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PHILIPPINE INDUSTRIAL STATISTICS *

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The Role of Statistics in Developmental Efforts

The answers to the questions "what is?" and "what will be?", are a vital input to the entire process of studying and planning for development be it in industry or the whole economy. When plans are implented, accurate, appropriate and up-to-date statistics are essential tools for guiding and monitoring implementation. Statisticians then are analogous to the toolmakers in manufacturing, for your labors could turn out to be not only essential, but may advance or impede productivity.

Viewed in another way, statistics and statisticians play an important role today for the users and uses of statistics have grown in number, and increased in importance. Quality has, therefore, become more important, together with the availability and ability of statistics to meet the needs of the users. The new requirement in your field of specialization becomes demanding because it is recognized particularly in government that the best and effective approach to objective and well conceived decisions, plans, programs and projects are those brought about by empirical and systematic approaches of study. There is increasing emphasis on quantification of results, and of plan implications.

Statistics should be timely and properly collected, processed, analyzed and distributed. For example, if the gaps and inadequacies of our statistics on the industrial sector are minimized, then we who are given responsibility in the government for stimulating and guiding industrial development could do a better job.

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The Philippine Statistical System and Industrial Statistics

The collection of data on the segments of the industrial sector of the economy (establishments engaged in manufacturing, mining, construction and utilities) have expanded. Systems of basic industrial inquiries have been established by different government agencies. However, this has had an undesirable side effect; the proliferation of inquiries and surveys results in the collection and inquiry by different agencies on more or less the same subjects from the same sources.

For example, the matrix of available statistics on manufacturing prepared by the Inter-agency Committee on Industrial Statistics shows that at least five agencies (NCSO, CB, BOI, DI, DT) are collecting statistics on costs/prices in manufacturing. As such the industry groups have repeatedly complained to us about the unnecessary burden imposed on them in complying to the same query by different agencies.

In addition, conflicting and non-comparative outputs may be generated. This problem which is burdensome for the respondents and uneconomical for the government can be traced to the decentralized set-up of the statistics gathering system. However, decentralization without duplication is possible if stronger central coordination among agencies is fully undertaken by the government. The integration of statistical surveys, which we fully support, is one of the concrete measures which will remedy this problem.

The Major Statistical Series on Industries

Currently, at least five statistical series are used for measuring and gauging the structure and developments in industries. The series on (1) the number of establishments; (2) employment; (3) value added; (4) cost/benefit of production; and (5) capital investments or expenditures are commonly used. They are published regularly. The NCSO presents their series in its two survey programs—the Annual Survey of Manufactures and the Census of Manufactures. The Surveys are published annually except for the census years 1961, 1967 and 1972.

The five series on manufacturing have been of significant value. However, several problems and shortcomings have been observed in the course of searching for the appropriate statistics to firm up studies on various aspects of our industries par-

ticularly the manufacturing sector.

1. We accept that the interruption of the series in the Survey by the census is in order. The results of census which cover all the establishments provide basic data with which to compare the reliability and acceptability of the results of surveys using sampling technique. Realistic fitting of the kinds of data is possible if in the years when the census is done, no major policy or economic developments took place so as to get "normal year" results. Attention is, therefore, invited in the case of 1961 and 1972 censuses which saw the lifting of exchange and import controls and the overall socio-economic transformation, respectively.

2. The objective of conducting census which is to have basis for comparison is negated if its findings and that of the annual sampling surveys are not comparable. The definition of "small and large" establishments of these two projects are different. The Annual Survey of Manufactures considers establishments with 5-19 workers as small and medium while the Census considers those with 1-9 workers as the counterpart.

3. The considerable time lag between the collection and publication of the series explains why various agencies are compelled to try to gather their own data on the same series. According to the Philippine Statistical System of NEDA the preliminary report on the Annual of Manufacture results and should be available 1 year and 2 months after the survey—meaning, the final report would be out about 2 years later. The dynamism of our economy today requires most current data, if possible on monthly basis, so as to acquaint the government with problems requiring immediate action.

Timeliness of statistics must be given due concern. It is an essential factor affecting the formulation of policies and plans.

4. There is much less information on the unorganized and SMI vis-a-vis the large establishments. The bias is apparent as the statistics for large establishments (under the five series) are detailed by industry group, by geographic region, by type of ownership, by size and by community. Those of the small establishments are presented on the 2-digit industry level while those for large establishments, on the 4-digit level.

The emphasis of the government development program on

the development of SMI demands the broadening and improvement of industrial statistics complementary to other policy instruments.

Need For Periodic Review of Sampling Scheme

It is equally important to review and analyze the methodology and design of the present samples.

In continuous and repetitive inquiries, the continuity of the information is the main objective. However, at periodic intervals, the statistical problem must be studied anew involving a review of the sample and sampling scheme and an analysis of the statistical methodology and tables for substantial changes. In a developing economy such as ours, important structural changes take place in particular industries. New emphases are established. These changes in situation should be recognized.

Production statistics, upon which estimates of national income originating from the manufacturing sector are based, need improvement in quality and coverage. Data on durable and non-durable manufactures, which form the basis for estimating value added by the manufacturing sector proper are obtained from the reports of cooperating firms only by the Central Bank and National Census and Statistics Office. Sample coverage of existing industry surveys is mainly limited to some segments of the industry concerned, vis.; the medium and large-scale establishments or organized industries. Some substantial segments of the industry, the cottage and small-scale establishments or unorganized industries are excluded. Yet of total manufacturing employment, unorganized manufacturing is reported to account for 70 per cent.

The representativeness of the sample coverage is also seriously affected by the lack of standard definitions or concept for cottage, small, medium and large industrial establishments. Varying classifications into these categories of manufacturing establishments by size of capital investment or total assets and by number of workers employed are presently being used by different government agencies.

With the passage of time, some establishments are phased out or shifted to other industrial activities and because of the dynamic nature of the industrial structure, new firms will be

established particularly firms for new products which are rapidly emerging as in the case of the plastic and plastic products industry. Provision for the "births and deaths" of business establishments to provide the replacements for obsolete and phased-out firms or to update the sample is now being made by the Central Bank Economic Research Department.

Differences in the sampling design employed contribute to divergent reporting of industrial characteristics whether in absolute or relative figures. The sampling frame of the National Sample Survey of Households of the National Census and Statistics Office is based on the 1970 Population Census; the Annual Survey of Establishments of the same agency, the 1967 Economic Census; the Sample Survey of Establishments of the Department of Labor, the 1967 Economic Census and lists of establishments by different government agencies; and the Central Bank Survey of Establishments, the 1971 Bureau of Internal Revenue list of corporations. The sampling design used by the National Census and Statistics Office is a two-stage random sample; the Annual Survey of Establishments, a multi-stratified random sample the DOL-Sample Survey of Establishments, a stratified cut-off random sample; and the CB-Survey of Establishments, a mix of complete enumeration and random sampling of strata.

Concluding Statements

I have discussed primarily the problems and some suggested solutions to the statistics on manufacturing, the major sector of the industries sector. I am sure there are other areas not yet considered. The Philippine Statistical Association, which brings together the sources and users of statistics, could be of great help in identifying problems and suggesting solutions on this matter. Your initiatives could be very important to increase the usefulness of the statistical machinery and reports. If good statistics are made available on time the willingness of those who are the subject of queries and surveys would be improved and "lack of cooperation of respondents" would cease as the "broken record excuse" for lack of statistics. The government fully supports these undertakings as manifested by its Statistical Development Program and the creation of different Inter-agency Committees on Statistics.