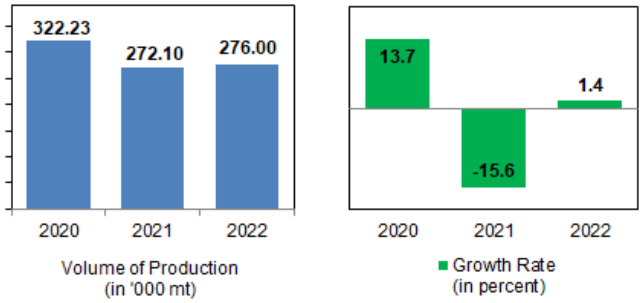
Figure 1. Volume and Annual Growth Rate of Fisheries Production, Philippines: April to June 2020 to 2022[P]



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

Commercial fisheries output was 276.00 thousand metric tons during the quarter. It showed a 1.4 percent increase from the previous year's same quarter record of 272.10 thousand metric tons. The subsector's output comprised 22.7 percent of the total fisheries production. (Figure 2 and Table 1)

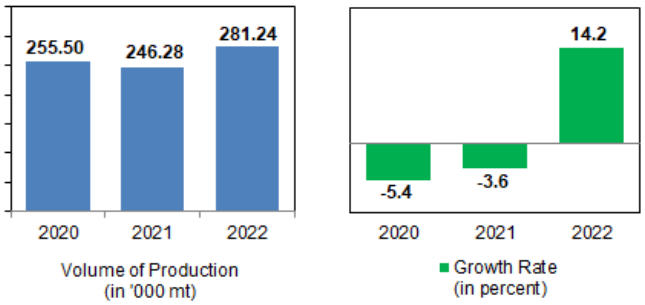
Figure 2. Volume and Annual Growth Rate of Commercial Fisheries Production, Philippines: April to June 2020 to 2022[P]



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

Total unloadings in municipal landing centers was estimated at 281.24 thousand metric tons during the quarter. The volume was 14.2 percent higher than the second quarter 2021 level of 246.28 thousand metric tons. The subsector constituted 23.2 percent of the total fisheries output. (Figure 3 and Table 1)

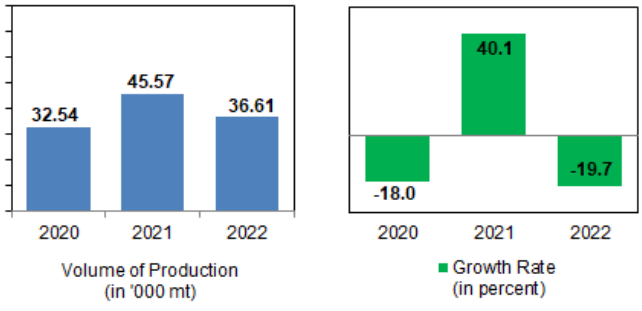
Figure 3. Volume and Annual Growth Rate of Marine Municipal Fisheries Production, Philippines: April to June 2020 to 2022[P]



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

Inland municipal fisheries production was recorded at 36.61 thousand metric tons from 45.57 thousand metric tons in the previous year, indicating an annual decline of -19.7 percent. Inland fisheries recorded the least share to the total fisheries at 3.0 percent. (Figure 4 and Table 1)

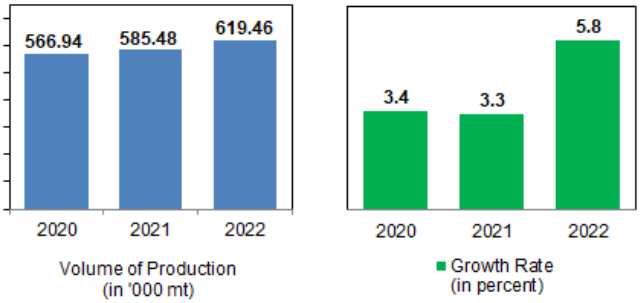
Figure 4. Volume and Annual Growth Rate of Inland Municipal Fisheries Production, Philippines: April to June 2020 to 2022[P]



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

Total harvests from aquaculture farms was registered at 619.46 thousand metric tons. It posted a 5.8 percent improvement from 585.48 thousand metric tons in the same quarter of 2021. Aquaculture subsector had the largest share of 51.1 percent to the total fisheries production. (Figure 5 and Table 1)

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



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

Of the 20 major species, fastest growths were noted in bigeye tuna (tambakol/bariles, 46.7%), squid (pusit, 37.0%), fimbriated sardines (tunsoy, 36.1%), yellowfin tuna (tambakol/bariles, 23.6%), seaweed (21.2%), and grouper (lapu-lapu, 20.8%). (Table 2)

On the other hand, the fastest declines were noted in tiger prawn (sugpo, -30.8%), blue crab (alimasag, -28.5%), frigate tuna (tulingan, -21.9%), and mudcrab (alimango, -20.9%). (Table 2)

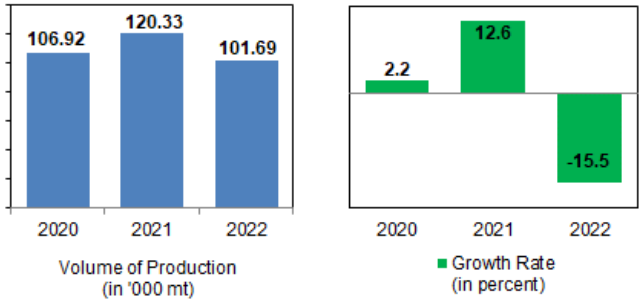
Production of Major Species

1. Milkfish (Bangus)

a. Total milkfish harvested during the second quarter of 2022 declined to 101.69 thousand metric tons or by -15.5 percent from the previous year's output of 120.33 thousand in the same period of 2021. (Figure 6 and Table 2)

b. During the period, milkfish production shared 8.4 percent to the total fisheries output. (Table 2)

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



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

c. At current prices, the gross earnings of milkfish output amounted to PhP 11.99 billion in the second quarter of 2022. It went down by -10.5 percent from its record of PhP 13.39 billion in the same quarter of previous year. (Table 3)

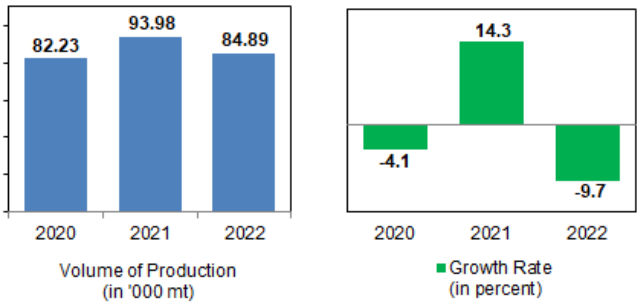
d. On average, the 2022 farmgate price during the quarter was quoted at PhP 117.87 per kilogram, which exhibited a 6.0 percent increase from the same period quotation of PhP 111.25 per kilogram in 2021. (Table 4)

2. Tilapia

a. Production of tilapia during the period reached 84.89 thousand metric tons, which indicates a drop of -9.7 percent compared with the second quarter level of 93.98 thousand metric tons in 2021. (Figure 7 and Table 2)

b. Harvested tilapia during the period comprised 7.0 percent of the total fisheries produced. (Table 2)

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



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

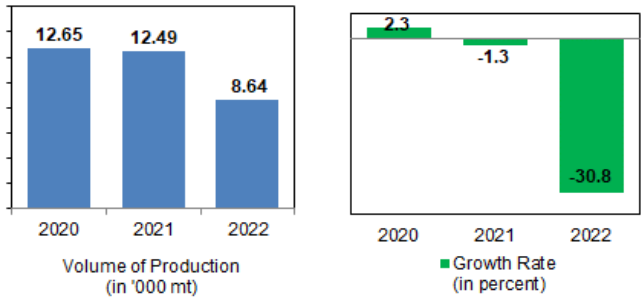
c. The gross value of tilapia production from April to June 2022 was recorded at PhP 7.26 billion or a -4.0 percent decline from the PhP 7.56 billion earnings in the same quarter of 2021. (Table 3)

d. The average farmgate price of tilapia per kilogram at the national level was PhP 85.52 this quarter. It went up by 6.3 percent from its price per kilogram of PhP 80.47 in the same period of previous year. (Table 4)

3. Tiger prawn (Sugpo)

a. Tiger prawn production during the second quarter of 2022 was recorded at 8.64 thousand metric tons, a reduction of -30.8 percent from its level of 12.49 thousand metric tons in the same quarter of previous year. (Figure 8 and Table 2)

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



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

b. Tiger prawn production comprised 0.7 percent of the total fisheries output during the quarter. (Table 2)

c. At current prices, the volume of tiger prawn output in 2022 was valued at PhP 5.26 billion or -22.5 percent cutback from the previous year's value of PhP 6.78 billion in the same quarter. (Table 3)

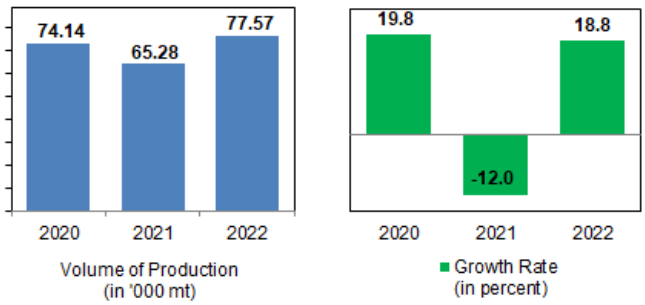
d. The average farmgate price of tiger prawn at the national level was quoted at PhP 608.03 per kilogram in 2022. It increased by 12.0 percent from its 2021 price of PhP 542.68 per kilogram during the quarter. (Table 4)

4. Skipjack (Gulyasan)

a. Skipjack production was estimated at 77.57 thousand metric tons. This was higher by 18.8 percent from 65.28 thousand metric tons output in the same quarter of previous year. (Figure 9 and Table 2)

b. During the quarter, skipjack output shared 6.4 percent of the total fisheries production. (Table 2)

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



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

c. At current prices, the gross value of skipjack was PhP 7.50 billion during the second quarter of 2022. It increased by 44.9 percent compared with its value of PhP 5.18 billion in the same quarter of 2021. (Table 3)

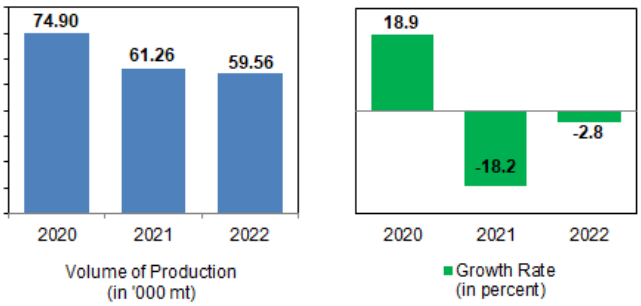
d. During the quarter, the average farmgate price of skipjack was PhP 96.71 per kilogram. It registered an increment of 22.0 percent from the same quarter of previous year's price quotation of PhP 79.29 per kilogram. (Table 4)

5. Roundscad (Galunggong)

a. During the quarter, the total roundscad production went down to 59.56 thousand metric tons or a -2.8 percent drop from its production of 61.26 thousand metric tons a year ago. (Figure 10 and Table 2)

b. Roundscad accounted for 4.9 percent of the total fisheries production for the second quarter of 2022. (Table 2)

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



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

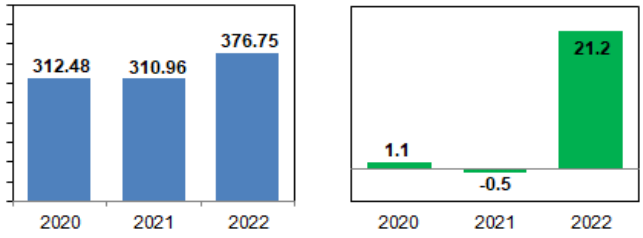
c. At current prices, the total value of roundscad reached PhP 5.49 billion or a 21.4 percent growth compared with its same quarter of previous year's earnings of PhP 4.52 billion. (Table 3)

d. Roundscad's average farmgate price during the quarter was quoted at PhP 92.13 per kilogram. It was 24.8 percent higher than its same quarter of previous year's price of PhP 73.80 per kilogram. (Table 4)

6. Seaweed

a. Seaweed production during the second quarter of 2022 was estimated at 376.75 thousand metric tons, which indicates an annual increase of 21.2 percent from its same quarter of previous year's output of 310.96 thousand metric tons. (Figure 11 and Table 2)

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



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

b. About 31.1 percent of the total fisheries production was shared by seaweed output during the quarter. (Table 2)

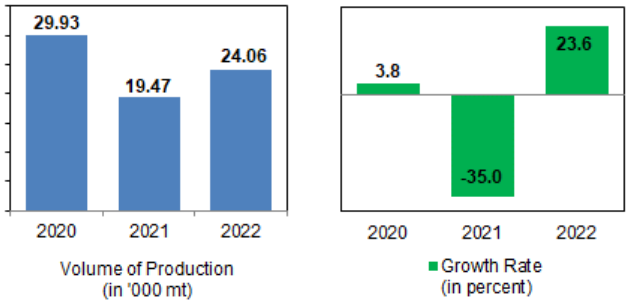
c. For the second quarter of 2022, gross earnings for seaweed production was estimated at PhP 4.02 billion at current prices. This exhibited an annual growth of 73.0 percent from its same quarter of 2021 record of PhP 2.32 billion. (Table 3)

d. The average farmgate price of seaweed was quoted at PhP 10.67 per kilogram during the quarter, which represents growth of 42.8 percent from its previous year's same quarter price of PhP 7.47 per kilogram. (Table 4)

7. Yellowfin tuna (Tambakol/Bariles)

a. Yellowfin tuna production was registered at 24.06 thousand metric tons during the quarter. It increased by 23.6 percent compared with the previous year's same quarter record of 19.47 thousand metric tons. (Figure 12 and Table 2)

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



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

b. Yellowfin tuna output contributed 2.0 percent to the total fisheries output during the second quarter of 2022. (Table 2)

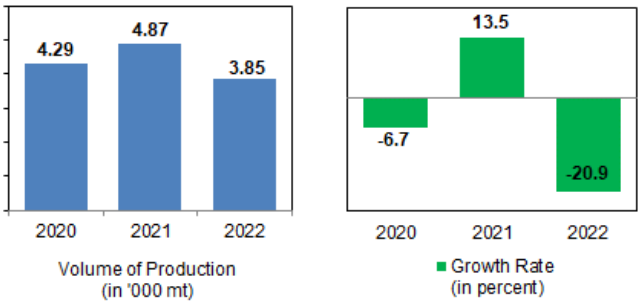
c. Total earnings from yellowfin tuna production was registered at PhP 4.01 billion. It increased by 49.7 percent compared with its 2021 same quarter gross earnings of PhP 2.68 billion. (Table 3)

d. At the national level, a kilogram of yellowfin tuna was priced at PhP 166.58. It increased by 21.1 percent from its same quarter of previous year's average farmgate price of PhP 137.54 per kilogram. (Table 4)

8. Mudcrab (Alimango)

a. The estimated production of mudcrab during the quarter was 3.85 thousand metric tons, indicating a -20.9 percent annual decrease from the same quarter of previous year's output of 4.87 thousand metric tons. (Figure 13 and Table 2)

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



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

b. During the quarter, the mudcrab output accounted for 0.3 percent of the total fisheries production. (Table 2)

c. At current prices, the gross revenue of mudcrab went down by -12.0 percent for this quarter. It amounted to PhP 1.86 billion from the PhP 2.11 billion gross value in the same quarter of 2021. (Table 3)

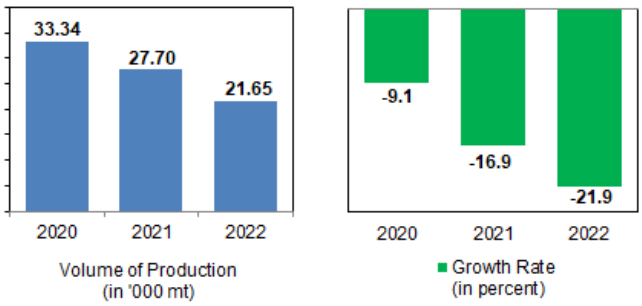
d. The average farmgate price of mudcrab at the national level during the second quarter of 2022 was quoted at PhP 482.82 per kilogram. It increased by 11.3 percent from the previous year's same quarter price of PhP 433.69 per kilogram. (Table 4)

9. Frigate tuna (Tulingan)

a. Frigate tuna production fell by -21.9 percent during the quarter, producing 21.65 thousand metric tons in comparison with the same quarter of the previous year's level of 27.70 thousand metric tons. (Figure 14 and Table 2)

b. Of the total fisheries output during the period, frigate tuna production comprised 1.8 percent. (Table 2)

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



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

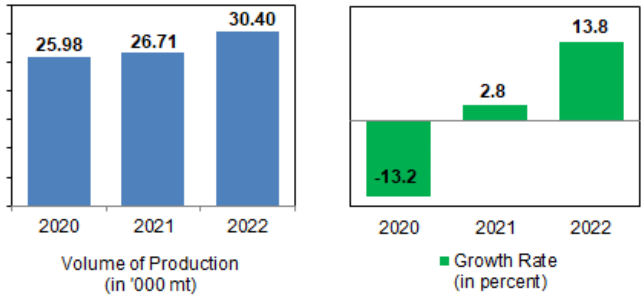
c. The value of frigate tuna production at current prices amounted to PhP 2.71 billion, indicating a 12.4 percent increase from its same quarter of the previous year's record of PhP 2.42 billion. (Table 3)

d. During the quarter, the farmgate average price of frigate tuna at the national level was PhP 125.37 per kilogram. It increased by 43.8 percent from its previous year's same quarter price of PhP 87.21 per kilogram. (Table 4)

10. Big-eyed scad (Matangbaka)

a. The total volume of big-eyed scad during the quarter was registered at 30.40 thousand metric tons. This was 13.8 percent higher than its 2021 same quarter level of 26.71 thousand metric tons. (Figure 15 and Table 2)

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



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

b. Of the total fisheries production, big-eyed scad contributed 2.5 percent during the quarter. (Table 2)

c. The gross value of big-eyed scad production amounted to PhP 3.43 billion at current prices, indicating an increase of 41.8 percent from its same quarter of previous year's value of PhP 2.42 billion. (Table 3)

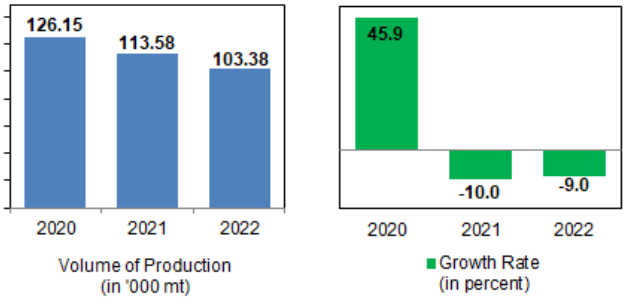
d. The average farmgate price of big-eyed scad for this quarter was registered at PhP 112.69 per kilogram. An increase of 24.6 percent from the same quarter of previous year's quotation of PhP 90.46 per kilogram. (Table 4)

11. Bali sardinella (Tamban)

a. A total of 103.38 thousand metric tons of bali sardinella was recorded during the second quarter of 2022. It decreased by -9.0 percent from the same quarter of previous year's level of 113.58 thousand metric tons. (Figure 16 and Table 2)

b. The volume of bali sardinella production contributed 8.5 percent to the overall fisheries production during the quarter. (Table 2)

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



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

c. The total value of production of the bali sardinella during the quarter was PhP 3.66 billion at current prices. It went up by 12.8 percent compared with its gross value in the same quarter of the previous year of PhP 3.24 billion. (Table 3)

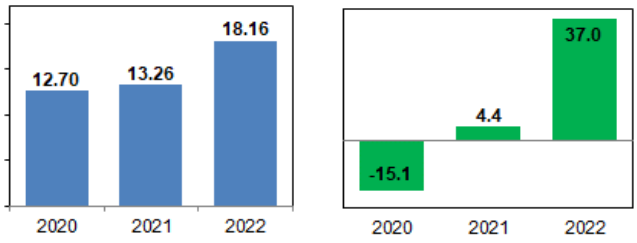
d. At the national level, the average farmgate price of bali sardinella was PhP 35.39 per kilogram during the period, which was 23.9 percent higher from its same quarter of the previous year's record of PhP 28.56 per kilogram. (Table 4)

12. Squid (Pusit)

a. Squid production during the quarter reached 18.16 thousand metric tons. It rose by 37.0 percent compared with its same quarter of previous year's record of 13.26 thousand metric tons. (Figure 17 and Table 2)

b. Of the total fisheries production, squid contributed 1.5 percent during the second quarter of 2022. (Table 2)

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



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

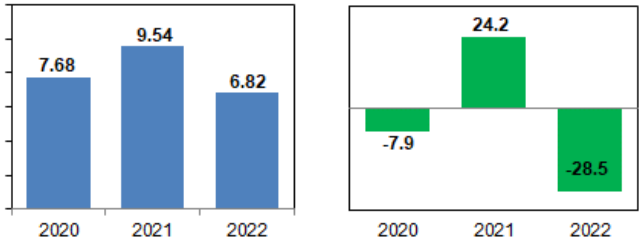
c. At current prices, the gross value of squid amounted to PhP 2.67 billion for the second quarter, showing an improvement of 57.3 percent from its 2021 same quarter total earnings of PhP 1.70 billion. (Table 3)

d. At the national level, the average farmgate price of squid was posted at PhP 146.95 per kilogram, which was 14.9 percent higher than its previous year's same quarter quotation of PhP 127.92 per kilogram. (Table 4)

13. Blue crab (Alimasag)

a. A total of 6.82 thousand metric tons of blue crab production was reported during the second quarter of 2022. It was -28.5 percent lower than the same quarter of previous year's output of 9.54 thousand metric tons. (Figure 18 and Table 2)

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



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

b. Blue crab output contributed 0.6 percent of the total fisheries production during the quarter. (Table 2)

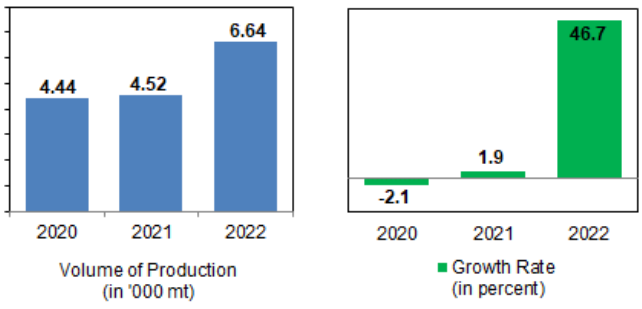
c. At current prices, the gross value of blue crab output for the quarter was PhP 1.29 billion, representing a -22.9 percent decrease from the same quarter of previous year's level of PhP 1.68 billion. (Table 3)

d. The average farmgate price per kilogram of blue crab during the second quarter of 2022 was posted at PhP 189.68. It increased by 7.8 percent from its 2021 same quarter price of PhP 176.00 per kilogram. (Table 4)

14. Bigeye tuna (Tambakol/Bariles)

a. The total bigeye tuna production for the second quarter of 2022 was recorded at 6.64 thousand metric tons. It went up by 46.7 percent compared to the 4.52 thousand metric tons level in the same quarter of previous year. (Figure 19 and Table 2)

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



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

b. The output of bigeye tuna contributed 0.5 percent to the total fisheries production during the quarter. (Table 2)

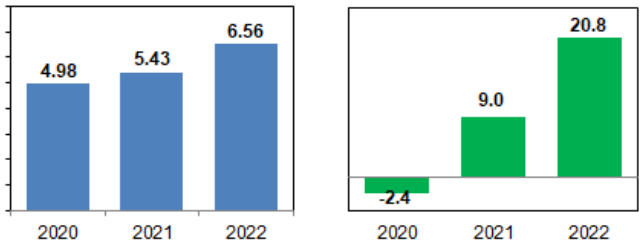
c. The gross value of bigeye tuna production amounted to PhP 1.23 billion at current prices, indicating an uptrend of 85.4 percent from its PhP 0.66 billion mark during the same quarter in 2021. (Table 3)

d. The average farmgate price per kilogram of bigeye tuna was PhP 185.22, which shows an increase of 26.4 percent from the 2021 same period quotation of PhP 146.50 per kilogram. (Table 4)

15. Grouper (Lapu-lapu)

a. During the second quarter of 2022, the total volume of grouper production was registered at 6.56 thousand metric tons. It increased by 20.8 percent from the previous year's same quarter volume of production of 5.43 thousand metric tons. (Figure 20 and Table 2)

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



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

b. Of the total fisheries production, grouper contributed 0.5 percent during the quarter. (Table 2)

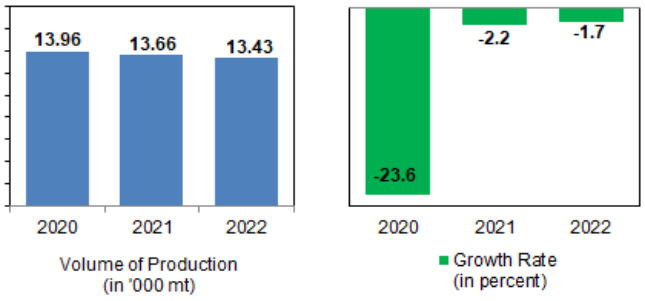
c. At current prices, grouper's value of production was registered at PhP 1.51 billion during the quarter. An increase of 44.4 percent was observed from the PhP 1.04 billion mark during the same quarter in 2021. (Table 3)

d. The average farmgate price of grouper during the quarter was PhP 229.67 per kilogram. This was 19.6 percent higher compared with the previous year's same quarter price of PhP 192.01 per kilogram. (Table 4)

16. Indian mackerel (Alumahan)

a. The volume of indian mackerel production during the second quarter of 2022 was posted at 13.43 thousand metric tons. It decreased by -1.7 percent compared with the previous year's same quarter output of 13.66 thousand metric tons. (Figure 21 and Table 2)

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



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

b. From the total fisheries production, indian mackerel contributed 1.1 percent during the quarter. (Table 2)

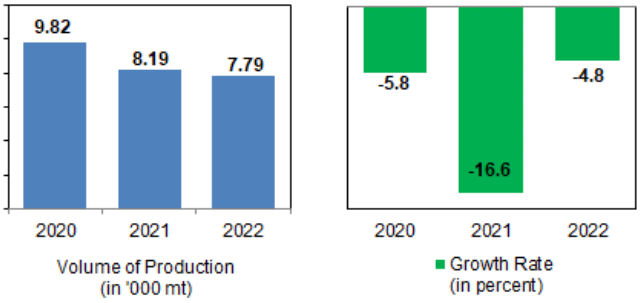
c. The gross value of indian mackerel production at current prices reached an amount of PhP 1.59 billion, achieving a 22.7 percent increase in comparison with the 2021 same period level of PhP 1.29 billion. (Table 3)

d. The average farmgate price of indian mackerel during the quarter was PhP 118.09 per kilogram with an increment of 24.8 percent from the previous year's same quarter quotation of PhP 94.61 per kilogram. (Table 4)

17. Threadfin bream (Bisugo)

a. The volume of threadfin bream production during the second quarter of 2022 was estimated at 7.79 thousand metric tons, which dropped by -4.8 percent from its production of 8.19 thousand metric tons from the same quarter in 2021. (Figure 22 and Table 2)

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



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

b. About 0.6 percent of the total fisheries production was accounted to threadfin bream. (Table 2)

c. The total value of production at current prices for threadfin bream during the quarter reached PhP 1.17 billion. It increased by 7.7 percent compared to its value of PhP 1.08 billion from the same quarter of the previous year. (Table 3)

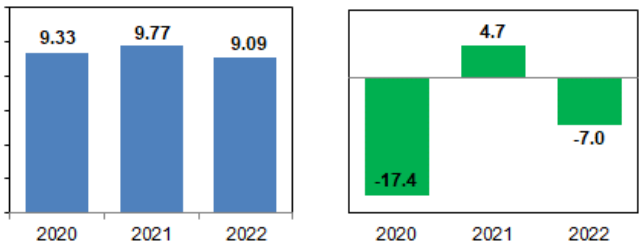
d. The average farmgate price of threadfin bream during the quarter was registered at PhP 149.58 per kilogram. It went up by 13.1 percent from its price of PhP 132.24 per kilogram in the same quarter of 2021. (Table 4)

18. Slipmouth (Sapsap)

a. During the quarter, slipmouth production was recorded at 9.09 thousand metric tons or -7.0 percent decline compared with the same quarter of previous year's level of 9.77 thousand metric tons. (Figure 23 and Table 2)

b. Slipmouth production shared 0.7 percent to the total fisheries output this quarter. (Table 2)

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



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

c. At current prices, the value of slipmouth production this quarter amounted to PhP 0.77 billion, an increase of 7.3 percent from last year's same quarter level of PhP 0.71 billion. (Table 3)

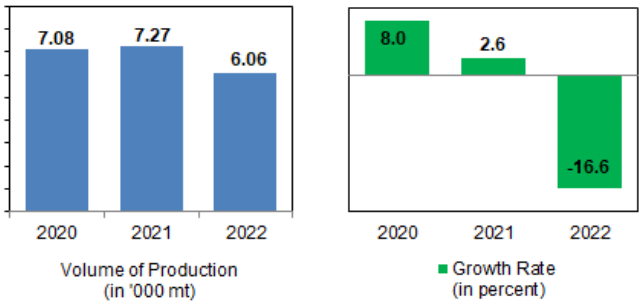
d. During the quarter, the average farmgate price of slipmouth was PhP 84.38 per kilogram. This was 15.3 percent higher than the 2021 same quarter price of PhP 73.17 per kilogram. (Table 4)

19. Cavalla (Talakitok)

a. During the second quarter of 2022, cavalla's total production was 6.06 thousand metric tons or a -16.6 percent reduction from its same quarter of previous year's output of 7.27 thousand metric tons. (Figure 24 and Table 2)

b. Cavalla shared 0.5 percent to the total fisheries production during the period. (Table 2)

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



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

c. The value of cavalla production at current prices amounted to PhP 877.66 million during the quarter. It was lower by -17.0 percent from its same quarter of previous year's record of PhP 1,057.41 million. (Table 3)

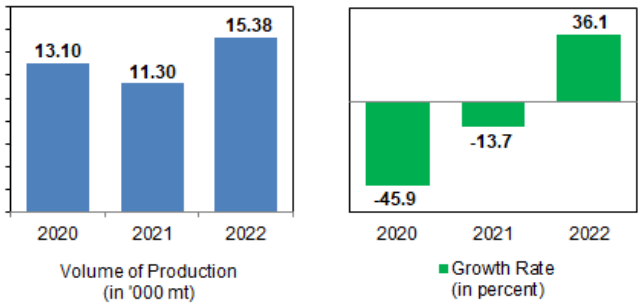
d. Cavalla's average farmgate price per kilogram amounted to PhP 144.73 or a decrease of -0.5 percent from its price of PhP 145.50 per kilogram in the same quarter of 2021. (Table 4)

20. Fimbriated sardines (Tunsoy)

a. The volume of fimbriated sardines production was registered at 15.38 thousand metric tons, which exhibited a substantial growth of 36.1 percent from its 11.30 thousand metric tons output in same quarter of 2021. (Figure 25 and Table 2)

b. Fimbriated sardines output accounted for 1.3 percent of the overall fisheries production during the quarter. (Table 2)

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



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

c. The gross value of fimbriated sardines production at current prices reached a total of PhP 738.78 million this quarter. It posted a 53.5 percent increase from its value of PhP 481.20 million during the same quarter of 2021. (Table 3)

d. On average, farmgate price per kilogram of fimbriated sardines in the second quarter of 2022 was PhP 48.04. This indicates an annual growth of 12.8 percent from its price of PhP 42.59 per kilogram in the same quarter of the previous year. (Table 4)

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 landing center *i*
   X - total average daily unloading for the province
   X_i - total average daily unloading for landing center *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 Factor 1

To take into account non-sampled fishing days for week *k,* the adjustment factor is as follows:

$$A_{imk} = F_{imk} * I_{imk}$$

where:

A_{imk} - adjustment factor for non-sampled fishing days for week *k* of month *m* for landing center *i*

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

I_{imk} - actual data collection status in landing center *i* for week *k* of month *m* (1 if with actual data collection, 0 otherwise)

Adjustment Factor 2

To take into account fishing days for weeks without data collection at month *m*, the adjustment factor is obtained as follows:

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

where:

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

A_{im} - adjustment factor for weeks with fishing days but no data collection in landing center *i* for month *m*

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*

I_{imk} - actual data collection status in landing center *i* for week *k* of month m (1 if with actual 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 base weight and the adjustment factors.

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

where:

w'_{ijmk} - final weight of boat *j* in landing center *i* for week *k* of month *m*

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

A_{imk} - adjustment factor for non-sampled fishing days for week k of month m in landing center *i*

A_{im} - adjustment factor for weeks with fishing days but no data collection in 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:

$$\hat{Y}_p = \sum_{i=1}^{a} \sum_{m=1}^{3} \sum_{j=1}^{n_i} w'_{ijmk} * y_{ijmk}$$

where:

$\hat{Y}p$ - estimate of total volume of fish production for the province

w'_{ijmk} - final weight of boat *j* in landing center *i* for week *k* of month *m*

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

a - total number of sampled landing centers in the province

n_i - number of sampled boats 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 volume of fish production for the region

$\hat{Y}p$ - estimate of total volume of fish production 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 volume of fish production for the national level

$\hat{Y}r$ - estimate of total volume of fish production for the region

n_r - total number of regions in the country with commercial landing center

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 Factor 1

To take into account the non-sampled fishing days for week *k,* the adjustment factor is as follows:

$$A_{himk} = F_{himk} * I_{himk}$$

where:

A_{himk} - adjustment factor for non-sampled fishing days for week *k* of month *m* in landing center *i* at stratum *h*

F_{himk} - total number of fishing days in landing center *i* at stratum *h* for week *k* of month *m*

I_{himk} - actual data collection status in landing center at stratum *h* for week *k* of month *m* (1 if with actual data collection, 0 otherwise)

Adjustment Factor 2

To take into account fishing days for weeks without data collection at month m, the adjustment factor is obtained as follows:

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

where:

$$F_{him} = \sum_{k=1}^{n_k} F_{himk} \qquad f_{him} = \sum_{k=1}^{n_k} F_{himk}\, I_{himk}$$

A_{him} - adjustment factor for weeks with fishing days but no data collection in landing center *i* of month *m* at stratum *h*

F_{him} - total number of fishing days for month *m* of landing center *i* at stratum *h*

f_{him} - total number of represented fishing days for month *m* of landing center *i* at stratum *h*

F_{himk} - total number of fishing days in landing center *i* at stratum *h* for week *k* of month *m*

I_{himk} - actual data collection status in landing center *i* at stratum *h* 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 factors.

$$w'_{hijmk} = w_{hijmk} * A_{himk} * A_{him}$$

where:

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

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

A_{himk} - adjustment factor for non-sampled fishing days for week of landing center *i* for month *m* in landing center *i* at stratum *h*

A_{him} - adjustment factor for weeks with fishing days but no data collection in landing center *i* of month *m* at stratum *h*

c. Estimation of Totals

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

Stratum *h* production

$$\hat{Y}_h = \sum_{i=1}^{a_h} \sum_{m=1}^{3} \sum_{j=1}^{n_{hi}} w'_{hijmk} * y_{hijmk}$$

Provincial total

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

where:

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

$\hat{Y}_h$ - estimate of total volume of fish production at stratum *h*

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

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

a_h - total number of sampled landing centers for stratum h of the province

n_{hi} - number of sampled boats in 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 volume of fish production for the region

$\hat{Y}p$ - estimate of total volume of fish production 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 volume of fish production for the national level

$\hat{Y}r$ - estimate of total volume of fish production for the region

n_r - total number of regions in the country with municipal landing center

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 households for the province
X_i - total number of inland fishing households in barangay *i*
a - number of sample inland fishing barangays for the province
N_i - total number of inland fishing households in barangay *i*
n_i - number of sample inland fishing households 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 volume of fish production for the province
w'_{ij} - final weight of household j in barangay i
y_{ij} - volume of fish production 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 volume of fish production for the region
$\hat{Y}p$ - estimate of total volume of fish production 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 volume of fish production for the national level

$\hat{Y}r$ - estimate of total volume of fish production for the region

n_r - total number of regions in the region with inland fishing households

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:

$$w_i' = w_i * A_p$$

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 is computed using the following formula:

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

where:

$\hat{Y}p$ - estimate of total volume of fish production 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 volume of fish production for the region

$\hat{Y}p$ - estimate of total volume of fish production 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 volume of fish production for the national

$\hat{Y}r$ - estimate of total volume of fish production for the region

n_r - total number of regions in the country

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

Subsector	Volume of Production (metric tons)			Percent Change (%)		Percent Share to Total Fisheries (%)
	2020	2021	2022[P]	2021/2020	2022[P]/2021	2022
Fisheries	1,177,213.07	1,149,436.55	1,213,313.18	-2.4	5.6	100.0
Commercial Fisheries	322,233.87	272,104.29	276,001.57	-15.6	1.4	22.7
Municipal Fisheries	288,039.50	291,848.66	317,852.63	1.3	8.9	26.2
Marine	255,501.93	246,281.01	281,238.34	-3.6	14.2	23.2
Inland	32,537.57	45,567.65	36,614.29	40.1	-19.7	3.0
Aquaculture	566,939.70	585,483.59	619,458.98	3.3	5.8	51.1

[P] - Preliminary
Note: Percent change and percent share may yield different results when computed manually due to rounding.
Source: Philippine Statistics Authority

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

Species	Volume of Production (metric tons)			Percent Change (%)		Percent Share to Total Fisheries (%)
	2020	2021	2022[P]	2021/2020	2022[P]/2021	2022
Fisheries	1,177,213.07	1,149,436.55	1,213,313.18	-2.4	5.6	100.0
Milkfish (Bangus)	106,915.67	120,333.39	101,694.49	12.6	-15.5	8.4
Tilapia	82,227.40	93,976.77	84,891.39	14.3	-9.7	7.0
Tiger prawn (Sugpo)	12,652.75	12,491.62	8,644.41	-1.3	-30.8	0.7
Skipjack (Gulyasan)	74,142.58	65,281.18	77,568.81	-12.0	18.8	6.4
Roundscad (Galunggong)	74,896.41	61,255.45	59,556.64	-18.2	-2.8	4.9
Seaweed	312,478.61	310,960.41	376,749.24	-0.5	21.2	31.1
Yellowfin tuna (Tambakol/Bariles)	29,928.62	19,465.92	24,062.55	-35.0	23.6	2.0
Mudcrab (Alimango)	4,290.13	4,868.47	3,848.91	13.5	-20.9	0.3
Frigate tuna (Tulingan)	33,337.55	27,697.07	21,646.19	-16.9	-21.9	1.8
Big-eyed scad (Matangbaka)	25,984.44	26,706.55	30,402.08	2.8	13.8	2.5
Bali sardinella (Tamban)	126,147.57	113,581.24	103,379.04	-10.0	-9.0	8.5
Squid (Pusit)	12,702.12	13,263.24	18,163.79	4.4	37.0	1.5
Blue crab (Alimasag)	7,680.36	9,540.07	6,824.30	24.2	-28.5	0.6
Bigeye tuna (Tambakol/Bariles)	4,441.86	4,524.87	6,637.05	1.9	46.7	0.5
Grouper (Lapu-lapu)	4,982.60	5,429.43	6,556.04	9.0	20.8	0.5
Indian mackerel (Alumahan)	13,964.16	13,659.69	13,430.39	-2.2	-1.7	1.1
Threadfin bream (Bisugo)	9,816.99	8,186.63	7,793.08	-16.6	-4.8	0.6
Slipmouth (Sapsap)	9,331.51	9,770.38	9,090.85	4.7	-7.0	0.7
Cavalla (Talakitok)	7,084.49	7,267.31	6,064.22	2.6	-16.6	0.5
Fimbriated sardines (Tunsoy)	13,096.02	11,297.18	15,378.58	-13.7	36.1	1.3
Others	211,111.23	209,879.68	230,931.14	-0.6	10.0	19.0

[P] - Preliminary
Note: Percent change and percent share may yield different results when computed manually due to rounding.
Source: Philippine Statistics Authority

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

Species	Value of Production at Current Prices ('000 PhP)			Percent Change (%)		Percent Share to Total Fisheries (%)
	2020	2021	2022[P]	2021/2020	2022[P]/2021	2022
Fisheries	73,208,373.19	80,205,186.30	92,591,093.80	9.6	15.4	100.0
Milkfish (Bangus)	11,584,706.29	13,386,894.75	11,986,597.77	15.6	-10.5	12.9
Tilapia	6,564,664.10	7,562,665.40	7,259,533.06	15.2	-4.0	7.8
Tiger prawn (Sugpo)	6,747,380.16	6,778,905.51	5,256,079.54	0.5	-22.5	5.7
Skipjack (Gulyasan)	4,722,524.05	5,175,984.98	7,501,315.38	9.6	44.9	8.1
Roundscad (Galunggong)	4,703,238.73	4,520,474.19	5,486,956.86	-3.9	21.4	5.9
Seaweed	2,463,767.71	2,323,541.83	4,020,591.59	-5.7	73.0	4.3
Yellowfin tuna (Tambakol/Bariles)	3,084,557.06	2,677,335.94	4,008,292.61	-13.2	49.7	4.3
Mudcrab (Alimango)	1,907,854.28	2,111,416.10	1,858,323.74	10.7	-12.0	2.0
Frigate tuna (Tulingan)	2,500,757.50	2,415,413.23	2,713,876.85	-3.4	12.4	2.9
Big-eyed scad (Matangbaka)	2,068,197.43	2,415,875.56	3,425,958.43	16.8	41.8	3.7
Bali sardinella (Tamban)	2,763,055.19	3,243,814.52	3,659,044.27	17.4	12.8	4.0
Squid (Pusit)	1,534,202.94	1,696,641.73	2,669,202.52	10.6	57.3	2.9
Blue crab (Alimasag)	1,059,698.37	1,679,055.95	1,294,460.57	58.5	-22.9	1.4
Bigeye tuna (Tambakol/Bariles)	570,774.58	662,902.93	1,229,308.70	16.1	85.4	1.3
Grouper (Lapu-lapu)	853,242.94	1,042,530.72	1,505,738.10	22.2	44.4	1.6
Indian mackerel (Alumahan)	1,189,238.34	1,292,331.73	1,585,950.52	8.7	22.7	1.7
Threadfin bream (Bisugo)	1,233,737.54	1,082,603.09	1,165,707.90	-12.3	7.7	1.3
Slipmouth (Sapsap)	640,678.22	714,890.13	767,075.01	11.6	7.3	0.8
Cavalla (Talakitok)	908,037.86	1,057,410.89	877,661.63	16.5	-17.0	0.9
Fimbriated sardines (Tunsoy)	469,536.53	481,201.94	738,775.76	2.5	53.5	0.8
Others	15,638,523.37	17,883,295.18	23,580,643.00	14.4	31.9	25.5

[P] - Preliminary
Note: Percent change and percent share may yield different results when computed manually due to rounding.
Source: Philippine Statistics Authority

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

Species	Average Price (PhP/Kg)			Percent Change (%)	
	2020	2021	2022[P]	2021/2020	2022[P]/2021
Fisheries					
Milkfish (Bangus)	108.35	111.25	117.87	2.7	6.0
Tilapia	79.84	80.47	85.52	0.8	6.3
Tiger prawn (Sugpo)	533.27	542.68	608.03	1.8	12.0
Skipjack (Gulyasan)	63.70	79.29	96.71	24.5	22.0
Roundscad (Galunggong)	62.80	73.80	92.13	17.5	24.8
Seaweed	7.88	7.47	10.67	-5.2	42.8
Yellowfin tuna (Tambakol/Bariles)	103.06	137.54	166.58	33.5	21.1
Mudcrab (Alimango)	444.71	433.69	482.82	-2.5	11.3
Frigate tuna (Tulingan)	75.01	87.21	125.37	16.3	43.8
Big-eyed scad (Matangbaka)	79.59	90.46	112.69	13.7	24.6
Bali sardinella (Tamban)	21.90	28.56	35.39	30.4	23.9
Squid (Pusit)	120.78	127.92	146.95	5.9	14.9
Blue crab (Alimasag)	137.98	176.00	189.68	27.6	7.8
Bigeye tuna (Tambakol/ Bariles)	128.50	146.50	185.22	14.0	26.4
Grouper (Lapu-lapu)	171.24	192.01	229.67	12.1	19.6
Indian mackerel (Alumahan)	85.16	94.61	118.09	11.1	24.8
Threadfin bream (Bisugo)	125.67	132.24	149.58	5.2	13.1
Slipmouth (Sapsap)	68.66	73.17	84.38	6.6	15.3
Cavalla (Talakitok)	128.17	145.50	144.73	13.5	-0.5
Fimbriated sardines (Tunsoy)	35.85	42.59	48.04	18.8	12.8
Others	74.08	85.21	102.11	15.0	19.8

[P] - Preliminary
Note: Percent change may yield different results when computed manually due to rounding.
Source: Philippine Statistics Authority

PSA

Fisheries Situation Report

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