Philippines - Quarterly Aquaculture Survey 2020

Philippine Statistics Authority (PSA)

Report generated on: February 16, 2023

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Overview

Identification

ID NUMBER
PHL-PSA-QAqS-2020-V1

Version

VERSION DESCRIPTION
V2: edited at Central Office, anonymized

PRODUCTION DATE
2020-08-18

NOTES
Reflects modification in the new sampling frame used as it adopted the results of the List of Aquafarms from the Updating List of Aquaculture Farms (ULAF) activity conducted in 2017 which replaced Aquaculture Farm Inventory (AqFI).

Overview

ABSTRACT
The Philippine Statistics Authority (PSA) through the Fisheries Statistics Division (FSD) under the Economic Sector Statistics Service (ESSS) is responsible for the conduct of periodic surveys related to fisheries. The fisheries sector is composed of three (3) subsectors, namely; commercial, municipal fisheries and aquaculture. There are four (4) quarterly surveys that generate volume and value of production by species at the national, regional and provincial level. The statistics primarily serve as input to the compilation of performance of agriculture and national accounts. The data sets are also used for policy making and program implementation on fisheries.

Aquaculture is one of the fisheries subsectors. It involves propagation and culturing of fish and other fishery species in farming facility such as fishpond, fish pen and fish cage. It also includes oyster, mussel and seaweed culture. The QAqS serves as the activity that gathers information on volume and price of species harvested in the aquafarms.

The QAqS aims to generate volume and value of aquaculture production by aquafarm type, species and quarter at the provincial level, regional and national levels.

During its quarterly conduct, data collection, supervision, field editing and data processing are done the field offices. Three levels of data review are undertaken which are the provincial, regional and national. As a final point, the FSD is responsible for the release of the estimates and preparation of reports.

KIND OF DATA
Sample survey data [ssd]

UNITS OF ANALYSIS
Aquafarm as the unit of analysis.

Scope

NOTES
The data items in the survey forms are production, area harvested and price by species of each aquafarm type. The information are asked during the current quarter and the same quarter of the previous year.

TOPICS

Topic	Vocabulary	URI
Economic statistics/Sectoral/Fishery	Philippine Statistics Authority	

Coverage

GEOGRAPHIC COVERAGE
Provinces in regions; National coverage

UNIVERSE
All aquafarms nationwide covering the following aquafarm type/water environments:

a. Brackishwater and freshwater fishponds

b. Brackishwater, freshwater and marine pens and cages

c. Oyster, mussel and seaweed

d. Other freshwater aquafarms like rice fish, small farm reservoir, etc.

Producers and Sponsors

PRIMARY INVESTIGATOR(S)

Name	Affiliation
Philippine Statistics Authority (PSA)	National Economic and Development Authority (NEDA)

FUNDING

Name	Abbreviation	Role
Government of the Philippines	GOP	Full funding

Metadata Production

METADATA PRODUCED BY

Name	Abbreviation	Affiliation	Role
Fisheries Statistics Division	FSD	Philippine Statistics Authority (PSA)	Documenter of the study

DATE OF METADATA PRODUCTION
2021-10-01

DDI DOCUMENT VERSION
Version 1.0

DDI DOCUMENT ID
DDI-PHL-PSA-QAqS-2020-V1

Sampling

Sampling Procedure

QAqS is a non-probability survey. During its field operations in the First Quarter 2020 round, it initially adopted the updated List of Aquafarms from the 2017 Updating of List of Aquaculture Farms (ULAF) as its new sampling frame. It replaced the Aquaculture Farm Inventory (AqFI).

The QAqS has province for its domain. The sampling procedure was done by aquafarm type in the province.

By aquafarm type, municipalities were ranked according to total area of aquafarms based on ULAF. Municipalities with cumulative share of at least 80% to total area were taken as sample municipalities.

For each sample municipality, eight (8) sample aquafarms were selected, if the number of aquafarms in the municipality is more than 25. If the number of aquafarms is 25 or less, five (5) sample aquafarms were selected. A total of 6662 sample aquafarms were covered nationwide.

The selected aquafarms serve as the samples for the regular conduct of QAqS.

Deviations from Sample Design

No deviation from the survey design

Response Rate

Response rate for quarterly aquaculture survey was 85%. This accounted for farms in operation and those without harvest during the reference period.

Weighting

QAqS is a non-probability survey. As such, no weighing procedure is applied.

Questionnaires

Overview

There were five (5) QAqS survey forms written in English that were being used depending on the type of aquafarm. The data sets were the same for all the forms except for the section on species cultured applicable to the type of aquafarm.

- QAqS Form 1 - Fishpond
- QAqS Form 2 - Pen and Cage
- QAqS Form 3 - Oyster, Mussel and Seaweed
- QAqS Form 4 - Hatchery*
- QAqS Form 5 - Other Freshwater Farms

All survey forms were provided as technical documents, except QAqS Form 4 for Hatchery which was not covered in survey.

* QAqS Form 4 - Hatchery is used to collect data on fry/fingerling production and price. However, the data gathered is not included in estimation of aquaculture production.

Data Collection

Data Collection Dates

Start	End	Cycle
2020-03-23	2020-03-26	First Quarter
2020-06-22	2020-06-25	Second Quarter
2020-09-21	2020-09-24	Third Quarter
2021-08-18	2020-11-26	Fourth Quarter

Data Collection Mode

Face-to-face [f2f]

Data Collection Notes

Prior to data collection, there were three (3) levels of training on field operations for QAqS being conducted as follows:

1. Operational training on fisheries surveys served as the first level training conducted annually. The FSD staff act as resource persons. The participants included two (2) representatives per region.

2. Second level training was conducted in the Regional Statistical Service Office (RSSO) immediately after the first level training. Participants to the second level training were representatives from the RSSO and two (2) participants from each province.

3. Third level training was held at the Provincial Statistics Office (PSO) prior to each survey round. This training was intended for the enumerators or the hired Statistical Researchers (SRs) and attended also by the PSO supervisors.

The hired SRs conducted the interviews with the supervision of the regular staff of the PSA PSO. They interviewed the owner/operator and/or caretaker of the sample aquafarms about the harvests in the aquafarm during the reference quarter using the appropriate QAqS survey forms. They also inquired from the key informants about the production of most of the operators in the municipality and the conditions affecting production. Key informants may be Municipal Agricultural Officer (MAO), barangay official, official/member of aquafarm operators' organization and other knowledgeable persons regarding aquafarm operation.

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Data Collectors

Name	Abbreviation	Affiliation
Philippine Statistics Authority	PSA	National Economic Development Authority (NEDA)

Supervision

The Regional Director (RD) who is the head of RSSO was responsible for the regional level monitoring and supervision of the survey operations of the Provincial Statistics Offices (PSOs).

The Provincial Statistics Officer provided the over-all supervision in the province. Among the responsibilities of the supervisor were to conduct SR training prior to data collection, assign area of coverage, schedule the data collection and ensure completeness of the accomplished survey forms. To ensure the smooth implementation of data collection, the PSO conducted spot-checking and back checking activities and addressed problems encountered by the SRs under his/her supervision. The Statistical Operations and Coordination Division (SOCD) Chief also provided another level of supervision. And sometimes, Central Office personnel became available to provide support and control of the said activities.

Data Processing

Data Editing

Initially, the survey returns were manually edited to ensure completeness and accuracy. During this stage, survey returns were checked for completeness from the list of samples. For each of the survey forms, entries should be complete and numeric entries are in proper unit of measurement and decimal places.

After encoding, the entries were then again inspected and reviewed for completeness, accuracy and consistency with other items.

Other Processing

The Fisheries Data Generation System (DataGen) is an MS Excel based system that facilitates encoding, editing, generation of estimates and data review of quarterly fisheries surveys. The PSO is responsible for the data processing of QAqS returrns using the DataGen.

Data Appraisal

Estimates of Sampling Error

Not applicable

Other forms of Data Appraisal

Since quarterly survey was done through interviews of key informants, validation of responses was needed. Additional information was gathered from interviews of people from government and non-government agencies and offices and other stakeholders in fisheries, for example, fish/seaweed traders and processors. The use of auxiliary information was also one way of validating data generated by the survey. Examples of these are the programs of the Bureau of Fisheries and Aquatic Resources (BFAR) for uplifting the aquaculture sector, record of weather disturbances and the provinces affected by the calamity and, existing fishery laws. Comparing current estimates with the time series of aquaculture data was also another way of appraising survey results.

To ensure the quality of data, the generated outputs had to undergo data review and validation. Data review involves internal checks of the data collected, consistency and completeness check of data items and; detection and correction of identified errors. Data validation, on the other hand, ensures that the estimates generated are truly reflective of the current fisheries situation. It involves thorough analysis of the generated estimates with auxiliary information.

Data review was undertaken in three (3) levels: provincial, regional and national levels which are identified as Provincial Data Review (PDR), Regional Data Review (RDR) and National Data Review (NDR), respectively.