

GDDS PHASE 2: CONTRACT NO. PO7146414
MANAGEMENT OF STATISTICAL SYSTEMS MODULE 2008
IMPROVING DATA QUALITY IN THE PRODUCTION OF
OFFICIAL STATISTICS FROM ADMINISTRATIVE RECORDS

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Abbreviations

CBN	Central Bank of Nigeria
CPTC	Coordination Policy and Technical Cooperation
UBEP	Universal Basic Education Project
UNICEF	United Nations Children’s Fund
CWIQ	Core Welfare Indicators Questionnaire
DFID	UK Department for International Development
DQAF	Data quality Assessment Framework
ECOWAS	Economic Community of West African States
EMCAP	Economic Management Capacity Building Project
EMIS	Education Management Information System
ESS	European Statistical Service
ERGP	Economic Reform and Growth Project
EUROSTAT	Statistical office of the European Communities
FME	Federal Ministry of Education
FOS	Federal Office of Statistics
GDDS	General Data Dissemination System
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
ILO	International Labour Organisation
IMF	International Monetary Fund
ISO9000	International Standards Organisation standard for quality management systems
JCHEW	Junior Community Health Education Worker
LGA	Local Government Areas
MDA	Ministries Departments and Agencies
MDG	Millenium Development Goals
NBS	National Bureau of Statistics

NCCS	National Consultative Committee on Statistics
NCE	Nigerian Council on Education
NEMIS	National Education Management Information System
NITEL	Nigerian Telecommunications Limited
NLSS	Nigeria Living Standards Survey
NNPC	Nigerian National Petroleum Corporation
NSDS	National Statistical Development Strategy
NSI	National Statistical Institute
NSS	National Statistical System
OECD	Organisation for Economic Cooperation and Development
ONS	Office for National Statistics
PATHS	Partnerships for Transforming Health Systems
PRS	Planning Research and Statistics division
SLA	Service Level Agreement
SQL	Standard Query Language
SVC	Statistical Value Chain
UK	United Kingdom
UNSD	United Nations Statistics Division
UNSC	United Nations Statistical Commission

1 Introduction

This was the first of three missions to the Nigerian Bureau of Statistics under the second phase of the GDDS project. The missions are designed to improve data quality in the production of official statistics from administrative records in Nigeria. The specific purpose of this mission was to examine the existing situation, hold discussions with stakeholders, and agree a way forward. Specific outputs were to be a draft report covering.

- A. Description of five flows of data (different institutions) from the sources towards indicators used, or to be used, in Nigerian official statistics.
- B. The principals of coordinating a National Statistical System.
- C. A plan for a pilot application of those principals in a particular area.

The rest of this report is organised as follows. Section 2 gives some observations on the current situation and section 3 provides a summary of conclusions and some recommendations for future work within this phase of the GDDS. These sections correspond to paragraphs 1.1.6 and 1.1.7 of Section T1 of the “Living Document” for Nigeria. Annexes A-C contain the outputs for this visit listed above and annexes D-F cover the activities of the visit, the people met, and the terms of reference.

2 Observations (Paragraph 1.1.6 of Section T1 for the “Living Document”)

- Existing arrangements for handling flows of administrative data between different departments are poorly coordinated, highly dependent on personal relations between individual NBS staff and those in other departments and can result in inconsistent data and confusion to users. (see annexe A.1)
- The NBS is aware of these problems and has an active programme to address them (see annexe A.2). It is crucial that assistance provided under GDDS phase 2 align with these efforts rather than duplicating or even undermining them.

3 Conclusions/Recommendations (Paragraph 1.1.7 of Section T1 for the “Living Document”)

3.1 Recommendations for use of technical assistance under GDDS phase 2

- The NBS should contact the Ministry of Education and Kaduna State to set up a working group to produce a set of papers covering
 - A prototype agreement between the Ministry , the Bureau, and the State
 - A revised education chapter for the Statistics Compendium
 - A paper exploring technical methods for data reconciliation and coordination

The remaining technical assistance under GDDS phase 2 should be designed to assist this working party (see annexe C.2 for further details).

3.2 General recommendations to assist in the creation of a National Statistical System for Nigeria

- 1 The NSDS stakeholder group should be expanded to include users as well as producers of statistics, the document should contain explicit models for inter organisation agreements, and it should be endorsed by other high level bodies as well as the NCCS (see C.1.1.1)
- 2 The NBS statistical compendium should be revised along the lines developed in the education pilot (C.1.1.2)
- 3 The statistical yearbook templates should include more security features and the final document should be prepared from a database rather than from linked spreadsheets.(C.1.1.3)
- 4 Training for state statisticians should be in appropriate areas (C.1.1.4)
- 5 The website should be improved and made into a tool for organising the work of the office internally as well as externally (C.1.1.5)
- 6 Methods for the using true administrative records not originally designed for statistical purposes should be developed and disseminated (C.1.2.1, C.1.2.2 and C.2.)
- 7 The NBS should create a specific unit to handle its responsibilities to the wider statistical system (C.1.2.3)
- 8 Donors should support the NBS in 1-7 above and begin to fulfil their obligations under the Statistics Act and the Paris Declaration (C1.2.4).

Annex A Five flows of data illustrating current arrangements in Nigerian official statistics and the NBS's existing change programme

The traditional procedure by which the NBS, and before it the Federal Office of Statistics acquires administrative data is as follows. First an officer in the FOS was tasked with creating a report that required data from a Ministry Department or Agency. That FOS officer approached someone in the MDA and asked them to provide that data. The officer in the other organisation would usually ask for a letter for their superior. Some time later they would produce an estimate themselves or perhaps obtain one from an internal publication. The FOS officer would then use this estimate which might or might not agree with other estimates provided by that MDA in their own publications or supplied to other FOS officers. Such estimates are used in many FOS products including the National Accounts but are most prevalent in the Nigeria Abstract of Statistics, Social Statistics of Nigeria, and the Nigeria Statistical Yearbook. Although the procedures for capturing and using data within the MDA are different in each of the examples considered below they all conform to this pattern. However it would be misleading to describe the current arrangements without discussing the NBS's programmes to improve coordination of the National Statistical System.

A.1 Current arrangements

A.1.1 Education

The Nigerian Education system is governed by the National Policy on Education, the Education Decree No. 16 of 1985 and the 1999 Constitution of the Federal Republic of Nigeria. These entrust the Federal Ministry of Education with collecting and collating data for purposes of educational planning and financing. Education is organised on three levels. Most tertiary education and some secondary schools are the responsibility of the Federal Government, most secondary education is the responsibility of the State Governments and primary education is the responsibility of the LGAs or local government authorities. There are approximately two hundred and sixty tertiary institutions, eleven thousand secondary schools and sixty thousand primary schools. The National Council on Education brings together all the stakeholders in the Education system at state, local, and federal level and attempts to assist in coordination.

The statistics and National Education Management Information System (NEMIS) branch of the Policy Planning Management and Research Department of the Federal Ministry of Education has, with assistance from donors under the Universal Basic Education project compiled a directory of educational institutions and has recently begun an annual census of these establishments relating to a school census day in the first week of February every year. Between sixty and sixty five percent of schools contacted respond. Multiple copies of the questionnaires are filled for the state education ministries and for the federal ministries. Some state education ministries capture the results themselves and provide them to the National "Education Databank" electronically while for others the data is entered by the FME in Abuja. Processing uses a custom designed SQL database system.

In August 2006 the Federal Ministry produced Basic and Senior Secondary education statistics 2004 and 2005 with assistance from the DFID/UBEP project and UNICEF. The data covered include enrolment by age, class, gender, school type, and disability status; the geographical distribution of schools; teachers employed; estimated survival rates for pupils from one year to the next; and the proportion of schools with access to particular facilities (clinics, sports fields, clubs such as the scouts, adequate classrooms and textbooks). Information is available for 2004 on a national level and for 2005 on a state by state basis.

In November 2007 the statistics and NEMIS branch of the FME published “Statistics of Education in Nigeria 1999-2005” containing some results from these censuses as well as data generated by agencies such as the National Board for Technical Education, the National Commission for Colleges of Education, the National Teachers Institution, the West Africa Examinations Council, The National Examinations Council, The National Business and Technical Education Board, and the Joint Administration Matriculation Board. The data covers many of the same areas as the UBE report but goes into more detail on teacher and pupil numbers and leaves out information on school facilities. The results had been agreed with the states in a joint stakeholder meeting. In some cases they differ slightly from those in the earlier publication, for example total net primary enrolment in 2005 was given as 22,267,407 in the 2006 publication but 22,076,401 in the 2007 publication. Interestingly the latter gives a projected population of primary school age pupils as 22,154, 332. Both the 2006 and 2007 enrolment estimates were from 60-65% of schools only suggesting that either the enrolment is too high or the population estimate is too low. The 2006 publication estimates the Gross enrolment ratio in 2005 as 95.98%.

NBS staff collect results from the Statistics and NEMIS branch of the FME for the Annual Abstract and Social Statistics but also collect information from some of the Educational Agencies directly. The Annual Abstract gives an estimate of primary school enrolment in 2005 of 22,099,553 while the estimate for the same year in the Social Statistics publication is 20,951,818.

As well as the annual school census monthly and even weekly data on schools is gathered by the state school inspectorates and LGA school services divisions. In Kaduna state for instance there are eight school inspectorate zones each with a staff of school inspectors. Each school inspector is responsible for filing regular reports on the schools in their subdivision and there are forms for these reports. In the Kagarko Local government there are eighteen school zones each with a district education officer and four school supervisors. The supervisors file standard reports to the zone every week and the district officers provide monthly reports to the LGA headquarters who collate them and send them to the state capital from time to time. The reports do not appear to progress beyond the state capital. At no stage of this system are the staff providing the reports exactly sure what they are used for.

In 2008 the National Council on Education endorsed the draft policy on the National Education Management Information System which suggests setting up a hierarchy of information gathering bodies at the federal, state and local level to coordinate all information flows. The PRS in the ministry are receptive to the idea of a National Statistical System but are not keen to provide raw data to the NBS.

A.1.2 Health

The apex body for health is the National Health Commission established in 2006. Like Education, the Federal Ministry of Health has its Management Information system (HMIS) but unlike education this is located in a separate office rather than forming part of the ministry’s Planning, Research and Statistics unit and it does not collect data directly from service delivery units. Instead the HMIS sends semi annual questionnaires to the thirty six states and the Federal Capital Territory. These states in turn are supposed to send quarterly questionnaires to their LGAs and the LGAs collect monthly questionnaires from each health facility in their LGA and from each Junior Community Health Education Worker (JCHEW). The JCHEWs are supposed to ensure that every Nigerian above the age of five possesses and maintains a health information card and that every house has a health information number. The structure described above follows the recommendations laid down by the National Health Management Information System Policy published by the Federal Ministry in December 2006. Although the HMIS unit have collected forms from many states they have not yet been able to make any publications.

The Federal Ministry of Health contains several other bodies collecting and aggregating data besides the PRS and the HMIS. The PATHS programme for instance maintains its own information system and PATHS states will only report to the HMIS in PATHS format as opposed to HMIS format. National programmes for Malaria, HIV, and tuberculosis also produce their own National estimates.

Data in the Annual Abstract and “Social Statistics” come from a variety of sources including Demographic and Health surveys and other figures from the National Population Council. The estimates that come from the Federal Ministry of health appear to be supplied by the PRS as oppose to the HMIS. They are collected by individual NBS statisticians visiting individual Ministry of Health Statisticians.

Staff of the PRS are mostly ex FOS employees who would be keen to strengthen their links with NBS as much as possible and would welcome re-absorption into it. They were aware of the statistics act and of the NBS’s new role in the National Statistical System.

A.1.3 Federal Ministry of Employment and Productivity

The Ministry’s enabling law is encapsulated in Official Gazette No.15 vol.76 of 03 March 1989. All matters relating to Labour and Employment are reserved for the Federal Government. The Planning Research and Statistics section of the Ministry has in the past conducted ad hoc surveys such as a survey on child labour but has two main regular collections, monthly returns from the 45 employment exchanges spread around the country and an establishment based employment survey. They have approximately fourteen staff and produce an “annual bulletin of labour statistics” (latest printed publication 2004).

The PRS has to visit the employment exchanges in order to obtain all their monthly returns which costs approximately two million Naira a year. However they still do not obtain results for all offices and have no way of allowing for this in their National estimates.

The employment survey has been prepared in close cooperation with the NBS who have assisted with the establishment frame and sampling. The cost of the exercise is approximately 20 million Naira¹. The PRS captures the data itself and enters the returns on a Preliminary tables provided by the PRS suggest that there may be problems with the grossing up methodology (estimates of 22 million teachers) but these will probably be addressed before publication.

Only the administrative data on registration in employment exchanges is used by the NBS for its annual abstract or Social Statistics. Data for both publications is provided by NBS staff making individual visits to the PRS. The Ministry of Labour website was not working at the time of the visit. The PRS staff are mostly ex FOS employees who would be keen to strengthen their links with NBS as much as possible and would welcome re-absorption into it. They were unaware of the new Statistics Act.

A.1.4 National Directorate of Employment

This is a parastatal of the Federal Ministry with offices created under the National Directorate of Employment Act 1990 as amended in 2002 which runs employment generation schemes in every state. The PRS department in Abuja produces data on take up of these programmes based on quarterly reports from each state that they add up manually. They were the only institution encountered that had no problem collecting returns from all their sub offices. The NBS collects

¹ \$1US = approximately 118 Naira

information for the National Abstract (but not social statistics) directly from the NDE. The PRS staff were unaware of the Statistics act.

A.1.5 Federal Ministry of Immigration

The Federal Ministry of Immigration operates under the 1990 Immigration act. This act does not specifically mention statistics but provides for centralised reporting of each entry and exit and annual reports to the minister. The Planning Research and Statistics section of the Federal Ministry of Immigration do not publish their own reports or pass returns to the NBS. Instead their results are used for internal planning and monitoring and as an input into the ministry's annual report. They have two main potential sources. The passport data is captured by immigration officers at the point of entry and the immigration cards filled by passengers. Currently only the former are exploited. Abuja, Lagos and Kano airports are linked to the ministry head office with a real time computer system that shows each passport as it is scanned. This system is used to generate bespoke reports as and when required but there are no regular formats. At present data from other entry points are received manually and captured centrally but there are plans to move them onto the real time system.

The officers of the PRS section were unaware of the implications of the new statistics act but were keen to cooperate with the NBS. However they thought it infeasible for them themselves to become statisticians under the NBS. Instead they suggested the model used for the audit function in the ministry where uniformed immigration officers work alongside staff seconded from the Auditor General's office i.e. the NBS should second officers to the ministry where they would work alongside the ministry's own staff.

A.2 Existing NBS change programmes

The NBS is currently undertaking or has recently undertaken a wide variety of programmes and processes designed to develop the Nigerian National Statistical System. These include:

A.2.1 The 2007 Statistics Act

The act establishes the "National Statistical System" as a legal entity, lays down its roles and charges the board of the NBS, the National Consultative Committee on Statistics, and the Bureau itself with coordinating the system. The powers and responsibilities granted to these bodies are very wide including the duty to monitor the technical quality of all official statistics², to maintain a national database, and to act as the point of contact for all international agencies on statistical matters. The NBS board is charged with protecting the professional independence of all public sector statisticians and providing quarterly reports to the President on the entire statistical system. The NCCS is charged with examining the annual work programmes of all the agencies in the public sector annually and presenting a National programme to the Board. All Ministries, Departments and Agencies producing statistics of any sort are meant to comply with procedures laid down by the NBS and to provide the statistician general with datasets and data whenever he asks for it and in any format that he requires. They must create and pay for statistics units staffed with secondees from the NBS and can only conduct National surveys with the explicit prior agreement of the Bureau. If they do conduct surveys they can only publish the results after the

² Official statistics are defined in the act as all statistics produced by the NBS, line ministries, public authorities, state statistical agencies, and local government statistics units.

NBS has checked and validated them and must provide the raw data to the NBS. Private Nigerian and foreign institutions wishing to conduct National surveys must fulfil the same conditions.

Not all the procedures and processes laid down in the new act are operating at the moment. However the Statistician General and the board of the NBS have been appointed and the National Consultative Committee has begun biannual meetings. The next meetings are scheduled for April and November 2008.

A.2.2 The National Statistical Development Strategy

The NBS have, with assistance provided by the African Development Bank through the ECOWAS secretariat begun to create a National Statistical Development Strategy (NSDS). They have engaged a team of four local consultants and one international consultant (an ex Director General of the Federal Office of Statistics). They have already held two stakeholder meetings, one with Federal MDAs last December in Jos and one with State Statisticians in Lagos. The following have been identified as core stakeholders.

- The Federal Ministry of Health
- The Federal Ministry of Education
- The Federal Ministry of Transport
- The Federal Ministry of Interior
- The Federal Ministry of Housing and Environment
- The Federal Ministry of Finance
- The Federal Ministry of Agric & Water Resources
- The Federal Ministry of Women Affairs & Youth Development
- The Central Bank of Nigeria (CBN)
- The Nigeria Customs Services
- The Nigeria National Petroleum Corporation (NNPC)
- The Nigeria Immigration Services
- The Debt Management Office
- The Nigeria Ports Authority
- The National Population Commission
- The Federal Inland Revenue Services
- The Federal Ministry of Labour and Productivity
- The National Directorate of Employment

- Six Pilot States: Jigawa, Niger, Kaduna, Imo, Ondo, and Cross River

A team including the Statistician General has visited the ministries of Finance, Health, Immigration, and Women's affairs and youth development. Although the list is not a complete list of stakeholders in the statistical system as important statistical users (the National Planning Commission, the Media, etc) are left out it serves as a useful list of the producers of statistics whose data flows must be coordinated. Conveniently all of them are represented in the National Statistical Commission.

A.2.3 The Compendium of Statistics

The NBS have created and printed a "Compendium of Statistics" covering existing data flows. This lists the data series expected in each area and allocates a number to each. It also provides some background on the sources of data for each series and, sometimes, indicates the recommended international classification system to use. The document is too long to review completely but the flows described in the education chapter conform to those described in section A.1.1

A.2.4 Zonal Datacentres and Computerisation of NBS head office

The NBS has built a large local area network within its headquarters that provides internet access to every desk (NITEL permitting). It has also developed substantial data-centres in each of the six zonal offices³ and is using them to capture survey data. At present data for each state is entered on a single computer and each state file is emailed to headquarters separately from an internet cafe. However there are plans to link the whole system into a wide area network with several operators entering into the same database at once.

A.2.5 Website and Abstract

The NBS has launched a new and much improved website that provides access to survey datasets for the NLSS and CWIQ surveys as well as access to some NBS reports and metadata. There are plans to link the National Databank's SQL database to the website so that users can access series directly over the net and also to allow remote data entry via special templates for 22 Federal Ministries Departments and Agencies in Abuja. A company has been engaged to create the information technology infrastructure and provide hardware and training to these MDAs

A.2.6 Yearbook and Outreach to State Statistical Offices

The NBS has engaged a consultant to develop a system of Excel templates that will help state statistical offices to compile yearbooks. Offices will be provided with computers and training in filling in administrative data on each subject for each Local Government Administration. When all workbooks for a state are filled correctly a workbook with linked formulas in whole state tables will be filled automatically. If all the workbooks in all the states are filled correctly a further set of linked workbooks containing a National Statistical Yearbook will be filled automatically.

The NBS has also begun conducting training courses for the staff of state statistical offices and trying to build support for state level statistics acts and state level statistical master plans defining the role of these offices.

³ Nigeria has three Northern Geopolitical Zones, Northwest, North Central and North East, and three Southern, Southwest, South East and South South.

Annex B The Principles of Coordinating a National Statistical System (NSS)

The term “National Statistical System” is used in two senses. On the one hand it can be used to refer simply to all the institutions in the country involved in producing and disseminating data. On the other hand people talk of achieving an NSS as an aspiration that countries can aim for. For example Pali Lehohla in his response to the keynote address at the 38th session of the UNSC refers to a “transformation from a rather slow and additive evolving system of national statistics to a radically different conception, namely of national statistical systems”⁴. The clear implication is that there are certain standards that a country must meet in order to qualify as having an NSS. Lehohla goes on to say that “This conception is more recent for the major part of the world except possibly for some of the Scandinavian and Nordic countries.”, implying that these standards are exacting. This annexe contains two sections, first an outline of what it means to create an NSS then a discussion of some of the issues involved in creating one.

B.1 What is required for a country to say that it has an NSS?

Examination of reports such as the UNSC papers and the United Nations’ Handbook on statistical organisation suggests that the following are important;

B.1.1 Unified branding and coordinated dissemination

A true NSS should present a unified face to users. They should never be left in doubt which institution is responsible for which series and each participating institution should have enough familiarity with the outputs of the other institutions in the NSS to direct enquiries to the appropriate source. Where one institution is reporting on or reprinting data generated by another the vintage of that data should be clearly indicated to avoid confusion when the estimate is revised. Variations in quality across outputs should be indicated by a national system of quality markers and standards rather than the reputation of particular institutions. Users should be able to see which data meets which standard.

The NSS must also appear unified from the point of view of the respondent providing data. Enterprises and households should not be repeatedly approached to provide the same information to different parts of the NSS.

B.1.2 Common classifications & concepts

It is only possible for users and statisticians to compare or combine data from different institutions if common concepts and classifications are used. Information on employment and occupation for instance should use common concepts about what it means to be employed (is one hour a year sufficient to count as employed, are apprentices employed?) and a common classification of occupations. Consistency is much easier to achieve where all institutions are following international recommendations but this is not enough in itself as most international classification systems have to be adapted for local use. It is crucial that such adaptation is coordinated across the NSS.

⁴ (UNSC papers Feb. 2007)

B.1.3 Common registers and frames

Registers of enterprises and establishments and frames for household surveys are a prerequisite for valid sample surveys. Clearly samples drawn from different frames cannot be expected to be comparable. Maintenance of up to date registers and frames is also one of the most difficult and costly exercise for any organisation conducting sample surveys. For both these reasons registers and frames in a true NSS must be compiled and maintained jointly by all participating institutions. This implies that they must have developed a legal framework that allows data sharing.

B.1.4 Full data sharing

The need to minimise burdens on respondents while adding as much value as possible for the user means that survey data must be analysable in many different ways. In particular linking data from different surveys is a powerful technique that requires access to record level data as well as aggregate figures. Sharing record level data across an NSS requires not only a willingness on the part of all participants to participate but an established system that allows data sharing to take place without contravening respondents' confidentiality needs and undermining their willingness to respond to surveys.

B.1.5 Full utilisation of administrative data

Public sector agencies collect an enormous range of information for non-statistical purposes; tax authorities maintain registers of companies and individuals and collect information on their income, health authorities maintain records on households in order to run public health programmes such as immunisation and perinatal services, and all public bodies keep records on the number of staff they employ and the facilities they control. Because generating statistics was not the initial reason to set up these systems there are often substantial difficulties in utilising the data they generate. To take only one example revenue records are generally organised according to when the revenue was received rather than when the economic activity that generated the revenue actually occurred. Nevertheless the sheer range, frequency and – in theory- timeliness of the data generated by administrative systems is so significant that any true NSS must have developed procedures for using them.

B.1.6 Unified quality system and peer review using established quality frameworks

Finally it is important that all the elements of the NSS follow and are seen to follow the standard recommendations for producing good statistics such as the United Nations fundamental principals of official statistics and the special data dissemination standard. This requires a system of regular peer review of all the different areas of statistics by reviewers qualified to conduct quality audits and conversant with the various measures of statistical quality that have been proposed such as the IMF's data quality assessment framework, EUROSTAT's European quality assessment framework etc.

B.2 What are the issues to consider in developing an NSS ?

Achieving an NSS requires much more than just technical skills. Technical issues do exist but the managerial and political problems associated with setting up an NSS are usually more important. Some of the questions that must be addressed are described below

B.2.1 Structural Issues

One of the most distinctive features of an NSS is whether it is highly centralised like the offices in Sweden, Canada, or Australia where most data series are produced by the National Statistics Office itself or a highly decentralised one like the United States with a plethora of different bureau and agencies operating at federal, state, and local level. Both options can work but the decentralised option requires much more in the way of formally negotiated structures and procedures.

The relationship between the degree of centralisation and the need for formal structures becomes most obvious when there is institutional change. In the UK for instance the new statistics act is separating the General Registry Office from the Office for National Statistics and the routine access to the births and deaths registry that was previously an ad hoc arrangement between civil servants in the same department now has to be written down into a formal concordat. Such agreements are necessary to provide a legal basis for datasharing across an institutional boundary wherever that data has been gathered subject to the proviso that it will not be released except for statistical purposes. Under a strict interpretation of the principal of equal access to published statistics the release of unpublished data to, say, compile a statistical compendium, would also have to be covered under such an agreement.

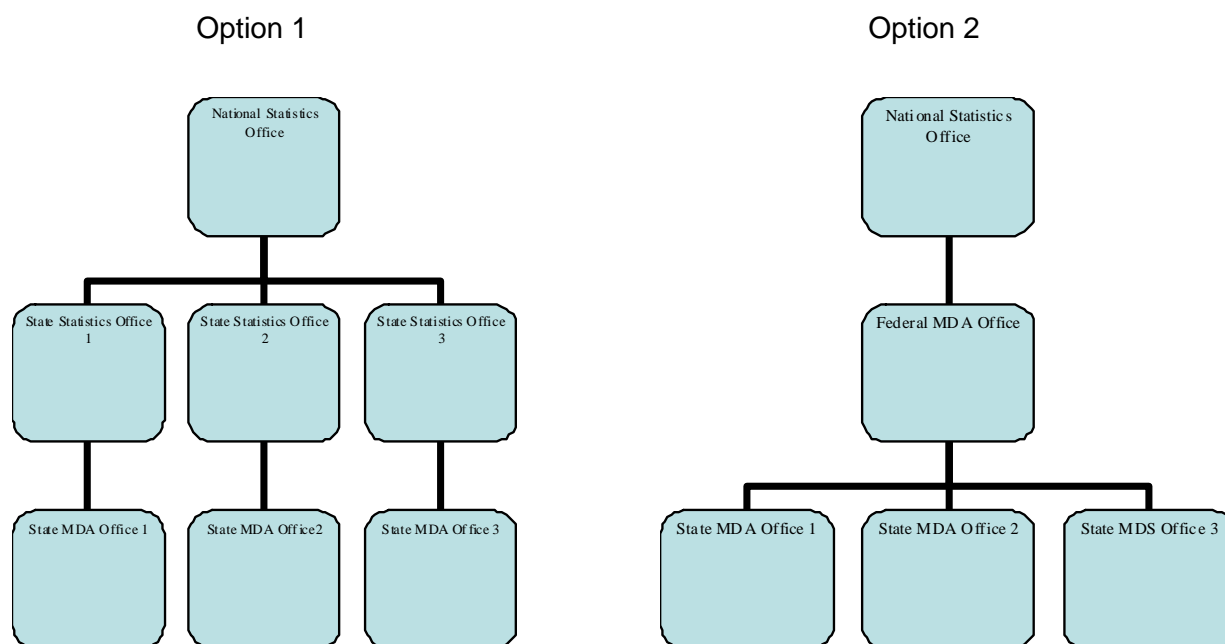
There will often be situations where data sharing, even for purely statistical purposes, is expressly forbidden by the acts under which some institutions operate. For instance the release of individual records gathered for tax purposes outside the tax authority may be forbidden under any circumstances. Even if the statistics act gives the NSI authority to demand all records the tax authority is unlikely to grant access merely because the NSI asks for it. Such problems may need judicial review and even legislative changes to solve them.

Whether the agreements regulating the relationships between the different elements of the NSS are legally binding or not they will only produce a coherent system if the respective responsibilities are clearly designated. Each link in the *Statistical Value Chain*⁵ or SVC must be allocated to one institution or the other. It is for example vital to specify whether or not the institution receiving a figure is merely going to reprint it or is going to carry out some sort of checking and quality control. If they are going to do some sort of quality control the institution providing the data needs to know how long that will take and what form of feedback there will be.

One aspect of the SVC that needs to be given particularly careful consideration is aggregation. In a federal system where both the NSI and the MDAs in the NSS have offices distributed around the country there is a choice between state offices of the MDAs or state ministries reporting to their state statisticians or state office of the NSI and the same state MDA offices reporting to their own federal ministry and that reporting to the NSI (see Fig 1.). Which is appropriate will depend to some extent on the degree of coordination within each MDA. Where an MDA lacks one strong central body responsible for all its data flows there may well be parallel channels for reporting information on each different programme and activity to the centre resulting in confusing or conflicting information.

⁵ The Statistical Value Chain is a description of all the stages in producing a data series. (see www.statistics.gov.uk)

Fig 1. Alternative information flows



B.2.2 Political Issues

In an uncoordinated system with low public trust in all official statistics institutions may be fairly relaxed about who publishes what data when. In a coordinated and integrated statistical system however the right to publish the first estimate of a particular series is an important source of power⁶. If an institution cedes the right to publish the first estimate in the national databank and only discovers what it has given up afterwards it is likely to attempt to undermine any agreements that were reached and disrupt the system. All parties need to be made aware of the full implications of the agreements they are signing even if this requires extended negotiations that escalate to a higher level.

While producing accurate data for every series is likely to be the most important consideration for a National Statistics Office the incentives facing an MDA may well be different. If a ministry of education for example receives a certain amount of money for every child in school it will want a measurement system that makes sure that no attendees miss out by ensuring that every child who might possibly have attended school is counted. This is a different thing from trying to get the best possible estimate of those who actually attended. If coordination involves reconciling unbiased estimates and biased estimates by choosing something in the middle then the result will also be biased. In these circumstances it may sometimes be preferable to allow two different estimates to coexist, especially if the difference can be presented as due to different collection mechanisms, a census versus a sample for instance. However this may not be necessary in many cases. Even the strongest biases may be the result of taking the most favourable view of the data rather than deliberate fraud. In such cases the integration of estimates from different sources, the comparison of population records with enrolment totals for example, is likely to curb the tendency to exaggerate.

⁶ In the UK we refer to the “ownership” of a given statistical series. As well as a formal institutional owner each series will often have an individual statistician who “owns” it in practise. This is often reflected in the technical permissions required to update the ONS databases.

B.2.3 Technical Issues

As well as the significant managerial and political issues there are also important technical challenges in setting up an NSS. Simply moving information around can present significant challenges despite the recent improvements arising from the spread of mobile phones and internet cafes. More fundamentally it is vital to develop a methodology to allow for non response. It is extremely rare for all schools, clinics, police stations etc. to respond to an enquiry. A national estimate produced by simply adding up the estimates from all the respondents will convey more information about changes in the response rate than the actual target variables. Quality control is another important technical issue. There are several aspects to improving statistical quality. Unfortunately simple routine quality control of outputs is still not universal among African statisticians with the result that obvious mistakes still emerge in publications. On a bureau wide level awareness of the various systems for measuring and assessing statistical quality – the DQAF, the ESS dimensions of quality ;and the United Nations fundamental principals of official statistics etc. is still not widespread in the NSS, especially outside the NSI. Finally knowledge of the techniques for quality management developed by the private services sector, Total Quality Management, ISO900 etc., is very limited in National Statistical Systems anywhere in the world.

Annex C Applying the principles of coordinating a National Statistical System in Nigeria – plan for a pilot application

The main message of this report is to endorse the measures already being adopted by the NBS, to recommend that the NBS continues with its programme of change, and that the donor community continues to support it. However there are also opportunities for improvement. This annexe provides an outline for such improvements. Although this mission has paid particular attention to Education Statistics many of the steps needed for constructing an NSS concern issues that are much wider than a single dataset. The first section of this annexe is therefore concerned with general recommendations that concern the change programme as a whole. The second, shorter, section presents more specific proposals for addressing the management and technical issues concerned in developing an NSS for education statistics.

C.1 General Recommendations

The recommendations below are organised into two parts, the first relates to areas covered in the existing change programme outlined in annexe C, the second contains proposals for additional programmes that are necessary if the NBS's vision for the National Statistical System is to be realised.

C.1.1 Recommendations about existing activities

C.1.1.1 NSDS

Unfortunately it was not possible to meet with the team of consultants producing the NSDS during the visit during this visit to establish exactly what they were planning to cover in their report. Some of the following things may therefore already be underway, they are however covered here for completeness.

- The NSDS should contain a draft agreement between the National Bureau and the MDAs laying out in detail the tasks expected of each, when they need to be carried out, the quality standards that need to be met and a mechanism for annual reviews of the extent to which each party is meeting these commitments. One possible model might be the service level agreements used in the UK statistical system⁷. This draft (and indeed the whole NSDS) should be presented to the November meeting of the NCCS for endorsement.
- Although the NCCS is the main body charged with statistical policy there are clearly overlaps with similar bodies charged with overseeing specific policy areas. For instance the National Council on Education's statutory responsibilities include responsibility for the Education Management Information System. Rather than seek a definitive legal ruling on where final authority lays it would be much better to seek the explicit endorsement of such bodies for the relevant sections of the NSDS.
- The most important stakeholders in an NSDS are the users of statistics rather than the suppliers. The list in A.2.2 will have to be supplemented to complete the process successfully.

⁷ <http://www.ons.gov.uk/about/our-organisation/corporate-documentation/agreements>
<http://www.statisticsauthority.gov.uk/uk-statistical-system/history/key-historical-documents/>
<http://www.clip.local.gov.uk/lgv/aio/31231>
<http://www.gro-scotland.gov.uk/abotgros/concor.html>

C.1.1.2 The Compendium

Although the compendium is a useful document as it stands it does not contain all the metadata necessary to use the series it describes. For instance the education compendium does not indicate whether a pupil who spent a single hour in a class during a year would or would not count as registered and whether the definitions of teacher and education used correspond with those used in the international standard classifications of occupations and industries. This sort of metadata, which is normally contained in the survey instructions, is essential for users and producers to understand exactly what is being measured.

The compendium should also include the National versions of the standard statistical classification systems and definitions. Although the UNSD and other international authorities maintain standard classifications these often have to be adapted to meet national needs by collapsing areas that are of little interest to a particular country or where data is not available and creating extra subdivisions for areas of particular interest. The UK for example maintains a standard industrial classification that is consistent with the international classification at a high level but is tailored to meet the UK's own needs. Countries may also develop their own definitions. The Federal office of statistics for example developed a Nigerian definition of unemployment as they felt that the ILO definition was too restrictive to be meaningful. Many countries have their own particular definition of the term 'informal'. It should be part of the role of the Compendium to document such decisions and prevent them being made differently by different agencies in the National Statistical System.

C.1.1.3 The Statistical Yearbook

Although Excel workbooks are a powerful tool for collecting and processing data their very flexibility makes them dangerous for work which is being done more than one time, by more than one person, or in more than one place. Small changes made during data entry or processing will affect linked formulae in ways that are difficult and laborious to trace and check. Most dangerously of all such changes may cause errors to estimates that are not immediately obvious in the high level results. It is therefore necessary to adopt rigorous procedures to avoid errors in spreadsheet systems even where these reduce flexibility and impose burdens on those using the system. For example

- All workbooks should be password protected and contain log sheets and macros that require each user making changes to record the reason for those changes and their details in the log sheet
- All worksheets should be password protected so that only the areas where data entry is required are editable.
- Data entry cells should be conditionally formatted so that substantial changes to time series show up in a different colour and the data enterer is prompted to provide an explanation for them
- Workbooks should contain a database sheet. Publications should be produced by uploading the sheet into a database, checking it in the database, and publishing from the database rather than using linked spreadsheets to go straight from data entry to publication tables. (Note that this will require extra training for state statisticians)
- Where new workbooks must be created on an annual basis these new workbooks should be checked and signed off by a senior officer after a more junior officer has created them

C.1.1.4 Training for State Statisticians

Any training at all for state statisticians is valuable but training will be especially useful if it is tailored to the role that is envisaged for them. It should probably concentrate on the principles of official statistics and the techniques of checking and quality assuring data.

C.1.1.5 The Website

Creating the NBS website and keeping it updated has already had an important effect on external perceptions of the NBS and existing plans to transfer all survey datasets onto the micro database and link the National Databank time series database to the website are crucial to maintaining and improving that image. However even these external objectives will not be met unless it is possible to reduce the time-lag between finishing a publication and getting it up on the website from approximately three months at the moment to approximately three days which is the minimum for many OECD statistics offices. The current delay is probably caused by a combination of three factors

- The situation is allowed to persist because senior management accepts it
- The number of people working in the web publishing team is inadequate
- The web publishing team is doing checking and formatting work that should be undertaken by the statisticians producing the reports.

NBS statisticians need to see posting on the website as synonymous with publication rather than as an additional outlet for material that has already been produced. Their job should be defined as producing .pdf files that can be posted directly rather than word documents or spreadsheets that are passed to the publications unit for further checking and editing. What is particularly dangerous is the blurring of the line between what is 'published' and what isn't. Any report provided to anyone outside the NBS by an NBS employee affects the credibility of the whole organisation so reports which are not fit to be posted on the website should not be released to anyone.

- NBS needs to provide training to staff in the policies and procedures for publication and where to find data on the Website.

The NBS website is currently used purely for external dissemination. It should also be a tool for internal coordination. All staff should be thoroughly familiar with all the data on it. In particular:

- Staff should take full responsibility for data posted in their area and see it as their responsibility to correct any omissions or errors immediately. It is therefore necessary that each data series on the website is allocated to an owner who is responsible for it.
- Staff should seek information from the website first rather than approaching an MDA for information that has already been collected by another part of the NBS.

Most of the data on the website is currently created as individual reports. This makes it very difficult to check for consistency between publications or even check for plausibility within publications. Most official statistics in OECD countries are now produced via databases. Statisticians maintain series for every variable they measure. These series have private versions visible within the office only. Statisticians load information onto the private versions for checking and validation and "publication" consists of copying the data from the private to the public versions once the data has been validated. Although reports are still produced and placed on the website at the same time that the validated private data series are copied into the public versions, these are a secondary output and all tables in a report that contain primary data – i.e. data that is not derived

from other data in the same report- are generated from the database rather than the database being filled from reports.

The NBS already has most of the technological infrastructure to support this vision in the National Databank which it is already planning to link to the website. Actually realising the potential of this technology however will require a change to staff working practises. In order to bring this about NBS should develop a programme to train staff in:

- Using the NBS website and the databank to search for data
- Loading information on the databank
- Creating checking tables to ensure that the information they have on the databank is plausible and then producing publication tables from the National Databank

The databank will also have to add a facility for maintaining internal series as well as external ones but this is a relatively trivial issue.

In order to really use the website for their work staff need to be able to view the internet all the time, even when external links are not working It is therefore necessary that the NBS

- Create a mirror site for internal use by staff even when external links are not working
- Designate staff to cover for vital functions like paying the backup ISP provider and switching the router so that access is not blocked just because one member of staff is away from the office.
- Train staff in use of the helpdesk so that they do not wait until the network manager passes their desk to fix problems with accessing the website

C.1.2 New things that need to be done

C.1.2.1 Non response

The production of meaningful national estimates from datasets when data from some facilities, LGAs or even whole states is missing requires a method for estimating for non response. Estimation for non response in administrative data is currently unknown in Nigeria. It is therefore important to concentrate on robust, easily explicable methods that can be used in a wide variety of situations rather than develop ideal methods for one particular situation.

- The NBS should develop a simple method for estimating non response in administrative data, produce training materials, and run courses in implementing the methodology for MDA and State statisticians.

C.1.2.2 True Administrative data

The term “administrative data“ is often used to refer to all data provided by elements of the NSS outside the National Statistical Institution itself. Strictly speaking however it refers to data which has been created as a by product of a non statistical procedure. In the case of education data for example the results of the schools census are not strictly speaking administrative but the returns provided by school inspectors are. Although such data is of enormous potential value there are a number of serious issues to be addressed in using data that was not designed for statistical

purposes to produce official statistics (see for example *Use of Registers and Administrative Data Sources for Statistical Purposes Best Practices of Statistics Finland* Statistics Finland 2004.) The issues involved in using administrative statistics in Nigeria will differ in some respects from those in Finland

- The NBS should produce a study of the potential for the use of true administrative data to produce statistics, the difficulties involved, and the strategies that can be used to overcome them in a Nigerian context, and develop training and advocacy material to raise awareness of these techniques.

C.1.2.3 Creation of an NSS unit within the NBS

The Statistics Act places responsibility for functions relating to the NSS with the NBS itself, the Board of the NBS or the NCCS. As neither of the last two have permanent full time staff these functions will need to be supported by the NBS. If these functions are to be carried out effectively they will require a dedicated resource. The NBS should therefore set up an NSS unit within the NBS tasked with:

- Acting as the secretariat to the NBS board and NCCS
- Drafting annual reports on the NSS as a whole covering all government and donor funded statistical expenditures and activities in the NBS, MDAs and states. These will facilitate coordination of the system by allowing policy makers and donors to view it as a whole. The quarterly reports required by the statistics act should be a light update of these annual reports. Comprehensive quarterly reports would be too onerous.
- Be responsible for maintaining relationships between the NBS and other parts of the statistical system; draft, negotiate and monitor service level agreements, act as authoriser for MDAs and States wishing to conduct surveys, and provide stamp of approval to statistics produced by them.
- Undertake quality reviews of particular areas of statistics

In order to carry out this role effectively staff will need *training* in both statistical quality systems (DQAF etc) and the mechanics for running quality audits using established systems (ISO 9000 etc) see http://www.underoak.co.uk/public-courses/other_training/iso.htm.for sources of quality training in the UK)

The NBS will also need to create a distinctive *logo and branding* for the NSS as opposed to the Bureau so that data and materials that meet the standards maintained by the NSS are readily identifiable.

C.1.2.4 Donor Issues

The development of a National Statistical System will require support and understanding from key donors as well as the Nigerian authorities. Support is needed on three fronts. In ascending order of difficulty these are:

- Promoting the vision of a National Statistical System with Nigerian Policy makers

- Providing resources for NSS development through statistical reform projects such as the statistical component of the ERGP
- Cooperating in an annual report on the statistical and data gathering aspects of all their programmes.
- Avoiding undermining efforts to develop the NSS through funding parallel reporting uncoordinated with the NSS

One of the most difficult aspects of trying to coordinate an NSS is the tendency for states and MDAs to set up parallel systems for reporting and monitoring. This is a problem even in countries like the UK where most MDAs are drawing their funding directly or indirectly from a common treasury but the situation is much more serious when MDAs and states receive a substantial fraction of their funding from donors all of whom want to set up their own monitoring system. The fact that this is prohibited under the Paris Declaration on aid effectiveness and illegal under the 2007 statistics act is unlikely to prevent this practise. However requiring project proposals to state that they are in compliance with the statistics act might at least get them to think about the issue.

C.2 Recommendations for an education specific pilot

Although all of the recommendations in C1 fall within the scope of the GDDS phase 2 “Management of Statistical Systems” module it is neither necessary nor desirable to use the relatively limited resources in the remainder of the module’s technical assistance component to deal with all of them. Donor issues and improved use of the website for example are clearly out of scope. Many of these wider issues are already being addressed in the NSDS development process and the National Coordinating Committee on Statistics (NCCS) and it will be much more productive to fit into the meetings and reports arranged for these rather than try to develop a parallel process. Where gaps exist they can be taken up in the programme of the DFID/World Bank ERGP statistics project.

As the terms of reference for this mission suggest the most productive use of the GDDS technical assistance is to focus on a specific area of statistics and attempt to provide a model for wider NSS work. Of all the areas examined in this mission education is the most suitable for such a pilot because;

- Education is on the concurrent list in the constitution so a pilot must address the issues of coordination at the Federal, State and local levels
- Information flows within the Federal Ministry are relatively orderly
- The subject is vital for development but the statistics to be collected are inherently less complicated than those for say health
- There has already been a lot of existing work on which to build.

Not all of the issues covered in C1 can be included in the Education pilot. There is also a need to align with existing efforts to coordinate the National Statistical System. The obvious vehicle for instituting a programme of service level agreements is the National Statistics Development Strategy and it will be important to hold discussions with the team working on this document. The most important event to align with is the meeting of the National Consultative Committee on Statistics scheduled for November 2008.

We therefore recommend that the remainder of the resources in this phase of the GDDS should be devoted to assisting a small working party consisting of the director of statistics at the ministry of education, the NBS's principal statistical officer responsible for producing the statistical abstract, and an appropriate officer from the Kaduna State education PRS. The working party should aim to prepare the following papers, discuss them with the NSDS team , the NBS and the FME, and present them to the NCC. in November

- A model Service Level Agreement between the Federal Ministry, State Ministries and the NBS for the exchange of education statistics. Adapted from the coordination documents used in the UK⁸.
- A revised education section for the statistics compendium.
- An investigation into the enrolment rate in Kaduna state. Although the results will be of interest in their own right the aim is not to replace or challenge anything currently produced but to demonstrate and test options for rating up for non response and using the true administrative data from school inspection reports to improve the EMIS and the other elements of the Nigerian Statistical System. The paper would build on the work already done in the Universal Basic Education project and compare the schools census; NBS surveys such as the Nigeria Living Standards Survey, CWIQ, and General Household Survey; and whatever is available from the schools inspectorate.

⁸ <http://www.ons.gov.uk/about/our-organisation/corporate-documentation/agreements>
<http://www.statisticsauthority.gov.uk/uk-statistical-system/history/key-historical-documents/>
<http://www.clip.local.gov.uk/lgv/aio/31231>
<http://www.gro-scotland.gov.uk/abotgros/concor.html>

Annex D Summary of activities and acknowledgements

I arrived in Abuja on Saturday 8th March. Monday 10th March was spent with staff of the NBS and the Director-General and preparing visits the following day. Tuesday and Wednesday were spent in visiting statisticians at the Federal ministries of Education and Health and preparing for visits to Kaduna state. Thursday was spent visiting staff of the NBS, the state statistics offices and the state ministry of education at Kaduna. On Friday we visited the Local Government Administration at Kogere, a rural LGA in Kaduna State, and saw the vice principal of the local school and a visiting member of the Schools inspectorate. Saturday 15th March was spent reading reports received and working on preliminary findings. On Monday 17th March a presentation was made to staff of the DFID office in Abuja and senior economists from the World Bank and IMF. On Tuesday we visited the Federal Ministry of Labour, the Federal Ministry of Immigration and the National Directorate of Employment and presented preliminary findings similar to those included in this report to the Director General and the head of the CPTC in NBS. The DG and head of the CPTC endorsed the recommendations in the presentation. Wednesday and Thursday were devoted to writing and reading further reports.

I would like to extend grateful thanks to the following for providing assistance during the mission. In particular Mrs Felicia Obikudu of the Corporate Planning and Technical Coordination department who organised my programme during the visit.

I would also like to thank

Staff of the National Bureau of Statistics

Dr V.O. Akinyosoje, Director- General

Mr S.J. Mayaki Director of Corporate Planning and Technical Coordination

Mr H.C. Etiama Asst. Director in charge of Public Affairs and International Relations

Mr Salami Chief Statistician Social Statistics Division

Mr E.A. Fafunmi Principal Statistician in charge of Website, GIS and Databank

Mr. M.S. Simon Principal Statistical Officer for the Statistical Abstract

Mrs A.N. Adewimbi (Deputy Director CMIS)

Mr Mamza Head of Networks

Mr Ademola Pratt Consultant on the Statistical Yearbook

Mr. P. S. Abaya zonal controller, north west zone

Mr. Bulus Garba deputy state statistical officer for Kaduna state

MDA staff and State Statisticians

Mr. Henry O Airohoudion of the National Directorate of Employment

Dr. Akin Oyemakinde, Head of HMIS Ministry of Health

Mr A.O. Ojo Chief Statistician Federal Ministry of Employment and Productivity

Mr S O Okimbor ACS Federal Ministry of Employment and Productivity

Mr. V. Salisu, ad statistics Kaduna State

Mr. Jogi Isaac, ad statistic Kaduna State

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Mr. Thomas M Danbaki, Vice Principle Kodogere School

Mr. Idris Ibrahim, Director of Statistics, Federal Ministry of Education

Ms. Celina Inuwa, Emis officer Kaduna

Mr. E.S Kaura, head of PRS, Federal Ministry of Immigration

Mr. Charles EDUM, head of IT Federal Ministry of Immigration

Donors etc.

Mr. Greg Nzekwu Senior Economist World Bank Abuja

Ms. Ozoemena S. Nnaji, Senior Economist, IMF Abuja

Ms. Lindsey Block Economic Adviser DFID Abuja

Mr. Scott Caldwell Governance Adviser DFID Abuja

Ms. Jill Reynolds Human Development Economist DFID Abuja

Annex E Principal Reports examined during the visit

NBS Publications

NBS Compendium for Statistical Terms Concepts, Definitions, and Methodologies for Data Production and Management in Nigeria

NBS Social Statistics of Nigeria 2005

Nigeria Abstract of Statistics 2005

Development and Harmonisation of Social Research Indicators in Nigeria

Nigeria Statistical Yearbook 1996

NBS Reports and Documentation

Statistical Master Plan

Statistics law 2007

Status report on the design of a National Strategy for the Development of Statistics in Nigeria

Report of Mission to NBS on NSDS

State Statistical Master Plan

MDA Statistical and Strategic Publications

Statistics of Education in Nigeria 1999-2005

Basic and Secondary Education Statistics in Nigeria

National Health Management Information System Policy

Bulletin of Labour Statistics

Annex F Terms of Reference for Nigeria GDDS work

3.1 General Data Dissemination System, (GDDS phase 2)

3.2 Socio-Demographic Statistics Project for Anglophone Africa: Provision of technical assistance as the expert for:

3.3 Management of Statistical Systems

3.4 to Nigeria

3.4.1 Background

With financial support from the Department for International Development (DFID) of the United Kingdom, the World Bank is implementing a project to assist 21 Anglophone Africa countries to participate in the General Data Dissemination System (GDDS). Participating countries are being assisted to participate in the GDDS through two separate, but linked projects both financed by DFID. The IMF is providing project management and technical support in the area of economic and financial statistics. The World Bank is providing technical support in the area of socio-demographic statistics. Both projects run concurrently until March 2009.

3.4.2 Technical Assistance

Technical assistance is being provided through the World Bank to help countries implement plans for improvement in population, health, agriculture, labor market, justice and security, management of statistical systems, GIS and small area statistics. The GDDS framework developed by the IMF provides the framework for the detailed elaboration of long-term statistical development strategies. Participating countries have already expressed their requests for technical assistance and both the IMF and the World Bank have developed their assistance strategies.

Nigeria was one of the countries which asked for technical assistance in the field of Management of Statistical Statistics.

3.4.3 Terms of Reference

3.4.3.1 Background

Nigeria attended the GDDS 2 Module launch workshop on the Management of statistical systems in **Windhoek in April 2007** where they drew up their Country Work Plan regarding the deliverance of three technical assistance missions covering three country identified priorities. These priorities are part of the Work Plan Structure Doc. The purpose of the work plan structure document is to act as a living document for the duration of the technical assistance and to serve as an information base from which the TOR for every mission can be drawn up. To this end, this TOR for the first mission to Nigeria has been drawn up from the work plan. In this work plan the Nigeria statistical office has decided to focus on one key objective.

Key Objective: Improve data quality in the production of official statistics from administrative records

The Problem to be addressed is: Lack of uniform standards, definitions, concepts & methodologies in the production of data within the Nigeria Statistical System (NSS).

The Purpose of the assignment: The purpose of the assignment would be to complete the first technical assistance mission to Nigeria to address these questions and to define a .tailored approach to deal with them.

The approach taken:

The main purpose of the visit is to identify and prioritize the needs for administrative data collection in the Nigerian Statistical System. This will require; :

1. To draft a list of domains of official statistics for which administrative data sources are needed. That is assumed to be first of all the services that are provided for by government institutions (Education, Health, etc.).
2. To identify the main administrative sources that needs to be used in each of these institutions.
3. To describe by source the existing production processes: data collection and data processing, the examination of the current arrangements for sharing and transferring data between these institutions, and the identification of problems and issues arising from the data itself or the arrangements for sharing it.
4. To list the legal regulations that are relevant for the provision of data from identified administrative sources to statistical offices for statistical purposes, describing their roles and responsibilities as defined by current rules and regulations,

The mission will also attempt to identify a suitable dataset and partner institution to use as a prototype for improving data-flows in a specific area, in order to create a typical case (study).

Activities (to be undertaken together with suitable counterpart provided by NBS) by the consultant:

Week 1

- Identify the key domains, data sets that are relevant in view of the use of administrative sources. (Refer to the National Statistical Development Strategy, and other documents outlining the roles and responsibilities of the NBS and other institutions in the National Statistical System (NSS).)
- Identify the existing production process, and/or the plans for modernization. (refer to the NSDS if available). Refer to statistical publications of NBS and other institutions in the NSS and identify existing data flows
- List the relevant statistics laws, regulations and omissions by domain and in general
- Select central institutions CBN, FMF, & NPC and visit them to discuss data needs and flows.
- Begin visits with a selection of not more than 5 line ministries and other key data providers in the domains of social and economic statistics (e.g. such as FMW, education, health, Police & Prisons, FIRS, FMARD, Solid Minerals, etc.). Note: do not enter into discussions with institutions of financial statistics (Ministry of Finance and Central bank). That is taken care of by the IMF.
- Identify in consultation with NBS a suitable dataset and partner to use as a case study on ways to improve data flows

Week 2

- Revisit data provider identified as key partner
- Revisit the selected institutions to discuss and describe: their data sources, the quality of their administrations, the problems they have in dealing with quality, the information technology and other tools they use, the type of indicators that they have or can provide, the link of those indicators with official statistics, the differences between these agreed output indicators and the administrative data, the process of transmission of data, and the legal and confidentiality issues when relevant.
- Identify gaps in existing administrative data flows; identify problems with transmission mechanisms and data sources.
- These five selected statistical production processes will be described, starting from the data sources toward the use of this data for the production of specific indicators.
- Draft report outlining
 - The principals of coordinating a National Statistical system, only relevant for the use of administrative data
 - A plan for a pilot application of those principals in a particular area (the case study)
 - Description of five flows of data (different institutions) from the sources towards indicators used, or to be used, in Nigerian official statistics.
- Discuss preliminary report with NBS and other key stakeholders
- Agree on objectives and activities for the next two missions with NBS
- Use the enclosed framework (see Annex) for a living document to write together with the counterparts a first report on the mission for their files.

Deliverables:

1. A mission report on the basis of the letter of the GDDS manager.
2. A report on the report writing with the NBS staff.

The following questions may be considered during the work:

- 1) Who are the relevant institutions as sources for administrative data.
- 2) What and how and when are these data sets used? (list of projects that lead to outputs).
- 3) Who are the main users? (list)
- 4) Who are representing the data-providers, by type of data? (list)
- 5) Who is defining the institutional framework for this exchange of information? (list)
- 6) What are the relations between these producers and users of data, institutional and technical?
- 7) What are the plans (indicators and publications)?
- 8) What types of use is made?
- 9) Can MOUs be used to improve the working and communication relations (between data providers and users of administrative data)?

A distinction should be made between the institutional description of the institutions involved and their formal linkages with other government organizations (being users or data providers), and the various production processes. When activities are described that should be the relevant statistical production processes. Needed are also interviews with the most relevant units.

Based on this information, proposals can be drafted for a stakeholder meeting during a next mission.

- **Activities**
 - Review the present documents and plans on the NSS.
 - Assess and determine the needs for changes and additions to the NSS.
 - Review the existing planning of the activities in the NSS domain.
 - Draw up lists of main stakeholders for this topic.
 - Draft a mission report for the file of the country on the discussions held.

- **Output.**

As mentioned below and in the annex A, a mission report is needed, and a common mission report has to be drafted with our partner, using the format of the Living document. Lists of stakeholders and short descriptions of their situation. When possible a Draft Memorandum of Understanding or Memorandum of Agreement to be used between the relevant (statistical) government units that work together, for example as an institution that is a data provider, or a user about the nature of their relation, taking into account the legal conditions like confidentiality. A short note shall be written on the link between the national strategy in statistics and the agreed objectives in the GDDS approach. The proposal for improved coordination can be short.

 1. List of key stakeholders.
 2. List of problems to be addressed.
 3. Main aspects of a strategy to be considered.
 4. The possibility of using Memorandums of understanding to improve cooperation.
 5. Short list of recommendations.

A concluding Mission Report form will be part of the final deliverable. (See letter)

Communications:

You will meet with the Head of the organization and GDDS coordinator at the start of the visit, if possible, and you will report briefly to them at the end of the visit.

Duration

As noted, the total consultant time for the mission is 14 working days with 10 days mission time, 4 days for preparation time and report writing.

Timing

To be completed during March/April 2008.