

THE HISTORICAL DEVELOPMENT OF THE NIGERIAN STATISTICAL SYSTEM AND ITS POTENTIALS TO GOOD GOVERNANCE

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ABSTRACT

The global emergence of statistics as a veritable tool for development became prominent in the late 1990s and the early part of the 21st century. The objective of this paper is to review the historical development of the National Statistical System (NSS) and critically analyze the changes that have taken place in the organizational structure. Data was obtained on FOS Capital Budget for 2000 – 2003 and National Data Bank Capital Budget for 1999 – 2003 from Statistical master plan for the Nigerian National Statistical System (2004/5 – 2008/9). Also, facts on human resources depicting Staffing Position by Category for the period 2001 through 2003 was extracted from Data Production and Information Management in Nigeria (Incorporating Policy Guidelines). In addition, data on Countries Receiving international financial aid (Commitments) was extracted from Partner Report on Support to Statistics (PRESS). Tabulation, simple bar charts, mean, median, mode and trend line were used for statistical analysis. Findings showed an astronomical increase in demand for data in recent times due to the search for new opportunities and agitation for accountability by citizens. However, progress remains insufficient, suppliers/users are not statistically literate, funding support is largely donor-driven. The government should put in place a sustainability programme as the case is with advanced economies. This starts with higher budgetary allocation to the sector to be supported by the organized private sector and other stakeholders. Also, the Statistical Master Plan should be updated and the content adhered to in order to strengthen the statistical system appropriately. Ultimately, every Nigerian needs to be statistically literate.

Keywords: Statistics, Transformation, Development, Strategies, Policy Formulations, Governance

1.0 INTRODUCTION

The global emergence of statistics as a veritable tool for development became prominent in the late 1990s and the early part of the 21st century. The international community and many developing countries now put greater emphasis on statistics to be able to provide a basis for measuring and monitoring the developmental goals, targets, and indicators of various national and international programmes such as Human Development Index (HDI), Poverty Reduction Strategy (PRSS) and the Millennium Development Goals (MDGs). More importantly, focus on governance and accountability by governments has increased demand for statistics by the media, civil societies and the general

public. Invariably, reliable statistics is now an indispensable tool for policy makers, citizens of developing countries and the international community to support result-based management, better governance and greater aid effectiveness

In Africa, statistical development since the 1960s is driven mainly by a number of programmes initiated by statistical offices and statistical training institutions located outside Africa. First was the programme funded by the United Nations Development Programme (UNDP) called Statistical Training Programme for Africa (STPA) which was adopted in 1978 by the Economic Commission for Africa (ECA) Conference of Ministers. The aim of the

programme was to ensure that African region had a permanent supply of qualified statistical staff. The second programme was the Addis Ababa Plan of Action for Statistical Development in Africa which was adopted by ECA Conference of Ministers in May 1990. Among others, the objectives of the Plan of Action were to: achieve national self-sufficiency in statistical production; ensure autonomy of the National Statistical System (NSS) and improve coordination of all statistical development programmes at both national and international levels.

In 1999, the rejuvenation of the statistical system in Africa became intense with the establishment of the Partnership in Statistics for Development in the 21st Century (PARIS21) to promote better use and production of statistics in all developing countries. Since its inception, PARIS21 has successfully developed a worldwide network of statisticians, policy makers, analysts and development practitioners committed to evidence-based decision making. Other waves of purposeful initiatives include the creation of a strong statistical function: the African Development Bank (AfDB); the creation of African Symposium on Statistical Development (ASSD) in 2005 to address the glaring data gaps in monitoring the progress made in Africa on the MDGs and the creation of AFRISTAT as a centre of guidance and harmonisation for statistical development mainly for the Francophone Africa.

Like most African countries, the system of production and dissemination of official statistics in Nigeria was inherited from the colonial government. The establishment of a national statistical office after independence formed the nucleus of the NSS with the responsibility of providing policy direction, strategy and making recommendations in the field of statistics. The central objective of the NSS has been to provide relevant, comprehensive, accurate and reliable statistical information. Hence, the system has grown in leaps and bounds over the years. This development can be linked to the growing demand for good governance, economic transformation and improved living standard. The statistical system is now constantly under pressure to produce timely and relevant data for decision making and planning, implementation, monitoring and evaluation of development programmes.

Several concerted efforts have been made by government in the past to boost the activities and performance of the NSS. For instance, in the late 80s and early 90s, various reorganizational studies were initiated not only to improve the structure and operations of the then Federal Office of Statistics (FOS) but the entire statistical system. The twin aims of data collection decentralisation and the promotion of statistical culture and awareness also led to the decreed creation of Planning, Research and Statistics Departments (PRSDs) in every government ministries and parastatals. Similarly, training activities received expansion at the FOS with the establishment of four training schools and a sponsored professional training programme at the University of Ibadan.

Several countries and organizations have introduced programs to improve school-level education on data-analysis and probability, sometimes called data handling, stochastics, or chance (Australian Education Council, 1991; National Council of Teachers of Mathematics, 2000; Plante and Reid, 2011). The American Statistical Association and the Royal Statistical Society are two leaders, among professional organizations worldwide, in the design and trialing of curricula and resource materials for courses in statistical literacy at both school and university levels. There are also, of course, many individual initiatives, piloted by foresightful statistics educators around the world (Snell, 2002; Sowe, 2003; Olubusoye, 2014; Olubusoye, 2017; Korter et al. 2019). More voices should be raised to emphasize the importance of developing statistical literacy skills applicable in many contexts.

The arching questions are: what has been the historical development of statistical system in Nigeria? What progress has been made over the years in producing quality data for national transformation? What are the current challenges? What does the future look like for the NSS? According to Adamu (1978), "official statistical system needs to be re-examined from time to time. The machine easily gets rusty, churning out statistics which may no longer be relevant and which fail to meet the changing needs of the economy."

Statistical literacy is a key ability expected of citizens in information-laden societies, often touted as an expected outcome of schooling and as a necessary component of adults' numeracy and literacy. It involves understanding and using the basic knowledge and tools of statistics: knowing what basic statistical terms mean, understanding the use of simple statistical symbols and recognizing and being able to interpret different representations of data (Garfield, 1999; Snell, 1999; Rumsey, 2002a). Statistical literacy has a natural association with numeracy (Watson 2002). Statistical literacy is the ability to interpret, critically evaluate and communicate about information and messages. It refers to the aspects necessary to establish an awareness of data that must take place in order to reasonably consume information (Rumsey, 2002b). The process allows statistical principles and techniques to be applied in contexts associated with other areas of the curriculum and/or areas outside the school experience in the wider society. The concept involves teaching statistics better for a different or additional purpose using real world and media-based examples with relevant worry questions.

Some schools and perhaps most post secondary academic institutions teach statistics to some students as part of mathematics, statistics or science and social studies, yet not in a way that necessarily emphasizes the development of statistical literacy (Wild, Triggs and Pffankuch, 1997; Hawkins, 1997; Moore and Cobb, 2000; Scheaffer 2001; Gal, 2002a; Wild, 2005). Current knowledge base about statistical literacy of school or university students and of adults in general is patchy (Gal, 2002b). Majority of the current adult population in any country has not had much if any formal exposure to the statistical or mathematical knowledge bases given known education levels across the world (Wallman, 1993; Statistics Canada & OECD, 1996; UNESCO, 2000; Ottaviani, 2002). Remarkably, until very recently even economically advanced societies have prized far less the goal of developing a functionally numerate citizenry than one that is functionally literate. Even in these societies it will be a huge task to redress existing deficiencies. In developed societies formal teaching aimed expressly at enhancing statistical literacy is still a fledgling enterprise, offered only in scattered locations and to relatively few people.

This is even more true in the case of adult learners than it is for young people (Sowey, 2003).

The need to develop statistical and probabilistic knowledge and to empower people from all walks of life to become critical consumers and users of statistical information has been embraced by educators and policy makers in diverse countries as well as by many professional organizations. The focus is in the school curriculum to develop high-level statistical-questioning skills, the cross-curricular nature of data handling, representation, and interpretation applicable in many contexts (Hofstetter and Sgroi, 1996; Kinneavy, 1996; Garfield & Gal, 1999; Watson, 2000; Watson, 2002; Gal, 2002a; Best, 2005; Trewin, 2005; Gerd, 2008; Gould, 2010). For example, a National Statement on Mathematics for Australian Schools (Australian Education Council [AEC] 1991, 178) contains a call for students to understand the impact of statistics on daily life.

Therefore, the objective of this paper is to review the historical development of the NSS and critically analyze the changes that have taken place in the organizational structure.

1.1. Overview of the Nigerian Statistical System

According to 2006 population census, Nigeria is home to over 140 million people on a land area of approximately 91,907.9 sq. Kilometres. The country operates a federal system of government with thirty-six (36) states and the Federal Capital Territory (FCT). The entire country is further sub-divided into six (6) geopolitical zones and seven hundred and seventy-four (774) Local Government Areas (LGAs). With over 500 ethnic groups, over 250 languages and over 20 million households, Nigeria is well diversified in culture and rich in human resources. Nigeria attained independence in 1960 and a Republic status in 1963. The political development is characterized by instability with nearly three (3) decades of military dictatorship but have enjoyed uninterrupted democratic rule since May 29, 1999.

Post-independence constitutions put statistics on the concurrent list, thus making it possible for states and federal government to legislate on

statistics as they deem fit simultaneous. As a result of this constitutional set up combined with the size of the country, the statistical system operating in Nigeria could be described as a decentralized one. According to (Adamu, 1978), the NSS started in the 1940s at a time when the whole country was centrally governed by the colonial power. In other words, the country started with a centrally organized and coordinated statistical system.

In Nigeria, production of official statistics takes place at each level of tiers of the government - federal, state and local. There exists the Planning, Research and Statistics Department (PRSD) in each of the federal ministries. The PRSDs routinely gather and process data relating to the sector of the society or areas of concern over which the ministry has jurisdiction. Some of them have various statistical outputs commonly labelled as *Digest of Statistics*, *Annual Statistical Bulletin* and *Abstracts of Statistics* amongst other nomenclature. PRSD also exists at the various state ministries with similar function and statistical outputs. Surveys commonly undertaken at the state level include health manpower surveys, labour surveys and agricultural surveys while school census, census of health facilities and traffic census are main areas of focus in the case of censuses. At the local government councils, data are collected by the Budget Planning Department of each council. The Statistics section of this department engages in data collection by direct observation and total enumeration of markets and parking spaces. These direct observations are made in the parks to measure the Internally Generated Revenue (IGR) of the local councils. To enumerate different types of shops let out by the councils, data are collected annually on markets.

1.2 Evolution of the Nigerian Statistical System (NSS) Phase I–Early Stage (1928–1957)

Opinion differs on the exact time the NSS came into existence. While (Adamu, 1978) believed it started in the 1940s at a time when the whole country was centrally governed by the colonial power, (Afonja, 1999) believed it was 1928 because of the reference to the post of Government Statistician in government documents. Notwithstanding, the system evolved during the period of colonial administration as a means of collecting basic statistics for the purpose of reporting their performance to the colonial power in London.

Phase II – Development Stage (1957–1988)

This is the period that laid the foundation for the growth and development of the NSS. The first legislative framework for the conduct of statistical activities in the country was passed into law in 1958 with the Statistics Act of 1957. The provisions of the Act recognised and gave backing to the decentralization of the NSS. The Act empowered the Chief Statistician to “supervise and manage the census directed to be taken of the Federation or any part thereof, or any class of inhabitants thereof, and any such direction that may specify, (a) the date or dates on or between which such a census is to be taken, and (b) the information to be obtained in such a census.”

Phase III – Reorganization and Consolidation (1988-2007)

The structural changes witnessed in the political configuration of Nigeria in 1976, 1989, 1993 and 1997 that led to the creation of 19, 21, 30, and 36 states respectively brought about corresponding expansion in the components of the NSS. At the federal level, the Civil Service Reforms were introduced in 1986 but with its statute promulgated in 1988 as Civil Service Reforms Decree (CSRD) 43 of 1988. This decree made it mandatory for the Planning, Research and Statistics Department (PRSD) to be created in all ministries and government parastatals.

Phase IV – Implementation of the Nigerian Statistical Master Plan (2007–2009)

The Nigerian SMP was originally designed to span five years, 2005-2009. However, the legal framework that would provide the basis for the creation of proposed “autonomous modern, state-of-the-art IT-strategy-focused, and responsive agency” to be called National Bureau of Statistics (NBS) was not passed by the National Assembly until 2007. Thus, the Statistics Act 2007 formally established the current NBS with all-embracing powers to coordinate the National Statistical System. The Act clearly recognized NBS as the main national agency responsible for the development and management of official statistics, the authority and custodian of official statistics in Nigeria.

Phase V – Implementation of the National Strategy for the Development of Statistics (2010 to 2014)

As part of the effort to facilitate sustainable development of National Statistical System in Africa, Marrakech declaration for an action plan for Statistics was made by African Heads of Governments in February, 2004. The National Strategy for the Development of Statistics (NSDS) document provided the key strategy to guide the national statistical offices on the implementation of the action plan. To Nigeria, it was a follow-up statistical strategy to the National SMP implemented from 2005- 2009. The NSDS strategy was expected to span for a period of five (5) years, from 2010 -2014.

2.0 MATERIALS AND METHODS

This section describes data and methods used for this research. Progress in the Nigerian National Statistical System was assessed with a focus on budgets, dependence on international financial aids, human resources and statistical culture.

2.1 Data Collection

Data was obtained on FOS Capital Budget for 2000 – 2003 and National Data Bank Capital Budget for 1999 – 2003 from Statistical master plan for the Nigerian National Statistical System (2004/5 – 2008/9) Pg 51. Also, facts on human resources depicting Staffing Position by Category for the period 2001 through 2003 was extracted from Data Production and Information Management in Nigeria (Incorporating Policy Guidelines) by Afonja ,1999, pg. 9 – 14. In addition, data on Countries Receiving international financial aid (Commitments) was extracted from Partner Report on Support to Statistics (PRESS), Pg 12, PRESS 2009

2.2 Methods

Descriptive Statistics was used to assess the Nigerian Statistical System.

2.2.1 Tabulation

This is a systematic arrangement of data in rows and columns which promotes understanding of the data. Tabulation prepares data for analysis with a view to drawing valid conclusions about the entire population. A table generally contains the following- *Title*: This gives information about

the contents of the table; *Pre-factorial note*: This gives information about the contents of the columns and the rows; *Body*: The body of the table contains both the numerical and literal information pertaining to the various characteristics under study. The intersections between the rows and columns form cells in which data can be inserted; *Footnote*: This is a statement which gives some specific information about the contents given in the body of the table; *Source Note*: This gives information about the source of data given in the table. That is, whether the data emanates from a primary or secondary source; *Heading and sub-headings*: This gives information about the table and sub-tables used; *Units*: The units of measurement should be clearly indicated; *Easy to read*: This is essential in a good table. The aim of tabulation is for clarification and if this is not achieved then the table should be redesigned. Where necessary, two or more simple tables could be drawn to represent a complex table.

2.2.2 Simple bar chart

In simple bar charts, series of rectangular bars are drawn such that the height or length of each bar is proportional to the magnitude of the figure being represented. The graph sheet is usually employed for constructing the simple bar chart. A uniform scale on the X and Y- axis is used to represent the values. On the period/time axis there is provision for spaces between the time(s) of occurrence for events.

2.2.3 Arithmetic mean

Let x_1, x_2, \dots, x_n be the n values of the variable X , then their arithmetic mean, denoted by \bar{X} is defined as

$$\bar{X} = \frac{x_1 + x_2 + \dots + x_n}{n} \quad (1)$$

In case the weights w_1, w_2, \dots, w_n are attached to the n variables x_1, x_2, \dots, x_n respectively to reflect the importance of each of the items, then the weighted mean is defined to be:

$$\bar{X} = \frac{w_1x_1 + w_2x_2 + \dots + w_nx_n}{w_1 + w_2 + \dots + w_n} \quad (2)$$

Hence if the value $1x$ occurs $1f$ times, $2x$ occurs $2f$ times and up to nx occurs nf times, then the arithmetic mean is given by:

$$\bar{X} = \frac{f_1x_1 + f_2x_2 + \dots + f_nx_n}{f_1 + f_2 + \dots + f_n} \quad (3)$$

2.2.4 Median

Given the set of numbers $1x, 2x, \dots, nx$, the median is the middle or central value of the set when arranged in ascending or descending order. In other words the median is that value of the variable which has half the number of observations below it and the remaining half above it. In case the total number of observations N is odd, then the median is the value in the $\frac{(N+1)}{2}$ position (4)

But if N is even, the median is given by the arithmetic mean of the items in the $\left(\frac{N}{2}\right)^{th}$ and $\left(\frac{N}{2}+1\right)^{th}$ position (5)

2.2.5 Mode

The mode of a set of values is the one which occur with the greatest frequency. A mode will not exist for a set which has no repeated values. A distribution could have more than one mode. Thus, we speak of a distribution being uni-modal (one modal value), bi-modal (two modal values) or in general multi-modal (many modal values).

2.2.6 Trend Line

A scatter graph is a graph with a scale for each variable and upon which variable values are plotted in pairs, a vertical axis for the dependent variable and a horizontal axis for the independent variable.

The value of a scatter graph can be increased by adding the line of best fit called the trend line. This is the line judged to best fit the pattern of the points: it is drawn so as to pass centrally through the graph of the points. Since all the points normally cannot lie on the line, the objective is to minimize the total deviations of the points from the line. Once the line of the best fit has been fixed, our scatter graph can be used for estimation by reading off from the line.

3.0 RESULTS AND DISCUSSION

Since the existence of the NSS nearly a century ago, it is evident that some visible progress has been made and at the same time so much still needs to be achieved. Also, for about eleven years after the adoption of the Action for statistics in Marrakech in 2004, the NSS is still far from fully meeting the needs of its numerous users. The NSDS have been implemented in Nigeria and have helped to raise awareness about the key role of official statistics in development, however, progress remains insufficient, funding remains dependent on sources outside the country, the process of programming and annual monitoring and evaluation remains incomplete and does not include all producers, confidence in the NSS is low and governance remains weak, including transparency and independence. In this section we examine the progress the NSS has made with respect to budgets, dependence on international financial aids, human resources and statistical culture.

Budgets

Table 1 present government's capital funding (funding other than salaries) for the FOS for a few selected time frame.

Table 1: FOS Capital Budget for 2000 – 2003

Year	Proposed ¹	Approved	Released
2000		71,555,446	69,706,447
2001		17,236,750	NIL
2002	2,348,771,000	266,000,000	169,000,000
2003	3,438,000,330	230,000,000	100,949,000

Source: Statistical master plan for the Nigerian National Statistical System (2004/5 – 2008/9) Pg 51

Table 1 clearly shows the extent of government under - funding of the NSS. It can be seen that the amounts approved bore no relationship with the amount requested. 67% of the proposed budget in 2003 was approved, and of the approved amount, only 44% was released.

Figure 1 shows the FOS Capital Budget for 2000 through 2003. The proposed budget (blue), the approved (wine) and actual release (green) are totally different. This shows poor funding of the FOS and invariably neglect of the NSS.

Figure 1: FOS Capital Budgets 2000-2003



Table 2 present government's capital funding (funding other than salaries) for the National Data Bank (NDB) for a few selected time frame. Figures proposed, approved and released reflect poor funding for the NDB.

Table 2: National Data Bank Capital Budget for 1999 – 2003

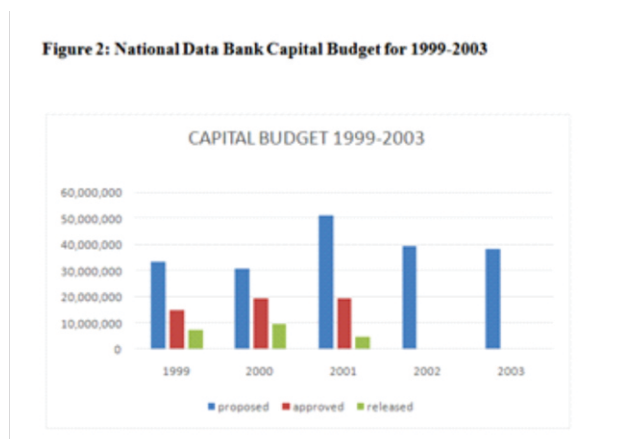
Table 2: National Data Bank Capital Budget for 1999 – 2003

Year	Proposed	Approved	Released
1999	33,700,000	15,200,000	7,600,000
2000	30,820,000	19,540,000	9,770,000
2001	51,310,000	19,650,000	4,885,000
2002	39,485,000	NIL	NIL
2003	38,580,000	NIL	NIL

Source: Statistical master plan for the Nigeria National Statistical System (2004/5 – 2008/9) Pg 51

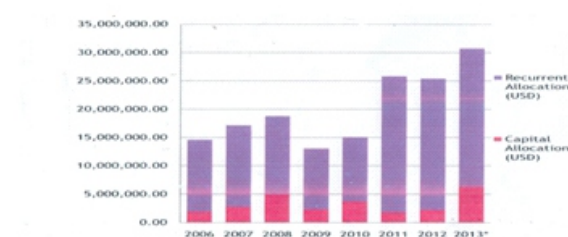
Figure 2 shows the National Data Bank Capital Budget between 1999 and 2003. The proposed budget (blue), the approved (wine) and actual release (green) are totally different. This shows poor funding of the NDB.

Figure 2: National Data Bank Capital Budget for 1999-2003



The budget profile however, improved from 2006 – 2013 (Figure 3) with the recurrent budget (mostly personnel costs) for the NBS on the high over the years and capital budget on the other hand had largely declined since 2008. As a result of recent advocacy efforts and demonstrable successes, the then immediate past administration in the country increased the capital allocation by 25% in 2012 and by a whopping 178% for 2013 (Kale, 2013).

Figure 3: Statistics Budget Profile 2006-2013 (\$USD)



Source: Kale (2013), Where are the Numbers? National Bureau of Statistics and the Reset of the Nigerian National Statistical System, NBS

International Financial Aids

Up till this moment, many statistical activities in the Nigeria are donor-driven, whereas, donor-driven projects and programmes are usually short term and sometimes take precedence over long-term planning and distort national priorities for statistical production. Government generally funds ad hoc data collection when specific data are needed to meet a policy or decision need, the “quick fix” approach. This approach, unfortunately, has not conferred lasting benefit to the NSS in terms of capacity building and raising the profile of statistics. At most, it has distorted national priorities for data production.

For instance, the results of Partner Report on Support to Statistics(PRESS) 2009 show that financial disbursements to statistical development in Africa rose from US\$ 309 million for the three-year period 2006-08 to roughly US\$ 422 million for the period 2007-09, which represent a 37% increase. Likewise, commitments to statistical development rose from US\$ 600 million (59.4% of global totals) to US\$ 734 million (52.2% of global totals). Of the

52 African countries covered under the PRESS exercise, the seven receiving the most aid in term of commitment (see Table 4) accounted for 30% of the regional total. Similarly, the top three African recipients in terms of disbursements (see Table 5) received 39% of the regional total. This heavy concentration of aid to a small number of countries is consistent with worldwide trends: nearly 55% of all disbursements globally (excluding unallocated funds went to a mere 13 countries). A close look at Tables 3&4 shows Nigeria as the greatest recipient of the international financial aid.

Table 3: Countries Receiving Most Aid (Commitments)

Recipient Country	Amount (US\$M)	Project/ Programme Period
Nigeria	58.8	2004-2013
Mozambique	49.7	2002-2014
Kenya	25.6	2004-2010
Sudan	23.8	2004-2013
Tanzania	23.8	2000-2013
Ethiopia	21.0	2004-2011
Burkina Faso	21.0	2004-2013
Rwanda	18.2	2003-2012
Mali	18.2	2004-2012
Malawi	16.3	2000-2011

Source: Partner Report on Support to Statistics (PRESS), Pg 12, PRESS 2009

Table 4: Countries Receiving Most Aid (Disbursement)

Recipient Country	Amount (US\$M)	Project/ Programme Period
Nigeria	97.5	2004-2013
Kenya	32.8	2004-2009
Mozambique	32.3	2002-2014
Sudan	19.1	2004-2013
Ethiopia	17.7	2004-2011
Malawi	12.9	2000-2011
Tanzania	11.6	2000-2013
Mali	10.8	2004-2012
Rwanda	10.7	2003-2012
Burkina Faso	10.6	2004-2013

Source: Partner Report on Support to Statistics (PRESS), Pg 12, PRESS 2009

Figure 4 shows Countries Receiving Most Aid (Commitments). Nigeria receives the highest commitments aids, while Malawi has the lowest aid commitments.

Figure 4: Countries Receiving Most Aid (Commitments)

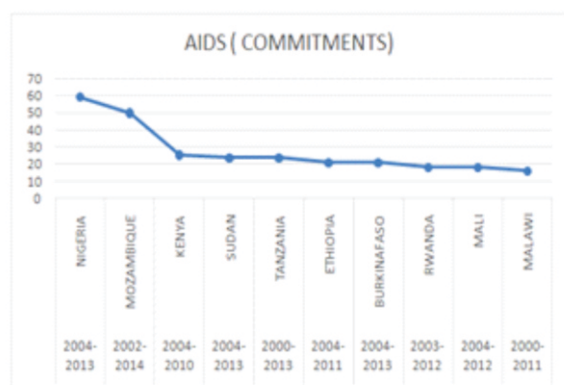


Figure 5 shows Countries Receiving Most Aids (Disbursement). Nigeria gets the highest aids in disbursement while Ethiopia receives the lowest aids.

Figure 5 shows Countries Receiving Most Aids (Disbursement).



Human Resources

Table 5 depicts the staff strength in FOS between 1984 and 1997.

Table 5: Staffing position at the Federal Office of Statistics (1984 – 1997)

Category	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Statistical	283	292	211	210	214	240	149	144	170	314	182	314	144	144
Professional	328	328	275	217	270	320	297	297	295	337	337	337	337	337
Sub-professional	2878	2878	2613	2972	3196	3212	3082	3082	3457	2566	2566	2566	2566	2566
Others	41	41	30	14	19	24	8	8	10	34	34	34	34	34
Administrative	40	40	40	44	52	63	43	43	43	58	58	58	58	58
Professional	280	280	271	279	279	35	35	35	43	27	27	27	27	27
Sub-professional	1477	1477	1039	1583	1453	1582	1443	1443	1610	3138	3138	3138	3138	3138
Others	1477	1477	1039	1583	1453	1582	1443	1443	1610	3138	3138	3138	3138	3138
Total	5358	5358	3710	5107	5289	5332	5057	5057	5648	5648	5648	5648	5648	5648

Source: Data Production and Information Management in Nigeria (Incorporating Policy Guidelines). (Afonja, 1999, pg. 9 – 14)

Table 6 presents the staffing level by staff category at FOS for the period 2001 – 2003.

Table 6: Staffing Position by Category (2001 – 2003)

	2001	2002	2003
Professional	293	305	231
Sub-professional	1454	1740	1583
Others	2946	3344	2657
Total	4693	5389	4471

Source: Statistical Master Plan for Nigeria National Statistical System 2004/5 – 2008/9, pg. 24- 27

Between 2001 and 2003, statisticians constituted only 3% of the total staff component and 58% of the professional staff at the FOS. Of the 4471 staff, 5.2% were professionals, 35.4% sub-professionals and 59.4% were other staff. The NBS inherited about 4100 workers from the FOS and NDB with a significant proportion either unqualified or inadequate. Only 15% of the combined workforces were professionals (Economists, Statisticians, Social Scientists or

ICT experts) or sub-professionals (ND, HND). As part of the human management and development component of the NBS reform agenda, a right balance between the Headquarters, Zonal and State offices was aimed at in order to improve the integrity of the data to be produced by the Agency. The right mix of professionals and non-professionals was to increase the percentage of professionals and sub-professionals from 15% to 85% (NCCS, June 2006, p 28 – 30).

Table 7 depicts the summary statistics for staff at the Federal Office of Statistics. The average of sub-professionals (1592.33) and other categories of staff (2982.33) can be seen to be higher than the average number of professional staff (276.33) at the Federal Office of Statistics. Whereas, the NSS require experts in the field of statistics for effective discharge of statistical activities in any country.

Table 7: Summary Statistics for Staffing

	Professional	Sub-professional	Others
mean	276.33	1592.33	2982.33
Maximum	305	1740	3344
minimum	231	1454	2657
Std. Dev	39.716	143.228	344.938
skewness	-1.556	0.292	0.469
kurtosis	0	0	0

Figure 6 depicts the staffing position by category for the period between 2001 and 2003. The number of professionals (blue) engaged is extremely on the low.

Figure 6: Staffing Position by Category (2001 – 2003)



Statistical Culture

The NSS is characterized by poor statistical culture, lack of feel for numbers and generally a lack of appreciation about the important role statistical data and information can play in the

society. The general attitude towards Nigerian statistical data was that they are unreliable and unusable (Adamu, 1978). At present there is a surge in African data demand and especially Nigerian data. The paradigm shift to results based management from financial to output, performance and outcome measurement, return to strategic planning by the FGN, increased demand for accountability from citizens and return to democracy after three decades of military dictatorship are possible factors driving the current demand for data.

Other possible factors responsible for the increased demand in data include: weakening growth and search for new opportunities (worsened by the global economic crisis), major international brands entering the Nigerian market and the statistics budget profile which has been on the increase particularly in 2012 and 2013 (Kale, 2013).

The increase in demand is reflected in Table 8. Using reports downloaded, requested for data onsite, request for data by email, visits to website/ Number of hits and number of times NBS was mentioned in the media as performance indicators, findings showed between 140 - 20,950 percent increase in demand for data between 2005 and 2012. Thus, it can be said that there is an improved awareness of the significance of statistical products. Although it is difficult to say what category of data users have actually increased.

Table 8: Demand for Nigerian Statistics 2005 and 2012

Demand for Nigerian Statistics 2005 and 2012		
Performance Indicators	2005	2012
1 Reports downloaded	48,479	1,015,6454
2 Request for data onsite	23	334
3 Request for data email	106	4,882
4 Visits to website/ No of hits	36,280	4,486,112
5 No. of times NBS mentioned in the media	73	3,365

Source: Kale (2013), Where are the Numbers? National Bureau of Statistics and the Reset of the Nigerian National Statistical System, NBS

4. CONCLUSION

There is a need to sustain the present repositioning exercises ongoing in the Nigerian National Statistical System. The funds for reforms coming from donors and international financial organizations should be discouraged. The suggestion, therefore, is for the government to put in place a sustainability programme as the case is with advanced economies which starts with higher budgetary allocation to the sector that can be supported by the organised private sector and other stakeholders' participation in supporting the system financially. Also, the Statistical Master Plan should be updated and the content adhered to in order to strengthen the statistical system appropriately. Statistical literacy should be introduced at a very early stage particularly in the nursery and primary schools. This could promote the statistical culture for the upcoming generation, raise the sense of accountability and strengthen the Nigerian Statistical System. In addition, to function effectively as data producer, data user, data supplier and/or faculty member of research and training institutions, every Nigerian needs to be statistically literate.

Above all, professional activities of the National Bureau of Statistics should strictly be the business of trained statisticians. In the long run, quality of data can be greatly improved. Ultimately, the quality of data available to policy makers determines the quality of governance.

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