

GOVERNMENT STATISTICS AND THE DATA NEEDS OF THE PRIVATE SECTOR*

by

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The Purpose of Government in Collecting Data

1. As part of its *administrative* function some government offices have to collect information on individuals or firms. Thus, citizens are required to file duly accomplished income tax forms in April of every year in order for them to determine how much taxes they have to pay the government. In order to be able to develop, establish and promote a sound social security service, the Social Security System collects and compiles data on employer-employee contributions, members benefit payments, Medicare contributions, etc. Vital events such as births and deaths of persons and contracts of marriages have to be recorded at the office of local civil registrars as required by the Civil Registry Act.

Some government agencies have *regulatory* functions so that in order for individuals or firms to conduct their profession or business, licenses and permits are issued to them. Permits for instance, are issued by the Bureau of Forestry Development and the Bureau of Fisheries and Aquatic Resources to regulate fishing and logging operations.

The National Census and Statistics Office conducts periodic censuses and socio-economic surveys to provide and update baseline information. A number of government offices have to collect data as inputs to policy formulation, do surveys to supplement existing information for evolving plans and programs. Often, data have to be collected by government in order to participate in international studies for international comparisons.

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2. From these information and data collected and compiled by the government, statistics are generated to satisfy not only the specific uses and needs of the government itself but also those of the general needs of the public. Statistics on the economy are produced to have an assessment of its performance, in order that the effectivity of programs and projects at the national and local levels can be evaluated and thus guide further the government in the proper management of these programs on development.

The Gross National Product (GNP)

3. The process of understanding how factors and inter-relations among them are affecting the economic and social life in any given country is a complex one. The process can be facilitated and enhanced if such information gathered and data collected by the government for various purposes are compiled and analysed in a "socio-economic framework".

Thus, the attempt to describe the progress made in the country in terms of a system of national accounts is one such *framework*. From this system the *value* of total output of goods and services (gross national product) produced in a given current year is derived. Such important sectoral transactions of business and industry, of persons and of government (these are the major producers of the nation's output) are articulated in accounting settings with capital and external transaction accounts providing reconciliations among the various transactions and components in the system (see Appendix). Thus, the three major producers, for example, in 1978 produced goods and services equivalent to ₱137.88 derived from services rendered (sold) by persons (i.e. compensation of employees) and entrepreneurial activity (entrepreneur and property income of persons) of ₱129.6B, those of government of ₱1.0B and those of business and industry (corporate income) of ₱7.3B. We call this the "net national product (NNP) at factor cost" or "national income". Add to NNP estimates of non-factor cost (direct taxes net of subsidies) and capital consumption allowance to give us the Gross National Product (at market prices) of ₱170.9B.

These income flows resulting from these major transactions may be viewed also as having been derived from three major sectors of the economy; i.e., Agriculture, forestry and fishery ₱46.9B; industry ₱59.4B; services ₱64.8B which add up to Gross Domestic Product at

Unit: Million Pesos

ADVANCE ESTIMATES AS OF
DECEMBER 1978

TABLE 5.
GROSS NATIONAL PRODUCT, NATIONAL INCOME AND GROSS DOMESTIC PRODUCT
BY INDUSTRIAL ORIGIN, CY 1976 TO 1978

<i>Industry</i>	<i>At Current Prices</i>			<i>At constant prices of 1972</i>		
	<i>1976^r</i>	<i>1977^r</i>	<i>1978^a</i>	<i>1976^r</i>	<i>1977^r</i>	<i>1978^a</i>
1. AGRICULTURE, FISHERY AND FORESTRY	<u>37,341</u>	<u>42,688</u>	<u>46,855</u>	<u>19,671</u>	<u>20,646</u>	<u>21,541</u>
2. INDUSTRIAL SECTOR	<u>45,687</u>	<u>53,076</u>	<u>59,449</u>	<u>24,904</u>	<u>26,821</u>	<u>28,559</u>
a. Mining and quarrying	2,128	2,472	3,078	1,491	1,742	1,829
b. Manufacturing	32,545	37,834	42,160	17,481	18,793	20,025
c. Construction	9,784	11,356	12,527	5,254	5,575	5,930
d. Electricity, gas and water	1,230	1,414	1,684	678	711	775
3. SERVICE SECTOR	<u>50,126</u>	<u>57,545</u>	<u>64,750</u>	<u>29,010</u>	<u>30,696</u>	<u>32,581</u>
a. Transport, communication and storage	5,583	6,370	7,250	3,559	3,779	3,990
b. Commerce	29,139	33,876	37,647	15,938	16,903	17,963
c. Services	15,404	17,299	19,853	9,513	10,014	10,623
GROSS DOMESTIC PRODUCT at market prices	<u><u>133,154</u></u>	<u><u>153,309</u></u>	<u><u>171,054</u></u>	<u><u>73,585</u></u>	<u><u>78,163</u></u>	<u><u>82,681</u></u>

Table 5 (Continued)

<i>Industry</i>	<i>At Current Prices</i>			<i>At constant prices of 1972</i>		
	<i>1976^r</i>	<i>1977^r</i>	<i>1978^a</i>	<i>1976^r</i>	<i>1977^r</i>	<i>1978^a</i>
Net factor income from the rest of the world	(1,216)	(1,351)	(157)	(244)	(205)	(204)
GROSS NATIONAL PRODUCT at market prices	<u>131,938</u>	<u>151,958</u>	<u>170,897</u>	<u>73,341</u>	<u>77,958</u>	<u>82,477</u>
Indirect taxes net of subsidies	12,735	14,516	17,055	7,036	7,402	8,243
Capital consumption allowance	12,873	14,260	16,023	6,847	7,276	8,105
NET NATIONAL PRODUCT or NATIONAL INCOME	<u>106,330</u>	<u>123,182</u>	<u>137,819</u>	<u>59,458</u>	<u>63,280</u>	<u>66,129</u>

^rRevised^aAdvance

Source: NEDA, Statistical Coordination Office, National Accounts Staff.

ACCOUNT I. GROSS NATIONAL PRODUCT AND EXPENDITURE ACCOUNT
(At current prices)

	1976 ^r	1977 ^r	1978 ^a
1. Compensation of employees (II-1)			
2. Entrepreneurial and property income of persons (II-2)	99,322	115,693	129,573
3. General government income from property and entrepreneurship (III-1)	626	887	956
4. Corporate income	<u>6,382</u>	<u>6,602</u>	<u>7,290</u>
a. Corporate tax* (III-3a)	2,231	2,053	2,332
b. Corporate savings (IV-1b)	4,151	4,549	4,958
NATIONAL INCOME OR NET NATIONAL PRODUCT at factor cost	<u>106,330</u>	<u>123,182</u>	<u>137,819</u>
5. Indirect taxes (III-2)	13,303	14,908	17,643
6. Less: Subsidies (III-7)	568	392	588
7. Capital consumption allowance (IV-2)	12,873	14,260	16,023
GROSS NATIONAL PRODUCT in purchasers' values	<u>131,938</u>	<u>151,958</u>	<u>170,897</u>
8. Personal consumption expenditures (II-6)	86,205	98,355	112,974
9. General government consumption expenditures (III-6)	14,050	15,827	17,988
10. Gross domestic capital formation (IV-4)	<u>41,053</u>	<u>44,344</u>	<u>48,467</u>
a. Fixed capital formation (IV-4a)	32,753	36,415	89,424
b. Increase in stocks (IV-4b)	8,300	7,929	9,043
11. Exports of goods and non-factor services (V-1)	23,248	29,200	80,655
12. Less: Imports of goods and non-factor services (V-5)	31,841	35,717	40,450

Account I (Continued)

	1976 ^r	1977 ^r	1978 ^a
13. Statistical discrepancy (II-10)	439	1,300	1,470
EXPENDITURES ON GROSS DOMESTIC PRODUCT	<u>133,154</u>	<u>153,309</u>	<u>171,054</u>
14. Net factor income from the rest of the world (V-15)	(1,216)	(1,351)	(157)
EXPENDITURES ON GROSS NATIONAL PRODUCT	<u>131,938</u>	<u>151,958</u>	<u>170,897</u>

^rRevised
^aAdvance

*Source of basic data, Bureau of Internal Revenue.

Source: NEDA, Statistical Coordination Office, National Accounts Staff.

market or producer's prices of ₱171.1B. Adjusted for "net factor income" on external activities of ₱.2B would give us also GNP at market prices.

And in yet another way GNP may be viewed as current consumption expenditures by persons (₱113.0B), by government (₱17.9B), and finally, as expenditures for domestic capital formation (₱48.5B) and on "net exports of goods and non-factor services" (₱9.8B) to obtain expenditures on gross domestic product. Deduct factor payments from the external sector (₱.2B) to give an expenditure on GNP of ₱171.0B which is supposed to equal GNP.

Measuring Real GNP

4. The preceding discussion is an attempt, in a very general way, to describe the methodology employed to derive the GNP and other macro-economic aggregates that are periodically published and quoted in government publications. The numbers shown are values at current prices. Measuring real GNP has added problems in that changes in market prices of current goods and services produced are included in GNP at current prices. If the physical volume of goods and services currently produced are priced at base-year prices, the resulting number is real GNP. Deflating GNP at current prices by price indexes of production will not result in real GNP even if the latter does reflect the changes in current prices of goods produced from those of the base period. We still would need to express the "services" component of current GNP at base-year prices which is quite tricky. This means estimating the total amount of inputs (manhours, say, for labor) that would produce the current physical volume of goods using prices of the base-year period. To the extent that changes in prices of "services" remain constant from the base year to the current year, the two methods above can have the same results.

5. The process of reducing to "real" terms the various components of GNP can be lengthy, apart from being beyond the scope of this brief paper. It may be mentioned, however, that a combination of direct estimates and deflation are being used whenever convenient (depending on availability of data). Real GNP for the year 1978 was estimated at ₱82.5B in constant prices of 1972; or a real growth rate of 5.8% over that of the previous year.

Some Analytic Drawbacks of the System of National Accounts (SNA)

6. The SNA does not cover the entire statistical framework currently utilized by our government economists and statisticians in analyzing changes in the economy. Other than having an overall measure of economic performance in terms of growth and level of GNP, "per capita" measures, and a few other related macro-economic variables (e.g., capital/output ratios, distribution and share of various sectors to total output, gross savings and investments, foreign trade performance, etc), the existing SNA hardly provides an adequate analytic framework for studying at a less aggregative level the effects of a policy or a package of policies to be formulated under a number of situations. For example, the distributional effects especially to final consumers of anticipated price increases in oil, taxes, housing rentals, etc. could not be easily handled using the current SNA. Though we know that the response of prices of other goods and services to the anticipated price increases is only in one direction (and that is, *up*), some quantification is essential to provide better guides for a number of options that may be available to higher authorities who make the final decisions on policies to be adopted and the guidelines that may be formulated in cushioning the total impact to the public.

The Input/Output Tables

7. Hence, one drawback of the SNA is that it has limited utility in analysing economic effects relating to the supply of and demand for particular goods and services but also their effects on all the others. Input/output tables are just about the type of framework that can handle such problems. The NEDA and the National Census and Statistics Office (NCSO) have made attempts to construct a system of input/output tables for years 1961, 1965, 1969 and 1974. Essentially, the basic transaction table is a matrix of sales (rows) of intermediate products and services of industries to other industries and to the final consumers (private institutions and households, government) including those channeled for exports and capital formation, and the purchases (columns) of industries from other industries including imports (non-competitive) of raw materials and services necessary for production and purchases of other primary inputs termed as "value added".

8. The systems of national accounts and that of the input/output tables are two of the economic frameworks which are currently in use by government (particularly the NEDA which is charged with coordinating the statistical activities of government) for developing an integrated system of statistics in the country. Other frameworks in development are mentioned in my previous paper.*

The Need to Have Suitable Government Statistical Framework

9. Up to this point, I have made an attempt to indicate some purposes of government in collecting data and the use that government makes of such statistics resulting from their compilation. Some general descriptions of frameworks within which the data available in government agencies, either as a result of their regulatory and/or administrative functions, or of conducting censuses and surveys to provide baseline information on many aspects of socio-economic situation in the country are utilized and further processed as inputs to research and studies that may be needed for evaluating past, or assessing current or planning future programs and projects in the government. They serve also in determining options available when considering strategies and in formulating policies to be adopted in resolving issues of significant national interest. The development in government of the statistical frameworks for socio-economic analysis is greatly influenced by the nature (social and political) of current plans and programs for national development.**

10. But these are not the only uses of these economic frameworks. To statisticians in government, they serve as (i) guides to determine gaps and help indicate the scale of priorities in statistical activities of government, (ii) ultimately, as tools to strengthen the national statistical system by improving the quality, timeliness and accuracy of statistics produced. The effective management of these myriad of government statistical activities in order to achieve optimum efficiency in government operations would need as well a strong coordinating system. Statistical standards and definitions of terms in use should be set and duplication of statistical activities should be minimized (if not totally removed).

*"Some Developments in Philippine Government Statistics" presented at the First National Convention on Statistics held at the Philippine International Convention Center on December 4-5, 1978.

**Such as the current development of "social indicators"

The Government Statistical Coordinating Systems

11. Central to the coordinating system is the NEDA, which is charged, among other things, to coordinate the statistical activities of government. NEDA exercises this function through the Statistical Coordination Office (SCO). At the highest level of the coordination system is the *NEDA Committee on Statistical Development*, chaired by the Minister of Economic Planning with ministers from some 10 ministries as members (See Chart). Statistical policies, presidential decrees, letters of instructions are considered and acted by this Committee for the entire NEDA Board which is chaired by the President. Supportive of this Committee is a Statistical Advisory Board (SAB) composed of Deputy Ministers from the ministries represented in the NEDA Committee on Statistical Development.

The SAB is aided by some eleven (11) inter-agency committees on substantive matters. These are in (1) agriculture, forestry and fishery statistics, (2) industrial and energy statistics, (3) social services statistics, (4) trade and tourism statistics, (5) transportation and communication statistics, (6) financial statistics, (7) price statistics, (8) survey design (9) labor, employment and income statistics, (10) population and vital statistics, and (11) standards and classifications. Sources of statistics in each of these sectors are discussed in a previous paper*. Government statistical activities are not without problems and to tackle a number of issues generated by these activities such as the setting of statistical standards, common definitions, removal of duplication of statistically-related activities, planning of joint statistical activities to improve or fill-up gaps in current statistical operations, etc. are discussed and identified at this level. Recommendations are forwarded to the SAB which in turn attempts to resolve issues of statistical policies. If necessary, the matter may further be elevated to the Committee for final arbitration.

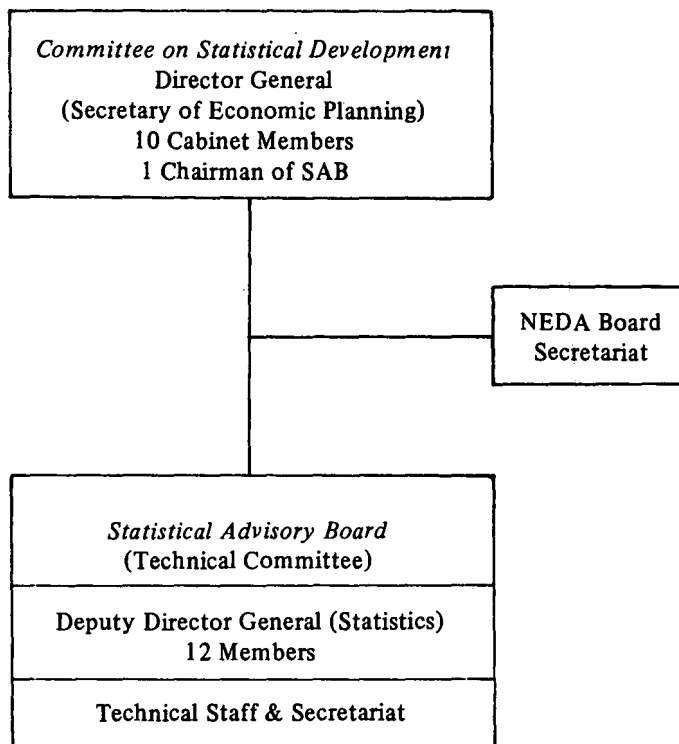
How About the Data Needs of the Private Sector?

12. Having said so much of government statistics and the system which produces them, what about the needs of the private sector? Are they being met? These are pertinent and significant. I have been attempting, as a matter of fact, to answer these questions for the last 14 years at the NCSO (and 6 years at the NEDA). But I do not

*Ibid, pp. 5-21.

NEDA COMMITTEE ON STATISTICAL DEVELOPMENT

A. Organization Chart



B. Composition of the CSD per LOI No. 601

Chairman: Secretary of Economic Planning (NEDA Director General)

- Members:
1. Secretary of Labor
 2. Secretary of Finance
 3. Governor of the Central Bank
 4. Secretary of Agriculture
 5. Secretary of Natural Resources
 6. Secretary of Industry
 7. Secretary of Health
 8. Secretary of Education and Culture
 9. Secretary of Trade (additional)
 10. Commissioner of the Budget
 11. Chairman of the Statistical Advisory Board (Ex-Officio)

feel completely satisfied. My feeling is that our office can barely supply the needs of the public, considering that I generally get requests for information which cannot be acted by my division chiefs for the reason that (i) the data are not yet available for direct use and release and as they have to be specially processed, or (ii) the data requested are so specific to a particular firm or individual, or (iii) the data are available in different publications but the party does not have the time to copy and can he get the publications free, (iv) the data are available in tapes and can he get the copy also in tapes, or that (v) the data are not available but the requesting party does not believe the division chief. The Executive Director can certainly help.

In meeting (i) the office has to consider its manpower resources as channelling personnel to work on such requests can only mean taking away personnel from other priorities. Sometimes, there are offers of help in processing; however, since the data are invariably in raw form, we may get the situation in (ii). Here, the *confidential* provision of Commonwealth Act 591 does not allow disclosure "to any persons except authorized employees of the Bureau of the Census and Statistics, acting in the performance of their duties; . . . Any person violating the provision of this section shall, upon conviction, be punished by a fine of not more than six hundred pesos or by imprisonment for not more than six months, or by both." (Sec. 4, CA. 591 — *An Act to Create a Bureau of the Census and Statistics to Consolidate Activities of the Government Therein.*) In (iii), costs of publications have gone up so much that the office can print only very few copies per volume. Hence, only some selected libraries of government agencies and offices are furnished copies and the rest are sold to the public to cover partly the costs of publication. We have not been able to resolve the problem in (iv). The office does not supply information on tapes as a matter of long-standing policy. (The NCSO has not been able to supply even other government agencies any information or data in tapes.) The problem in (v) is the most difficult. The requesting party does not believe the Executive Director, either!

Incidentally, from reports compiled at the different units of the NCSO Central Office, the number of requests for information and data served totaled 23,289 in 1977 and 26,640 in 1978. These do not include the number of reports published and disseminated or

sold. Some 131,270 copies have been printed in the last two years alone. In the regions, the number of requests for information and data provided totaled 30,816 in 1977 and 28,493 in 1978.

While some needs of private industry and business are probably met at the most aggregative or macro-level* the problems in meeting most of these are aptly summarized (in another paper**) which laments the inadequacy of information and data on studies of demand for industry products and services. There is mention of no central source of information where researchers can go for their data needs and at times the different sources may give even conflicting information. If data were available they are often too aggregative to be of use or are too outdated to be of significant value in the study being undertaken. Detailed or more specific data, even if available, are more difficult to obtain because of "cockeyed view toward confidentiality of industry statistics".

Some brief notes may be helpful in understanding the reasons for these shortcomings observed in trying to utilize government statistics for data needs. Some problem areas mentioned have been discussed earlier like *confidentiality*. Government statistical producers and users are aware of these problems of conflicting statistics and continuous efforts are being made to minimize their occurrence. As mentioned earlier, government statistical services are decentralized with a central coordinating authority exercised by the Statistical Coordination Office of the NEDA. To resolve some of these issues, the President has issued two letters of instructions (LOI 521 and 732) to all ministries and agencies of the government to effect:

1. Full support by department secretaries and national/regional heads to:
 - a. Integrated Household Surveys
 - b. Integrated Establishment Surveys
 - c. All other surveys that call for integration
2. All new large-scale surveys with a sample size of 500 or more to be done by government agencies may be reviewed by NEDA on a *post factum* basis.

*See for example, "Regional Indicators for Marketing" by Carlos Evangelista, First National Convention on Statistics, PICC, December 4-5, 1978, which says that the "paper relies on the wealth of economic data, primarily government statistics, that are available."

**"Industry Information Needs" by Ms. Sally Zaballa, First National Convention on Statistics held at PICC, December 4-5, 1978.

3. The universal adoption of prescribed standards and classification systems by government agencies.
4. The NEDA and the Budget Commission should pursue vigorously its proposed tie-up in the budget review process so that they could institutionalize a more effective system of resource (budget) allocation for statistical activities.
5. The rationalization of the growth and development of computer based information systems, e.g. data banks/management information systems, among departments by the National Computer Center.
6. Closer interdepartmental coordination in the government to prevent the use of conflicting statistics in department reports and press releases.
7. The maximum utilization of the administrative/regulatory data collection of agencies which include the Bureau of Internal Revenue, Social Security System and Government Service Insurance System and Board of Transportation.
8. The NEDA, thru its Statistical Coordination Office, shall issue such directives as are necessary to agencies concerned to effect proper allocation of statistical functions and responsibilities including the discontinuance of producing and/or publishing particular statistical series (a) already regularly produced, which may be considered either duplicative or of very low reliability, or (b) still planned to be produced by agencies concerned.

13. Among important sources of data for market researchers are the income and expenditure surveys conducted by the NCSO for the years 1956, 1961, 1965, and 1971. From some initial samples of 6,000 households the sample size reached more than 11,000 households by 1971. In 1976, soon after the conduct of the Integrated Population Census and Its Economic Activities, Phase II, in December, 1975 (IPCEA, II), a sample of some 30,000 households was drawn for a survey of family expenditures. The corresponding schedules of these families were matched with the 1975 IPCEA, II for the income portion. During the current year the Joint Tax Research Commission and the NCSO are conducting a "family diary method" of income and expenditures from some 30,000 households. The results of the first four surveys have been published while only hand-

tallied summaries for 1975 are available.* The coverage and scope of the 1975 ICPEA, II are much more extensive than other income surveys as it covered some 600,000 households and questions on incomes of households from all sources were asked. Because of the very complicated and extensive EDP programming required, the NCSO has so far the final tabulation of Bataan province which came but only last week. It is hoped that most of the other provinces including the national summary will have the final results by the end of this year.

Essentially, the "Income and Expenditure" Surveys have two parts: Part I on income and Part II on expenditure for the year. Part I has some 13 blocks of questions for the family enterprise and income earners: (1) wages and salaries for "agriculture, fishing, forestry and hunting" and "other industries including government" activities, enterprises of (2) trading, (3) manufacturing, processing or repair, (4) transport, and (5) others (such as restaurants, hotels, boarding houses, laundry shops, barber shops, etc.), (6) practice of profession or trade (as lawyers, physicians, engineers, etc.), (7) production of articles primarily for home use, (8) income from livestock and poultry raised, (9) crops, fruits and nuts harvested, (10) farm operating expenses, (11) income from fishing, forestry and hunting, (12) households share of crops, fruits and nuts, livestock raised by others and from (13) other sources.

Part II has five blocks on detailed expenditures on (1) food consumed at home (such as cereals, fish, meat and eggs, milk and dairy products, roots and vegetables, etc.) and those consumed outside, (2) housing, fuel, light and water and other households operations, (3) clothing and other wear and personal care, (4) medical care, transport, communication, recreation and education, and (5) other goods and services purchased.

The Center for Research and Communication (CRC) jointly with the NCSO analysed the 1971 survey¹ on the nature of relationship of the Filipino family consumption patterns as influenced by demographic and economic factors, their sensitivity to expenditures

*As this paper goes to press, some EDP print-outs of three provinces have come out and a few selected results have been released in *Special Release from the Office of the Executive Director, NCSO*, Nos. 250, 254 and 255.

¹"A Guide to the Spending Patterns of Filipino Families", a research report by the NCSO and CRC, August 1974, mimeographed (145 pp.)

on various products and services with respect to income and by social and economic status. Some shifts of these demands over time and changes in buying habits between urban and rural households have been examined.

Concluding Remarks

14. I would like to conclude this brief note with some optimism on the future of research possibilities utilizing existing data available in a number of government offices. Perhaps with more sophisticated approaches, a systematic study on demand and savings behavior of consumers can reveal certain trends. For example, we can probably characterize the behavior of an average consumer by a small set of explanatory variables which could include relative prices. At different levels of development, it is possible to examine the response behavior of consumers to changes in prices and income.

Crucial in formulating strategies that would enhance the understanding of the nature of socio-economic development and especially those that could result in adequately satisfying the basic needs of the "poor" are studies on income and consumption behavior. Apropos to this would be the identification of subsistence levels. It is our plan therefore that more and more surveys dealing on income and expenditure will be conducted by the government in the future.