# STATISTICS ON DEVELOPMENT PLANNING: THE FUTURE REQUIREMENTS

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#### I. INTRODUCTION

Planning involves the setting of goals, priorities, and programs. These are interdependent, and are also mostly reflected in numbers. In setting them up, available statistics, or systematized quantitative information, are heavily relied upon.

Plan targets cannot be set without looking at benchmark values, which then identify the gaps the plan intends to narrow down, and the additional work implied in meeting these present and future economic needs. Even if this stage of planning is fulfilled, however, the task is not yet complete. Information on existing and potential resources must be available to ascertain whether the targets or expectations could be supported. If there are resource constraints, adjustments in the development program are made, based on a new set of priorities.

Statistics are also necessary in measuring the achievement of the development plan and, in turn, the progress of the economy. The information thus derived is then fed back to the plan appraisal exercises and, subsequently, to the next plan formulation activities.

The Philippine statistical system continues to evolve, branching out into more and more detailed and complex activities to satisfy the ever-increasing demands of planners and other data users. Nevertheless, gaps still prevail, and have recently widened, necessitating additional efforts for the statisticians to fill the dearth for information.

The next section gives a brief overview of the Philippine statistical system — its evolution, characteristics, and depth — followed by a section on future development planning thrusts which statistical development must address itself to. Subsequently, a supportive program on statistics is being suggested, and finally, summary and conclusions will be presented in the last section.

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# II. BRIEF OVERVIEW OF THE PHILIPPINE STATISTICAL SYSTEM

Statistical activities in the Philippines were initiated even as far back as the Spanish times, when three population censuses were produced in 1877, 1887, and 1897, and some other information on the country and its resources was gathered to gauge its economic progress under the Spanish rule.

During the American regime, attempts were made to centralize statistical activities. This was finally realized in the Commonwealth period when the Bureau of the Census and Statistics was created by virtue of Commonwealth Act No. 591.

The rapid economic growth experienced a few years after World War II was accompanied by an expansion of government functions. Such phenomena created pressures to generate more statistical information which a single statistical agency could not handle all by itself. Hence, there was a gradual decentralization of statistical activities.

In 1955, the governmental structure was reorganized. While retaining its decentralized character, a body was created within the newly "revitalized" National Economic Council (NEC) under Reorganization Plan No. 10, implemented by Executive Order No. 119, to coordinate statistical activities in major primary data producing agencies. Thus, a decentralized but coordinated statistical setup was formalized.

The NEC was charged with the task of formulating comprehensive economic programs for the country, which it carried out with the drawing up of the Five-Year Economic Development Program for Fiscal Years 1955-59 and other subsequent plans. This development signalled the integration of statistical activities in planning activities. NEC's Office of National Planning (ONP), which produced the development plans, relied on the Office of Statistical Coordination and Standards (OSCAS), the statistical coordinating body under the NEC, and other major statistical agencies for its data needs.

As the statistical system became more and more decentralized through the years, the need to strengthen its coordination also became acute. At the same time, there emerged a duplication of governmental functions, which was remedied by the decreeing into law of the Integrated Reorganization Plan (IRP) in 1972. Along with this innovation, the National Economic and Development Authority

(NEDA) was created as the central planning body, and within its organization the Statistical Coordination Office (SCO) was established to fulfill more forcefully the role played earlier by OSCAS. Subsequently, statistical coordination was elevated to the highest governmental level with the setting up of a policy-determining Committee on Statistical Development, with the Statistical Advisory Board (SAB) serving as its technical committee in addition to its regular duties and responsibilities provided under the IRP.

The present Philippine statistical system, therefore, could be characterized as highly decentralized with a strong coordinating body.

There are 15 or so units within the government which are major producers of statistics, plus about a hundred more in administrative agencies which produce statistics as by-products of their functions.

Information formally generated by the statistical system has grown by leaps and bounds through the years. As of 1980, major statistical surveys alone numbered almost a hundred. These include production of basic data such as population, agricultural and industrial production and other related information, household income and expenditures, food consumption, and nutritional status. These surveys could be broken down into censuses, regular surveys (conducted quarterly, annually, biennially, quinquennially, etc.), or special surveys (conducted once and for all or irregularly).

Other statistics, notably those on the fiscal and monetary sectors, have expanded as the task of monitoring the financial system, the financial position of the government and public corporations, tax compliance, and the like, and the regulation of certain financial activities, became more complex.

Finally, there evolved an increasing level of sophistication in statistics derived from basic information, with the system of national accounts now including, apart from national income and product accounts (which have been published recently biannually), input-output (interindustry) tables, flow-of-funds accounts, and a social accounting matrix. Regional income accounts have likewise begun to be reported.

There may be other information available yet unpublished, such as those monitored to satisfy the internal requirements of certain offices, and those obtained to meet the data needs of some studies in research institutions.

# III. STATISTICS AND FUTURE DEVELOPMENT PLANNING THRUSTS

The effectivity of planning as a tool in shaping the course of economic progress is determined significantly by the adequacy and quality of statistical support which such an activity generates. The capability of planning to resolve certain critical economic and social issues over the medium term is constrained by the availability of data which serve as useful guide as to the proper steps to take.

It is therefore imperative to orient statistical activities to the likely areas which development planning might tackle in the future. This does not mean, however, that new activities should be accorded importance at the expense of existing ones. Rather, new information must be gathered simultaneously with the improvement in quality of existing ones, as it is as crucial in planning to have a long series of observations available. This section attempts to identify likely areas in development in which statistical support may be required.

### Regional and Local Level Planning

More recent plans have incorporated a regional dimension, in response to the need to provide a balanced economic growth among regions. With this thrust came statistical development, notably the preparation of the regional income accounts, regional budgetary accounts, and other related information. Nevertheless, data for planning purposes require further improvement and expansion. Regional expenditure accounts have to be prepared, and the lag between the reference period and the time when data are reported has to be reduced. Production figures at major commodity and industry levels must be made available at regular intervals. The same must also be said of data on wages, commodity prices, employment, and major demographic and social indicators such as population, fertility, migration, food consumption, etc.

Development planning may also be initiated down to the grass roots level. The proposed Local Government Code explicitly provided that such function shall be performed within the country's political subdivisions — province, city, municipality, and barrio. This implies the need to improve not only the capabilities of planners even at the barangay level, but also the competence of local govern-

ments in generating their own statistics. In this connection, the coordinating office and major statistical agencies must be prepared to supervise and provide technical assistance in data collection, processing, tabulation, and reporting, as well as to provide guidelines or standards to facilitate data comparison among localities and their integration at the higher level.

Finally, national planning will have to concentrate more on understanding regional interdependence, rather than on the usual setting of national targets and forcing the lower hierarchy to adjust to the national guidelines. This new approach appears to be more rational, especially if the objective is the equitable sharing of the benefits of growth in all regions, since this takes into account symbiotic and mutually reinforcing regional strategies, and the broader implications of providing generously or withholding resources for the development of one geographical area vis-à-vis others. In effect, this will require improved capability in the formulation of regional planning and link models and, in turn, more ample and timely information at the regional and local levels.

### Welfare Aspects of Economic Development

Some regular surveys are conducted which attempt to measure welfare. These include surveys on labor force and employment, family income and expenditures, and nutrition, among others. Most of this information, however, is made available irregularly or at longer time intervals. On the other hand, the majority of those regularly published suffers in quality.

Perhaps, part of the problem lies in conceptual difficulties; but whatever faults there may be, it is important to find adequate remedies for them if social issues are to be adequately addressed in development planning.

Moreover, the existing array of social indicators have to be supplemented by more concrete measures of welfare to determine whether efforts to attain the social development objectives are succeeding and whether a broader segment of the population, at a given point in time, lives a materially adequate existence. Such indicators may include construction starts, educational expenditures, sale of selected household appliances, numbers of households with electricity, and the like.

#### Financial Orientation

Planning does not merely involve the setting of targets or expectations for the real sector, but more importantly, the matching of the aggregate financial requirements of programs and projects designed to sustain certain overall economic growth figures with available financing from revenues, money creation, and borrowings. Along this thrust, there have been frequent discussions on strengthening the linkage between planning and budgeting, and efforts to improve such a linkage are being continuously initiated. However, government fiscal planning is but a part of the overall financial planning. It is also necessary to fully integrate the monetary and external borrowing implications of programs and projects, and to be able to set a system of priorities on the basis of available financial resources over a given plan period.

Aggregate financial data and their monitoring are fairly well-established. There are, however, some difficulties with the information available which have to be remedied. For instance, certain financial data reflected in the national income accounts do not coincide with the information taken from the fiscal or the balance of payments accounts, due to conceptual differences. Such differences, if difficult to resolve due to lags and inherent weaknesses of the system, must be properly taken note of and documented so that data users are guided accordingly.

Refinements must also be initiated in such areas as more adequate coverage and timely monitoring of infrastructure expenditures and other physical capital outlays, incorporation of adequate financing information on government corporations, a clear delineation between public and private sector investments in the reporting system, and a breakdown of external borrowings, amortization and interest payments between the government and private sector, among others.

# Modelling Exercises

The formulation of plausible econometric models with some degree of permanence in use, and not just the usual one-shot affair, will increasingly become a prime requisite in setting the quantitative levels and growth figures of future plans. Throughout the world, modelling activities have been gaining rapid acceptance, even in least developed countries, and progress in modelling techniques continues

to advance. Indeed, a point has been reached where modelling is now synonymous with quantitative planning.

Modelling work in the Philippines will not be merely confined to the support of plan formulation exercises. Models of shorter-term duration will be set up to monitor the progress of the development programs on an annual or shorter-period basis, to forecast the likely economic scenario given external and other exogenous developments, and to guide policy-makers on the likely courses of action to stabilize the economy.

These activities will require a long series of observed historical data, some of which are already available. They will also require time series observations of shorter period than the annual data being presently generated. While some of these data are now available, it must be mentioned that what is necessary is that their concept be consistent with a long series of observations. Otherwise, the models will be prone to serious observation errors and will give misleading conclusions. If concepts and definitions for a given set of data have changed at some point in time, they must be clearly indicated, and their numerical implication also stated, so that planners or model-builders could make the necessary adjustments.

Likewise, it is important that the data series are accurately reported to similarly avoid erroneous estimation results in modelling. It must be noted that the predictive accuracy of models is only as good as the base data used to build them.

With regard to the new statistical demands enunciated earlier, it is not yet possible to incorporate them in modelling exercises, unless in generating such data, the effort is to stretch the series of information as far back as possible, which is enough to provide for the requirements of modelling. If this is not possible and such data are necessary, the probable alternative that the model-builders might take is to use proxy variables — available information which approximates the variables which are not yet available at the moment.

This listing of future planning thrusts is not by any means exhaustive. They are, however, the major ones which might probably be taken up in future planning exercises, and the task involved in satisfying these requirements might even imply the generation of extra efforts and resources on the part of the statistical system.

#### IV. SUPPORTIVE STATISTICAL PROGRAM

Pinpointing the future concentration of statistics is a simple task, but implementing them is admittedly difficult. The four development planning areas earlier mentioned will require tremendous resources — manpower, financial and otherwise. The message to policy-makers is this: if one is serious enough to consider the important role played by statistics in development planning, one must be ready to pay for it.

While emphasis on skills training and statistical capabilities are as equally important, the government must also stress recruitment and remunerative compensation in order to induce a greater number of people to enter the statistical profession. Anyway, with the emerging needs for data quality and various sets of statistics, demand for statisticians and other related fields must rise, and if economics is right, so will their price. The cost involved must be weighed vis-à-vis the prospective information derived from such a statistical program.

This leads to the next point which is the need to set a statistical priority program to take care of resource constraints. This could be handled by the integration of the statistical program with the national development program. While the government had formulated two statistical development plans in the recent past, and the new Philippine Development Plan for 1983-87 has mentioned in general the need for statistical improvements and plan monitoring, the proper course of action would be to identify statistical priorities for a particular plan period. Mere enumeration of a comprehensive set of intentions will tend to disperse meager resources and achieve, in the final analysis, very little results.

Statistical coordination must continue to be strengthened. Along this line, timely delivery of data must be ensured, not only by recruitment of adequate level of manpower, but also by more extensive use of computers and other physical facilities. Similarly, efforts must be exerted to account for other data series which might already be available in other agencies, or are easily obtainable, but of which data users may not be aware of. Their publication is also necessary. Another means of facilitating coordination, which was in fact mentioned in the existing statistical development plan, is the formulation of standards and uniform formats. This is a useful exercise which must be seriously considered.

#### V. SUMMARY AND CONCLUSION

The Philippine statistical system could be described as highly decentralized with a strong coordinating body. It has responded to the demands of development planning by providing the necessary quantitative information to produce sensible plans, as well as to monitor them, with the planning exercise in turn limited by the amount of quality statistics available.

Future plans will require more information in areas such as regional and local level planning, welfare aspects of development, financial planning, and econometric modelling. Data series, which are conceptually consistent throughout the period of observation, are necessary, and it would be imperative to point out changes in concepts or definitions in order that planners could make adjustments accordingly.

The generation of additional statistical information implies the pouring of more resources to statistical development — manpower, financial and others. With resource constraints, a system of priority must be formulated to provide the framework for the statistical program, which must then be integrated into the medium-term economic development program. Meanwhile, planners must optimize the use of whatever information is available, by employing the techniques of imputations and proxy variables. At the same time, coordination must be strengthened to simplify data interpretation, retrieval, and the reporting system, and to uncover certain useful information for planning and other purposes which the formal system may have overlooked.

In the ultimate analysis, the issues being posed by this paper are, how far should statistical development be pursued in behalf of planning so that its benefits will outweigh its costs, and how much is the government willing to spend in order to improve existing statistics. This paper merely gave indications of probable areas of planning in the future together with their statistical implications, but the more fundamental issues mentioned above are left open for wider discussions.

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