

REPUBLIC OF THE PHILIPPINES PHILIPPINE STATISTICS AUTHORITY BOARD

PSA Board Resolution No. 04 Series of 2020

APPROVING AND ADOPTING THE NEW SAMPLING DESIGN OF THE BACKYARD LIVESTOCK AND POULTRY SURVEY (BLPS)

WHEREAS, Executive Order (EO) No. 352, "Designation of Statistical Activities That Will Generate Critical Data for Decision Making of the Government and the Private Sector" issued on 01 July 1996, established the System of Designated Statistics (SDS) in the Philippine Statistical System;

WHEREAS, the SDS is a mechanism that identifies and designates the most critical and essential statistics required for social and economic planning/analysis based on approved criteria;

WHEREAS, the Backyard Livestock and Poultry Survey (BLPS), which is a statistical activity conducted quarterly by the PSA, is included in the SDS:

WHEREAS, the BLPS is the main source of data on supply and disposition of farm animals such as chicken, duck, swine, cattle, carabao and goat;

WHEREAS, the current sampling design of the BLPS is stratified two-stage sampling with palay farm area as stratification variable. The first stage of selection is the selection of sample barangays or Primary Sampling Units (PSUs) using probability proportional to size (pps) with palay farm area as measure of size. The second stage is the selection of sample livestock and poultry farming households or Secondary Sampling Units (SSUs) from the samples of PPS which is selected using systematic sampling. No rotation of samples is employed and the domains are the provinces, excluding Batanes, but including Davao City and Zamboanga City;

WHEREAS, the current sampling design of the BLPS, which was developed nearly three decades ago with the 1991 Census of Agriculture and Fisheries as sampling frame, no longer captures the attributes of livestock and poultry farming in the country at the moment;

WHEREAS, the major limitations of the current sampling design include the following: (a) the BLPS samples do not ensure representativeness of the population of livestock and poultry farming households in the country as these samples are drawn from the samples of Palay Production Survey (PPS) which was designed based on the characteristics of palay farming; (b) the formation of 10 strata to classify barangays prior to selection of sample palay farming households may lead to some strata with only few

barangays when using the 2012 CAF as sampling frame; and (c) the use of same sample barangays and households in all rounds of the survey increases respondent's fatigue and does not allow updating of farming status of more households in the province;

WHEREAS, the abovementioned limitations of the current sampling design of the BLPS were the motivations in the redesigning to come up with a more efficient sampling design for the survey;

WHEREAS, after series of reviews, simulation of various possible scenarios and conduct of pilot survey, the proposed sampling design for BLPS is two-stage with the following details, to wit:

- 1. The first stage is the selection of sample barangays or PSUs using probability proportional to size (pps) systematic with total animal inventory as measure of size.
- 2. The second stage is the selection of livestock and poultry farming households or SSUs using systematic sampling.
- 3. Rotation of samples is done annually for barangays and quarterly for farming households. However, while the COVID-19 pandemic continues to affect mobility, sample farming households are rotated annually.
- 4. Samples for BLPS are independent from PPS and the domains are the provinces, including Batanes and the National Capital Region (NCR).

WHEREAS, the proposed design has the following advantages: (a) increases precision of estimates as confirmed in the results of the pilot survey, thus generating more reliable livestock and poultry statistics; (b) ensures representativeness of drawn samples for BLPS due to the independent selection of samples from PPS, use of appropriate measure of size, and the use of the latest available sampling frame; (c) reduces response burden and allows updating of the farming status of more households in the province; and (d) increases the provincial and regional domains with the inclusion of Batanes and NCR;

WHEREAS, the Interagency Committee on Agriculture and Fishery Statistics (IACAFS) endorses the proposed new sampling design of the BLPS for approval of the PSA Board;

NOW, THEREFORE, BE IT RESOLVED, that the PSA Board approves the adoption of the two-stage sampling design of the BLPS with the following details, to wit:

- 1. The first stage is the selection of sample barangays or PSUs using probability proportional to size (pps) systematic with total animal inventory as measure of size.
- The second stage is the selection of livestock and poultry farming households or SSUs using systematic sampling.
- 3. Rotation of samples is done annually for barangays and quarterly for farming households. However, while the COVID-19 pandemic continues to affect mobility, sample farming households are rotated annually.

4. Samples for BLPS are independent from PPS and the domains are the provinces, including Batanes and the National Capital Region (NCR).

Approved this 11th day of August 2020, in Metro Manila.

DENNIS S. MAPA, Ph.D.

Undersecretary

National Statistician and Civil Registrar General

Philippine Statistics Authority

Designated Chairperson, PSA Board