

I. RATIONALE

Under the existing data systems of the Bureau of Agricultural Statistics (BAS), the measurement of the performance of the agricultural sector is mainly done through estimating the sector's gross outputs in terms of quantities of commodities produced and their corresponding prices during an accounting period. This system is well supported by the current statistical surveys and monitoring activities of the BAS which are heavily oriented towards the collection of data on production and prices of agricultural commodities. The periodic report on the performance of agriculture, however, does not directly answer the question about the state of welfare and development of the farming population. Reports of growth in agriculture are usually met by questions of whether the growth translates or not to a better-off farming population; whether poverty incidence in the rural sector drops or not and whether income gap improves or not.

For over a decade now, the BAS has been maintaining a statistical framework called Agricultural Indicators System (AIS). The AIS has been designed to provide the required information for assessing the socio-economic changes in the agriculture sector, analyzing the agrarian structure and situating agriculture in the national economy. The system is heavily dependent on secondary data gathered by BAS and other agencies. For lack of data, the current AIS does not include yet statistical indicators that can aptly characterize farm households.

On an ad hoc basis, the BAS conducts evaluation and impact studies/surveys for specific development programs which are oftentimes focused on particular commodities. These surveys address the need for data elements required for benchmarking, monitoring and evaluation of commodity programs for which the surveys are conducted.

These efforts, however noteworthy, are found insufficient to provide statistical support for a more comprehensive and systematic monitoring of the performance of agriculture in relation to the development plan for the sector. Implicitly, the agricultural statistical system has not also been able to support the statistical requirements of the Agricultural Research System particularly in targeting and prioritizing research and development (R & D) programs. The BAS recognizes this weakness but it is constrained by lack of resources. Currently, its financial resources are barely enough to sustain the regular surveys and monitoring activities which are intended to generate production and price data.

The BAS is mandated to provide information support to the agricultural sector including the provision of relevant statistics for development policy, planning, and program implementation. Implicit in these development concerns is the prioritization of agricultural researches. This survey will support the agricultural R & D Program in terms of benchmark data on the characteristics of farms and farm households. It will likewise provide inputs in the development and/or improvement of the performance indicators system in agriculture. Further, the survey results will quantify the impact of agricultural policies of the government on their intended beneficiaries.

II. OBJECTIVES

The Integrated Farm Household Survey (IFHS) is intended to generate benchmark statistics that will serve as inputs in agricultural research prioritization and improvement of agricultural performance indicators system.

The specific objectives revolve on the determination and generation of the following information:

1. level, structure and sources of farm household income;
2. characteristics of farms or farm enterprises and the farm households;
3. access of farm households to agricultural support services;
4. farm management such as input use and cultivation practices;
5. expenditure patterns of the farm households;
6. farm investments; and
7. other socio-economic data.

III. SURVEY METHODOLOGY

3.1 SAMPLING SCHEME

Geographic Coverage

The 2003 Integrated Farm Household Survey (IFHS) covered farming households in 592 barangays nationwide. Excluded were the provinces of Batanes and Lanao del Sur.

Sampling Frame

The IFHS utilized different sampling frames at the barangay and household levels. At the barangay level, the list of agricultural barangays covered in the 1999 Barangay Screening Survey (BSS) of the Bureau of Agricultural Statistics (BAS) served as the sampling frame. At the household level, the listing of households generated from the 2000 Census of Population and Housing (CPH) of the National Statistics Office (NSO) was used as basis for drawing the samples.

The 2000 CPH listing was utilized in drawing the samples for the IFHS despite the limitation that CPH households were not classified into farming and non-farming categories for two major considerations. First, the 2000 CPH provided the most updated lists of households by barangay. Second, budgetary constraints precluded the conduct of household screening in the selected sample barangays for the survey.

Sampling Design

The domain of the survey was the province. A two-stage stratified sampling design was adopted with the barangay as primary sampling unit and the farming household as secondary sampling unit. The number of farming households was used as the stratification variable. Primary and secondary sampling units were both drawn using simple random sampling.

Sample Size Determination

In getting the number of barangays as representative of the domain (province) level, the total number of agricultural barangays in the province reported in the 1999 BSS was used in proportionately allocating the target sample size of around 600 barangays to the IFHS provinces. Due to budgetary consideration, the total number of barangays included for small and large agricultural provinces was set at six (6) and nine (9) barangays, respectively, depending on the computed total sample size for the province, that is,

$$\begin{aligned}n' &= 6 \text{ if } n \leq 6, \text{ and} \\n' &= 9 \text{ otherwise.}\end{aligned}$$

Ten (10) sample households were allocated to each sample barangay. This procedure resulted in a total sample size of 592 barangays and 5,920 households for the entire country.

Sample Selection

Primary Sampling Units

A general feature of the design was the division of the primary sampling units into strata of approximately equal sizes relative to number of farming households reported in the 1999 BSS. The division of the barangays within the province and the drawing of samples were done as follows:

The barangays were arrayed in descending order based on the total number of farming households. These barangays were then divided into three (3) strata such that the cumulative total number of farming households of all the barangays in any one stratum was approximately of the same magnitude as the rest of the individual strata. Thus,

Stratum 1 barangays constituted all "large barangays",
Stratum 2 barangays constituted all "medium barangays", and
Stratum 3 barangays constituted all "small barangays"

with respect to total number of farming households.

Equal sample sizes were allocated to and drawn from the three strata, resulting in two (2) and three (3) sample barangays, respectively, per stratum depending on the sample size for the province. Selection of sample barangays was done at the BAS Central Office using simple random sampling. The generated lists of sample barangays were then submitted to NSO for the drawing of sample households and for the photocopying of corresponding barangay maps.

Secondary Sampling Units

Drawing of sample households was made at the NSO field offices using simple random sampling procedure. The generated lists of samples were sent to BAS Central Office for control and distribution to concerned Provincial Operations Centers (POCs).

3.2 Field Data Collection

Data collection was assigned to Contractual Data Collectors (CDCs) who personally interviewed qualified respondents in the sample barangays using a structured questionnaire. Considering that the sample households selected from the 2000 CPH Listing were not all engaged in farming activities, screening of "candidate sample households" was implemented during field data collection so that only **farm households with farming/fishing operations during the period July 2002 to June 2003** were enumerated in the survey.