

## Republic of the Philippines PHILIPPINE STATISTICS AUTHORITY BOARD

## PSA Board Resolution No. 10 Series of 2022

## APPROVING AND ADOPTING THE NEW SAMPLING DESIGN OF THE COMMERCIAL LIVESTOCK AND POULTRY SURVEY (CLPS)

WHEREAS, the Commercial Livestock and Poultry Survey (CLPS) is one of the statistical activities conducted quarterly by the Philippine Statistics Authority (PSA) and is the main source of data on supply and disposition and other related data on livestock and poultry commodities from establishments such as carabao, cattle, swine, goat, sheep, layer, broiler, and duck;

WHEREAS, the current sampling design of the CLPS is single stage stratified sampling design with the maximum farm/housing capacity as stratification variable. Stratum boundaries are obtained using the Dalenius-Hodges method. Sample size is determined using Neyman procedure with target coefficient variation of five percent (5%). The number of strata per province ranges from two (2) to four (4) depending on the homogeneity of the stratification variable. Complete enumeration is applied for provinces with less than 25 establishments, otherwise, stratified sampling design is used;

WHEREAS, the current sampling design of the CLPS, which was developed nearly three decades ago no longer capture the changes in the behavior of livestock and poultry farming in the country;

WHEREAS, the major limitations of the current sampling design includes the following: (a) stratification is not updated, hence, not reflecting the possible changes in maximum farm/housing capacity of the establishments; and (b) the number of stratum varies per animal type per province, imposing difficulty in terms of field operations;

WHEREAS, the above mentioned limitations of the current sampling design of the CLPS 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 in March to April 2022, the proposed sampling design for CLPS is a stratified probability proportional to size (PPS), where the establishment is the primary sampling unit (PSU). The animal type serves as a stratification variable and the size measure is the maximum farm/housing capacity of the establishment. Per animal type, the establishments are sorted by maximum housing capacity and sample establishments are selected using systematic

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sampling. A panel sample establishment will be maintained for a year, and a new set of samples will be selected every first quarter of the succeeding year;

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; and (b) allows easier field implementation since there is no need for varying numbers of stratum per animal type per domain;

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

**WHEREAS**, the PSA shall implement the use of the proposed sampling design of the CLPS starting first quarter of 2023;

**NOW, THEREFORE, BE IT RESOLVED,** that the PSA Board hereby approves the adoption of the new sampling design for the CLPS with the following details, to wit:

- (a) The sampling design for CLPS is a stratified probability proportional to size (PPS), where the establishment is the primary sampling unit (PSU);
- (b) The animal type serves as a stratification variable and the size measure is the maximum farm/housing capacity of the establishment. Per animal type, the establishments are sorted by maximum housing capacity and sample establishments are selected using systematic sampling; and
- (c) A panel sample establishment will be maintained for a year, and a new set of samples will be selected during the first quarter of the next year.

Approved this 12th day of August 2022 in Quezon City.

ARSENIO M. BALISACAN, Ph.D.

Secretary

National Economic and Development Authority Chairperson, PSA Board

Chairperson, PSA Boar

Attested by:

Undersecretary

National Statistician and Civil Registrar General

Chairperson, PSA Board Secretariat

VIS S. MAPA. Ph.D.