



### Speaker 2

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# **Revolutionizing Official Statistics in Nigeria**

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#### Abstract:

The main purpose of this paper is to identify and discuss the problems of official statistics in Nigeria with the view to recommending approaches that will help in revamping and revolutionizing its conduct. The problem of official statistics is endemic in Nigeria and ingrained in all sectors. This paper identified key problems of official statistics in Nigeria to include: national identity problem, unqualified personnel, poor ICT infrastructure and appreciation, poor data handling and storage, absence of strong data bank, ignorance, high level poverty, lack of adequate training and re-training of staff, difficulty in obtaining data, delay in data publication, lack of data integrity, skewed policies, political considerations/ nepotism, poor quality data collection, high level insecurity, lack of equipment, facilities and materials, low incentives/motivation. This paper concluded that the proper assessment of the current situation of official statistics using the 5Ws and a structural H questions have the capacity to revolutionize official statistics given their success in places that have adopted them. It however recommended that frantic efforts must be made to address the following: Knowing the number of citizens in Nigeria should be paramount, employing personnel that are qualified with statistics background in sensitive positions is of essence, ample ICT infrastructure and appreciation, collection, processing and dissemination of official statistics should be rigorously re-engineered, adequate training and re-training of staff on how to handle big data, proper handling and storage of data, sufficient funding should be made available, the present high level of insecurity should be addressed, skewed policies and political considerations should be avoided, functional equipment, facilities and materials should be provided, motivation, timely payment of salaries, incentives for staff and artificial intelligence should be integrated into the data generation, collation and analysis process.

## **Keywords:**

Artificial intelligence, Data analysis, Data bank, Storage, Collation

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#### 1. Introduction:

Official statistics are statistics published by government agencies from local and international organizations in order to provide quantitative and/or qualitative information on all major areas of citizens' lives, such as economic and social development, living conditions, health, education, and the environment. It provides comprehensive, timely, relevant, responsive and focused statistical Information relating to all activities as well as conditions of the inhabitants of Nigeria. The Federal Official statistics vigorously collaborates with all the tiers of Government and their agencies in the production of administrative statistics; coordinate statistical orderliness; and promote general use of statistical standards. It also consistently improves on the information that leads to better decision making.

United Nations Statistics Division (2021) report on country profile of Nigeria states that prior to 1947, there was no recognised body responsible for statistical activities in Nigeria although the population census, the most important and oldest statistical exercise in Nigeria, was conducted in 1866 for the municipality of Lagos, based on the Act enacted for that purpose in 1863. Population census and external trade statistics were the first set of official statistics to be developed in Nigeria. Also in the 1980s, the Federal Office of Statistics through Decree 42 of 1988 (the civil service review) was organised into 7 departments and 3 units with a Director General. By that Decree, statistical units were supposed to be established in every government agency as a corporate body of that establishment thereby relieving the FOS the task of pooling statisticians at the FOS.

The National Bureau of Statistics (NBS) came into being with the merger of the Federal Office of Statistics (FOS) and the National Data Bank (NDB). The creation is part of the implementation of the Statistical Master Plan (SMP), a programme document of the Federal Government of Nigeria (FGN). The document's preparation was funded by the World Bank in 2003. The implementation is designed to span five years, 2005-2009. The Internal Organisation of the bureau is built on Statistics Act of 2007 which is the Legal Instrument established by the Acts of Parliament. Other producers of official statistics are the Central Bank of Nigeria, the National Population Commission, and the relevant line ministries.

The main purpose of this paper is to identify and discuss the problems of official statistics in Nigeria with the view to recommending approaches that will help in revamping and revolutionizing its conduct.

## 2. Methodology:

To properly assess the current situation of official statistics in Nigeria archival retrieval method focussed on the 5W's and a structural H questions was adopted. This has the capacity to revolutionize official statistics given their success in places that have adopted them.

### 3. Result:

Since 1947, Federal Office of Statistics had failed to meet its mandate of producing adequate, accurate and timely data needed for decision making. Falling into decay in much of the 1990s, the agency's performance got to its lowest ebb between 2000 and 2003. Among the reasons for this appalling state were the poor attention from Government, bad management, a bloated and low quality workforce, preponderance of non-professional staff (particularly administrative and accounting personnel), archaic data production and management technologies, and low morale and productivity of workers. All these manifested in non-production of relevant statistics for planning and evidence-based policy formulation, implementation, monitoring and

evaluation, or, at best, the production of data that were untimely and often without any iota of integrity. This situation necessitated the current process of reforms in the NBS.

The broad objective of the reforms in the NBS is to implement the SMP and also transform the Bureau along the dictates of the ongoing Federal Government Public Service Reform Programme. The Agency is involved in the Economic Reform and Governance Programme (ERGP) of the World Bank and the European Union's (EU's) EMCAP programme, which are both managed through the Federal Ministry of Finance. The goal of the entire reform programme for NBS is to transform the Agency into a world class National Statistical Office (NSO), which will be able to produce adequate, high quality and timely data relevant to the demands of users in Government, the universities and research Institutes, private sector organizations and international agencies.

The problem of official statistics is endemic in Nigeria and ingrained in all sectors. This paper identified key problems of official statistics in Nigeria to include:

- 1. National identity problem: This makes the number of citizens in the country uncertain for effective planning.
- 2. Unqualified personnel: employing the wrong people. When you don't know the job requirements, how can you function well?
- Poor ICT infrastructure and appreciation: The main problems are high cost of getting, installing, operating, maintaining, and replacing ICT systems, use of unlicensed software, outdated hardware and software systems, lack of technical support for maintenance of systems (Balasubramanian et al., 2009).
- 4. Poor data handling and storage: This can lead to lost revenue in many ways, for example, imputing of incorrect data, human error, getting data from wrong source, targeting the wrong population to generate data, due to detrimental in multichannel selling.
- 5. Absence of strong data bank: Not having a strong data bank to store previously generated data.
- 6. Ignorance: Not knowing what to do and how to do it.
- 7. High level poverty: Untimely, delayed and small salary of workers which prompts them to look for other quick means of likelihood
- 8. Lack of adequate training and re-training of staff: Workshops, symposiums and seminars need to be organize for staff on work ethics, artificial intelligence, machine learning and so on.
- Difficulty in obtaining data: Many things are involved here like inability of the respondents to release information, lack of access road, unavailability of materials, lack of fund, etcetera.
- 10. Delay in data publication: Nonchalant behaviour, lazier faire attitude, too much familiarity, lack of fund,
- 11. Skewed policies: In Nigeria, the higher the number of people in a state, the higher the allocation money for that particular state which leads to bias statistics
- 12. Political considerations/ nepotism: This is wanting a particular outcome. It is also, the practice among those with power or influence of favouring relatives or friends, especially by giving them jobs.
- 13. Poor quality data collection: There are many potential reasons for poor quality data collection, these include: excess amount of data to be collected with unlimited time interval to execute the project and "shortcuts" to finish reporting. Human error due to many manual steps; moving figures, summing up, etcetera.

- 14. High level insecurity: The current state of the country is so terrible that no worker is ready to search for information, no enumerator is ready to go to field and this results to bias and uncertain ethical means to get the information
- 15. Lack of equipment, Facilities and materials: Providing and maintenance of this equipment Facilities and materials with qualified personnel to operate the equipment and Facilities leads to effective running of the system.
- 16. Low incentives/motivation: Incentive measures, such as salaries, secondary benefits, and intangible rewards, recognition or sanctions have traditionally been used to motivate employees to increase performance.
- 17. Lack of data integrity: A typical example will be illustrated using breakdown of the 2006 Census Figures in Lagos State as reported in table 1, 2, and 3 by National Population Commission (NPC), Lagos State and Federal Republic of Nigeria (FRN) Official Gazette respectively.

| Table 1: Breakdown of the 2006 Census Figures by NPC       |           |           |           |  |  |
|--|-----------|-----------|-----------|--|--|
| Lagos State  | Males     | Females   | Total     |  |  |
|  | 4,678,020 | 4,335,514 | 9,013,534 |  |  |
| Source: National Population Commission 2006 Census Figures |           |           |           |  |  |

| Table 2: Breakdown of the 2006 Census Figures by Lagos State                    |           |           |            |  |  |
|---|-----------|-----------|------------|--|--|
| Lagos State   | Males     | Females   | Total      |  |  |
|   | 9,115,041 | 8,437,901 | 17,552,942 |  |  |
| Source: Lagos State Government reported in the Punch (Lagos) February 6, pp. 3. |           |           |            |  |  |

| Table 3: Breakdown of the 2006 Census Figures by FRN  |           |          |           |  |  |  |
|---|-----------|----------|-----------|--|--|--|
| Lagos State   | Males     | Females  | Total     |  |  |  |
|   | 4,719,125 | 4394,480 | 9,113,605 |  |  |  |
| Source: Federal Republic of Nigeria Official Gazette No. 2 Abuja — 2nd February, 2009 Vol. 96, p. B35 for Lagos State |           |          |           |  |  |  |

The difference in the three reports are so high to be overlooked. Looking at the table 1 and 2, we have four million, four hundred and thirty seven thousand and twenty one (4,437,021) difference for males and four million, one hundred and two thousand, three hundred and eight seven (4,02,387) difference for females. The total number of males alone in table 2 is greater than the whole population of Lagos state as reported by National Population Commission (NPC). In the same year, the Lagos state government put the state's population at more than 17.5million as against 9 million by National Population Commission, a difference of 94.7%. for table 2 and 3 is having the same issues as seen in table 1 and 2 but table 1 and 3 which are

from NPC and FRN have approximately the same figures, that can be explained. NPC and FRN difference may due to time interval, immigrate or emigration unlike difference between NPC and Lagos State (table 1 and 2) or Lagos State and FRN (table 2 and 3) reports.

The three different reports from the same year shows the level of poor quality data collection and management that exist in Nigeria. The tremendous variations between the two census reports indicates fundamental flaws in the collation, collection, design, techniques, approaches, analysis of the data sets.

This is a very big issue that needs to be addressed which brings us to the big question: **How Do We Revolutionize Official Statistics In Nigeria?** 

#### 4. Discussion and Conclusion:

All these issues and challenges listed in the previous section leads to the consequences of poor quality information which includes: loss of business, increased liability, low productivity, and heightened costs etcetera, just to mention but a few. Also with the fast rate of decay in country, if nothing is done, we cannot join in the list of countries to achieve the 17 sustainable development goals (No poverty, Zero hunger, Good health, Education, Gender equality, clean water, clean energy, Economy growth, industry and infrastructure, no inequality, sustainability, responsible consumption, climate action, life underwater, life on land, peace and justice and partnership) from United State by 2030.

Apart from the proper assessing the current situation of official statistics, the 5W's and a structural H questions which are part of the basic steps for reforming official statistics:

- +++ Who will need or act on the information
- +++ What has been done before? What is important and current state? What do the populace need to know?
- +++ Where do we get accurate and reliable data?
- +++ When will the set project be achieved?
- +++ Why is the project going on?
- +++How to overcome the problems encountered?

The next step is to follow strictly the data production process of official statistics which comprises of 8 phases, as documented in the Generic Statistical Business Process Model, which are; Specify needs, design, build, collect, process, analyse, disseminate and evaluate. Also to be noted are the quality criteria to be respected when collecting information which are: relevance, impartiality, dissemination, independence, transparency, confidentiality, international standards (special data dissemination standards and general data dissemination system). All these have the capacity to revolutionize official statistics given their success in places that have adopted them.

It is however, suggested that efforts must be made to address the following: knowing the number of citizens in the country should be paramount, employing personnel that are qualified with statistics background in sensitive positions is of essence, ample ICT infrastructure and appreciation, collection, processing and dissemination of official statistics should be rigorously re-engineered, adequate training and re-training of staff on how to handle big data, proper handling and storage of data, sufficient funding should be made available, the present high level of insecurity should be addressed, skewed policies and political considerations should be avoided, functional equipment, facilities and materials should be provided, motivation, timely payment of salaries, incentives for staff and artificial intelligence should be integrated

into the data generation, collation and analysis process. It is pertinent to note that when an information is porous due to error in collection, organization, analysis, and management, then it is said to be of poor quality information and leads to skewed planning, weak policy formulation and inept policy execution. All hope is not lost in Nigeria, in the sense that there are a lot and lot of room for improvements and is at that point, we know we are ready to have workable official statistics and achieve the 17 sustainable development goals by 2030.

### References:

- 1. A UNDP Capacity Development Resource (2006) Incentive Systems: Incentives, Motivation, and Development Performance. Capacity Development Group Bureau for Development Policy United Nations Development Programme November 2006, Excutive summary p.4 Available at <a href="http://www.unpcdc.org/media/20669/incentive-systems-cp8%5B1%5D.pdf">http://www.unpcdc.org/media/20669/incentive-systems-cp8%5B1%5D.pdf</a>
- 2. Balasubramanian, N., Bernard Black, and Vikramaditya S. Khanna (2009), "Firm Level Corporate Governance in India", working paper, at http://ssrn.com/abstract=992529.
- 3. Bamgbose, J. A. (2009), Falsification of population census data in a heterogeneous Nigerian state: The fourth republic example, African Journal of Political Science and International Relations, 3 (8), 311-319. Available online at http://www.academicjournals.org/AJPSIR ISSN 1996-0832 © 2009 Academic Journals. Accessed on 02/06/2021. Available at https://academicjournals.org/article/article1380813122\_Bamgbose%20pdf.pdf
- 4. Eurostat-"Comparative EU-Statistics on Income and Living Conditions: Issues and Challenges". Available at http://www.stat.fi/eusilc/index\_en.html
- 5. Federal Republic of Nigeria Official Gazette No. 2 Abuja 2nd February, 2009 (96), B35, https://gazettes.africa/archive/ng/2009/ng-government-gazette-dated-2009-02-02-no-2.pdf, accessed 02/06/2021.
- 6. Lagos State Government reported in the Punch (Lagos) February 6: 3.
- 7. National Bureau of Statistics, Nigeria (2021). Available at https://en.wikipedia.org/wiki/National\_Bureau\_of\_Statistics,\_Nigeria
- Sustainable Development Goals, accessed on 02/06/201. Available at https://www.sightsavers.org/policy-and-advocacy/globalgoals/?gclid=Cj0KCQjw2NyFBhDoARIsAMtHtZ7UIZXXjCkanJgpbEn7o9nA\_vcjn 2-ot7lTF9N9DzBj5Pos2WfIV3kaAlf8EALw\_wcB
- 9. UNESCO. "Global Education Digest 2007". http://www.uis.unesco.org/ev.php?ID=7167\_201&ID2=DO\_TOPIC
- 10. United Nations Statistics Division report (2021), https://unstats.un.org/unsd/dnss/docViewer.aspx?docID=635#start
- 11. United Nations. "Economic and development statistics". Available at http://www.un.org/esa/progareas/stats.html, accessed on 02/06/2021.
- 12. World Health Organization. "World Health Statistics 2008". Available at http://www.who.int/whosis/whostat/2008/en/index.html