

STATISTICS AS AN UNDISPUTABLE INSTRUMENT FOR NATIONAL DEVELOPMENT

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Abstract

This paper examines the importance of statistics and statisticians in national development and that government at all levels should embark on building a very viable information system in order to have adequate statistical information for designing and appalling evidence base policy. Given the relevant statistics cited from Nigeria statistical database, this study shows that no meaningful national development could take place without empowering the national statistical system. In national development, the appetition of a policy is to accomplish national goals and to attain a fair measure of success in the objectives, there is need to map out strategic plans, set up machinery for implementation of the plans and monitor the execution process; this is exactly the point at which the role of statistics is vital and relevant.

Keywords: National Development, Statistical system, Statistical Acts and Planning

1.0 Introduction

For the purpose of clarity, and good understanding of what is Statistics, we defined Statistics as a scientific method of collecting data, organizing, tabulating, presenting, analyzing, interpreting as well as drawing a reasonable conclusion towards a useful decision making. Therefore, private individuals, Governments, private companies and NGOs alike needed to decide on important issues every now and then; making such decisions demand information and continually needs to be clear exemplification based in order to be assented to by the larger world. There is no how a good argument can be genuine or valid without figures or data to back it up. These figures must be obtained, organize, analyzed and presented without playing any politics with it. It must be reliable, up to date and repeatable approaches. Presentation of such figures is intended to make us enlightened of the topography around us (D K Shangodoyin and D A Agunbiade, 1999), with this we can justify some overture or criticism, or at least to place a discussion in appropriate perspective.

Honestly speaking, statisticians are propounding facts and figures to their instant environment. For example, statisticians used the result of opinion polls as a starting point to promote the projections of the result of election or use result obtained from pilot survey on pre-census to determine the population figure of a country. These forecasts are useful if every literate person in a community is able to comprehend and interpret the information presented to him but to enhance this, some fundamental knowledge of statistics is apparently desirable as it aid for better conception of the rudimentary phenomena. Statistics is an expedient instrument for

national development, growth and planning and a government that lacks viable infrastructure for information generation, dissemination and its usage is sternly encumbered in doing proper planning, monitoring and evaluation of developmental programmes and projects and also in arriving at good judgement with respect to their government policy formulation. Governments, corporate companies should embark on creating a workable information system in order to have adequate statistical information for beguiling a dreadful social and economic policy. It has been advocated that the National statistical system in any country should get more attention if the country is to have an orderly and definite development programme (United Nations Resolution on World Statistics Day, 2010) (Ward, M, 2004). In national development planning, the desires of a policy planner should be to attain such goals as full employment, price stability, and economic growth, equilibrium in the balance of payment, equitable distribution of income, educational development, social security, political stability and so on. To have a fair measure of success in the goals stated above, there is need to map out strategic plans, set up machinery for execution of the plans and monitor the implementation process; this is exactly the point at which the role of statistics is vital and useful.

Hence, this research work is on the role of Statistics to national development with particular reference to Nigeria. This paper consists of 6 sections. Section 1 is on introduction; the relevance of statistics and statisticians in national development is discussed in section 2. Statistical information and national development are discussed in section 3. The stages required in the production of reliable statistics is featured in section 4, while the statistical systems for data production in Nigeria is articulated in section 5 and the concluding part of this paper is in section 6.

2.0 Role of Statistics in National Development

Statistics which is define as scientific methods of collecting data, organizing, tabulating, presenting, analyzing as well as drawing a reasonable conclusion towards a reasonable decision making (Ikusika S.S, Lawal F.k, 2018), plays an important function in the monitoring an uninterrupted process that demands data that is obtained to assist in establishing whether planned objectives are likely to be achieved or not. In monitoring and evaluation of ongoing economic reform programmes of the governments, statistical information is at the same time compulsory as it will provides the essential data on performance indicators which serves to measure the impact of policy and programmes on the quality of life of target populations. The various issues facing Nigeria, such as HIV/AIDS pandemic, shortage of skilled professional in technology, sciences and medicine, unemployment, rise in public debt, insecurity, and reformed of social programmes demand statistics that will furnish brainstorm into the underlying realities. The arrangement of such strategic information in the context of nodding resources is the major question for National Statistical Offices. This condition of course calls for anteriority setting, in another words, we mean identifying the new information to be produced, appropriate dissemination of information and the means of optimizing operational efficiency, reducing response burden, and the programme reductions made by budget constraints. Priority setting is based on judgment rather than spontaneous approaches. Therefore, Statistical data are the inputs used to influence judgment. It must be emphasized that statistical information is an input and a vital one, for the efficient operation of economic and social agents in both the private and public sectors. The role of statistics in national development and management of social anomies becomes increasingly more complex, its areas of intervention multiply and expansion of National Statistical Offices as well as the regulations on production of statistics becomes more necessary at this point in time for any meaningful social and economic growth to be recorded. Growth is said to occur when an economy's productive capacity increases and this in turn is used to produce more goods and services in

successive time periods. Thus, economic growth is a desirable goal which leads to economic development. However, the challenge of economic development has remained a daunting one for many developing nations such as Nigeria. Consequently, development is meaningful only if there is improvement in the quality of life of the people.

Timely, complete, accurate and reliable statistics is critical to creating and sustaining an environment which fosters strong, equitable development, and is an essential ingredient for formulation of sound economic development policies and total reduction in social anomies. Thus, for economic management to attain its ultimate goals of sustainable economic development improved societal welfare, equity and other macroeconomic goals, must be based on the availability of timely and reliable aggregate statistical indices such as Gross Domestic product (GDP), Inflation Rate, Unemployment Rate, Interest Rate, Income per capita and Balance of Payments to name a few. From the United Nations view point (Ward, M, 2004), statistics is a pathfinder for solution as well as a veritable tool in assessing the extent or level of national development of an economy including monitoring and management of societal vices in any given period. The national economic policies and complex interactions among various sectors of the economy make it imperative for building up macroeconomic planning models. This kind of model build-up is only possible with statistical information (which is also used in estimating the parameters of the model) enables us to monitor the performance of the economy and the social well-being of the people; the basic statistics required in economic policy formulation include:

- Consumption data (Government & Private)
- Investment Expenditure (Government & Private)
- Import and Exports
- Prices and Inflation
- Industrial Production and Indices
- Energy and Power production/ consumption
- Agricultural and raw Material Production
- Transportation & Communication Indicators
- Government Services
- Housing & Finance
- Interest Rates & Exchange Rates
- Banking & Finance Also some basic statistics needed in social policy formulation and execution include:

The role of statistics in national development is very critical. For instance, Income per capita which immediately raises the wider issue of income distribution in a sovereign nation such as Nigeria is a topic which generates public interest, especially during budget presentation to the public. It is one topic, which interests everybody, to the extent that almost everybody has a point of view. Yet, the statistician is expected to state and measure the situation as it is. Statistics can reveal to us especially in areas of income policy and any matter relating to economic planning and development that you cannot have peace where there is injustice; for peace and justice are inseparable: a person diseased and malnourished is not at peace, a young man or woman without employment is not at peace. Consequently, a society which has all these afflicting the citizens shall always remain torn by crime, delinquency, violence, cruelty and low development. Thus, statistics on these issues serves as monitoring indicators which are vital for development plans. Example, it was observed that 40% of the total population or almost 83 million people live below the country's poverty line of 137,430 naira or \$381.75 per year by figure published from the Statistics office, a report between September 2018 to October

2019 (Nigeria Bureau of Statistics, 2019) that the incidence of poverty (persons below PDL) was 43% (89million) and another 25% (53million) are vulnerable in 2018/2019. The sectoral distribution showed that the incidence of poverty in urban areas was 71% compared with 79.6% recorded for rural areas. These figures provide a powerful tool for policy review of pervert reduction strategies, implementation mechanisms and monitoring and evaluation.

The importance and availability of timely and reliable statistics on socio-economic life of a sovereign nation cannot be over-stressed. For instance, a number of goals have become generally accepted as the objective of economic policy and development. Movement towards their attainment is deemed to lead to broad stability and increased national welfare. In the case of developing countries like Nigeria, the objectives among others include: full employment, or a low level of unemployment, price stability, balance of payments equilibrium, economic growth and development. The first two objectives refer to Internal Balance while the third refers to the External Balance. Full employment has been ranked amongst the foremost objectives of economic policy (C Stijn, D Giovanni, I Deniz and L Luc, 2010), though there is no unanimity on the meaning of full employment. It does not mean zero unemployment; full employment is not always full. It is now admitted that full employment stands for 97-98 percent employment or an unemployment rate of 2-3 percent. The objective of calculating inflation rate (Consumer Price index-CPI) is a measure of monetary stability. An inflation rate of 2-3 percent a year is favored by planners because fluctuation in price brings uncertainty and instability to the economy, with unnecessary loss to some and undue advantages to others. Thus, a policy of price stability keeps the value of money stable, eliminates cyclical fluctuations, brings economic stability, helps to reduce inequalities of income and wealth, secures social justice and promotes economic welfare. The objectives of calculating the External Balance is equally important because equilibrium is desirable in the balance of payments since a deficit could lead to a drain of a nation's external reserves and/or an accumulation of external debt. A surplus, on the other hand, will lead to an increase in foreign reserves and money supply.

3.0 Statistical Information and National Development

As afore mentioned above, statistical information is needed for making complex evidence based national decisions; planning a nation's economic and social development is complex involving the procedure of rendering, accomplishing and checking interrelated sets of decisions. The result of such series of tasks when prepared for a given period is normally called a Development Plan. Planning has become a stable part of major government decision making; the integration of the whole practice demands the exercise of a highly organized and well-developed statistical system, outside which a planned economy is unrealizable. Such statistical system must make available (for planning and other purposes of government industry and business) a well-integrated mass of accurate data at different degrees of aggregation, which can be used at each stage of the planning process (Adamu, S O, 1978). However, planned decisions rely very heavily on high quality statistical data. National development requires a well-organized statistical system allowing planners to work on the broad set of statistical indicators that are indispensable for the development and improvement in planning.

4.0 Production of Statistics

In a bid to install a feasible architecture for statistical production, it is probably essential to apprehend the different stages of statistical formation. The production process for statistics can be likened with the widely known and understood Industrial production process. It begins with planning, statistical/survey designs, data collection, data processing and analysis to report writing and dissemination of final statistical products. Every one of these stages is critical and important. Nonetheless, proper planning of a statistical project is extremely piercing for its

success. Certainly, it has been applauded that if a survey project is to be completed within the stipulated time frame, adequate attention must be devoted to planning. With good planning, implementation cannot go wrong. Another stage requiring particular attention is the data collection as collected data represent raw material for statistical products. Quality of data must be very lofty ensuring absolute reduction of both the sampling error (if a sample approach has been used for data collection) and non-sampling error. This is not to say that other stages are less important; these stages should be planned for and adequately implemented. Navigating through these processes it becomes very clear that we require adequate time, money, and efficient coordination for data to be produced timely. The success of work of various national statistical systems depends on the timeliness and accuracy of data output are functions of data processing. Data processing has gone beyond the ordinary coding, editing, sorting, computing and final publication of data collected. There is also the important matter of data storage and retrieval, together with the removal of unwanted material and its replacement in revised form. To perform these tasks Statisticians requires specialists from outside their profession. Some of the most difficult problems in data processing are connected with storage and retrieval. Data storage is an important function of national statistical systems. It is not simply a problem of using tapes and discs and managing variable format records, but of the whole complex area termed database management.

5.0 Statistical Systems for Data Production in Nigeria

It is necessary at this stage to understand the sources through which statistics can be procured in order to build systems that can assemble data from these sources. Basically, data could be obtained through a census, a sample survey or through administrative records. The National Bureau of Statistics (NBS) (Formally, Federal Officer of Statistics (FOS)), established for Data collection and analysis, had developed three statistical systems to cover all the range of data required in Nigeria (see Nigerian 1957 statistics ordinance). NBS covers most and household statistics through National Integrated Survey of Household (NISH). This system allows the collection of data through the households and individuals. NISH uses a carefully designed master sample which is normally operated over a period of five years. Information obtained at household level could be via such surveys as those of NISH or through a population census as those taken at interval of ten years. The second system is the National Integrated Survey of Establishments (NISE) through which most of the economic statistics are covered. The coverage of the Establishments or Economic Institutions could be on a sample or census basis. Coverage is also among sectors of the economy spanning manufacturing, distribution, hotels and restaurants, transport and professional services to mention just a few. The third system is the System of Administrative Statistics (SAS). Within this, administrative statistics are generated from administrative records. These records are kept for various reasons ranging from regulatory to monitoring. These records could cover both economic and social data and could be partial covering of a sub-population or the whole population. All these three systems, NISH, NISE and SAS effectively and comprehensively cover all data requirements of the population. It is appropriate at this time to bring in the roles of users and suppliers of data in the business of data production. Data generation is a joint venture amongst three broad groups of producers (statistical worker), the users and the suppliers of information. Quite often when there is the dearth of data or if quality of available data is not good, the blame for these situations often go to the Statistician; but little do people realize that both the users and suppliers of data contribute to this undesirable situation. Production of good statistics is not possible except users contribute to the development of definitions and concepts including standards for classification and the like. Users must equally carry out analysis of supplied data so as to bring out the understanding and quality of the data. These functions of the users contribute greatly to the overall development of statistics. On the other hand, the role of suppliers of data is very crucial, they

need to cooperate in statistical surveys in giving correct information which is vital to quality data for socio-economic growth of Nigeria.

6.0 Conclusion

We conclude that statistical information serves impetus to the direction, growth, development and management of anomalies of any Nation which is the core theme of this national conference. For this purpose, the production of statistics should be legislated for a timely, accurate and effective dissemination of data. In Nigeria, the main provision of the statistical ordinance (for data collection, particularly population census and the duties of the statistician general of the federation) should incorporate the reality of the present e-data needs and dissemination around the world. If the functions and uses of Statistics is considered paramount by the government and private organizations, it will lead to growth in industries and national economy which directly or indirectly will lead to more employment and in turn reduce social anomalies in Nigeria.

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