



*Statistics work*

## Of grains, fish and numbers

**A**griculture remains to be one of the key sectors in the Philippine setting. Thus, the need for information about agriculture continues to grow. This demand has given a greater and even new meaning to statistics.

As Philippine Institute for Development Studies (PIDS) President Dr. Mario B. Lamberte said in his opening remarks during a recent policy forum on agricultural databases, "The

importance of the agriculture sector in the Philippine economy underlies the importance of coming up with reliable and timely statistics to provide a solid basis for formulating policies."

Nothing could be further from the truth. Through statistics, problems and issues confronting the sector have been identified and, in the process, given sufficient attention. Their contributions in the crafting of appropriate policies and implementation of in-

telligent measures to develop the agriculture sector cannot also be ignored.

This perspective has thus put the lime-light on agricultural statistics, their main provider and the various data systems used to construct the needed numbers and analyses.

### **The BAS emerges<sup>1</sup>**

In the early 1980s, the government saw the need to improve the agricultural database in the country. This was in view of problems on data gaps, issues on the relevance of some data series, and data duplications, with the latter even resulting in conflicting figures and confusion among data users. In addition, at that time, the development of agricultural statistics re- ➔ *page 3*

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<sup>1</sup> This section draws heavily from the paper titled "The BAS: Its mandate and role in the DA and the PSS" by Recide and Valdellon (2002).

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**Editorial Board:** Dr. Mario B. Lamberte, *President*; Dr. Gilberto M. Llanto, *Vice-President*; Mr. Mario C. Feranil, *Director for Project Services and Development*; Ms. Jennifer P.T. Liguton, *Director for Research Information*; Ms. Andrea S. Agcaoili, *Director for Operations and Finance*; Atty. Roque A. Sorioso, *Legal Consultant*.

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**Research Information Staff**

Philippine Institute for Development Studies  
 Room 304, NEDA sa Makati Building,  
 106 Amorsolo Street, Legaspi Village, 1229 Makati City, Philippines  
 Telephone numbers 892-4059 and 893-5705  
 Telefax numbers (632) 893-9589 and 816-1091  
 E-mail address: [publications@pidsnet.pids.gov.ph](mailto:publications@pidsnet.pids.gov.ph)

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**Editor's Notes**

Good policymaking is not totally dependent on good policymakers. A large part of the process depends on the quality of data and information made accessible to these noble public servants.

Their hunger for information is well-founded. For having and knowing the right information invariably leads to knowledge, "the most basic of all the raw materials," and to being in control of certain events and developments that help respond to problems and concerns.

Of course, it is also important to note that not only the policymakers and intellectual group require timely data. Farmers and fisherfolks, in particular, need information as well if they are to make correct decisions and provide the right produce at the right time for the general populace.

To be sure, statistics—that dreaded but very useful word—provides a perfect reason to be in control of the past, the present and the future. Yet, notwithstanding this critical

importance, full support in terms of increased budgets to organizations providing such statistics is somehow "missing."

This matter has, in some ways, affected the tasks of organizations like the Bureau of Agricultural Statistics (BAS). For one, not all of the data demanded and needed by endusers could be generated due to lack of needed resources. Nevertheless, to its credit, the bureau is doing its best to perform beyond these budgetary constraints and has turned its difficulty into a challenge.

Perhaps, it is simply the lack of awareness on the part of those who could "make the difference" about the daunting tasks that such organizations undertake on the demands on them.

As such, it is perhaps incumbent for the users of and stakeholders to these organizations' outputs to advocate for increased government and private sector support to them.

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ceived very low priority in terms of limited resources because the statistical system was treated more as a user rather than a producer of statistics.

Thus, in 1987, the Bureau of Agricultural Statistics (BAS) was created as one of the seven bureaus of the Department of Agriculture (DA) under Executive Order No. 116. Its mandate was to oversee the production of statistics on agriculture, fishery and related fields. Since then, the bureau has focused in this task for the planning and policy formulation needs of the government, specifically the DA and the Philippine Statistical System (PSS).<sup>2</sup>

The bureau adopted a two-pronged strategy to address its clients' information needs. The first strategy was the maintenance of a regular statistical program and implementation of improved measures designed to enhance the adequacy (such as timeliness, comprehensiveness and relevance) of agricultural statistics.

The second strategy involved the development of new survey designs and data collection methodologies, strengthening of statistical coordination, implementation of decentralized data processing system, and improvement of data validation procedures for agricultural crops production.

Two years ago, the structural organization of the bureau was strengthened with the passage of Republic Act (RA) 8435, more popularly known as the Agriculture and Fisheries Modernization Act (AFMA) of 1997. This law further mandated the bureau to provide tech-



*The BAS also serves the statistical needs of farmers, fisherfolks, and other agridependent sectors of society.*

nical assistance to endusers in the access and analysis of product and market information and technology.

The bureau was also designated as the central information source and server of the National Information Network (NIN) of the DA. The network was created under the AFMA and will link all the offices and levels of the DA with research institutions so as to provide endusers easy access to information and marketing services related to agriculture and fisheries.

Aside from serving the statistical data requirements of the DA and the PSS, the bureau also serves the statistical needs of farmers, fisherfolks, and other agridependent sectors of society, on one hand, and provides statistical

services to private agribusiness sectors, researchers, scholars, academe, other government institutions, international organizations, and the general public, on the other.

To meet the demand, the bureau undertakes intensive data collection and monitoring activities, ranging from daily, thrice a week, weekly, monthly, quarterly, semestral, and annual surveys from industries and households.

The bureau also helps other data-producing agencies in the production of statistics and ensures that statistical standards and concepts are properly applied.

Ultimately, the bureau hopes to deliver quality statistical information and services efficiently, effectively and pro-actively to address the changing and emerging needs of development planners, policymakers and other stakeholders in the government and private sectors.

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<sup>2</sup> The system includes the following government agencies: National Economic and Development Authority (NEDA), National Statistics Office (NSO), National Statistical Coordination Board (NSCB), Philippine Institute for Development Studies (PIDS), Bureau of Labor and Employment Statistics (BLES), Philippine Statistical Association-Agribusiness System for Statistical Information Services and Technology (PSA-ASSIST), Bangko Sentral ng Pilipinas (BSP), and Statistical Research and Training Center (SRTC).

### Assisting BAS

In a recent gathering of experts from the fields of statistics, agriculture and policy research,<sup>3</sup> a number of issues were raised regarding the production of agricultural statistics for various agricultural sectors, including rice and corn, livestock and poultry, fisheries, and other crops.

Dominant in the discussions was the need to advocate for an increased budget for the bureau. For one, users realized that there were some data series and BAS publications, particularly in the 1980s, that were discontinued in recent years.

Related to this is the issue on the collection of data right down to the provincial and, even, municipal level. This would, however, entail the assignment of more personnel in the provincial level who are expected not only to collect data but also to produce the necessary statistics for provincial/municipal users.

BAS Director Romeo Recide recognized the demand for such data and

*The demand for agricultural statistics is changing and the requirement is exact. Quality cannot be overlooked. Yet, budgetary constraints sometimes dictate otherwise.*

made known the bureau's plan of transforming the provincial operation centers "from mere data collection centers into complete statistical offices in the sense that they can collect, process, analyze and disseminate data."

This conforms with the vision of the NIN to have an agricultural information center in each municipality. In the meantime, however, the BAS provincial field office will serve as the agricultural information center for each province.

Meanwhile, with regards to the dissemination of government statistics, users believe that statistics at the provincial level, however preliminary,

should be made accessible. Users are, however, cautioned in their use of provincial data since these still undergo many revisions and validation before being integrated in the national level and disseminated.

### Making statistics work

Director Recide acknowledged four main issues needed to be addressed in order to further improve the set of agricultural statistics in the Philippines, to wit:

- \* improving the coordination and establishing linkages between users and possible partners;
- \* increasing the data items collected, including details on geographic disaggregation, use of specific varieties, usage of technology and on prices by type of commodity;
- \* improving access to information; and
- \* advocating for more support for the agriculture statistical system in the country.

The demand for agricultural statistics is changing and the requirement is exact. Quality cannot be overlooked. Yet, budgetary constraints sometimes dictate otherwise. Still, the producers of such statistics consider the problems and difficulties they face more as a challenge and are determined to do their best. **DRN**

*"Philippine agriculture is not rice and corn alone." -Dr. Rolando Dy (UA&P)*



<sup>3</sup> The 12<sup>th</sup> Agricultural Policy Forum on "Database of the Philippine Agricultural Economy" was jointly sponsored by the Institute and the Bureau of Agricultural Research (BAR) on January 18, 2002 at Makati City.

## points of view

**Dr. V. Bruce J. Tolentino** (Economic Policy Adviser, Royal Government of Cambodia): My impression on the issue of converting provincial operation centers into complete statistical centers is that it will not be feasible. This is because to be able to produce statistics at the provincial level that will be satisfactory for provincial use, a quantum increase in the size of the Bureau of Agricultural Statistics (BAS) and the facilities provided to the bureau will be necessary.

However, we do know that there are at least 150 agriculture people in each province. Why not then provide technical assistance to local government units (LGUs) so that they can do their own statistics? After all, when the LGUs come to BAS, they are most likely doing it for their own use. It might not be comparable across provinces but certainly it will be sufficient for their own purposes.

\* \* \*

**Dr. Larry Digal** (University of the Philippines - Mindanao): I would like to raise the issue of making statistics more responsive to the users, particularly to policymakers and policy researchers.

For example, on the database of prices, there are a number of available time series data that can be used to address various issues on marketing such as market efficiency. But the problem is that there are gaps in the price database for different provinces.

There are instances in some months wherein there are no price data for some provinces. Sometimes, different classifications are used in disaggregating estimates. This results in loss of information and inconsistency in the database.

Perhaps one of the reasons for this problem is the untimely release of budget. Sometimes, budget for some regional offices are released later than that of the central or other regional offices. There is likewise

a glaring gap in the supply or production of data, particularly on marketing cost data.

These data are important in analyzing the impact of the cost of marketing services on the agricultural sector, in understanding the different marketing issues (e.g., shipping cartel) and in formulating policies on marketing. I know BAS is already doing this but we would appreciate it if we could also get hold of these data.

\* \* \*

**Dr. Rolando Dy** (University of Asia and the Pacific): Philippine agriculture is not rice and corn alone. I think we have been assuming this for too long. As a result, other commodities are not getting the right support. In addition, I think that these other commodities will become important in the future.

It would therefore be good for the BAS staff to understand the whole supply chain. It is not only a question of collecting data but also understanding and appreciating the data utilization and flow of these commodities in the downstream industries.

\* \* \*

**Mr. Gideon P. Carnaje** (UP Visayas): It is widely accepted that generators of data should have a clear idea about what data users need and what data users do. Perhaps one of the first things that need to be undertaken might be for users to set out clearly their minimum data requirements in the form of a set of statistical tables and submit these to the BAS.

\* \* \*

**Dr. Castor de Jesus** (PCAMRD): Because of information technology, I would like to see, in the near future, the BAS resorting to the use of text messages in collecting and retrieving data down at the municipal level. This way, it is not only the cost in generating data that will be minimized but also time.

The rapid growth in demand for water by the agricultural, industrial and household sectors will place greater pressure on Philippine water supplies in the future.

Among the many water management issues, surface water management—watershed management or more precisely, river basin management—is prominent in both the local and national scenes.

At the national level, there is a debate over the allocation of powers among agencies and questions on what appropriate river basin management policy to implement. The issues are further complicated in the rural Philippine scene by devolution, which has empowered provincial and municipal governments, and by the granting to indigenous communities the property and use rights to natural resources.

Efficiency and equity issues in the design of institutions and policies at the national or river basin level are intensified by questions over the vertical division of responsibilities. Using the river basin as a jurisdictional unit may be optimal for surface water management based on textbook analysis but in reality, it may not maximize either efficiency or equity gains given the overlapping mandates and the empowerment of local and community-level institutions in the decade since devolution.

Thus, a collaborative research and advocacy project was designed in 2001 to explore the various aspects of the surface water management problem. However, given that the issues are complex and extensive, the project intends to focus mainly on two major topics perceived to be of greatest importance and relevance to the current Philippine policy and legislative setting. These are tentatively identified as (a)

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the implications of local governance on watershed management and (b) the optimal design of national and regional water management institutions.

The project will be undertaken by the University of the Philippines–Los Baños (UPLB) and the Philippine Institute for Development Studies (PIDS) under the Sustainable Agriculture and Natural Resource Management Collaborative Research Support Program for Southeast Asia (SANREM CRSP/SEA).

The core institutions involved, UPLB and PIDS, have extensive background in environmental and natural resources research that have gained attention in the Philippine government circle. On the other hand, the SANREM CRSP/SEA, as a project, has achieved a level of prominence in the

Philippine policy scene. The program is based at the University of Wisconsin, United States of America, but is being coordinated and implemented in the Philippines by the Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCCARD).

The research outputs are intended for a wide range of audience—from legislators and their advisors, to researchers, the media sector and the general public. The results will basically address the perceived demands of the agencies responsible for institutional and policy design. The findings will be disseminated to other targetted audiences through the project's advocacy component. This includes policy fora, posting of the studies in the PIDS website and their consequent publication into books or policy notes. *DRN*

\* Based on the concept/framework paper prepared by the project proponents.

## DENR urged to tighten monitoring of quarrying operations

The Department of Environment and Natural Resources (DENR) should intensify its monitoring of illegal quarrying activities, particularly in Palawan and Rizal, because of their negative environmental impacts.<sup>1</sup>

According to Dr. Danilo C. Israel, senior research fellow at the Philippine Institute for Development Studies, an effective monitoring of quarrying activities is critical to protect the environment and ensure that the quarrying subsector's contribution to economic development is maximized. He argues that illegal quarrying results in revenue losses on the part of the government because these activities do not pay related permits and taxes. It also forces the government to spend more money in tracking down and ap-

prehending illegal operators.

"Illegal quarrying operations worsen an already bad environmental situation by violating quarrying rules such as gathering aggregates in

riverbanks, hauling more volume than what is sustainable in a given site, and extending quarrying operations into environmentally sensitive sites. These further cause soil erosion, pollution, siltation and flooding of downstream bodies. Quarrying operations also produce dusts along their transportation routes and noise pollution in quarry sites," Israel explains.

"A potential effective approach to stop illegal quarrying is to impose higher fines and penalties to violators. Another solution is to streamline the process of giving permits so that duplication is eliminated and the time needed for applying is shortened. Reducing the cost of securing a permit will also encourage quarrying operators to apply for a permit," he adds.

He likewise suggests the DENR to evaluate its encouraging experiences in quar-

rying management in Rizal to determine the possibility of replicating these in other similarly situated quarrying sites. Quarrying operations in Rizal were suspended for several months from 1998 until early 1999 and were only allowed to resume under very strict guidelines and preconditions set by the Department.

To make monitoring financially sustainable, Israel recommends the setting up of multisectoral monitoring teams (MMTs) funded by the Monitoring Trust Funds (MTFs) of quarrying firms. At present, MMTs are already being strongly implemented in some mining firms. In quarrying, however, they are nonexistent or inactive, even in more environmentally conscious provinces like Palawan.

"Monitoring and enforcement in quarrying can be improved through the involvement of local communities. In Palawan, for example, there are areas where residents adjacent to quarry sites are highly vigilant in monitoring the activities. They make sure that the volume aggregates taken by operators do not exceed the allowable limit. They also see to it that the extraction methods employed do not cause undue harm to the environment," Israel concluded. *DRN*

<sup>1</sup> Based on Policy Notes 2001-05 titled "The Silent Dangers of Quarrying."

Charging polluters according to the concentration of pollutants that they discharge is an effective way to minimize water and air pollution. This is the rationale of the "polluters pay" principle.<sup>1</sup>

According to Mr. Panfilo de Guzman of the University of the Philippines at Los Baños, allowing polluters to internalize the cost of pollution will give them an incentive to minimize the generation of pollutants and provide treatment for the

pollution they generated. For the system to be truly effective, however, de Guzman said that regulators must ensure that the pollution charge rate will not be inexpensive for industries to pay.

He noted that pollution charges for water management will encourage firms to pursue the most cost-effective pollution prevention and abatement measures so as to comply with pollution load limits and maintain specific water quality standard.

The pollution charge system used by the Laguna Lake Development Authority (LLDA) for industrial and commercial establishments around the lake was cited as an example of this method. LLDA's pollution charge consists of two parts: a fixed amount and a variable amount.

*To reduce pollution...*

## Polluters should pay

The fixed charge rate covers the administrative costs of implementing the charge system while the variable fees are charges based on pollution load. The variable charge rate is intended to approximate the cost of pollution abatement. Thus, the higher the volume and concentration of pollution being discharged, the higher the fee. Industries covered under the LLDA system include food processing, food canning, livestock raising, grain milling, petroleum refining, plastic and synthetics, pulp and paper, sugarcane processing, textile milling and thermal power generation. *DRN*

<sup>1</sup> This is explained in the third issue of the *Economic Issue of the Day (EID)* for year 2001. The *EID* is a series of brief writeups that explain in simple language, certain economic concepts and how they apply or relate to everyday occurrences or developments. The article was written under the auspices of the Sustainable Agriculture and Natural Resource Management Collaborative Research Support Program for South East Asia (SANREM-CRSP/SEA).

One way of protecting watersheds from further degradation is to impose a more efficient pricing policy for water—one that does not only cover the direct cost of water distribution but also the cost of watershed as the provider of water.<sup>1</sup>

Ms. Dulce Elazegui of the Institute of Strategic Planning and Policy Studies of the University of the Philippines-Los Baños recommends the allocation of government revenues from these additional charges to management-related activities aimed at conserving watersheds. A certain amount of these additional revenues should be earmarked for the implementation of a watershed management plan.

“Water is a product of the watershed. Therefore, watersheds should be accorded the appropriate cost or charge for providing water. Under the present price structure of water, the cost of using and exploiting the watershed is not incorporated. What is only taken into account are direct supply costs such as distribution costs, including capital, infrastructure, operation and maintenance,” Elazegui stated.

She suggested that the cost of rehabilitating and protecting the watersheds should be considered in estimating water fees. She cited that rehabilitating the watersheds would cost P20,000 per hectare while protecting them would cost P7,000 to P10,000 per hectare.

“Incorporating such costs in water fees and charges will imply higher fees. However, this will encourage water conservation and will thus improve the quality of water service and the environment. Experience in other countries has shown that raising water tar-

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iffs and imposing sewerage charges and affluent taxes have reduced water consumption without impairing industrial growth,” she added.

Elazegui also underscored the negative effects of varying policies on and the disconcerted efforts of public and private agencies toward managing the country’s water resources. She noted that these different policies which separately vested powers to specific agencies over water management have resulted in a lack of an integrative mechanism to interrelate the different functions of the agencies involved.

“There is a need to clarify the specific roles of various institutions involved in water conservation and management to harness a collaborative effort. At the local level, it is important to strengthen local capability for designing optimal

arrangements and performing economic regulatory functions concerning water resources since the expansion of water supply projects has become increasingly costly,” Elazegui recommended. *DRN*

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<sup>1</sup> This is explained in PIDS Policy Notes 2002-03 titled “Watering Down the Water Problem: An Institutional Perspective.” The article was written under the auspices of the Sustainable Agriculture and Natural Resource Management Collaborative Research Support Program for South East Asia (SANREM-CRSP/SEA).