

ENVIRONMENTAL CONSTRAINT IN DATA SOURCING IN NIGERIA

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1. INTRODUCTION:

Data sourcing is an activity aimed at collecting information to satisfy some decision objectives. This definition of data sourcing includes activities of most government agencies who collect or are required to collect on regular basis data for policy formulation, programme development, monitoring and evaluation.

2. SOURCES OF DATA IN NIGERIA

Data are sourced in Nigeria mostly through:

- (a) Controlled experiments
- (b) Administrative records
- (c) Censuses and Surveys

(a) CONTROLLED EXPERIMENTS:

Controlled experiments are carried out by institutions of higher learning, research organizations and industries. They are usually limited in scope, covering various fields of study and mostly conducted in laboratories using scientific equipments and so on. Although the major problem is funding, controlled experiments fall outside the scope of this paper.

(b) **ADMINISTRATIVE RECORDS**

Since the establishment of the Federal Office of Statistics (FOS) the country had witnessed great expansion in the Nigerians Statistical System (NSS). It started with very few elements of system when Regions were created and later states with the number changing over time. Within each states, there were Local Government Authorities (LGAs), representing the third tier of government. These administrative units all need statistical services. At each level of government there has been expansion of government, machinery such as, ministries and parastatals and all these require statistical support to fulfill their various functions and mandates. Unfortunately, a large number of statistical information are buried in files across these ministries and parastatals and also, the private sector. Sometimes sourcing of these administrative data are made very difficult due to administrative bottlenecks. Decree 1988 of the Civil Service Reforms empowered the Planning Research and Statistics (PRS) departments in ministries and extra-ministerial departments as sole authority for compiling administrative statistics. Nigeria operates a federal system of government with the Federal units more or less autonomous in their structure. It has to be noted, however, that with the growing awareness, the policy and programmes of various agencies are interdependent. Users of statistical data require such integrated products and not just to be produced by various agencies. This gives co-ordination of data production a major advantage. Indeed, it is even more convenient and efficient for users to secure statistical out-puts in a variety of fields from

a single co-coordinating center. Scarcity of skilled manpower and other resources particularly, provide incentives for taking advantage of the economies of scale facilitated by coordination. Multiplicity of data collection agencies bring about low response rates, increased response errors, and of course increased burden on respondents. However, through an effective co-ordination programme, all these could be prevented.

c) **CENSUSES AND SURVEYS:**

The methods of data collection to be adopted depend upon the information required. Generally, data for censuses and surveys can be sourced in Nigeria using the following methods:-

- (i) Personal Interview
- (ii) Postal System/Self Enumeration
- (iii) Telephone
- (iv) Composite Method

3. **CONSTRAINTS IN DATA SOURCING IN NIGERIA**

In Nigeria sourcing of data has varying constraints influenced largely by the environment. These are:-

- a. Misconception of Statistics
- b. Unco-operative Attitude of Respondents
- c. Statistical Literacy and Education
- d. Improper Record Keeping
- e. Funding
- f. Ineffective Statistical Legislation
- g. Dedication by Enumerators

(a) **MISCONCEPTION OF STATISTICS:**

Due to the high level of illiteracy in Nigeria most citizens are yet to appreciate what statistics is all about. Statistics is one of the least understood professions in the country. The use of statistics, as an important instrument for planning and evaluation cannot be over emphasized. . The enumerators are often looked upon with skepticism and they have an uphill task explaining the objective of the survey to an unbelieving public. In some establishments two types of records are kept - one for office use and the others for data collectors and the like.

(b) **UN-COOPERATIVE ATTITUDE OF RESPONDENT:**

Lack of cooperation from individuals, communities and establishments is still a common experience in the field. It is very pronounced in Bayelsa State where community leaders, the militant youths, are very sensitive to Federal Government Projects because of Crude Oil Politics. FOS experience shows that for sourcing of household based data, approval must be obtained from the community leaders, chiefs and youths. No one group can give approval for any project without the consent of the others or else there would be chaos or the enumerator would be man handled. Some establishments conveniently stack away survey forms despite reminders requesting for supply of the required information. While in some other cases the questionnaires are lost. Experience also shows that some establishments treat the enumerators with ignominy and keep asking them to repeat visits. The manufacturing industries in states are always sited in remote areas.

Transportation to these places are always by motorcycles and taxi on hire bases. Repeated visits incur large expenditure on transportation. Experience also shows that some of the establishments complete the questionnaire complaisantly. Thus failing to give all answers to the questions in the questionnaire; giving room to data gaps. At times the data contained are unrealistic and un-useable. Correctness of information increases its accuracy and timely submission of data translates into timely release of produced statistics. Most people are apathetic to questions about themselves. Some of the reasons adduced for this is cultural. For example, the most common is the disclosure of the number of children one has, disclosure becomes imperative when certain number of children has been born to a woman because there are ceremonies of thanksgiving for achieving such a feat. In other cases the disclosure of wealth is also a taboo.

(c) **STATISTICAL LITERACY AND EDUCATION**

Without the availability of competent and knowledgeable persons to engage in data collection not much of good statistics could be produced. This is the greatest challenge of all statistical organizations.

The Federal School of Statistics established by FOS is providing for the NSS middle level manpower. These schools require being re-engineered in order to produce personnel with appropriate training. We also need to get them accredited by the National Board of Technical Education and they must be adequately equipped. Another area requiring review is the joint programme of training between the FOS and the Department of Statistics of the University of Ibadan. They are

Professional Diploma in Statistics (PDS) and the Post Graduate Diploma in Statistics (PGDS). The quality of in-takes for these programme has to be improved upon so that the outputs will be suitable for productive statistical work. The curricular of the programme could also be adjusted to give appropriate skills to the graduates of these courses

These courses will have to be supplemented by knowledge acquisition in the subject matter areas of statistics as in Agriculture, Labour Statistics, Price Statistics, Environment Statistics, Health Statistics, and Education Statistics and so on. An Institution to offer courses in these areas should also be able to conduct research in them. Such services could be obtained from the establishment of a Nigerian Statistics Institute.

Training focus should be to prepare staff to take on higher responsibilities so that the problem of succession will not affect the various statistical agencies and statistical development. Another challenge facing statistical development is the issue of retention of the trainees. This problem must be confronted head-on. We must also establish formal methods of giving training on the job to all statistical staff apart from regular attendance at workshops, seminars and conferences.

Outside the statistical agencies themselves we must raise the level of statistical literacy through other programmes. One such programme is currently being carried out in FOS. Students studying Statistics and

allied subjects in Nigerian Universities and Colleges of Technology are allowed to serve an attachment training period with FOS where they are encouraged to dirty their hands in data production duties. But a more fundamental approach is to re-visit our Educational policy and install a policy that will promote Numeracy and Statistical Literacy. The policy should make the teaching of statistics and mathematics right from the Primary School System possible. The Secondary School subject should include statistics as a separate subject as to enable students to offer them at the School Certificate Examination and the Joint Admissions and Matriculations Examination. The Mathematics Teachers require special encouragements in order to remain in the teaching of Mathematics.

(d). **IMPROPER RECORD KEEPING**

The keepings of records by households and individuals in Nigeria have been conditioned by the culture of the society in which they are born. Nearly all the societies within the country have their numerals which they use as vehicles of counting. These are applied to various facets of life from agriculture to commerce and even human life. For example, in agriculture a barn of yams contains a specific number of yams. A farmer also knows the number of sheep, goats, cows and other life stock owned by him. These can be represented with the appropriate numeral in his own cultural dialect. Also, in commerce the various units of measurements are known and adopted within the locality. Even in the present situation where you have many illiterate traders in the formal

sense they are abreast as to what stocks they are holding, when and how to replenish and how much profit, considering some overheads they have made.

The generally observed constraint is that they have all these information stucked into their heads. It is believed that the human brain cannot be exact especially when it has to do with a recall of previous and distant activity. Without doubt the inability of various cultures to develop written numerals has constraint the proper record keeping practices of the uneducated. Records keeping in household exist but it is not efficient and durable. This can not constitute a basis for prompt supply of data without exceeding difficult supplementing methodology. However, record keeping in establishments can be assumed to a culture of a well organized body.

(e) **FUNDING**

In programme budgeting, FOS activities may be classified into two categories namely statistical projects and non-statistical projects. The provision of official statistics constituted the statistical projects budget while the personnel and overhead costs constituted the non-statistical projects budgets. The table below gives the comparative position of the budgetary allocations and releases to statistical projects from 1994 to 1999.

From the table it is obvious that the major problem FOS has is funding. FOS is faced with large demands of statistical products with very

inadequate funding to meet the supply of the demands. There is now the need to develop a very robust policy on funding of statistical exercise to meet these demands. Nigeria can borrow a leaf from the books of international agencies in statistical funding. The world bank in implementing the Agricultural Development Programme (ADP) had designed a statistical component of the programme to monitor the implementation and also, measure their performance at completion. The funding had come from the project cost. All the social programmes of the Federal Government require effective monitoring and evaluation. Hence, all Federal Government social programmes should be monitored and evaluated using statistics with adequate funding of the component. Under this arrangement there will be adequate fund for statistical projects.

FOS BUDGETARY ALLOCATION TO STATISTICAL PROJECTS

1994 - 1999

YEAR	APPROVED ESTIMATE N'000	AMOUNT RELEASED N'000
1994	35,600	20,000
1995	60,000	59,427.5
1996	27,000	27,072
1997	57,000	51,500
1998	107,000	85,383.5
1999	19,600	9,800

(f) **INEFFECTIVE STATISTICAL LEGISLATION:**

The statistical legislation as contained in the 1957 Statistical Ordinance and Statistical Act (Amendment) Decree of 1979 provides the legal framework with which FOS/Statistical Agencies can secure the co-operation of suppliers in providing the required data or information. Basically the legislation can be reduced to two main provisions.

- (i) The compulsory provision i.e. empowering the FOS/Statistical Agencies to collect data from individuals or corporate organizations in a compulsory or obligatory basis, either through the process of interviewing or completing forms.
- (ii) The confidentiality provision i.e. a provision of safe guarding the confidentiality of the information collected from respondent.

The legislation on confidentiality basically seeks to ensure that data collected do not become available to persons other than those who are authorized to use them. In this regard the law seeks to protect both the supplier and the organisation collecting the information.

g. PENALTY FOR REFUSAL TO SUPPLY DATA

The legislation in statistics contains provisions which make it mandatory for the public to provide information if and when called upon to do so. Failure to furnish the required information an offence is committed and attracts the following penalties as contained in the statistical (Amendment) Act 1979.

For the individual Person

- (1) Who fails to furnish the information
 - i) A fine of N50.00 or 3 months imprisonment or both or
 - ii) A fine of N100.00 or 6 months imprisonment or both in a case of second or subsequent offence.
- (2) Who knowingly or recklessly furnish information which is false
- (3) A fine of N100.00 or 6 months imprisonment.

For co-operate Body

- i) Every director and officer of the body shall be liable to a fine of N50.00 each or imprisonment not exceeding 3 months

For Firm

Every partner shall be liable to a fine of N200.00 each or imprisonment not exceeding 3 months or both. These penalties are supposed to strengthen the capability of the organizations that collect data.

For one, prosecution is not likely to engender goodwill and hence the full co-operation of a respondent dragged to court. Secondly, even where he/she decides to co-operate there is no guarantee that the information supplied.

Apart from these, the penalties are not stiff enough as to serve as deterrent or induce compliance. Hence statistical organizations are left with no option than persuasion.

- (h) **DEDICATION TO WORK BY ENUMERATORS**

Some enumerators are not always painstaking in collecting data and often non-challant to their responsibilities. At times, their enthusiasm are dampened because of poor allowances for field work and inadequate provision of working materials. For example, in the riverine areas they need speed boats, life jackets, first aid boxes, rain boots, rain coats, bags to protect the questionnaires and so on which in some cases are not provided. It is worthy to mention that data collection is a very expensive exercise. Another factor is social, some enumerators want to get rich quick which is a social problem in Nigeria. Hence, some enumerators trade or do other businesses along with data collection and thus have divided interest. The problem is that of improper supervision. In establishment surveys some enumerators refuse to make call backs because of either cost of transportation or fear of the managing directors who had frightened them during their first visits to these establishments. Unfortunately, these enumerators fail to report the exact situation to their supervisors.

4. CONCLUSION

This paper looked at the environmental constraints to data sourcing in Nigeria as it affects Administrative records and censuses and surveys. It is the view of this paper that there are a large number of statistical records in the files in some ministries and local government that are yet to be compiled. Data collection stage offers a lot of challenges for statisticians. There is urgent need to use what technology offers to improve data collection activity. The need for all statistical agencies to use hand-held (Lap-Top) computers to collect data, use telephone to reach potential respondents and automate the

record keeping system so that a lot of administrative statistics could be generated from records cannot be over emphasised. There is also the challenge to improve the quality by using the qualitative to compliment the quantitative approach.

Finally, data sourcing is a very expensive and painstaking activity. The environmental constraint in data sourcing can be further reduced by planning, close supervision, strict checks and proper coordination of field staff.

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