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STRATEGIES IN MEETING THE STATISTICAL REQUIREMENTS
FOR POLICY AND PLANNING IN THE PHILIPPINES

# Strategies in Meeting the Statistical Requirements for Policy and Planning in the Philippines

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#### Abstract

The paper discusses the mechanisms used by the agricultural statistical system as it addresses the changing and expanding needs of its clients and stakeholders. As the backdrop, the paper refers to the system of designated statistics which the Philippine Statistical System (PSS) enforces. It presents the various approaches being done by the Bureau of Agricultural Statistics (BAS) to the statistical requirements of the Policy and Planning Group and the meet Implementation Group, which are concerned Program in improving the productivity and income of small farmers and fisherfolk. The demand for statistics has been increasing through time. Users are asking for a lot of things: sub-national statistics, various levels and types of disaggregation, real time statistics, early warning statistics, and many others. All these, push the statistical system to accelerate its research and development efforts to find ways of continuing to deliver quality products and services that satisfy its clients and stakeholders. The paper highlights the on-going activities of the BAS which are directed towards giving more focus to small farmers and fisherfolk. One is the Barangay Agriculture Profiling Survey is aimed at generating barangay (village) level statistics. Another is the Production and Marketing Analysis Service (PMAS) which through the processes and outputs involved can directly empower the small farmers. The paper recalls the past and recent milestones in the conduct of statistical activities that directly involved small farmers like farm recording as it also touches on current preparations for enhancing the BAS data systems to be more responsive to the demands of the stakeholders in the agriculture and fishery sector.

#### I. Introduction

The agricultural statistical system in the Philippines comprises of all entities concerned with the generation and dissemination of statistics on agriculture and fisheries and related fields. The major organizations under the system are the Bureau of Agricultural Statistics (BAS) and the National Statistics Office (NSO). The BAS serves as the focal agency of the agricultural statistical system.

In January 1987, Executive Order No. 116 which was signed by the President of the Republic of the Philippines was issued. This law created the BAS out

of the then Bureau of Agricultural Economics (BAEcon) and mandated the BAS to do the following:

- 1) Collect, compile and release official agricultural statistics;
- 2) Exercise technical supervision over all data collection centers; and
- 3) Coordinate all agricultural statistics and economic research activities of the bureaus, corporations and offices of the Department of Agriculture (DA).

Then, with the enactment of the Agriculture and Fisheries Modernization Act in 1997, the BAS took on two (2) additional mandates, namely;

- 1) Serve as the central information server of the DA's National Information Network (NIN); and
- 2) Provide technical assistance to end users in accessing and analyzing product and market information and technology.

The BAS is a staff bureau under the DA. Presently, it is composed of 10 divisions which are operating in the central or head office in Quezon City. It maintains 81 Provincial Operations Centers and 16 Regional Operations Centers around the country. The authorized personnel complement is 1087 but, the present number of personnel adds up to 900. The Bureau is headed by a Director who is supported by an one Assistant Director.

The mandates given to the BAS are translated into programs, projects and activities that will provide information support services to the entities in – charge of policies, programs and plans for the development of the agriculture sector. This paper is intended to articulate the major programs, projects and activities that have been or are being undertaken, specifically, by the BAS in order to support the development of policies and programs to empower the small farmers in the Philippines.

### II. Designation of Agricultural Statistics

The agricultural statistical system of the Philippines is governed by the System of Designated Statistics (SDS), one of the quality control mechanisms of the Philippine Statistical System (PSS). Under the SDS, the BAS has developed and maintained various statistical activities which include the following:

- 1) Palay (Paddy) and Corn Production Survey
- 2) Palay and Corn Stocks Survey
- 3) Livestock and Poultry Survey (Backyard and Commercial)
- 4) Fish Catch Survey (Commercial and Municipal)
- 5) Farm Prices Survey
- 6) Survey of Wholesale and Retail Prices of Agricultural Commodities
- 7) Seasonal Adjustment of Palay Production and Prices

The above list has not included yet those which are already being conducted but have not yet obtained and are proposed for designation. These are as follows:

- 1) Aquaculture Production Survey
- 2) Crops Production Survey (Other than Palay and Corn)
- 3) Costs and Returns Survey for Selected Commodities
- 4) Agricultural Labor Survey
- 5) Statistical Reports on:
  - Performance of Philippine Agriculture
  - > Regional Agricultural Production Accounts
  - Supply and Utilization Accounts of Agricultural Commodities
  - Trends in Agricultural Wage Rates
  - Producer Price Index in Agriculture
  - Crops Statistics of the Philippines
  - Livestock and Poultry Industry Performance

#### III. Demand for Agricultural Statistics

Notwithstanding the long list of designated and non-designated activities under the agricultural statistical system, the system cannot seemingly fully satisfy the demand for agricultural statistics. The agricultural statistical system has been under pressure to come up with new data sets, new dimensions for existing data generation and dissemination systems. The BAS is being called upon to address the statistical requirements of the DA to support its two-pronged concerns of global trade order and climate change while pursuing its main objective of food security..

Agriculture (crops, livestock and poultry and fisheries) account for about 18 percent of the gross domestic product of the Philippines. The sector employs some 35 percent of the total number of employed persons. In foreign trade, agricultural exports represent 13.82 percent of the country's total export earnings. Agricultural imports account for 12.37 percent of the country's import expenditures. These basic indicators point out the important role of agriculture in the Philippine economy. In turn, they highlight the important role of the statistical system in crafting policies and programs that can develop and sustain progress in the sector.

The current system for agricultural statistics allows generation of statistics at the national, regional and provincial levels. This is true for those items covered by regular statistical activities which are focused on production and prices. Otherwise, the data systems can provide national and regional levels of data disaggregation. The BAS' clients and stakeholders are asking for lower levels of data disaggregation. The lowest unit of geographic and political subdivision in the country is barangay (village).

The BAS' major clients and stakeholders are those entities and personalities involved in planning and policy. These clients are looking for various dimensions or types of disaggregation, other than geographic or political subdivisions. For example, in the case of palay (paddy) production statistics, users are now asking for production disaggregated by type of seeds used, by ecosystem; level of input usage by type of ecosystem, etc.

The BAS' data systems are being pressed to produce data on many socio – economic variables that can better situate the farm households. While, the BAS, even on an ad hoc basis comes up with surveys of consumption of agricultural commodities, income of farm households, cost of production and the like, doing these on a regular basis is still a problem because of budgetary constraints.

# IV. Efforts to Address Statistical Requirements of Policy, Planning and Programs

## 1) Barangay Agricultural Profiling Survey (BAPS)

In response to the persistent request of development program implementors, e.g., GMA-Rice Program, GMA- Corn Program, GMA- High Value Commercial Crops, GMA- Livestock and GMA – Fisheries, the BAS consented to conduct what has been termed as Barangay Agricultural Profiling Survey. This is barangay (village) – based survey using key informants in the barangays as the respondents in the survey interviews. All barangays are covered in the survey. A structured survey questionnaire is used to get information about the barangay and all the factors and entities that can influence the economic lives in the barangay, particularly, the farming population.

The conduct of BAPS is highly dependent on the availability of funding support as it is not among the regular statistical activities that are covered by regular budget of the BAS. This is always a product of partnership between the BAS and sub-national offices of the government, including the regional offices of the DA.

As the title implies, the BAPS can provide barangay (village) level agricultural characteristics of enterprises and households, production and marketing practices and related variables. All these can certainly help in designing and implementing policies and programs at the sub-national levels. Presently, the various policies and programs for the agriculture sector are embodied into a development program called FIELDS. This acronym stands for Fertilizer (for F), Irrigation (for I), Extension (for E), Loans (for L), Dryers and other infrastructure (for D), Seeds (for S). The implementation of the different activities under the program needs data as far down as disaggregation can go. The standing request of the Program

Directorate is towards the creation of a complete database for farmers in the country and the BAPS is seen as a big step in addressing this request.

In the regions where BAPS has been "semi – finally "completed, the outputs have already been usee in targeting, identifying and prioritizing development activities and corresponding beneficiaries. Thus far, there are only five (5) of the 16 regions of the country that have been able to conduct the BAPS.

#### 2) Production and Marketing Analysis Service (PMAS)

PMAS is the BAS' direct response to the mandate that requires the Bureau to provide technical assistance to end-users in accessing and analyzing product and market information and technology. It is envisioned to empower small farmers through the use of statistics on production, marketing and related fields in their decision-making. It is guided by the principle that information — based decisions can minimize risks that go along with the farmers' production and marketing operations. Through the PMAS, the BAS reaches out to the farmers and helps in transforming them into good users of statistics.

There are four (4) major activities under the PMAS and these are being done continuously in each of the project sites. These are: data collection, data processing/analysis/information packaging, training and information dissemination/transfer. Under this scheme, farmer-leaders are trained on data analysis and interpretation of production and marketing statistics. The learning is expected to be transferred to other farmers, who are usually, the members of the organizations represented by the farmer-leaders. The training of farmers has become a part of the consultative sessions. Most of the statistics taken up are products of the BAS. The session's main reference is the publication customized to the needs of the farmers in the project site. This is entitled StatGuide for Farmers which basically contains statistical information on production and prices in the province where the project is being implemented as well as in the provinces which are considered demand and supply areas for the commodity which is considered important in the project site.

To date, this PMAS has documented a number of success stories in each project site. These stories are uploaded in the BAS website. Successes revolve around being able to adjust production and marketing operations and decisions according to information that farmers picked up from the StatGuide. These include information on seasonality of prices, alternative markets, etc.

## 3) Provincial Agricultural Profile (PAP)

When the BAS' clients have started to make stronger demand for province-based statistics, other than those on production and prices, the BAS management has thought of asking the Provincial Operations Centers to collect and compile whatever agriculture – related data are available in the various national and local offices located in the provinces. Thereafter, in one consultation meeting among the management staff including the Provincial Agricultural Statistics Officers (PASOs), a template was developed. The preparation of the Profile is not just about putting up the Profile for the clients but, it also serves as a learning tool for the staff. It can identify what are missing in the agricultural statistical system as it can also identify what are superfluous.

As it is now, the Provincial Agricultural Profile comprehensively characterizes the province but, it gives special focus on agriculture. Among others, it carries information on physical and demographic characteristics, agricultural area and production, basic production and marketing practices, farm facilities, transport system and other infrastructure, farmers' organizations and cooperatives. For purposes of designing province or community – based programs, the Profile offers a good set of baseline information.

The updating of information, especially those on agriculture can ideally be done through the conduct of BAPS. However, BAPS is a resource – intensive undertaking. In the meantime that a BAPS cannot be done, this PAP serves the purpose of providing benchmarks.

## 4) Enhanced Information System for Palay (EISP)

One important cornerstone of the Philippines' agricultural statistical system is the data system for palay (paddy). Historically, production statistics is being generated on a quarterly basis. The frequency and the level of ICT support then was not as advanced now, the system has covered only the basic statistics such as production, area and yield. Through time, the levels of disaggregation have gone down to province from national and regional levels and have incorporated disaggregation by ecosystem, irrigated and non – irrigated. Very recently, the system has been asked to support the data needs of program implementors, GMA-Rice Program Directorate. Thus, over the last quarters, the system has been attempting to put up regional level reports, with provincial breakdowns, that capture various disaggregation levels and hopefully can give more focus on the kind of dimensions that interventions from the program. The program, in this case, is guided by the overarching objective of food security.

The EISP is presently generating quarterly data on production, area and yield, fertilizer use by ecosystem, by type of seeds used. It also comes up with data on irrigation, access to intervention programs like input subsidy. To be of more direct use by the Program Directorate, the survey now accounts for availability and accessibility of the FIELDS components among the palay farmers. In many ways, the quarterly survey results should be able to measure the impact and outcome of the government interventions.

## V. Past Efforts Towards Direct Empowerment of Farmers

#### 1) Processing, Analysis and Utilization of Farm Level Data

This was a project assisted by the FAO and implemented by the BAS. The overall objective of the project was to improve farmers' productivity, efficiency and income through the institutionalization of improved knowledge capacities on operational and financial farm management and planning for the primary sake of farmer-members of cooperatives. This would be achieved through: established and functional data processing and analysis systems in the project sites and improved capacities of cooperatives and selected BAS staff in entering, processing, analyzing and utilizing farm data for the benefit of farmer-members of cooperatives.

The project lasted for one and a half years. While all the project activities were implemented, the institutionalization did not materialize at the desired level. One of the important lessons learned in the project was ... it would take at least three years to be able to establish a farm – record based data system.

The BAS and the farmers cooperatives involved in the project saw the important role of farm records. It is noted that in this project, data were being recorded by the farmers themselves (or their children). The recording accounted for all farm activities and corresponding costs, cash or non—cash). To the BAS, the system provided very good data checks to data from surveys and other sources. It, thus secured accuracy of data, that were rather difficult to put together but were very important for policy. Data were used to determine credit policies as data guide policy in estimating farmers' equity, farmers' productivity and profitability.

Periodically, the BAS would check with the cooperators and somehow, the critical parts of the farm record system were being maintained for the farmers' and cooperatives' use.

#### 2) Community Level Statistical Information System (CLSIS)

The CLSIS was a sub-set of the project Rural Sector Statistical Information System (RSSIS) which was piloted by the World Bank in the Philippines with the BAS as the country's implementing unit. The main objective of the project was design and build a comprehensive, integrated, well-managed and sustainable statistical information system for the development of indicators for rural development and for monitoring rural poverty. In pursuit of this objective, a statistical framework was developed. It was noted that the framework called for data which were not in the mainstream of existing data systems in the PSS. Thus, the conduct of a pilot rural survey to generate community level statistics.

In the Philippine setting, the rural sector is almost always referred to as the farming sector. Therefore, the main element of the CLSIS was about agriculture. In this exercise, all possible sources of community level data were explored. The project succeeded in running the pilot activities and had demonstrated the feasibility of supporting the statistical framework. There were local government units (municipalities) in the project sites which were maintaining the system. The baseline data put up during the project life were being used in assessing the development of the community.

Meanwhile, the agriculture - related component of the RSSIS is being maintained at the BAS.

#### VI. Concluding Notes

Other than the continuing development and maintenance of existing methodologies, the BAS has always been looking forward to the application of Geographic Information System (GIS) as another tool for analyzing statistics. It is envisioned to assist statisticians in the interpretation of data to support requirements of users.

Empowering the small farmers remains as the most desirable outcome of all the programs, projects and activities of the agricultural statistical system. The title of this paper makes us realize that to empower the small farmers would still mean pursuing the existing statistical activities, generating the same basic statistics, BUT, requiring the system to be more responsive to the needs of policy and decision makers, program designers and implementors. It just means that the system has to keep improving.

Motivated by the objective of continuously improving the agricultural statistical system, the BAS has put in place its Research and Development Agenda which spells out the improvement plans over the next four (4) years. Correspondingly, the BAS has also painstakingly formulated its Information Systems Strategic Plan which guides the organization towards the optimum use of ICT in realizing its improvement plans. There is an overall Strategic Plan which guides all aspects of operations of the Bureau and this is being updated every three(3) years. In support of its vision, the BAS has designed an Agricultural Statistical Development Program.

In all these important documents, the service of the statistical system to Policy, Planning and Program Implementation is being underscored.