Philippines - Palay Production Survey 2017

Philippines Statistics Authority

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Overview

Identification

ID NUMBER
PHL_2017_PPS_v01_EN_M_v01_A_OCS

Overview

ABSTRACT
The Palay Production Survey is one of the two modules of the Palay and Corn Production Survey (PCPS), formerly known as the Rice and Corn Production Survey (RCPS).

The Palay Production Survey (PPS) 2017 is a quarterly survey conducted by the Philippine Statistics Authority (PSA). It aims to generate estimates on palay production, area and yield and other related information at the provincial level. The four rounds are conducted in January, April, July and October. Each round generates estimates for the immediate past quarter and forecasts for the next two quarters. Results of the survey serve as inputs to planners and policy makers on matters concerning the rice industry.

KIND OF DATA
Sample survey data [ssd]

UNITS OF ANALYSIS
Agricultural holdings

Scope

NOTES
The scope of the Palay Production Survey includes:

- Production, area planted/harvested and yield by ecosystem and seed type

- Usage of seeds, fertilizer and pesticides

- Source of irrigation water and adequacy

- Monthly distribution of production and area harvested

- Farm household disposition of production

- Area with standing crop

- Planting intention for the quarter

TOPICS

Topic	Vocabulary	URI
Agriculture, forestry, fisheries	Philippines Statistics Authority	

Coverage

GEOGRAPHIC COVERAGE
National Coverage

UNIVERSE
Farming households in palay producing barangays.

Producers and Sponsors

PRIMARY INVESTIGATOR(S)

Name	Affiliation
Philippines Statistics Authority	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
Office of Chief Statistician	OCS	Food and Agricultural Organization	Metadata adapated for FAM
Crops Statistics Division	CSD	Philippines Statistics Authority	Documentation of study

DDI DOCUMENT VERSION
PHL_2017_PPS_v01_EN_M_v01_A_OCS_v01

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DDI_PHL_2017_PPS_v01_EN_M_v01_A_OCS_FAO

Sampling

Sampling Procedure

The sampling procedure used in the Palay Production Survey (PPS) 2017 was first implemented in 1994. This is a replicated two-stage stratified sampling design with province as the domain, barangay as the Primary Sampling Unit (PSU) and farming household as the Secondary Sampling Unit (SSU).

The 1991 Census of Agriculture and Fisheries (CAF) provides the primary basis for the sampling frame for the PPS. Except Isabela, Laguna and Bukidnon where the traditional complete enumeration strategy was employed, the 1991 CAF used sampling techniques for selecting the primary sampling units (the barangays) for these three provinces.

The results of the 1991 Census of Agriculture and Fisheries (CAF 1991) serve as sampling frame at the psu and ssu levels. In the said census, the largest barangay in a municipality is taken with certainty while a 50 percent sampling rate is used for selecting the remaining barangays in the municipality. This scheme effectively resulted in the generation of two sub-universes: a sub universe of barangays with probability of selection equal to one (these barangas are called 'certainty barangays') and another sub-universe of barangays with probability of selection equal to 0.5. This characteristic of the CAF 1991 data is used in the selection of sample barangays for the PPS.

The barangays are arrayed in ascending order based on palay area which are stratified such that the aggregate palay area of the barangays belonging to one stratum is more or less equal to the aggregate palay area of the barangays in any other stratum. Ten strata are formed for major palay producing provinces and five for minor producing provinces. In all these provinces, the last stratum consisted of the certainty barangays per CAF 1991 design.

For each stratum, four (4) sample barangays are drawn independently using Probability Proportional to Size (PPS) sampling with the barangay's palay area as size measure. This resulted with four (4) independent sets of barangays (i.e., four replicates) for the province. Systematic sampling is used in drawing the sample farming households in each sample barangay.

For economic reasons, sample size per barangay is limited to a minimum of four (4) and a maximum of twenty-five (25). To correct for this limitation of the design, the use of household weights is instituted. A detailed discussion of weighting in the PPS is included in the survey's estimation procedure attached as a Technical Document.

Updating of frame on the list of agricultural households in the same sample barangays were generated through interview of key informants in 2007 and 2011 in order to get a precise estimate. In November 2007, an updating of the list of farming households in all palay sample barangays nationwide is done to address the problem of non-response due to transfer of residence, stoppage of farm operation, passing away of operator etc. Consequently, a new set of sample households is drawn.

Respondents who refused to be interviewed, not a home, unknown and transferred to another barangay are treated as missing and are replaced at the Central Office for the next quarter's survey. The replacement samples are taken from the list of replacements (farming households) for the barangay and are reflected in the list of sample households for the next round.

Weighting

Sample weights are applied to all variables at the household-level. These are determined as a function of the uniform raising factor for the province, denoted by Rk, and the adjusted household weights.

Rk is initially computed from the following characteristics: average total area planted to palay per stratum, average total area planted to palay per barangay, average number of farming households per barangay, average number of sample farming households per barangay and average number of sample barangays per stratum.

Sample size for the sample barangay is determined based on the following information: Rk, total number of farm households in the sample barangay, total palay area of the sample barangay, aggregate palay area in the stratum and number of sample barangays in the stratum.

For operational purposes, sample size per barangay is limited to a minimum of four (4) and a maximum of 25. To correct for this limitation, the use of a uniform sample weight for all sample households in the same sample barangay is instituted. Household weights are determined as a function of the computed sample size and the 'desired' sample size for the barangay, that is:

a) 1.00 if the computed sample size was between 4 and 25;

b) less than 1.00 if computed sample size was less than 4

c) more than 1.00 if computed sample size was more than 25, and

d) based on computed sample size and number of farming households in the barangay if computed sample size is less than 25 and said sample size is greater than total number of farming households in the barangay.

Household weights were encoded together with other household level data. During table generation, weighting adjustment was done to correct for sampling unit non-response due to the following reasons:

- refusal of target respondent or any other knowledgable household member to be interviewed

- sample barangay was not accessible during the survey period

- entire household was temporarily away during the survey operation

- sample household has transferred residence to another barangay

- sample household's residence could not be located / unknown in the sample barangay

Weighting adjustment was done for each sample barangay, whenever applicable. This was calculated by multiplying the original household weight by the reciprocal of the response rate. Response rate is the ratio of the number of sample households who responded to the survey (either palay household and non-palay household) to the total number of sample households in the barangay. Calculation of the final weight was done afterwards, by multiplying the adjusted weight by the uniform raising factor Rk.

Details of the above discussion on weighting adjustment procedures, are contained in the document describing the Palay Production Survey (PPS) sampling methodology provided attached as a Technical Document.

Questionnaires

No content available

Data Collection

Data Collection Dates

Start	End	Cycle
2017-04-01	2017-04-10	April 2017 Round
2017-07-01	2017-07-10	July 2017 Round
2017-10-01	2017-10-10	October 2017 Round
2017-12-01	2017-12-10	January 2018 Round

Data Collection Mode

Face-to-face paper [f2f]

Data Processing

No content available

Data Appraisal

No content available