POPULATION AND VITAL STATISTICS

1.   Introduction

One important area where data collection is essential is human population. Its data collection procedure is usually by direct enumeration carried out for every individual in the territory at approximately the same time. Collecting data on human population is, therefore, a complex series of related activities. There is no gainsaying the fact that accurate population statistics is vital to sound development planning and economic management. This explains the seriousness attached to the assemblage of population and vital statistics in the country today. Apart from the information on the stock of country's population, it is essential to know the rate at which the population is changing, structurally and in the aggregate. Vital statistics as computable from registration of important events (especially births and deaths), constitute an important set of data for studying the dynamics of a country's population. However, Nigeria is yet to implement the compulsory registration of births and deaths as legislated since 1979.

2.   Coverage, Scope, Uses and Users of Population and Vital Statistics

By definition, population statistics covers all the individuals in the territory defined for the exercise. The scope of the human population census data collection system varies considerably from country to country. The over-riding criteria for deciding on the number and the type of questions included in the census questionnaire are:

[i] the needs of the country in the field of demographic data collection for planning purposes.

[ii] the availability of resources to carry out the operation.

[iii] the need to achieve international comparability in concepts and topics for inclusion.

In some cases, some exclusions from the questionnaire may appear irrational such as the exclusion of respondent's religion and ethnic origin from Nigeria's 1991 population census questionnaire. International comparability of census results may be limited by differences in the definition of the population to which the collected data refer, i.e. is it dejure or defacto population? Is the normadic population taken care of?.

Population statistics and in particular human population census are the primary sources of basic data required for planning for administration and for many aspects of economic and social research. They are also useful for standardising other macroeconomic aggregates for inter-regional and international comparisions. Some of the uses of census data are for educational planning, planning for housing, agricultural planning, and planning in the areas of manpower, labour and health.

In a similar vein, sample surveys as sources of demographic statistics are useful in:

[i] inter-censuses estimates.

[ii] checking the accuracy of the census.

[iii] studying the dynamics of the population.

On their part, vital registration records and statistics also have several important uses, such as:

[i] administrative (evidence of date of birth, parentage citizenship, etc).

[ii]   statistics (additional data on fertility, mortality, sex ratio as can be used for population projections).

[iii] medical (information on causes of death are useful for health planning, epidemiological studies are based on morbidity data, etc.).

3. Sources and Methods of Compiling Population and Vital Statistics

Demographic and vital statistics in Nigeria are produced through censuses, surveys and administrative records. The National Population Commission (NPC) has the statutory responsibility for the production of demographic and vital statistics in Nigeria and is therefore, the main source of data. The National Bureau of Statistics (NBS) and the Immigration Service are also sources of demographic statistics.

The population census, ad-hoc surveys and the system of vital statistics are the sources of NPC's demographic and vital statistics. NPC's most important source of data is the national population census which is supposed to take place every ten years. Nigeria's last population census took place in 1991 and it was the most comprehensive in planning and execution. The census was preceded by detailed planning during which over 1,500 sheets of topographical maps of the country (including cadastral maps of urban areas) were acquired by the Commission's cartographic department.

The country was demarcated into 210,000 Enumeration Areas [EAs] in December 1990. About 250,000 pairs of enumerators (1 male and 1 female) were recruited and attached to the EAs. About 50,000 supervisors (1:5 EAs) were also recruited for the enumeration exercise.

Three pre-tests, and the final census were conducted before the census proper in 1991. It was possible to compute the head count within a short time, especially because of the curfew imposed to forestall double counting and to reduce the number of call-backs.

The questionnaire used for the census had 12 main items for recording the following information about each person resident in Nigeria: name, relationship with head of household, gender, age, disability, nationality, home place, home Local Government Area, literacy, marital status, work-stations and occupation.

After the field work, the completed questionnaires, summary and control forms were forwarded to the zonal offices for onward despatch to the NPC headquarters for central processing.

After the census was completed, cases of communities who claimed that they were not enumerated were referred to special courts whose decisions were final.

The provisional results of the census for each State and Local Government Area were released for limited circulation in March 1992. A total of 41 tables and cross-tabulations of demographic characteristics which have relevance to the socio-economic and political conditions of the country were compiled by the NPC.

NPC usually conducts sample surveys on ad-hoc or regular basis. These include:

[i]Nigerian Fertility Survey (NFS), conducted in 1981/82 by the Planning, Research and Statistics Department to study the fertility pattern of women ever married (aged between 15 and 49 years).[ii]

National Demographic Sample Surveys (NDSS), conducted in 1980 by the Population Statistics Department of NPC to study household composition, fertility, mortality and migration pattern.

[iii] Demographic and Health Surveys (DHS), conducted for NPC in 1986 by Ondo State Ministry of Health and Population Statistics to study fertility, mortality, child bearing and family planning technique used.

[iv] Pilot Sentinel Survey (PSS), conducted in 1988/89 by the Planning, Research and Statistics Department to study women aged 12 to 49 years in respect of pregnancy state, number of children and use of family planning techniques.

[v] Nigerian Sentinel Survey conducted by NPC in 1996.

The first two Surveys were national in coverage and may be repeated; DHS covered 90 Enumeration Areas in Ondo state and is a one-shot affair; PSS covered Kaduna, Bauchi, Enugu and Ibadan and had USAID funding for one year. The executing department manually did preliminary analysis of each survey consisting of editing, coding and transcription. Second stage analysis consisting of aggregation and derivation of estimates were computerised abroad by the international organisations. These are World Fertility Surveys, London (NFS), Demographic Data for Development, Wasting House, USA (NDSS), Demographic and Health Survey Department, Maryland, U.S.A (DHS). The NPC's computer facilities were used in processing the results of the PSS. Aggregation level was national for NPS, State, national, occupational and other socio-economic criteria for NDSS, and State for DHS and city for PSS.

The worksheets for the computerised analysis are available locally as well as overseas except those of NFS which are available only at the International Statistical Institute, The Hague. The reports of the surveys were manually produced locally and made available to Federal and State Governments as well as to the United Nations Fund for Population Activities (UNFPA), World Health Organisation (WHO),

United Nations Children Fund (UNICEF), the United States Agency for International Development (USAID) and private researchers.

Finally, there is the Vital Registration System, which is planned to be a system of continuous registration of the live birth, deaths and still births by the Vital Registration Department of the NPC. Initially, the system was to be tried out on experimental basis on 4 Urban and 4 Rural Local Government Areas. Three forms were designed to be completed on live births and still births to be reported within 21 days and deaths to be reported in 2 days. Completed forms were to be edited manually, while second stage processing was to be computerised by the NPC, to include data entry, aggregation and derivation.

The NPC is currently intensifying efforts to conduct a National Population Census in the first quarter of 2006.

The National Bureau of Statistics conducts three surveys which focus on some aspects of demographic statistics. These are:

[a]   the Survey of Internal Migration (SIM), which is a module of the National Integrated Survey of Households (NISH). It aims at providing information on the magnitude and direction of migration as well as on the characteristics of the migrants. Although it is envisaged to be conducted every five years, the only survey conducted so far was in 1986. It was a nationwide survey in which about 80 respondents were interviewed in each of 700 Enumeration Areas. The results were published by the NBS in the **Annual Abstract of Statistics.**

[b]   the General Household Survey, an annual survey, has a module on demographic characteristics such as size of households and distribution of population by marital status. It is based on a sample of enumeration areas and is national. Results are published by the Bureau in the **Annual Abstract of Statistics.**

[c] Nigeria Demographic and Health Survey is an ad-hoc survey to assess the demographic situation in the country, to collect data for the evaluation of family planning and health programmes and to support the dissemination and utilisation of such results. Results of the survey are used to estimate.

[i] total fertility (that is, total number of children a woman is expected to have in her lifetime).

[ii] proportions of women using various family planning methods.

The Immigration Service and National Bureau of Statistics are responsible for compiling information on immigration to and emigration from Nigeria. This information is compiled through aggregation unto annual summaries of various returns and reports received from the Immigration Service on arrivals and departures from Nigeria by air, road or sea for reasons of work, pleasure, returning home, etc., and also on facilities provided during the year by the passport and alien registration offices.

4. Current Methods of Data Storage and Dissemination

The analysis of the results of the 1991 census is highly computerised. Consequently, at the end of the data entry stage, all information supplied by individuals during the last census has been stored in machine-readable form.

5. NBS Data Base Coding System for Population and Vital Statistics

The operators of the National Bureau of Statistics have put together 33 items consisting of 1,416 detail names of variables that capture most of the aspects of demographic and vital statistics considered relevant for planning and research. The proposed data base includes most of the information which the NPC intends to produce from the 1991 census results. Since the Commission is expected to store more detailed demographic and vital statistics than those contained in the NBS data base, the latter can only be used as a guide in designing a more elaborate data base for the Population Commission.

The division on Population and Vital Statistics in the data base of the National Bureau of Statistics is arbitrarily coded as 81. This code falls between Education (80) and Health (85) in the ISIC.

The proposed items of data for this division are 33 and they fall into the following 11 groups, two of which have multiple items each with common details:

81   POPULATION AND VITAL STATISTICS
8101-8119 Selected Characteristics of the Nigerian Population by

Gender and Age Groups (19 Items, 66 Details Giving
1254   Records)

8120   Area, population and population density (5 details)
8121   Population living abroad by gender and status (12 details)
8122   Mobility of resident population by state and local Government (13 details)
8123   Birth and Death Rate per 1000 Population by Gender (9 Detail)
8124   Marriages and Divorces in Nigeria (6 Details)
8125   Divorced Persons per 1000 Population with spouses Living (15 Details)
8126   Divorced Persons per 1000 married persons with spouses Living (16 Details)
8127-8131 Selected Age - Specific indices of Fertility (Birth rate, childlessness and Number of Children ever - born) (5 items by 10 Details giving 50 records)
8132   Expectation of life at selected Ages by Gender (18 Details)
8133   Expected Deaths per 1000 Population : Age-Specific and by Gender (18 Details)

In all, there are 1,414 detail names or variables in the population and vital statistics division of the NBS's data base. The names with their appropriate coverages and dimensions are as listed below.

6.   CONCLUDING REMARKS

The National Population Commission is equipped with most of the facilities required for establishing a data base of demographic and vital statistics. With careful design, such a data base can be integrated with its present system.

Currently, it is only the NBS that publishes elements of demographic and vital statistics on a regular basis in the **Annual Abstract of Statistics** and **Social Statistics for Nigeria.** The National Population Commission should produce a regular publication on demographic and vital statistics. This task will be facilitated if the Commission has a data base which contains population census data as well as information on immigration and emigration (obtainable from Internal Affairs), births and deaths (as obtained from the vital registration system) and estimates from relevant surveys conducted by it or other agencies.

Finally, the NPC should ensure that all demographic surveys conducted in Nigeria are processed in the country, even if experts have to be invited from abroad to assist. This will not only prevent indiscriminate use of national social statistics by foreigners, but also facilitate local capacity development and conserve foreign exchange.