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SUMMARY, MAIN RECOMMENDATIONS AND ACTION POINTS

SUMMARY

I. Current Situation

Over the years, agencies and processes for producing, using and maintaining statistics as a basis for evidence-based policy making and monitoring were severely eroded, and increasingly, policy making in Nigeria became ad hoc, and monitoring of policy outcome completely absent. Demand within government for good statistics, especially during decades of military rule, declined precipitously; so too did funding for the development of statistical capacity and infrastructure, statistical production and maintenance. There has been a rapid increase in demand for statistics since the return to democratic governance in the country to better support national development processes. This demand has brought to bare (a) the weaknesses in statistical capacity and the dearth of data on social and economic indicators required for monitoring achievement of results on development policies and initiatives, (b) the unreliability of existing data, and (c) unsustainability of current statistical activities.

The main strengths of the National Statistical System on which this Plan aims to build were identified as recognition by stakeholders of the need to reform the system, recognition of the coordinating role of FOS and willingness to collaborate, existence of coordinating committees, existence of research and training institutions, networks of field offices with experienced field staff and existence of core competencies in a number of institutions for data collection and management. The weaknesses inhibiting performance of the National Statistical System which the Plan is set to mitigate or eliminate were identified as lack of a statistical culture, inadequate statistical advocacy, outdated and rather limiting 1957 Statistics Act, overlapping roles among agencies, insufficient coordination and feedback mechanisms, lack of clarify of statistical function in some line ministries, under-resourcing of statistical agencies and activities, general poor IT application among many agencies, inadequate knowledge management, poor maintenance of equipment, inadequate data management and dissemination, lack of data at low levels of aggregation and lack of timeliness in data release. Serious data gaps on many areas of national development were identified including poverty, gender, environment, food security, governance, etc.

A number of opportunities for developing the National Statistical System were identified and will be taken advantage of during the Plan period, including government and donor commitment to development of statistics, increased demand for data and information for informing development processes, the possibilities to share experiences in statistical operations in the sub-region, region and internationally, and existence of international frameworks and guidelines which the system can get off the shelf and use. Risks identified and which the Plan aims to avoid or whose impact will be reduced, were identified as reduced priority for and investment in statistics, failure to implement a new Statistics Act, failure to innovate and perform, inability to attract and retain qualified staff and lack of commitment to coordination

In order to arrest and reverse this trend, government has made improvement in statistics at the national, state and local government levels as one of the national priorities, hence this Statistical Master Plan.

II. Highlights of the Plan

Purpose

This Statistical Master Plan has been prepared to address the sorry state of the National Statistical System and the attendant limitations this has caused especially to key data users. The Plan which has been prepared through extensive consultations with data producers and users, provides: (i) a mechanism for statistical advocacy, (ii) a strategic trajectory defining where the NSO should be in five years time, (iii) a "road map" and milestones for getting there, (iv) a comprehensive and unified framework for assessing user needs on a continuing basis and meeting these needs, (v) mechanisms for feedback and learning, (vi) a framework for mobilizing, harnessing and leveraging resources (both national and international) and energies, and (vii) mechanisms for the creation of quality awareness and enhancement. It takes into account the three-tier government structure in the country – Federal, State and Local Government Area.

Basis

The Plan is based on a critical assessment of data gaps in various socio-economic areas of national life, identified user needs especially for policy design, planning and monitoring national development, and an assessment of existing institutional capacities in terms of resources, infrastructure (physical, techncial, IT and management) and systems to meet these needs.

Long-term vision

The long-term vision for the National Statistical System is one of a proactive, coordinated, wellmanaged and resourced system capable of meeting statistical data and information needs of society towards sustainable national development and poverty reduction.

Core values

The core values of the National Statistical System will be increased demand for and supply of good quality official statistics, and ensuring credibility and integrity of such statistics.

Strategic outcomes

The Plan aims to achieve three strategic outcomes, namely user satisfaction, effective and sustainable processes and staff satisfaction.

Strategic Themes and Goals

The following are the strategic themes and goals or overall accomplishments to be achieved by the Plan in order to realize the above vision and mission for the National Statistical System:

Strategic Theme 1: Organizational Development

Strategic goals: greater awareness about the importance of statistics to society; higher profile and positioning of statistics in government and society; greater use of statistics especially for evidence-based policy design and decision-making; congenial legal framework to underpin statistical arrangements and operations; coordination, collaboration, networking and information sharing among stakeholders; and institutional development.

Strategic Theme 2: Human Resources Development

Strategic goals: strategic skills development through knowledge transfer and training; staff motivation through meritocratic processes for recruitment and promotion, well defined career path, competitive remuneration and a rewards and recognition system.

Strategic Theme 3: Data Development

Strategic goals: improve data quality by creating an effective process value chain. The chain starts with innovation processes - identifying current and future user needs and developing solutions to meet these needs - and proceeds through operations process – delivering quality statistical products to users; increase data quantity through rationalized censuses and surveys, administrative records and exploitation of new areas.

Strategic Theme 4: Data Management, Dissemination and Access

Strategic goals: clearing backlog of unprocessed and unreported data; improved data analysis to add value statistical products and services; improved reporting, dissemination and access to make data and information more liberally and widely available to users in a timely manner and in user-friendly formats to enhance their use.

Strategic Theme 4: Infrastructure and Equipment

Strategic goals: improved infrastructure (physical, management, IT and technical) and supply of equipment to enhance agencies' capacity to produce and manage statistical data and information.

Provision has been made for establishment of routine goals and objectives around which activities and products will be established. The activities to be carried out to achieve the above goals have been identified together with outputs to be produced, associated targets and outcomes or effects that are intended to be achieved in order to meet user needs especially for policy, decision-making and planning.

Plan Implementation

Plan implementation will involve the following:

(i) building consensus around the proposed Statistics Act before it is submitted to the National Assembly for enactment. The Act which provides a legal basis for statistical operations in the country proposes, among other things, creation of an autonomous

modern, state-of-the-art IT-strategy-focused and responsive agency, the Nigeria National Bureau of Statistics to, *inter alia*, coordinate the National Statistical System;

- (ii) creating Plan-supporting organizational structures including Management teams, Departmental teams, Standing Committees and temporary working groups to handle specific cross-functional tasks; setting up a Steering Committee on the Statistical Master Plan; establishing a Master Plan Implementation Unit to coordinate and manage day-today activities and especially the various donor-funded projects;
- (iii) strategic alignment to be achieved by educating everyone in the Bureau and all stakeholders in the NSS (including policy and decision makers) about the Plan, its strategies and how to achieve them; managing change in such a way that change-oriented thinking becomes a habit for every body and that individuals can see change as an opportunity to enrich their careers and personal lives rather than a threat;
- (iv) making the new Bureau an information-age strategic learning organization in order to achieve good outcomes in different work areas;
- (v) preparing business plans or annual work programmes and budgets, with appropriate mechanisms for monitoring and assessing progress; and
- (vi) mobilizing technical assistance especially in the early stages of Plan implementation for in-process guidance and hands-on training of staff to build work-place skills and competencies.

Monitoring and Evaluation

The Master Plan will be a living document. Its implementation will be effectively monitored and at the end of the Plan period, its impact evaluated. Monitoring will be done: (i) to ensure that stated goals are being achieved, (ii) to track inputs, activities and outputs, (iii) to determine if implementation is on course or not, (iv) to alert management to problems or potential problems before the situation becomes critical, and (v) to take corrective actions to ensure that performance conforms to strategy or that the strategy is revised in light of new experience.

Performance indicators covering the external environment, the statistical processes including managerial and technical support, and outputs will be used to monitor and measure performance/ progress. In particular, system-wide indicators will be used to provide an overview of the statistical production across the NSS, agency-related indicators will be used to provide a pointer to the breadth and depth of statistical activities undertaken within the NSS while output indicators will provide an overview of the internal capacity of agencies producing them.

Benchmarking will be systematically undertaken to compare results from different Departments, Branches and Sections with reference to such things as timeliness, user satisfaction (internal benchmarking) and also to compare the Bureau's performance with that of high performing National Statistical Agencies in the sub-region, region and internationally (external benchmarking).

Regular reports will be prepared during the Plan period including: statutory Quarterly Progress Report to be prepared and presented by the Board of Directors of the Bureau to present to the Presidency; Master Plan Implementation Unit will prepare and submit to the World Bank a Quarterly progress report covering all project components; Project Management Reports with key financial data for the quarter and budgeted activities for the next two quarters; Annual Review Report following Annual Review; Mid-term Report following Mid-term Review; and Terminal Report following end of Plan review.

Proposed Budget and Investment Plan

A budget with recurrent and development components has been proposed. This budget will be met from two sources, namely donors and the government. It is expected that donors will assist government with grants and loans to invest in statistical development using the Statistical Master Plan framework. Government will be expected to fund the recurrent budget and to increasingly shoulder the responsibility of funding the development budget as funding by development partners reduces so that by the end of the life of the Plan, government should be funding the bulk of the budget.

III RECOMMENDATIONS AND ACTION POINTS

Given the current state of the NSS, it recommended that the following actions be taken to arrest the declining trend in both the quantity and quality in statistical production.

Organizational development

- Sensitization programmes should be undertaken to create greater awareness about the role and importance of statistics in society, enlist the cooperation of data suppliers in providing needed information and create demand for statistical products and services.
- Government should have the proposed Statistics Act passed into law so that statistical activities and operations including arrangements for data collection, compilation, dissemination and interpretation are underpinned by a congenial statistical legislation.
- Government should raise the profile of statistics and the agencies producing them. In particular, a modern autonomous agency should be established as proposed in the draft Statistics Act. The agency, Nigeria National Bureau of Statistics (NNBS), should be visible, more professional and well resourced.
- The functions and activities of data producing agencies should be better coordinated using the proposed mechanisms.
- In addition to inter-agency (horizontal) coordination, there should be technical coordination to ensure that data from different sources do not conflict and at the very least are comparable. Mechanisms for technical coordination have been proposed.
- The functions of Statistics Branches in line ministries should be streamlined.
- All data producing agencies should be strengthened so that they can better meet user needs.

Human Resource Development

- There should be an in-depth assessment of statistical training needs to be followed by development of a human resource development strategy and a comprehensive training programme.
- In the meantime, need-based training should be undertaken to build: competences in management, technical skills (e.g. sampling and data analysis), and soft skills (communication, report writing, etc).

- Training should be undertaken on an ongoing basis and should include induction for new staff, short in-house courses, short outside courses, study tours, and training for surveys and censuses.
- Given the low level of computerization and computer applications by professional and subprofessional statisticians working in institutions in the NSS, a crash training programme in computer application should be organized for all staff who lack proficiency in IT.
- The Training School should be strengthened and then upgraded.
- There should be training for key data producers in line ministries on how to use data.
- Teaching of official statistics at Universities should be promoted.
- Staff motivation should be made a priority for data producing agencies.

Data Development

- A review of the methodologies and instruments currently in use for statistical production at Federal and State levels should be undertaken.
- A review of the accuracy, reliability and spatial and temporal consistency of existing data should be undertaken, focusing on the soundness of source data and statistical techniques and whether statistical outputs sufficiently portray reality.
- The United Nations Fundamental Principles of Official Statistics should be the overarching guiding principles for the NSS in order for the public to have trust in official statistics.
- The NSS should subscribe to the international statistical community position that data quality enhances their credibility and usability; and that data quality is multi-dimensional and goes beyond the traditional view that equates quality with accuracy.
- The FOS and later NNBS should develop and promote use of statistical standards and appropriate methodologies.
- All national censuses and surveys, and all methodologies and instruments for collection of official statistics including administrative statistics, should be cleared by NNBS and the reports and data sets therefrom should be deposited with the NNBS.
- Resources required to undertake censuses and surveys should be made available in time so that activities are undertaken as scheduled.
- Administrative data collection should be improved through training, provision of equipment and other forms of support to agencies that collect them.
- There is a lot of unprocessed data in many agencies. These data should be processed and disseminated as a matter of priority.
- A policy on data quality should be developed on such things as acceptable error rate and non-response rates
- Data analysis should be improved. As much as possible, subject-matter specialists and Research and Training institutions should collaborate with data producers to add value to data through more detailed analysis especially policy-related analysis.
- A data dissemination policy providing for advance publication of a release calendar and simultaneous release of data to all stakeholders should be developed.
- The Bureau should be proactive in disseminating statistical data and information by providing more information to users in the form of up-to-date product catalogues, providing access to an enquiry point by telephone, fax, the Internet and electronic mail.
- Different media should be used to disseminate data including main bookshops in key towns and Universities in the country, Zonal and State Offices as main outlets for statistical reports, electronic media, press releases whenever new data are formally released, Internet, etc.

Data storage and retrieval should be improved by establishing user-friendly sectoral Data Banks with connectivity to the National Data Bank.

Infrastructure and equipment

- The infrastructure (physical, technical, management and IT) in many agencies needs to be upgraded and equipment supplied to them to a level where they can be able to produce good data efficiently and in a sustainable manner.
- The library should serve as a reference library for all statisticians and other users of statistics in the NSS. It should be well stocked with up-to-date books and journals as well as Internet facilities to facilitate access to publications that are regularly available on web sites of international statistical institutions and associations.
- Local Area Networks and Wide Area Networks should be established and there should be Internet connectivity.
- Equipment to be supplied should include vehicles, stand-by generators, IT equipment, and office equipment.
- There should be IT standards and policies to provide guidelines on such things as: computer hardware and software, computer replacement, virus protection, use of computers and Internet resources and electronic mail.
- A lot of equipment bought in the past either by government or by donor had not been maintained. All of that should stop and institutions should build a culture of maintenance of equipment, plant and vehicles.

Implementation

- Consensus should be built around the proposed Statistics Act through sensitization meetings which FOS should organize.
- The good offices of the Economic Advisor to the President should be used to sensitize the Council of Ministers and legislators about the draft Act.
- The transition from FOS to NNBS should be done in such a way that statistical activities now being undertaken by FOS are not interrupted.
- As much as possible, building bureaucracy, autocracy and top-down management style should be avoided in preference for a streamlined, participatory and coordinated style of management that breaks down organizational silos and encourages cross-functional and problem-solving teamwork should be adopted to manage the NNBS.
- FOS and later NNBS will have overall responsibility for coordinating the implementation of the Master Plan. However, a 15 member Steering Committee on the Statistical Master Plan will be set up at an early stage to coordinate Plan activities.
- Initially SCSMP will report and make recommendations to the Chief Economic Adviser to the President. Once the new Statistics Act comes into effect and NNBS and its Board have been established, the Committee will advise the Board which in turn will report to the Presidency.
- In order to coordinate and manage day-to-day Plan activities, and especially the various donor-funded projects supporting implementation, including the World Bank STATCAP project, a Master Plan Implementation Unit should be established in FOS.

- In-process guidance and hands-on technical assistance in those areas in which there is limited capacity or no capacity at all (new areas) should be sought particularly in the early stage of Plan implementation.
- FOS should mount a consistent communication programme to develop an understanding of the Plan strategies throughout the Bureau, mobilize staff to support them, educate staff about management systems and provide for feedback about the strategies.
- The Master Plan should be implemented in such a way that change is well managed so that individuals can see it as an opportunity to enrich their careers and personal lives.
- For its effective day-to-day implementation, the Plan should be translated into business plans or annual work programmes and budgets, with appropriate mechanisms for monitoring and assessing progress.

Monitoring and Evaluation

- Plan implementation should be effectively monitored and at the end of the Plan period, its impact evaluated using performance indicators and targets set in the Plan.
- Both internal and external benchmarking should be undertaken to assess performance and as a basis for improvements
- Monitoring of Plan implementation should be a continuing process. However, specific reviews have been identified which should be undertaken as specified.
- Reports on Plan implementation should include the statutory Quarterly Progress Report by the Board to the Presidency, quarterly Project Management Report, Annual Review Report, Mid-term Review Report and Terminal Review Report.

Budget

- The budget for the Master Plan should be met from two sources, namely donors and the government. Donors will assist government with grants and loans to invest in statistical development using the Statistical Master Plan framework.
- Government should fund the recurrent budget and increasingly shoulder the responsibility of funding the development budget as donor funding reduces.

Sustainability

To increase prospects for sustainability of the National Statistical System, dynamic and responsive organizational structures, systems and cultures should be created, requisite capacity should be built, all advisors should have counterparts for purposes of transferring knowledge and skills, and government should progressively increase it's funding for the activities originally funded by donors.

ACRONYMS

AAPA	Addis Ababa Plan of Action
ADB	African Development Bank
AIDS	Acquired Immunity Deficiency Syndrome
CBO	Community Based Organization
CBN	Central Bank of Nigeria
CEAR	Centre for Econometric and Allied Research
CEO	Chief Executive Officer
CMIS	Computer Management & Information Systems
COICOP	Classification of Individual Consumption According to Purpose
CPI	Consumer Price Index
CPTC	Corporate Planning & Technical Coordination
CSD	Census & Survey Department
CSRD	Civil Service Reform Decree
CWIQ	Core Welfare Indicator Questionnaire
DFI	Direct Foreign Investments
DFID	Department For International Development
DG	Director General
DQAF	Data Quality Assessment Framework
DSBB	Data Standard Bulletin Board
ECA	Economic Commission for Africa
ECOWAS	Economic Community of West African States
EMCAP	Economic Management and Capacity Building Project
EA	Enumeration Area
EU	European Union
FBE	Frame of Business Establishment
FACCS	Federal Agencies' Consultative Committee on Statistics
FAO	Food and Agricultural Organization
FME	Federal Ministry of Education
FOS	Federal Office of Statistics
FIIRO	Federal Institute for Industrial Research Oshodi
FSCC	Federal Statistics Coordinating Committee
FSM	Field Services Methodology
GDDS	General Data Dissemination System
GDP	Gross Domestic Product
GFS	Government Finance Statistics
GHS	General Household Survey
GIS	Geographic Information System
GPS	Global Positioning System
HIV	Human Immune Deficiency Virus
HRDS	Human Resource Development Strategy
ICT	Information and Communications Technology
IMF	International monetary Fund
ILO	International Labour Organization
ISIC	International and Industrial Classification

IT	Information Technology
LAN	Local Area Network
LGA	Local Government Area
LGIS	Local Government Information System
LGMIS	Local Government Management Information System
LGSA	Local Government Statistical Agencies
LSMS	Living Standard Monitoring Survey
MAN	Manufacturers Association of Nigeria
MDGs	Millennium Development Goals
NACCIMA	Nigeria Association of Chamber of Commerce, Industry Mining
in teenin i	and Agriculture
MIS	Management Information System
MPIU	Master Plan Implementation Unit
MTEF	Medium Term Expenditure Framework
MTR	Mid Term Review
NACS	National Advisory Committee on Statistics
NEPA	National Electric Power Authority
NASC	National Agricultural Sample Census
NCC	Nigeria Communication Commission
NCCS	National Consultative Committee on Statistics
NCIB	National Census of Industries and Businesses
NCS	National Council on Statistics
NDB	National Data Bank
NDHS	Nigeria Demographic & Health Survey
NEEDS	National Economic Empowerment and Development Strategy
NGO	Non Governmental Organization
NPEC	National primary Education Commission
NIS	National Information System
NISE	National Integrated Survey of Establishment
NSIS	National Statistical and Information System
NNBS	Nigeria Bureau of Statistics
NNPC	Nigeria National Petroleum Commission
NISER	Nigeria Institute for Social & Economic Research
NISH	National Integrated Survey of Household
NISTF	Nigeria Insurance and Social Trust Fund
NPC	National Planning Commission
N.POP.C	National Population Commission
NSA	Nigeria Statistical Association
NSDS	National Service Delivery Survey
NSO	National Statistical Office
NSS	National Statistical System
PDS	Professional Diploma in Statistics
PGDS	Post Graduate Diploma in Statistics
PFO	Permanent Field Organization
PMD	Personnel Management Department
PMR	Project Management Report
PPI	Producer Price Index

DPRS	Department of Planning Research & Statistics
PRSP	Poverty Reduction Strategy Paper
QPR	Quarterly Progress Report
SAP	Structural Adjustment Programme
SAM	Social Accounting Matrix
SCSMP	Steering Committee on Statistical Master Plan
SDB	Sectoral Data Bank
SEAD	Social & Economic Analysis Department
SEEDS	State Economic Empowerment and Development Strategy
SMART	Specific, Measurable, Achievable, Relevant and Time Bound
SMP	Statistical Master Plan
SG	Statistician General
SNA	System of National Account
SSAs	State Statistical Agencies
STATCAP	Statistical Capacity Assessment Programme
SWOT	Strengths, Weaknesses, Opportunities and Threats
TFSCB	Trust Fund for Statistical Capacity Building
TQM	Total Quality Management
TR	Terminal Review
TV	Television
UN	United Nations
UNDP	United Nation Development Programme
UNECA	United Nation Economic Commission for Africa
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations Children Fund
USA	United States of America
USAID	United States Aid for International Development
WAN	Wide Area Network
WHO	World Health Organization
YER	Yearly External Review
ZSO	Zonal Statistical Office



Introduction: Current Status and Assessment

CHAPTER ONE

Background and the Process

1.1 Background

1.1.1 Area, Climate and Political Development

Area and Climate

The Federal Republic of Nigeria has a land mass of 93,768 sq. kms. and its population was, at the last Population and Housing Census in 1991, about 89 million (Annual Abstract of Statistics, 2001 edition). The projected population for 2003 was 120 million people. The country is bounded on the West by the Republic of Benin, on the East by the Republic of Cameroon; on the North by Niger and Chad Republics, and on the South by the Gulf of Guinea.

Near the coast is a belt of mangrove swamps traversed by a network of creeks and rivers and by the great Niger Delta. Beyond this lies successive belts of tropical rain forests that break into a more open woodland with hilly ranges and the undulating plateau with hills of granite and sandstone, rising from 610 metres on the average to 1,829 metres east-wards. Midway north of the country the vegetation is grassland interspersed with trees and shrubs, which finally terminate in the Sahel Savanna region of the semi-arid North East.

Nigeria is blessed with favourable climatic conditions. The climate is equatorial and semiequatorial in nature. It is characterized by high humidity and substantial rainfall. There are two seasons in Nigeria – the wet and dry seasons. The wet season lasts from April to October while the dry season lasts from November through March.

Political and socio-economic Development

The Federal Republic of Nigeria consists of thirty-six (36) States and the Federal Capital Territory (Abuja). The entire country is further sub-divided into seven hundred and seventy-four (774) Local Government Areas (LGAs).

Nigeria attained Independence in 1960 and a Republic Status in 1963. The political development of Nigeria is characterized by instability with military dictatorships spanning almost three decades and allowing only about thirteen (13) years of civilian administration. The implication of this to the socio-economic development of Nigeria cannot be over emphasized, especially the downturn in quality of public service including statistical services.

The development of the petroleum industry during the 1960s and 1970s transformed Nigeria into an oil-exporter, and by mid-1970s, Nigeria was the second most dominant economy, after the republic of South Africa, in Sub-Saharan Africa and the continent's major exporter of petroleum. Petroleum alone accounted for close to 13% of GDP, at factor cost, in 1997,

and agriculture, hunting, forestry, fishing, mining and quarrying together made up about 52% of GDP. This pattern prevailed during the second half of the 1990s.

The decline in petroleum prices after 1981, a series of poor harvests, an overvalued currency and a widening budget deficit combined to make imports too expensive as well as diminishing export earnings leading to difficulties in financing major development projects. Austerity measures were introduced by the Shagari civilian administration in 1982 and Buhari military government in 1984 and 1985. They were continued after 1985 by the Babanginda military government which also adopted a structural adjustment program (SAP) in July 1986. However, SAP failed in Nigeria where the budget deficit had reached 11.4% of GDP in 1988, increasing to more than 12% of GDP in later years. Inflation had also grown from a yearly average of 24.0% in 1986-91 to 44.6% in 1992, to 57.2% in 1993 and 72.8% in 1995. SAP was, therefore, abandoned in 1994.

Political instability continued into the 1990s and it severely undermined international confidence and impeded the implementation of the economic policies of successive military regimes and civilian governments. The political and socio-economic environment for statistical development was, therefore, generally unfavourable in the 1990s. The return to civilian rule on May 29, 1999 led to an end to international sanctions and a revival of international confidence in Nigeria. The political and socio-economic environment for statistical development would, therefore, tend to be more favourable in the coming years.

1.1.2 National Development Framework

In spite of the successes achieved so far, the Federal Government is concerned about the socio-economic situation in the country. It is concerned about:

- (a) the low GDP growth rate which averaged 8% in the 1992 and 3.5% during 1999-2003. This low growth rate has been attributed to low productivity, de-capitalization, under-capitalization, low savings, low investment and growth trap. It is estimated that a minimum of 5% GDP growth rate has to be achieved to stop poverty from getting worse; and 7% or more to achieve the Millennium Development Goals by 2015. In addition, an annual investment rate of 30% of GDP will have to be achieved currently, the rate is 18%;
- (b) high levels of poverty, estimated at about 70% of the population in 1996/97 (FOS, April 1999). Other socio-economic indicators are poor, there is rising HIV/AIDS prevalence and the income inequality is one of the worst in the world. According to the UNDP Human Development Report 2003, the Gini Index for Nigeria is 50.6. The index measures the extent to which the distribution of income (or consumption) among individuals or households within a country deviates from a perfectly equal distribution. The higher the Gini Index, the higher the income inequality. A high level of income inequality stymies the prospects for growth as well as the subsequent impact of any growth on poverty reduction;
- (c) poor fiscal performance including heavy weight of government expenditures and government consumption in the economy, volatility of revenue and expenditures, lack of strong fiscal discipline, weak revenue effort, complicated tax policy and low tax compliance;
- (d) weak public institutions, weak human resource capacity;
- (e) low levels of transparency in government business and attendant high levels of corruption;

- (f) heavy unsustainable external and domestic debt burden;
- (g) poor infrastructure, weak basic social service provision and generally poor environment for private sector.

Accordingly, the Federal Government is elaborating a major reform programme, titled **National Economic Empowerment and Development Strategy** (NEEDS). NEEDS is a home-grown Poverty Reduction Strategy Paper (PRSP) equivalent, with the ultimate goals of reducing poverty, employment generation and wealth creation. It is expected that among the many frameworks of the NEEDS will be a Medium-term Expenditure Framework (MTEF) which involves a multi-year rather than annual budgeting, re-orienting expenditure towards priority and critical areas while restraining overall spending levels. Given the nature of the federation, NEEDS will be rolled out to States in form of **State Economic Empowerment and Development Strategy** (SEEDS). It is planned that SEEDS are prepared for the States using guidelines laid out by the Federal Government.

1.1.3 Government's Statistical Development Strategy

The statistics sector has in the past not received as much attention by government as it should. As a matter of fact, agencies and processes for producing, using and maintaining statistics as a basis for policy making and monitoring have been severely eroded and over the years, policy making became increasingly ad hoc, and monitoring of policy outcomes completely absent. Over the years, especially during decades of military dictatorship, there was little demand within government for good statistics and overtime funding for production and maintenance of statistics dwindled to almost nothing. At the same time, capacity fell drastically. This explains the absence of a government statistics policy or statistical development strategy.

1.1.4 Past and Ongoing Donor Support for Statistics

(a) Donor support

Over the years, the National Statistical System has benefited immensely from donor support as follows:

FOS

External assistance to FOS has been received from a number of sources, including the United Nations Economic Commission for Africa (ECA), United Nations Statistics Office, United nations Development Programme (UNDP), United Nations Children Fund (UNICEF), United Nations Fund for Population Activities (UNFPA), International Labour Organization (ILO), United Nations Food and Agriculture Organization (FAO), Economic Community of West African States (ECOWAS), United Kingdom Department for International Development (DFID), International Monetary Fund (IMF) and World Bank, among others and mainly for manpower training and for the purchase of equipment.

UNDP provided significant assistance through the National Statistical and Information System (NSIS) in 1995-1998 mainly for capacity building. Other international and bilateral assistance went to funding various activities especially at FOS including the following:

- the Multiple Indicator Cluster Surveys, 1997 (UNICEF provided equipment as well as actual data collection)
- the National Agricultural Sample Census, 1993 (FAO provided technical assistance and 3 Toyota land Cruisers)
- the Core Welfare Indicator Questionnaire (CWIQ) Survey carried out in 12 States between 2002 and 2003. DFID funded data collection in 4 States, World Bank in 6 States, European Union in 6 States. The survey was repeated in 4 States with funding by the World Bank and European Union.
- IMF assisted in National Accounts the construction of which was done by an informal committee composed of members from FOS, Nigeria Institute of Social and Economic Research (NISER), Central Bank of Nigeria (CBN), and National Planning Commission. World Bank assistance in the 1980s and 1990s related to national accounts, government enterprise statistics, and statistics related to poverty reduction.

Under the World Bank Technical Assistance Project 1989-1992, 22 Toyota Land Cruisers, equipment for agricultural surveys (prismatic compasses and measuring tapes) and computers were supplied to FOS, Also technical assistance was given in migrating the processing of foreign trade data from main frame computer to PCs, computerization of processing of Consumer Price Index (CPI), conducting a National Census of Industries and Businesses. Finally the project engaged two International Consultants to do a quick fix of National Accounts. The successor project, Economic Management Technical Assistance Project (1993-1997) continued to assist FOS in staff training and funding some special surveys as mentioned earlier.

There is an ongoing assistance project at FOS called Economic Management and Capacity Building Project (EMCAP). EMCAP is a multi-donor programme whose overall objective is to help improve Nigeria's economic governance by strengthening key institutions. The project started in 1999 and under the project:

- (a) Quarterly Economic Surveys were resumed after about 10 years of no survey taking. The last Annual and establishment surveys had been last done in 1991/92.
- (b) National Accounts have been updated up to 2003, using a new base. Data from the said Quarterly Economic Surveys were used in the updating of National Accounts.
- (c) In order to conduct these surveys, DFID funded the updating and computerization of the FOS Register of Establishments using information from the Registered Companies that pay VAT. DFID will be funding fieldwork to physically verify the updated register.
- (d) It was under this project that DFID provided funding for conducting CWIQ in 4 States as already mentioned above.
- (e) The EU is providing assistance in the following areas:
 - (i) General support to FOS
 - (ii) Poverty statistics
 - (iii) Social sector statistics
 - (iv) National Consumer Survey
 - (v) Core Welfare Indicators Questionnaire (CWIQ) Survey

National Population Commission

Technical Assistance for the National Population Commission was reported to have come from UNFPA, United States Agency for International Development (USAID), ECA and various other organizations and friendly governments. The types of assistance included support for Demographic and Health Surveys, the Population and Housing Census of 2001 and advisory services.

UNFPA is expected to provide \$1,200,000.00 for the census, UNFPA assisted in implementing a National Demographic and Health Surveys (1999) to the tune of \$260,000.00 to enable the evaluation of the population policy of 1988-2000. And support from ECA was made available through advisory services on cartography, sample surveys and data processing. Other assistance came from USAID, UNDP and friendly countries.

Ministry of Agriculture

FAO has supported the collection, processing, production and dissemination of agricultural statistics in the country. World Bank and UNDP have also provided technical assistance. External support was strong up to 1998 when it started to be phased out, or arrive only in trickles.

Ministries of Education and Health

Currently the World Bank is assisting with data collection in the School Census in the Ministry of Education, implementation of the National Health Management Information System in the Ministry of Health, etc.

Central Bank of Nigeria

Like other institutions, the Central Bank has also received technical assistance from the donor community. This assistance has been received from IMF and the World Bank.

(b) Lessons Learnt

The NSS benefited immensely from donor assistance. The following lessons have been learnt from donor assistance received so far for statistical development in the country and have informed the design of the Statistical Master Plan (SMP).

- (i) Resources are needed to produce and make available to users the kind of statistics they need. Indeed with donor assistance, many statistical activities, which had been abandoned for lack of resources, e.g. surveys, report publishing were resumed. Also new activities could be undertaken to fill existing data gaps using resources provided by donors.
- (ii) Investment in infrastructure is essential for statistical production. For instance, with donor assistance, many computers were bought for various institutions. With these computers, huge backlogs of unprocessed data were cleared and time lag in release of statistical data reduced.
- (iii) It is necessary that government makes available counterpart funds so that activities funded by donor assistance do not grind to a halt when the assistance ends. Because government could not make counterpart funding available, many activities could not

be sustained when projects ended. Issues related to activity sustainability should, therefore, be adequately addressed in project design.

- (iv) A lot of equipment bought using donor funding could not be maintained and are now in a state of disrepair. Institutions should begin to build a culture of maintenance of plant, equipment and vehicles.
- (v) While many actors in the NSS received donor assistance, there was no framework for coordinating the assistance. So the assistance was ad hoc and piecemeal. As a result, the impact of the assistance was not as much as it could have been had it been coordinated. Coordination of donor assistance, therefore, should be promoted for greater effectiveness.
- (vi) Donor assistance had no significant impact in raising the profile of statistics in government and in creating greater awareness about the importance of statistics in the society. It is important that all statistical activities should have a component on advocacy.

1.2 THE PROCESS OF DESIGNING THE SMP

Careful attention was paid to the process of designing the Master Plan. This is because it is widely believed that in designing a Strategic Plan, the process is as important as the Plan itself.

1.2.1 Consultation and Participation

The process was consultative and participatory with national staff fully involved at every stage of the process. In particular, the FOS staff were encouraged to get fully involved in the diagnosis of the weaknesses of official statistics and in building consensus on strategies for strengthening the FOS and the NSS. This approach creates opportunities for staff empowerment (in particular, the staff will get exposed to many international statistical standards, concepts, frameworks and experiences), participation, internal and external communication, understanding and owning the sum and substance of both the process and the product (Plan). Both participation and ownership are essential ingredients for successful strategic management and the key to the success of Plans as they lead to more commitment, creativity, imagination, innovation and productivity.

The Consultants worked on a daily basis with members of staff of the FOS coordinated by Mr. J.O. Oladoye, the Director for Corporate Planning and Technical Coordination, and under the overall direction of Mr. Ahmadu Umaru, the Director-General, FOS. Many issues were discussed with the Director-General of FOS.

A Stakeholders' Workshop was held at the beginning of the work to empower national staff so that they could appreciate and meaningfully participate in the exercise. Another workshop will be held towards the end of the assignment to receive and discuss the Draft Master Plan. In addition, more focused smaller discussion groups were organized to address different aspects of the work. These aspects include (but are by no means limited to):

- conducting a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis with FOS staff and other stakeholders by identifying and evaluating (a) internal strengths and weaknesses in functional areas so that the Plan could build on the strengths and aim to mitigate or eliminate the weaknesses, and (b) external opportunities and threats so that advantage could be taken of the opportunities and threats can be avoided or their impact reduced;
- reviewing the "vision" and "mission" for the FOS and conducting a "vision" and "mission" exercise for the NSS;
- defining requirements in terms of human resources, office infrastructure, equipment, communications and transport;
- planning and developing strategies;

1.2.2 Previous Work

It is important to note that in the last 10 years or so, several initiatives have been taken to study and advise on how to strengthen FOS and the NSS. However, the recommendations of these initiatives and studies were not comprehensively implemented.. As much as possible, the design of the Statistical Master Plan (SMP) has taken into account recommendations and lessons learnt from these initiatives and studies (some of them recently done). This has helped to bring the thinking and experience of different experts (both national and international) to bear on the design of the SMP.

The studies include:

- a) FOS Management Study, 1992 by Cooper and Lybrand (sponsored by UNDP)
- b) Re-organization of FOS by a Re-organization Committee, June 1992 (Prof. J.N. Adichie et al)
- c) Data Production and Information Management in Nigeria by Prof. Biyi Afonja, 1999
- d) FOS Organization and Management Review by Graham Eele and Kathy Higgins 2000
- e) Report on the Evaluation of the Implementation of the Addis Ababa Plan of Action (AAPA) for Statistical Development in Africa in the 1990s in Nigeria by Prof. Ayenew Ejigou, 2000.
- f) Human Resources for Nigerian Statistical System by Prof. Biyi Afonja, 2001
- g) Assessment of Statistical Capacity and Strategy for Statistical Development in Nigeria Prof. Biyi Afonja, 2003

1.2.3 Data Needs and Capacity Assessment

The *raison d'etre* for strengthening the NSS is to better support national development processes by providing needed statistical data and information required for sound development policy-making and effective decision-making, accountability and democracy. The NSS needs to be demand-driven rather than supply-driven leading to better response to determine user requirements for statistics. Data needs assessment was conducted to determine, synthesize and prioritise current and future needs of main stakeholders. Main data users were identified and discussions held with them. The discussions sought to consult users on how they use statistical data, availability and non-availability of required data, their

assessment of the adequacy of available data and their current and perceived future data needs and priorities.

In addition to the data needs assessment, a capacity needs assessment was undertaken to determine the ability of FOS and other key data producers to satisfy user needs— ability in terms of organization, physical and technical capacity, and data collections systems. This was done by holding discussions with various data producers with a view to updating the available information from different studies that have been carried out. The assessment focused on such things as: the inventory of their capacity; what data they produce; how data are produced; how

they co-ordinate with data users; how they process, analyse and archive data; how they disseminate data to users; appropriate strategies for improvement; capacity building programmes; and requirements for technical assistance.

In order to ensure that no major categories of data users and producers was left out, data users and producers were classified into broad user and producer groups and information collected from selected agencies within each group. The groups were: government ministries/institutions, States and Local Government Areas,, public sector operators, private sector operators, civil society, training and research institutions, and donors and international organisations

Appropriate formats were designed and used to collect the required information, including:

- Data Needs Assessment: Current and Future Data Items Required (Annex I),
- Statistical Capacity Assessment (Annex II),
- Schedule for Focus Group Discussions (Annex III).

1.2.4 Workshops

A one-day Stakeholders' Workshop on Strategic Management was held to sensitize key stakeholders about the status of the NSS and the need for a paradigm shift in the production and management of official statistics. It focused on the need for assessing user demand on an ongoing basis and application of modern result-oriented management principles in responding to data needs. It was expected that once empowered, these stakeholders would play an informed and meaningful role in the process of designing and implementing the SMP.

The second workshop will be held towards the end of the assignment. It will be broader in terms of participation. It will be held to enable key stakeholders to receive and deliberate on the Master Plan, and to build broad consensus on strategies for strengthening the NSS. This second workshop will last for two days and will be given a high profile, possibly with the Economic Advisor and Chief Executive Officer (CEO) of the Planning Commission opening it officially.

CHAPTER TWO

Current Status of the National Statistical System

Before the current status of the National Statistical System (NSS) is described, it is important that there is a clear appreciation of what the NSS is and what it is not. It is also important that the review is done against the backdrop of desirable characteristics of a NSS. This will make the review of the system easier and more complete.

2.1 What is a National Statistical System?

There is a general tendency to narrowly conceive the National Statistical System (NSS) as comprising data producers, leaving out altogether or paying cursory attention to other components of the NSS that are equally important. In this Master Plan, the NSS is conceived to comprise four main components, namely:

- Data Producers
- Data users
- Data suppliers
- **Research** and training institutions

2.1.1 Data Producers and Their Roles

Who are data producers?

Production and compilation of official statistics in Nigeria can be characterized as decentralized, with many institutions involved in data collection and/or compilation at Federal, State and Local Government levels. The main institutions involved in data collection and/or compilation, however, include:

At federal level

- 1) Federal Office of Statistics (FOS)
- 2) Central Bank of Nigeria (CBN)
- 3) National Population Commission (N.POP.C)
- 4) National Data Bank (NDB)
- 5) Departments of Planning, Research and Statistics (DPRS) of Ministries and Parastatals
- 6) Research and Training Institutions

At State level

- 7) The State Statistical Agencies (SSAs)
- 8) Budget and Planning Departments of Local Government Councils.

The structure and functions of each of these agencies will be discussed below.

Roles of data producers

The role of data producers is to ensure that there is a continuous flow of high quality and accessible statistical data and information over an extended range of economic and social

subject matter required by users for a host of purposes. Statistical data and information are of high quality if they are relevant, comprehensive, accurate, consistent in time and space, disaggregated by main domains (e.g. gender, vulnerable groups, etc), timely and accessible.

2.1.2 Data Users and Their Roles

Who are data users?

Data users are the clientele of data production systems. They demand and utilize statistical products and services. It is important to mention that users are the most important component of the NSS. Statistical data and information are produced because users are there to demand and use them. Indeed, there cannot be a sustainable NSS without good users of national statistics. In a sense, therefore, the NSS will be sustained to the extent that it is user-focused and demand-driven.

Data users are diverse and their number is large and ever increasing. The main users, however, have been identified as:

- Policy and decision makers in government ministries and institutions, and quasigovernmental bodies,
- Politicians (e.g. Members of Senate and House of Assemblies),
- Authorities in States and Local Governments,
- Researchers and academicians,
- NGOs,
- Private sector Organizations,
- The donor community,
- International organizations,
- The media,
- The general public.

Statistical data and information are used for a variety of purposes as can be seen below:

(i) *Governments*

The Governments and their Ministries are the major users of statistical data and information in any country. They use them for planning, administration, monitoring, governance and accountability. In particular, they use the statistical data and information to:

- assess policy and programme options aimed at improving the well being of the population e.g. building roads, providing clean water, building schools, providing relief in case of disaster, etc.;
- monitor implementation of development activities and to measure their impact;
- for governance and administration such as deciding on grants to give to different administrative units, demarcating constituencies for electoral purposes, etc.
- identify vulnerable groups in society (e.g. the poor, aged, children and socially disadvantaged) for whom it designs special programmes usually multi-sectoral in nature e.g. NEEDS,
- demonstrate progress against development targets and also to plan and monitor the implementation and success of policies developed to achieve the targets.
- (ii) Private sector

Economic agents (business enterprises, associations, trade unions, etc) use data to assess opportunities, risks and prospects. They also use data to plan, make decisions, monitor, evaluate and report on business activities. For instance, traders use statistics to determine where to buy and sell products and to take critical investment decisions. The trader will want to know the prices of produce at the farm and the price of produce in the market before he decides to buy.

(i) Non-Government Organizations (NGOs) and Community-based Organizations (CBOs)

Non-Governmental Organizations (NGOs) are voluntary organizations that work for specific causes, mainly humanitarian in nature. They work with and among targeted communities – e.g. rural poor, women, the disabled, children, the displaced, etc. Community-Based Organizations (CBOs) are service organizations that provide social services at the local (community) level. Both NGOs and CBOs need and use a lot of population and other statistics to plan, implement, monitor and evaluate their activities. They also use statistics to report back to their headquarters.

(ii) Donors and international organizations

There are many donors (bilateral and multilateral) assisting Government with its development programmes. The donor community uses statistics a great deal to assess requirements for assistance and/or participation in development initiatives and to evaluate the effectiveness of the assistance given e.g. on reduction of poverty. They also use statistics to report back to their headquarters.

(v) The Press

The press uses statistics to inform analysis and reporting on various issues.

(vi) The general public

Members of the general public use statistics for a variety of purposes including public debate, making individual decisions and assessing the performance of government.

Roles of data users

Data users have a major role to play in the NSS including advancing a "*common understanding* of policy issues and related data requirements, setting data priorities, clarifying the objectives for data collection and agreeing on the best methods for collecting data"¹. In essence, data users are expected to play upstream roles in the development of the NSS.

2.1.3 Data Suppliers and Their Roles

One component of the NSS that is usually not mentioned much but which nonetheless is very important is the component of data suppliers. Data suppliers mainly include:

- Households
- Individuals and groups within specified organizations

¹ UN Statistical Office: Household Surveys of Agriculture, a Methodological Study, Department of Technical Cooperation in Development, Statistical Office, N.Y, 1991

• Establishments

The role of data suppliers is to cooperate with data collecting agencies in supplying accurate data and information when requested and in the form they are required.

2.1.4 Research and Training Institutions and Their Roles

Researchers

A lot of data collected by data producers are usually insufficiently analyzed. In order to add value to data and to do definitive and especially policy-related analyses, researchers, academicians, policy-analysts and specialists (e.g. poverty and gender analysts) should bring their subject-matter knowledge to bear on the process of data analysis. Essentially these intermediate data users turn data into usable information.

The main research institutions include:

- 1) Nigerian Institute of Social and Economic Research (NISER)
- 2) Centre for Econometric and Allied Research (CEAR)
- 3) Federal Institute for Industrial Research, Oshodi (FIIO)
- 4) Departments of Statistics in Universities and Polytechnics

Training institutions

Training institutions use live data from the system for teaching and illustration purposes. In addition, they have a major role to play in meeting training needs for the NSS. Training institutions also play the important role of developing and promoting appropriate data collection methodologies.

The main training institutions are:

- Federal Schools of Statistics
- Departments of Statistics at Nigerian Universities

2.2 What Should the NSS Achieve?

It is important that the NSS is effective. An effective NSS will:

- raise the profile of statistics and make them visible in government and society;
- advocate for statistics by making a general case for the importance and role of statistics in informing the process of governance, facilitating better decision-making and hence faster growth and more effective use of valuable resources for development and poverty reduction;
- promote a culture of evidence-based planning and decision -making;
- provide good quality statistics according to internationally recognized quality dimensions of relevance, completeness, consistency, accuracy, timeliness, disaggregatablility;
- make the statistics readily accessible and usable by a whole range of data users;
- mobilize and properly use national and international resources for statistics;
- promote coordinated investment in developing statistical capacity; and
- create demand for statistics.

2.3 Characteristics Of An Effective National Statistical System

National Statistical Systems in both developed and developing countries are grappling with the questions:

- What is our mission?
- How do we perform and can we do better?
- How do we convince government that statistics are important and adequate resources are needed?

These questions have led to major reviews of National Statistical Systems in many countries in recent past – in U.K and India and in many African countries.

There are a number of international standards against which the performance of NSSs can be gauged. However, the overarching standards are codified in the Fundamental Principles of Official Statistics.

2.3.1 Fundamental Principles of Official Statistics

The Fundamental Principles of Official Statistics were adopted by the United Nations Statistical Commission in 1994 and are now a universally agreed overarching framework for the mission of National Statistical Offices (NSOs)² and indeed also for official statistics in any country. The principles which are presented in Annex IV, give a set of fundamental values and principles, which NSOs and indeed other data producers should have in order for the public to have trust in official statistics they produce. These principles with which the NSS should be compliant include:

- **independence** of the NSS in order to protect the credibility and integrity of official statistics,
- □ **relevance** which refers to the appropriateness or comprehensiveness of statistical products,
- **credibility** which refers to professionalism, transparency and ethical standards that help to create a brand name, and define independence and separation from pernicious political influence, and
- □ **respondent relations** which cover suppliers, including private sector, and users of statistics, and involve selling the use of statistics to policy-makers and profiling statistical products to the public.

It is now recognized that integrity and credibility of data are better assured if:

- official statistics are free from political influence,
- the NSO enjoys a high profile,
- best practices and highest professional standards are applied,
- there is transparency of sources and methods, there is a well-defined dissemination policy that provides for advance publication of release calendar and simultaneous release of data (principle of equal access to data).

2.3.2 Legal Framework

² How We Are Doing: Performance Indicators for National Statistical Systems by Willem F.M. de Vries, Netherlands Official Statistics, Vol. 13, Spring 1998.

It is generally agreed internationally that a strong statistical legislation is a fundamental prerequisite for an effective statistical system³. A strong legal base is also central to the protection of confidentiality and the assurance of impartiality and objectivity of official statistics. In very poor countries, the role of statistical legislation in the production and dissemination of official statistics is particularly critical. The legislation should at a minimum do the following⁴:

- (a) list the functions of the statistical system, including the dissemination and publication of statistics as required for economic and social policy-making and to satisfy the essential requirements of domestic and international users,
- (b) provide the legal power to collect information,
- (c) establish the professional independence of the statistical system from political intervention,
- (d) ensure the confidentiality of information provided by individual entities, and
- (e) provide the coordination of statistical activities.

2.3.3 Shared Vision

An effective NSS should have a **vision** and **mission**. The vision will answer the question: What do we want the NSS to become or look like in, say 5 years from now, while the mission will answer the question: What is our business or purpose for existence? Both the vision and mission should be well-defined and clear statements that are shared among stakeholders in the system. The statements should inspire, supply energy, motivate and galvanize organizations in the NSS.

These statements should be well known to and lived by all staff in key stakeholder institutions – the staff should "*walk the talk*".

2.3.4 Strategic Direction

In addition to the vision and mission, a good NSS should have set strategic direction. It should have **strategic goals**, which define the overall accomplishments to be achieved over a defined time period. These objectives should be SMAT (Specific, Measurable, Achievable, Relevant and Time-bound). It should also have **strategies** or overall methods for achieving the strategic goals and milestones for achieving the goals. Associated with strategies is need for a comprehensive and unified framework for assessing and meeting user needs; mechanisms for feedback and learning, a framework for mobilizing, harnessing and leveraging resources (both national and international) and energies; and a framework for creation of quality awareness and enhancement.

2.3.5 User Focused and Driven

It is important that a NSS is user/demand focused and driven i.e. established to meet both national information needs for monitoring national development - in particular, poverty reduction - and good governance and accountability.

³ Consultative Seminar on Governance of National Statistical Systems, Singapore, May 28-30, 2003.

⁴ Sarmad Khawaja and Thomas K. Morrison: Statistical legislation: Towards a More General Framework, IMF Working Paper, WP/02/179

A user/driven NSS requires, *inter alia*, that the system identifies: (a) who the main users are, (b) what data and information they require, (c) the form in which they require the data and information, (d) what they use the data and information for, and (e) data and information gaps, and then effectively responds to fill the gaps.

While the system should also provide statistical information to meet international needs, statistical activities and programmes should not be donor-driven. They should be nationally conceived, owned and to the extent possible, nationally funded. The national government should appreciate that statistical development is sustained and see it as a long-term process that required investment. That way, the system has prospects for sustainability.

2.3.6 Robust and Dynamic

A good NSS should be robust and dynamic so that it can meet main data needs of the country, be able to assess current and future demand and be able to quickly respond to the ever-changing user needs.

We are increasingly noticing a discernable shift in the type of statistical data and information demanded in developing countries a shift away from traditional statistics to development-oriented statistics on such areas as:

- democratization
- decentralization
- human rights
- transparency and accountability
- gender issues
- new development indicators (e.g. poverty, HIV/AIDS, etc.)

2.3.7 Effective Leadership and Management

For the system to be more effective and better understood, it needs effective leadership. In particular, it needs a leadership that embodies and promotes professionalism and interests of the profession and articulates the vision and mission of the system.

A well-focussed, resourced, robust and responsive National Statistical Office (read FOS) is essential for providing the said leadership. The NSO needs to be able to advocate the use of statistics and the importance of the NSS to the development of the country. It needs to have an appropriate structure and culture to enable effective leadership and utilisation of resources. The NSO must manage effective relationships with other systemic players and have both the technical statistical expertise and organisational systems and capability to perform its role.

2.3.7 Coordination, Collaboration, Networking, and Information Sharing

An effective NSS should have well-established, formal and institutionalized arrangements for coordination and collaboration among key institutions in the system. These arrangements should be underpinned by an appropriate statistical legislation. There should also be a developed culture of networking and information sharing among stakeholders in the NSS.

Coordination, collaboration, networking and information sharing in the NSS are essential for *inter alia*⁵:

- (f) prevention of duplication of effort which often leads to inconsistent data and wasteful utilization of resources,
- (g) achievement of synergy and cost-effectiveness in utilization of scarce resources,
- (h) avoiding working at cross-purpose, non-complementary work and rivalry, and
- (i) generally producing higher quality data

Different types of coordination and collaboration are desirable. These include:

Coordination/collaboration among data producers: This includes both **horizontal and vertical coordination** among institutions aimed to ensure that they cease to be fortified "silos" and engage in complementary work, with the NSO as a point of reference, and **technical coordination** aimed to ensure that data from different institutions are mutually consistent or at the very least comparable. Technical coordination should also address issues related to harmonizing different data sources and combining quantitative and qualitative data especially in poverty monitoring. Technical coordination is generally achieved through service-wide adoption of standardized concepts, definitions and classifications. It can also be achieved through a common training programme for data collectors and compilers.

Coordination/collaboration between data users and producers: This form of coordination aims to **mainstream users** in the system so that they can play proactive and up-stream roles in the development of national statistics. In order to ensure that data users are clearly identified and that their real needs are continuously assessed and synthesized, it is important that mechanisms are established that will make it possible for continuous dialogue between them and data producers to take place.

Coordination/collaboration between producers and data suppliers: Data suppliers are under statutory obligation to supply needed data for statistical purposes. However, there is an increasing trend of non-response to statistical enquiries especially among establishments.

It is important that data producers should develop appropriate policies to guide relations with respondents. They need to appreciate the burden placed on data suppliers' time to fill questionnaires and do every thing possible to minimize this time. They also need to enhance suppliers' understanding of why needed data should be supplied and to re-assure them that the data they provide are for statistical purposes only and are treated with strict confidence.

Coordination/collaboration between producers and research and training institutions: This type of coordination is crucial to ensure that the NSS is supplied with trained statistical personnel and that more definitive analyses of statistical data can be done, leading to evidence-based policies and decision. The coordination will also lead to improvements in the quality of data as a result of feedbacks from data analysts.

2.3.9 Data Quality

There is broad consensus in the international statistical community that: (a) data quality enhances their credibility and usability, and (b) data quality is a multi-dimensional concept that goes beyond the traditional view that equates quality with accuracy. The IMF has

⁵ Kiregyera, Ben: Sample Surveys with Special reference to Africa, PHIDAM Enterprises, Kampala, Uganda, 1999

developed a Data Quality Assessment Framework (DQAF) that identifies five main dimensions of data quality. For each of these dimensions, DQAF identifies pointers that can be used to assess data quality. The quality dimensions are⁶:

Integrity: encompassing the institutional foundations that are in place to ensure professionalism in statistical policies and practices, transparency, and ethical standards.

Methodological soundness: covers the idea that the methodological basis for the production of statistics should be sound and that this can be attained by following international standards, guidelines and agreed practices.

Accuracy and reliability: relates to the notion that source data and compilation techniques must be sound if data are to meet users' needs. For most users, accuracy and reliability is the most sought out quality dimension.

Serviceability: this relates to the need to ensure that data are produced and disseminated in a timely fashion, with an appropriate periodicity; provide relevant information; are consistent internally and with other data sets; and follow a predictable revision policy. This dimension is also of great concern to users.

Accessibility: relates to the need to ensure that clear data and metadata (information about the data) are easily available, and assistance to users of data is adequate.

2.3.10 Data and Information Management and Flow

In an efficient NSS, statistical data and information should be well managed, readily accessible and usable for generating knowledge about issues, and helping in decision-making. In particular, there should be a smooth flow of data and information into the national decision-making and planning apparatus to support critical decision-making processes of government. Hence different types of statistical data and information (both quantitative and qualitative) should be pooled into purposely-designed databases, databanks (data warehouses) properly analyzed (mined) and information disseminated to users.

Figure 2.1 below shows components of and linkages within the NSS. It can be seen from the figure that the starting point in data provision is assessment of information requirements of main users and especially policy and decision-makers. It is when these needs have been identified that a meaningful programme of data collection can be put in place. The figure also shows what it takes to get information to users. The data have to be reduced to usable information and this is done through a process of data analysis. The role of subject-matter experts and institutions (intermediate data users) with such experts in the process of data analysis is crucial. Equally crucial is the need to appropriately package the information and disseminate it to main users.

2.4 EVOLUTION OF INSTITUTIONAL FRAMEWORK FOR DATA PRODUCTION

The institutional framework for data production in Nigeria has evolved since the colonial period from a simple unitary or centralized to a more complex system covering all sectors of

⁶ Clare Liuksila: Statistical Organization Within a Data Quality Framework, Statistical Organization in Proceedings of a Seminar organized by the Statistics Department of the IMF, November 2000. Edited by
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the economy and all levels of government – Federal, State and Local Government Areas. The trend of development of data production can be partitioned into three periods.

2.4.1 Phase I: Early Stage (pre-1957 Statistics Act)

From available records, a Statistics Unit headed by a Government Statistician was started in 1928. The activities of the Unit then were restricted to the basic statistics, which interested the colonial administration. The Government Statistician then was located in the Cabinet Secretariat with direct access to the Colonial Secretary. Then in 1947, statistical development in Nigeria turned out to assume a focused programme of government with the establishment of a Section of the Department of Customs and Excise as the nucleus of a full-fledged Department of Statistics. In 1949, the Department was expanded and re-organized on a more permanent basis and a Government Statistician was appointed to head it. At this stage, the National Statistical Office (NSO) operated as a centralized system under a unitary system of government.

As a result of the Richard Constitution of 1954 which created and gave autonomy to Regional Governments, the country operated a federal system of government with the Federal Government at the centre, and three regional governments, viz: Northern, Eastern and Western Regions. For the first time therefore, the respective governments became involved in the statistics that pertained to their areas of jurisdiction. A decentralized statistical system therefore became established.

At the Federal level, a few departments of government, some of which later metamorphosed to Ministries, became involved in statistical activities to deal with their own special areas of interest. Before the establishment of the Central Bank of Nigeria in 1958, the NSO collected and compiled the balance of payments position of the Federation.

2.4.2 Phase II: Development Stage (1957-1988)

The legislative framework for the conduct of statistical activities in Nigeria was passed into law in 1957 with the Statistics Acts of 1957. The Act provided for:

- a) taking of population censuses;
- b) collecting, compiling, analyzing and publishing statistical information relating to the commercial, industrial, agricultural, mining, social, economic and general activities and conditions of the inhabitants of the Federation:
- c) collaboration among departments of the Government of the Federation, the Regions and with local authorities, in the selection, compilation, analysis and publication of statistical records of administrations, and;
- d) organizing a coordinated scheme of social and economic statistics relating to the Federation.

These provisions recognized and gave a backing to the decentralization of statistical production in the Federation. These envisaged and encouraged the collaboration between the component parts of the NSS and finally allowed the establishment and operation of a "common statistical service" for statistical personnel in Federal government service. With independence in 1960, the National Statistical Office, which was then under the Nigeria Customs and Excise was transferred to the Ministry of Finance and eventually to the Federal Ministry of Economic Development. Its name was changed to the Federal Office of Statistics (FOS), enjoying the status of an extra – Ministerial department.

With expansion of the national economy, the need for new institutions and re –organization of existing institutions became necessary. Most of these had in–built into them the need for the collection and publication of statistical products. The CBN took over the collection and production of financial statistics, the National Population Commission (N.POP.C) was established to handle census matters hitherto under the purview of the FOS. The functions of the N.POP.C were later expanded and these overlapped with the functions of the FOS.

In addition to the CBN, the creation of the N.POP.C represented the second major decentralization effort which is sometimes regarded as an erosion of the authority of the FOS. The statistical development at the Federal level was then replicated at the regional level by the creation of statistical departments at the Ministries of Finance and Economic Development. By these developments, the NSS started its growth towards a big structure.

It is important to note that the Statistics Act of 1957 recognized the growth of the NSS and adequately gave FOS the mandate to coordinate it and ensure its effectiveness. With this provision the entire statistical services, at this stage were being pooled by one central control for both technical and administrative matters. All statistical personnel belonged to a pool and they were posted to various Ministries as the need arose. The only recognized and central coordinating body was the FOS. Under this arrangement, FOS was the only recognized repository of all statistical reports, publications and annual reports, of all Agencies nation- wide. In fact, FOS was to offer not only technical and professional supervisions but was also to be concerned with the setting up of standards of statistical definitions, concepts and classifications. These, the Office pursued vigorously with the establishment of statistical coordinating bodies. The functions and membership of these statistical coordinating bodies will be discussed more fully in later sections of this report.

2.4.3 Phase III: Reorganization and Consolidation (1988 to-date)

Data production proliferated during this phase both at the Federal and at the State levels. With respect to the States, the changes in the political structure in 1976, 1989, 1993 and 1996 leading to 19, 21, 30 and 36 States respectively have correspondingly increased the number of Statistical Agencies.

Also, the re- organization of the Federal Civil Service by Degree 43 of 1988 further decentralized statistics by creating the Departments of Planning, Research and Statistics (DPRSs) in all Ministries and agencies of government. The decree abolished the pooling system in force thereby ensuring the former FOS officials who managed the statistics units in Federal Agencies remained as career officers of the agencies.

The third tier of government, the local government, although has its own constitutional responsibilities, has not developed any statistical capability. Data on/ and at the local government level are however collected and published by both the Federal and State Statistical Agencies.

These data may not be the type that the local government requires for its own planning purpose. In order to make the local government statistically relevant, the FOS commenced a programme called Local Government Information System (LGIS) in 1982. The programme aimed at collecting data on some aspects of local government operations and physical infrastructure available to them. So far, data were collected in 1986, 1987 and 1993 by the FOS in collaboration with local governments and some international organizations such as the UNDP and UNICEF.

A major addition to the NSS was the establishment of the National Data Bank and Sectoral Data Banks in 1989, which were termed the National Information System (NIS). This put emphasis not only on data production per se but also on modern data management which entails developing the capacity and infrastructure for electronic data storage and dissemination using information technology in line with global trends. The NIS together with the NSS formed the National Statistical and Information System (NSIS). With support from UNDP, the NSS was rejuvenated and strengthened between 1994 and 1997 in a collaborative programme between the National Planning Commission, the FOS, the National Data Bank and several other agencies at the Federal, state and local Governments levels which have the responsibility for the generation and dissemination of statistics and information. This is the only technical assistance programme that covered the entire NSS.

2.5 SUMMARY DESCRIPTION OF MAIN DATA PRODUCERS

2.5.1 Federal Office of Statistics (FOS)

The FOS is the nodal Federal agency for planned development of the NSS. Its vision statement is:

"To become the best national statistical and information resource center and a reference point in Africa, comparing favourably with the best in the world".

Its mission is:

- To provide comprehensive, timely, relevant, responsive and customer-focused statistical information relating to the social and economic activities as well as living condicitons of the inhabitants of Nigeria,
- □ To vigorously collaborate with all tiers of government and their agencies in the production of administrative statistics,
- □ To co-ordinate statistical production activities of other government agencies so as to achieve statistical orderliness, and
- **□** To promote general use and application of statistical standards.

In the next sections, the structure of FOS is briefly presented.

(a) Structure

The FOS is headed by a Director-General who is assisted by directors responsible for different sectors of statistics. FOS has seven departments and three units under the Office of the Director-General, and they are as follows:

- Office of the Director-General
 - ➢ Audit Unit
 - ➢ Legal Unit
 - Public Affairs and International Statistical Relations unit
- Service Departments
 - Personnel Management Department
 - Finance and Supplies Department
- Operations Departments
 - Corporate Planning and Technical Co-ordination Department
 - Social and Economic Analysis Department
 - Field Services and Methodology Department
 - Computer Management and Information Services Department
 - Censuses and Surveys Department

In addition, FOS has 37 offices in State capitals and in Abuja, each under a State Officer. The supervision of FOS State Offices is carried out from six Zonal Offices, one each for the North East, the North West, North Central, South East, South West and South-South. Furthermore, two more sub-offices are also maintained as supervisory out-posts in each of the 36 states and Abuja.

Figure 2.2 gives the current structure of FOS

(b) **Resources**

Human

Table 2.1 presents the staffing level by staff category at FOS for the period 2001 –2003. Professional staff are graduates with University degrees in statistics or related fields e.g. demography, computer science, economics, cartography and mathematics. Professional staff operate at a higher level. They assess user requirements, design data production systems, do data analysis and write statistical reports. On the other hand, sub-professionals are holders of diplomas in various subjects. They generally perform at lower and intermediate levels and moreover in supportive roles to professional staff in such areas as data compilation, data entry, tabulation, etc. Other staff include all staff who do not fit into the category of professional and sub-professional staff.

Currently FOS has a total of 4,489 establishments. Almost all the establishments (99.6 %) are currently filled. The staff numbers rose to 5,389 in 2002 and then dropped to 4,471 in 2003, representing a 17% drop. The drop of 25% in the number of professionals was higher than for other categories of staff, being 9% for sub-professionals and 21% for other staff.

Table 2.1: Staffing position by category (2001- 2003)			
	Years		
Category	2001	2002	2003
Professional	293	305	231
Sub-Professional	1454	1740	1583
Other	2946	3344	2657
Total	4693	5389	4471

Source: FOS records



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Of the 4,471 staff currently in post, only 5.2% are professionals, 35.4% are sub-professionals and 59.4% are other staff.

Statisticians constitute only 3% of the total staff complement at FOS and 58% of the professional staff.

Table 2.2 compares the composition of FOS staff with those of that of Statistics South Africa and Uganda Bureau of Statistics.

Table 2.2: Comparative figures on staffing levels			
Staff category	Nigeria	South Africa	Uganda
Professionals	5.2	44	33
Sub-professional	35.4	47	24.4
Other	59.4	9	42.6

The comparison may suggest the

need to reduce the percentage of non-professionals and increase that of professionals.

It should also be mentioned that of the 231 professional staff at FOS, only 26 or 11% are female. This suggests that there is need to attract more female s to the professional ranks of the agency.

Financial

Like most government agencies, FOS is under-funded as can be seen in table 3.1.

Infrastructure

Adequate infrastructure is essential for production and management of a good National Statistical Office. Hereunder we briefly present the main infrastructure available at FOS.

(i) Office infrastructure

Office infrastructure has been poor. FOS has its main office in Abuja. However, most of the staff are in Lagos for want of office space in Abuja. The FOS offices in Lagos State are in four buildings which do not provide a good work environment. Fortunately, the Federal Government has acquired a new and big building in Abuja to house FOS headquarters.

(ii) Transport

FOS needs vehicles for fieldwork. The last major supply of vehicles was in 1992 during the life of the World Bank Technical Assistance Programme and the UNDP 4th Country Programme in 1996. By 2003, these vehicles had become too old and expensive to maintain. In 2003, the government introduced a policy of monetization of benefits of civil servants. By this policy, FOS was allowed to retain only 39 operation vehicles (one for each State, Federal Capital Territory and two for headquarters). Half these vehicles need major repairs before they can be put back on the road.

(iii) Statistical infrastructure

A statistical infrastructure is essential for effective operations of a National Statistical Office. The infrastructure comprises a geographical frame for household-based operations, a Business Register for establishment-based operations and population census data.

Geographical frame: In most countries of Africa, the geographical frame which is used as a basis for household-statistical operations comprises a list of Enumeration Areas (EAs) delineated for the population census together with supplementary information about them including number of households and facilities in each one of them. Usually the EAs are mapped and are updated on a continuing basis.

The FOS does not conduct the Census of Population and Housing any more. It gets lists of EAS from the National Population Commission, which conducts this census. The last census was conducted in 1991.

Frame of Business Establishments: A Frame of Business Establishments (FBE) is a comprehensive database holding information on registered business establishments in a country. The FBE usually includes information on: name, address (postal and physical), location, type of ownership, legal status, economic activity engaged in and total number of employees engaged. The FBE serves two main purposes. One, it provides information on the number of establishments in the country and their characteristics. Second, it provides a frame for establishment-based censuses, surveys and economic research. A good FBE is a basis for collecting reliable economic statistics in the country.

The FBE is continuously up-dated as a matter of routine by the staff of the Field Service and Methodology Department. With assistance from DFID, FOS carried out a comprehensive update of the FBE and computerized it.

National Master Sample: In order to rationalize the selection and implementation of different rounds of the continuing National Integrated Survey of Households (NISH) and other household–based surveys, which FOS carries out, it maintains a Master Sample of EAs. The Master Sample is a multi-purpose and flexible sub-frame consisting of units representing the population and from which further samples can be selected for different surveys or survey rounds. Essentially a Master Sample is selected and used for the above purpose for a defined period of time usually 4-5 years after which it is revised (up-dated).

A Master Sample is an important tool for integrating different surveys or survey rounds. The advantages of master samples include:

- □ reduction in costs of frame construction and maintenance,
- □ samples for individual surveys can be selected more quickly and economically,
- possibilities for integration, micro-level linkages and combined analysis of data from different surveys e.g. linking child nutritional status from one survey with data on socioeconomic variables collected in another,
- □ improvement of the accuracy of survey results from different rounds of a survey programme

(iv) Field Infrastructure

The main source of FOS data are field surveys and censuses. In order to support field data collection, FOS established a Permanent Field Organization (PFO) which is responsible for handling field data collection operations including controlling the flow of information to and from the headquarters; training and supervision of enumerators and supervisors; scheduling field work to ensure that data are collected in a timely and orderly manner; actual data collection; editing field questionnaires; and co-ordination of all other functions associated with field work.

The PFO comprises six (6) Zonal Statistical Offices (ZSOs) and State Offices. Each zone is responsible for about 6 FOS State Offices. FOS employs about 2,000 different categories of staff in its PFO.

(v) ICT Infrastructure

IT equipment and software: In 2001, FOS had a total of 226 PCs comprising a total of 18 computer brands. Most of these computers were at headquarters and a small number in Zonal Offices. A little less than half of these computers were functioning. By 2004, FOS had 111 functioning computers. About three quarters of these computers are at least 3 years old. There is no Local Area Network (LAN) let alone a Wide Area Network (WAN). In addition, FOS has 24 printers, 1 fax machine.

The main computer application software used at the Office include CSPro (and sometimes IMPS) for data entry, SPSS for data analysis and Microsoft Office for spread sheet and word processing.

Internet access and web site: FOS has no Internet connectivity or a web site. It badly needs both of them.

Database: The Office has subject-based datasets such as agriculture survey data, etc. but it has yet to develop a databank that can hold existing and future datasets and sectoral databases. Development of a socio-economic database would eliminate data inconsistencies, make it easier to access data and to do inter-linked analysis, including modeling.

Radio equipment

FOS has radio equipment to facilitate communication between Zonal Offices and States Offices. In some Zones, the equipment is non-functional.

(vi) Library

A library is an essential infrastructural component of a statistical institution. It is used as the main depository of books and other reference materials e.g. journals, periodicals magazines, maps etc. FOS has its own library with about 1300 books and about 300 journals.

It was reported that the library collection are old. For instance, books for the library were last purchased in 1996. New journals were last received in 1995. It was reported that on average, the library gets only about 200 users a year. This low use of the library has been attributed to the fact that FOS staff are scattered in different location and the library collections are not up-to-date.

(c) Dissemination Policy

FOS does not have a dissemination policy yet. However, it is now subscribing to GDDS. The main dissemination channel is statistical reports. These reports include mainly survey reports as well as statistical bulletins, which are produced periodically to give users a whole range of data. Some of the titles of these reports are given in the next chapter.

FOS does not disseminate data electronically - it does not burn CDs or use web dissemination.

2.5.2 National Population Commission (N.POP.C)

(a) History

In 1973, the results of the national Population Census were regarded with suspicion and the response of the government of the day was to excise from FOS the function of conducting the census as well as related demographic surveys and repose them in a separate body. Thus, the National Population Commission (N.POP.C.) was established by Decree No. 23 of 1989 to:

- (i) undertake the enumeration of the population of Nigeria periodically, through census, sample surveys, etc;
- (ii) prepare and maintain a national framework for the delineation exercise for censuses and sample surveys;
- (iii) establish and maintain a Machinery for continuous and Universal registration of births and deaths throughout the country;
- (iv) collect, collate and publish data on migration Statistics;
- (v) conduct researches, monitor the national population policy and setting up a national population information databank;
- (vi) provide information and data on population for purpose of facilitating national planning and economic development;
- (vii) advise the Federal Government on any population related matters and problems;
- (viii) disseminate information and educate the general public about the activities of the Commission
- (ix) arrange for the appointment and training of enumerators and all other categories of staff of the Commission; and
- (x) do all such things as may be necessary, desirable, expedient, supplementary or incidental to the performance of its functions.
- (b) Structure of N. POP. C

At the top echelon of the Commission is the Office of the Chairman who is the general overseer and Chairman of the Commission, comprising of 37 Commissioners, one in each State. The members of the Commission come from various professions, the private sector, the civil service, and from the military.

The Commission is divided into eight (8) departments each headed by a Director with the Director-General as the Chief Executive Officer. The Departments are as follows:

- (i) Administration and Supply
- (ii) Finance and Accounts
- (iii) Public Affairs
- (iv) Vital Registration
- (v) Information Technology Department (*ITD*)
- (vi) Censuses & Surveys
- (vii) Planning & Research Department
- (viii) Cartography

In addition, it has two support units: Internal Audit Unit and Legal unit.

The Commission has an office in each State and Local Government Area (LGA).

(b) Staffing

The Commission employs between 6000 and 7000 people who are deployed all over the country. These include statisticians, system analysts and programmers, economists, cartographers and support staff.

(c) Census and surveys

The main current activities of N.POP.C include preparation for the conduct of the next Population and Housing Census re-scheduled for 2005, conducting demographic surveys, reactivating the vital registration system and compiling migration statistics.

The census was supposed to be held in November 2001. In the event, it was postponed on account of lack of money. However, preparations for the census are in advanced stages. Census instruments are ready, the Cartography Department has introduced for the first time Geographic Positioning System (GPS) equipment in geo-referencing and mapping out EAs.

The Commission undertook a National Demographic and Health Survey (NDHS) in 1999. Currently, an Education Survey (ED Survey) as a follow-up on NDHS is underway.

The Commission collects immigration cards from the Federal Ministry of Internal Affairs and enters the data into computers. However, since 1990, the data have not been processed due to capacity problems and there is now a huge backlog. The Vital Registration System is not working well either due to poor funding position of the Commission as well as lack of sensitization of the population.

(d) IT

The Commission has about 362 computers. However, the computers are not networked. There is no database or databank and the Commission has no Internet access.

2.5.3 Central Bank of Nigeria (CBN)

(a) Legal authority

CBN derives its authority for data collection from the Supplement to Official Gazette Extraordinary No. 26, Vol. 78, 25th. June 1991, Decree No.24 Central Bank of Nigeria Decree 1991. The Department of Research is responsible for compiling monetary and financial data to enhance the achievement of the bank's core mandate of monetary policy formulation and implementation.

(b) Organization

The Statistics Division within the Research Department is responsible for data collection and compilation. Recent restructuring of the Bank gave rise to five offices under the Statistics Division, including:

- (i) Real Sector Statistics Office
- (ii) External Sector Office
- (iii) Fiscal Statistics Office
- (iv) Government Finance and Non-Banking Financial Statistics Office
- (v) Statistical Methods and Database Management Office

The Statistics Division has a professional staff strength of 50. Of these, 12 are professional statisticians. In addition, there are 6 other professional statisticians in other departments of the bank.

(c) Data Collection Activities

The Statistics Division collects data mainly for the Research Department in particular and the bank in general. It collects and processes various types of macro-economic data with emphasis on monetary and financial statistics, on monthly, quarterly, half yearly and annual basis. In particular, it carries out the following surveys to collect data for its Annual Report:

- Agricultural Survey
- Industrial Survey
- Foreign Private Investment Survey
- Economic Conditions Survey

In addition, the Bank collaborates with FOS in areas of common interest such as external sector statistics, external trade statistics, GDP estimation and price statistics. It has also collaborated with the Nigeria Institute for social and Economic Research (NISER) on Study of Distributive Trade. In order to capture other sectoral statistics relevant for monetary policy formulation, the Bank relies on other government agencies such as the FOS, N.POP.C and Federal Ministry of Finance.

The main statistical publications of the bank include the Economic and Financial Review (quarterly publication) and the Statistical Bulletin (annual publication)

Unlike other statistical agencies, the CBN does not seem to have funding and infrastructural problems. The main problems the bank faces in carrying out statistical work include:

- (i) Reluctance on the part of some respondents to complete survey questionnaires, thereby leading to low response rates. In addition, incomplete disclosure has also impacted negatively on the success of the surveys. For instance, some respondents conceal information on their earnings for fear that such information may be used for tax purposes.
- (ii) Poor record keeping in some organizations in the public sector thereby making data collection difficult or impossible.
- (iii) Lags in some of the data series obtained from government agencies.
- (iv) Inconsistency in some secondary data.
- (v) Obsolete base year of some of the economic indices that are collected from secondary sources. Consequently, such indices could not be compared with economic indices of other developing or advanced countries that have updated their base years.
- (vi) Dearth of high frequency data which are crucial for short-term policy analysis.

2.5.4 The National Databank (NDB)

The NDB is a computer-based government agency responsible for electronic data and information management and dissemination. The Decree establishing NPC in 1992 recognized the NDB as a subsidiary organ of the NPC along with other establishments. Although it does not have the status of a parastatal or extra-ministerial department of the National Planning Commission, it enjoys a reasonable degree of autonomy, which enables it to function unhampered by bureaucratic delays.

The NDB is headed by a Director and has three operational and two administrative divisions, namely:

- a) Data Compilation and Management (Operational)
- b) Computer Services (Operational);
- c) Information Generation and Dissemination (Operational);
- d) Personnel Management (Administrative) and
- e) Accounts (Administrative)

The NDB has a lean structure of 38 staff. Of these, 18 are professionals (7 statisticians, 5 economists and 6 computer programmers). There are no secretarial posts in the organization since that function is undertaken by the technical staff.

The NDB not only manages data for easy access, it also adds value to them to create meaningful information for decision-making and research activities. In that sense, therefore, the NDB serves as the Information and decision Support Center for national development efforts of the National Planning Commission.

The NDB received a lot of support from UNDP up to 1998. It is the apex agency supervising all the Sectoral Data Banks (SDBs). Presently there are seven (7) Sectoral Databanks in existence. These include SDBs in Federal Ministries of Agriculture, Health, Water Resources, Industry, Education, Finance and Raw Materials Research and Development Council. Some of these SDBs actually exist in principle, but are not functioning as expected.

2.5.5 Line Ministries

(a) Authority to compile statistics

In recognition of the responsibilities for collecting and compiling administrative statistics in different sectors, the Civil Service Reforms Decree 43 of 1988 established a Department of Planning, Research and Statistics (DPRS) in each Federal ministry/extra-ministerial departments. The CSRD created a structure of at most eight departments in each ministry. Three of these were mandatory. These are: (i) Personnel Management, (ii) Finance and Supplies and (iii) Planning, Research and Statistics. The others, which should not exceed five, were called operational departments and were to be appropriately designated by each ministry.

It is within the Planning, Research and Statistics Department that the Statistics Branch under Research and Statistics Division was located. The conceptualization of this aspect of the Decree was that every establishment needed information and statistics to carry out its statutory functions. Some of these statistics reside within the ambit of the ministries but owing to lack of statistical infrastructures it has not been possible to provide these basic information. On the other hand, data about the sector could also be generated by appropriate Parastatals, etc.

(b) Functions of the Statistics Branch

The Decree 43 of 1988 broadly delineates the Statistics Branch into sections each. These are:

- (i) The Internal Statistics Section which should collect statistics in respect of the ministry itself on issues such as personnel, finance, physical resources, operations, output, etc;
- (ii) The Sectoral Statistics Section which should routinely collect and process data relating to the sector of the society or areas of concern over which the ministry has jurisdiction.

The application of these broad principles to specific ministries/ extra ministerial departments requires some professionalism and direction. Most of those reported upon did not specify what their functions were despite the broad provisions of the CRSD 43 of 1988. However, some ministries such as Health, Industry, Agriculture, etc. now spell out statistical and information activities in their policy document and development memos.

(c) Staffing

Generally, the Statistics Branches of the DPRSs are understaffed. Those on the ground are also not well trained and well qualified. In some ministries, the heads of the DPRSs as well as the Deputy Directors (Research and Statistics) are generally not professional statisticians. Only a couple can either be said to be planners or researchers.

(d) Data production/compilation and management

A lot of administrative data are generated through statutory administrative returns and as a byproduct of general administration. These data are useful for management of programmes of different ministries and agencies collecting/compiling them.

In order to standardize and build objectivity into collection of administrative data, sector Ministries like Education, Health and Agriculture have designed formats which are administered to collect sectoral data.

In addition, many of the ministries/ extra- ministerial departments supervise parastatals and other bodies established by law; these could be good sources of data. These sources have not been fully exploited.

Various types of reports are written and disseminated and in a few cases, databanks have been built for data storage and easy retrieval.

2.5.6 State Statistical Agencies

As already indicated, statistical production at the official level in Nigeria runs through all tiers of government – Federal, State and Local. This section examines the situation at the state government level.

(a) Legal authority

The fact that the development of statistics in the states took its root from the Federal Office of Statistics (FOS) makes it clear that the only legal backing for the practice of statistics throughout the Federation for a long time was the 1957 Statistics Act. This Act empowered the FOS to collect data on inhabitants of Nigeria as well as to generate a coordinated scheme of socio-economic data. It also provided legal backing for a number of federal agencies to generate administrative statistical data, while spelling out regional (and later on state) responsibilities in the areas of censuses and other surveys.

(b) Statutory Functions

The State's Statistical Agencies (SSAs) have a statutory responsibility for providing statistical advice to their respective governments in particular, and to other enquirers (users) in general, with a view to enhancing policy formulation, implementation and monitoring as well as facilitating decision-making at all levels of governmental operations. This is usually accomplished through the publication of periodic statistical series as well as through meeting specific requests of users through the exchange of correspondence or otherwise.

(c) Organizational Structure

The State Statistical Agencies (SSAs) are departments either in the Ministry of Finance and Planning or in the Office of Governor and have professional statisticians as Heads and Directors. The SSAs coordinate statistical activities in other sectors in the State. They also supervise the collection of administrative data in ministries and Local Government Areas in the States.

The organizational structure of a model State Statistical Agency (SSA) usually consists of a headquarters office at the state capital and a number of zonal offices at different important centres, such as the old divisional headquarters or local government headquarters within the State. These zonal offices usually comprise of the staff of the SSAs who must be as close as possible to their operational bases or enumeration areas. And the operational network of a model SSA usually comprises of a number of Sections each with specified functions.

(d) Staffing

One of the major factors affecting the productivity of any SSA is its staffing by cadre, category (senior/junior) and by relative experience. With the dwindling resources of State governments, many SSAs are grossly under-staffed. In some States, vacancy rates of the Statistical Officers and Statistician levels (cadres) are above 50%. A host of others with a sizeable staff-strength are composed of fresh graduates and inexperienced personnel, while some cannot even boast of qualified professional statisticians.

(e) Data production activities at the SSAs

Censuses and surveys in the States are limited to school census, census of health facilities, traffic census and agricultural surveys. Once in a while and mainly with donor funding, ad hoc surveys are undertaken. The main source of data in the States are administrative records and returns. The State statistical personnel collect data from different sectoral departments at Local Government level. In most SSAs, analyses of data collected are mostly done manually through routine tabulations of data.

Publications relating to the various sectors suffer delay from as long as three to five years time lag. With the assistance of the UNDP, the State Statistical Yearbooks have been produced in most of the States. The Yearbooks give a lot of socio-economic data for each Local Government Area within the State.

(f) Budgeting/funding

Due to the economic down-turn currently experienced nationwide, many State governments are known to provide limited financial resources for statistical programmes. In this connection, a lack of adequate funding has been identified as the greatest single factor responsible for the usually poor statistical information being produced by the SSAs. Experiences in the states reveal the fact that budget provisions are only sparingly actualised in terms of funds releases to prosecute statistical projects.

(g) Data processing

It would appear that electronic data processing, indeed the application of IT in general, is at its lowest level in the States. Many SSAs have few computers, no electronic data processing staff and still carry out data processing manually. The available PCs (courtesy of the UNDP's NSIS programme) are not fully utilized, their use being so far limited to storage of manually processed data.

2.5.7 Local Governments

As at present, data are collected by the Budget and Planning Department of Local Government Council. The Statistics Section of this department engages in data collections by direct observation and total enumeration of markets and parking spaces. These direct observations are made in the parks to measure the Internally Generated Revenue of the local councils. Data are also collected annually on markets to enumerate the Type 1 and Type II shops let out by the councils.

The current status of data production at the local government level could be described as relatively rudimentary and thus falls short of expectations. Statistics needs to be accorded its rightful place at the local government level for progress to be made.

The NSS through the National Consultative Committee on Statistics embarked on a massive training of statistical personnel at the local Government level to enable them cope with the challenges of data collection at that level. Only a few States (Kaduna, Lagos, Enugu, Delta and Rivers) participated in this initiative. The programme got stuck on the way in 2002, as many States could not sponsor their statistical staff to the training.

2.6 Statistical Legislation

Like in most countries of the world, statistical operations in Nigeria are underpinned by a statistical legislation, the 1957 Statistics Act (reviewed in 1958). The Act follows a standard pattern used in many countries. It provided for the statistical information FOS can collect and powers to collect such information, collaboration in and coordination of data production, confidentiality of the information collected, restrictions on disclosure of the information and penalties for contravention of the provisions of the Act.

It is well recognized that the Act is outdated and no longer able to provide for the policy, administrative and economic changes that have taken place in the country and in the international arena since 1957. The Statistics Act was superceded by Decrees and various administrative arrangements which fundamentally impacted the NSS. In 1973, a National Census Board was established by Decree. Among other things, Decree 43 of 1988:

- (i) established Planning, Research and Statistics Departments in Federal ministries/extraministerial departments to collect sectoral data,
- (ii) did away with the unified scheme of service under which FOS posted staff to man Federal sectoral statistics units,

(iii) created the National Population Commission to, inter alia, conduct the Population and Housing Census and population surveys, and collection and compilation of migration statistics.

In order to ensure effective coordination of the NSS, the Council of Ministers set up three coordinating bodies in 1983 (see below).

Some of these weaknesses in the Statistics Act were identified by FOS, which drafted a new Statistics Act in 1994. The draft was overtaken by political changes in the country before it could be signed by the then Head of State.

2.7 Mechanisms for Statistical Coordination

Since the Statistics Act provided for the coordination of the statistical system, many efforts have been made over the years to actualize the provision. Now, a number of mechanisms are in place for coordinating data users and producers as well as statistical activities in the country. These include formal and ad hoc arrangements.

2.7.1 Formal arrangements

The formal coordination arrangements include three coordinating bodies which, as mentioned above, were established by the Council of Ministers in 1983. These bodies still exist. They include:

- a) The National Council on Statistics (NCS),
- b) The National Advisory Committee on Statistics (NACS), and
- c) The National Consultative Committee on Statistics (NCCS).

With the establishment in Federal ministries and parastatals of Planning, Research and Statistics Departments (DPRSs) by Decree 43 of 1988, the need to coordinate the statistical activities of these departments led to the establishment of another body, Federal Agencies' Consultative Committee on Statistics (FACCS), to coordinate statistics production at the Federal level.

The functions and membership of these bodies are as follows:

A. National Council on Statistical (NCS)

This is the highest policy making body of the Nigerian Statistical System (NSS).

Functions

NCS was established to:

- a) advise the government (Federal and State) on policy matters relating to statistics,
- b) examine on continuing basis, the various agencies constituting the National Statistical System, and
- c) examine from time to time, the organization and effectives of the National Statistical System, and recommend any needed changes.

Membership

Membership of the Committee includes:

- (i) Federal Minister in charge of statistics as Chairperson.
- (ii) State Commissioners in charge of statistics in each State.
- (iii) Director– General of the National Population Commission.
- (iv) Governor of the Central Bank of Nigerian.
- (v) Group- Managing Director, NNPC.
- (vi) Honourable Minister of Information.
- (vii) Chairman Revenue Mobilization, Fiscal & Allocation Commission.

The Director-General of FOS is an ex-official of the NCS. FOS provides the Secretariat of this and all other coordinating bodies.

B. National Advisory Committee on Statistics

This body, which replaces the old National Advisory Council on Statistics, is to provide a forum whereby both the producers and users of statistics meet regularly to exchange ideas.

Functions

- a) To advise from time to time on issues that may help to bring about the enhancement and improvement of the performance, timeliness and reliability of the National Statistical System.
- b) To advise on the general priorities and direction of the Federal/ State Statistical programmes with a view to providing guidance of government budgets reviews, planning and project implementation and to assist in the preparation of the work programmes of the National Consultative Committee on Statistics.
- c) To provide active assistance in the design of new modified programmes.
- d) To identify and advise generally on Statistical needs, data quality, gaps and timeliness of statistical information.

Membership

- a) Director- General of NISER-Chairman.
- b) Executive Secretary of the Nigerian chambers of Commerce, Agriculture and Industry, (NACCIMA)
- c) Executive Secretary of MAN.
- d) Four renowned Statisticians from the Universities to be chosen on personal merit.
- e) Director (macro), National Planning Commission.
- f) Director of Research, CBN
- g) Director (DPRS) Federal Ministry of Agriculture.
- h) Director (DPRS, Federal ministry of Industry.
- i) The Chairman, National Income, Salaries and wages Commission.
- j) A representative of the Nigerian Economy Society.
- k) A representative of the Nigerian Statistical Association.

- l) Director- General (FOS).
- m) Six Representatives of the National Consultative Committee on Statistics (NCCS)
- n) Director General, National Population Commission.
- o) The Chairman, Independent National Electoral Commission.
- p) Director (DPRS), Federal Ministry of Employment, Labour and productivity.
- q) Director (DPRS), Federal Ministry of Internal Affairs.
- r) Representative of NEPA.
- s) Representative of Nigerian Ports Authority.
- t) Representative of Nigerian Railway Corporation.
- u) Director (DPRS), Federal Ministry of Finance.
- v) Director (DPRS), Federal Ministry of Commerce.

C. National Consultative Committee on Statistics (NCCS)

This is a body of producers of National Statistics.

Functions

- a) to examine the statistical programmes of the various agencies annually (at an appropriate period before the commencement of fiscal year) in order to achieve greater coordination and avoid unnecessary duplication of efforts, and evolve a national statistical programme for the approval of the National Council on Statistics.
- b) To review and advise on conditions of service of statistical personnel.
- c) To examine from time to time the Statistics Act and recommend to the National Council on Statistics any necessary changes.
- d) To develop strategies which will ensure uniform standards and methodology amongst the various agencies with a view to improving on the quality, comparability and timeliness of their statistical output.
- e) To establish International Statistical Liaison and articulate the needs of Nigeria for data from other countries and international organizations and also provide avenue for International discussions on issues of common interest.

Membership

- a) Director General (FOS) as Chairperson.
- b) Directors of State Statistical Agencies.
- c) Comptroller General, Nigerian Customs Service.
- d) Chairman, Federal Inland Revenue Service.
- e) The Accountant -General of the Federation.
- f) Director General, National Population Commission.
- g) Inspector General of Police.
- h) Director of Research Department, CBN.
- i) Director (DPRS) of some Federal Ministries /Agencies.

D. Federal Agencies' Consultative Committee on Statistics (FACCS)

This is a body of producers of administrative statistics at the Federal level.

Functions

The committee is charged with responsibility of;

- a) Harmonizing the statistical production efforts of Federal Agencies.
- b) ensuring minimum waste of scarce resources employed in the statistical production of these Federal Agencies.
- c) providing necessary forum for discussion on statistical production.

Membership

This comprises the following members:

- a) Director- in-Charge of administrative statistics in FOS as Chairperson.
- b) Director (DPRS) of various Ministries and Parastatals.

E. Frequency of Meetings

The NCCS is required to meet twice a year, while the NCS, NACS, and FACCS are each required to meet once a year.

2.7.2 Ad hoc Arrangements

Before major surveys are carried out, consultations are held with data users and other data producers to agree the scope and instruments for data collection. This is, however, done on an ad hoc basis.

2.8 Typology of Data and Sources

Given the range of uses to which official statistics are put, different types of data will be required. These data come from different types of sources. This section outlines the various types of data and their sources. Basically, there are two types of data and the distinction between them is important. These are qualitative and quantitative data.

2.8.1 Quantitative data

These are hard data collected in censuses, surveys and routine administrative records. Census and survey data make aggregation possible (data can be generalized) and allow systematic disaggregation of data (can measure trends within sub-groups), allow comparison over time (particular strength with panel survey data), allow simulation of different policy options and provide results whose reliability is measurable. Censuses are the main source of basic data. The main censuses which are carried out include Population and Housing Census, the Census of Agriculture and the Economic Census. Censuses are complex operations that take a lot of resources, time, attention and organizational effort. Sample surveys on the other hand are a lot easier to organize and are also cheaper than censuses. They are a major source of current data. However, they are subject to sampling and non-sampling errors. Administrative data are usually by-products of administrative operations. They tend to be incomplete and out-of-date.

2.8.2 Qualitative data

These are data collected using participatory approach. The Conference held in Uganda in 2000 on Combining Participatory and Survey-based Approaches to Poverty Monitoring and Analysis noted that the approach "provides a richer definition of poverty and insight into causal processes. More accuracy and depth of information on certain questions and in certain cases can be collected and there is a possibility of being holistic (looking at a set of relationships as a whole). The approach makes it possible to go immediately back to data and interrogate initial findings/puzzles (further interviews and observation). It also takes advantage of a wide range of resources for "triangulation" (systematic cross checking)". The workshop further noted that ".....such data are an important complement to the quantitative information collected through surveys and routine administrative records. Use of these approaches also gives more opportunity for civil society to participate in the generation of data than in some other forms of data collection". The weaknesses of the approach were given as real observer bias issues (lack of guarantee of objectivity), failure to know how representative the data is of the national situation, unsuitability for providing definitive tests of hypotheses that apply to such wider populations, difficulties in verifying information and inability to do systematic data disaggregation.

2.8.3 Combining qualitative and quantitative data

There are advantages in combining qualitative and quantitative data. For instance, participatory approaches can be used to improve questionnaire design by re-phrasing questions and using local units of measurement (area, volume, weight). It is crucial that those who produce qualitative data and those who produce quantitative data work together to avoid producing contradictory results e.g. participatory poverty assessments and survey-based consumption-poverty measures giving contradictory signals as to the direction and/or magnitude of changes in poverty. This occurred in Uganda and is likely to happen elsewhere, since the two sets of techniques use different definitions of 'poverty' and so measure different things.

2.8.4 Levels of monitoring

For monitoring NEEDS, SEEDS, MDGs and other development initiatives, information will be required on inputs, process, outputs, outcomes and impacts of different programmes and interventions. This information will then feed into the planning, administrative and political structure, and then acted upon. The following table presents levels of monitoring and evaluation:

At each level, a number of measurable indicators are used. These indicators can be broadly classified into two groups, namely intermediate and final indicators. "Intermediate indicators are mostly composed of factors that are under the control of implementing agencies such as line

Ministries. On the other hand, final indicators are mostly composed of aspects of welfare not directly under the implementing agency's control^{*7}.

Level	What is involved	Main type of data	Main sources
Inputs	Delivery and use of resources (including	Administrative	Line Ministries
	budgets) on development-related		/States
	activities by responsible organizations		
Process	Procedures and operational mechanisms	Administrative	Line Ministries
	used for various interventions		/States
Outputs	Intermediate results of	Administrative	Line Ministries
	activities/interventions implemented e.g.		/States
	school built, clinics built, trained teachers		
Intermediate	Achievements and changes in status e.g.	Administrative/	Line Ministries
outcomes	increased income, better social conditions,	surveys/censuses	/States/FOS
	etc.		
Final outcomes	Actual changes or improvement in poor	Survey/census	FOS
(impact)	peoples' welfare or quality of life		

 Table 2.3: Levels of monitoring and evaluation

The table also serves to highlight the importance of different types of data to the monitoring and evaluation process of national development and hence the need to strengthen agencies that collect and manage data at national and State level.

⁷ Zambia: Poverty Reduction Strategy Paper 2002 –2004, Ministry of Finance and National Development, May 2002.

CHAPTER THREE

ASSESSMENT OF SYSEM STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS

3.1 INTRODUCTION

A Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis is a powerful diagnostic tool used to assess the organization and its environment. The SWOT analysis was carried out on the NSS to:

- (a) identify and evaluate controllable activities in functional areas among stakeholder agencies which are performed especially well (**strengths**) or poorly (**weaknesses**) with a view to building on the system's strengths and mitigating or eliminating weaknesses, and
- (b) identify and evaluate trends and events which are external to the system and largely beyond its control (e.g. economic, social, environmental, political, legal, governmental and technological trends and events) but which could benefit (**opportunities**) or harm (**threats**) the system with a view to taking advantage of opportunities and avoiding or reducing the impact of threats.

Table 3.4 summarizes the results of the SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis.

3.2 STRENGTHS

The NSS has a number of strengths which should form a basis for strengthening the system. The following major strengths of the NSS have been identified.

3.2.1 Recognition that the NSS is Weak and Needs Reform

All stakeholders and not least the Federal government, recognize that the NSS is fragile, vulnerable and unable to meet national needs for statistical data and information in its present form. They thus recognize the design of the SMP as timely and expect that it will lead to major reforms of the NSS. It is expected that this recognition will provide the needed impetus for reforming the system.

3.2.2 Recognition among stakeholders of the pivotal coordinating role of FOS

There is consensus about the potential pivotal role FOS can play in the development of the NSS as a standard setter and coordinator of the system. It is recognized all round that FOS has over the years suffered from neglect and lack of investment by government. There is, therefore, wide support for raising the profile of FOS, strengthening it and making it an autonomous government agency reporting to the Presidency.

3.2.3 Existence of Coordinating Bodies

As was mentioned above, a number of coordinating bodies are in place both at policy level and at operational level. These bodies have the potential to coordinate the NSS and those that have been meeting have achieved their intended purpose.

3.2.4 Willingness to Collaborate

There is a lot of willingness on the part of data producers to collaborate in data production. This is healthy and it has helped to avoid working at cross-purpose, unhealthy rivalries and production of conflicting data. For instance, FOS involves personnel from different agencies in the planning and implementation of different surveys. The same goes for CBN, N.POP.C and other agencies.

3.2.5 Existence of Research and Training Institutions

Research Institutions

Nigeria has fine research institutions like the Nigerian Institute for Social and Economic Research which are capable of conducting definitive and policy related analysis using data collected by various agencies in the country.

Training Institutions

Nigeria has in place training institutions to cater for both professional and sub-professional human resources needs of the NSS. Many Universities and Polytechnics in the country teach statistics. In particular, professional diploma training is given at the University of Ibadan, which also offers training programs at a number of professional levels. FOS has established training school with campuses in Ibadan, Enugu, Ikeja and Kaduna, which train sub-professional statistical staff up to diploma level (Iteja campus is earmarked for closure). Some of the best statisticians in the NSS have risen through the ranks, after initially training at the FOS school.

3.2.6 Field Infrastructure

Both FOS and the N.POP.C have extensive and permanent field organizations that give the two organizations a robust capability to conduct censuses and large-scale surveys even at short notice. The field organizations comprise offices in zones and States, and a corps of permanent field staff, namely supervisors and enumerators. Some field staff are very experienced in field data collection. This gives the two agencies comparative advantage over other data producers in the country.

3.2.7 Existence of Core Competencies

Some agencies have core competencies or unique capabilities that give them comparative advantage over other organizations in the country in performing certain statistical functions. For instance, there is no organization in the country other than FOS that can compile GDP estimates; the CBN has core competencies in compiling financial and monetary statistics, the N.POP.C has core competencies in conducting Population and Housing Censuses, etc.

These competencies have been built over the years through training and skills development.

3.2.8 Quality Awareness

Among data producers

Chapter one emphasized the need for data quality to enhance their credibility and usability. There are two perspectives to quality awareness. The first perspective relates to the need to create a strong corporate-wide quality culture, usually done through innovation and creativity to produce value-added quality products, and by developing frameworks for assessing the quality of such products. The second dimension relates to the ability of data users to judge whether given data meet quality standards.

At FOS, a number of initiatives have been taken in recent times to enhance data quality. In 1998, the DG introduced Total Quality Management (TQM) to ensure that every element of the office's processes has a quality element. After all, the quality of statistical products depends on the quality of the statistical processes. A series of quality awareness raising workshops and seminars were held at Federal and State level to inculcate a culture of quality awareness among data producers. In addition, a TQM framework was established. It consists of a TQM Council, a TQM Steering Committee, TQM State Committees and training for a number of facilitators. This initiative should be given more impetus given the benefits that it brings to the management of statistical processes and concomitant quality dividends. Establishment of FOS statistical schools and training of staff at different levels have also contributed to quality awareness especially among FOS staff.

Other agencies at federal level appreciate the need for data quality as can be gleaned from elaborate instruments (questionnaires, formats and instructions manuals) that have been designed for collecting census, survey and administrative data as well as training programmes that have been developed over the years for field collectors.

Among data users

There is quality awareness among the more sophisticated data users in research and training institutions, and planners e.g. in the National Planning Commission. Many other data users seem to have a simplistic view of data quality.

3.2.9 Adherence to Professional, Ethical and International Standards

The main data producing agencies comply with internationally recommended standards, classifications, guidelines and methodologies especially those of the United Nations in their work. Where necessary, all these are adapted to national conditions and circumstances.

It was observed that:

- □ the foundations of the FOS and the Central Bank of Nigeria especially are rooted in the Fundamental Principles of Official Statistics adopted by the United Nations Statistical Commission in 1994;
- □ the country has adopted the IMF's General Data Dissemination System (GDDS) to improve data quality, provide a framework for evaluating needs for data improvement and setting priorities in this respect, and to guide the country in the dissemination to the public of comprehensive, timely and accessible statistics;

- □ FOS is still using the 1968 System of National Accounts (SNA) with a few modifications based on 1993 SNA. The need to move rapidly to SNA93 is recognized;
- Classification of Individual Consumption According to Purpose (COICOP) is used for recording prices and expenditure;
- □ FOS uses International Standard Industrial Classification (ISIC) Rev.2 for classifying economic activities;
- Public finance statistics are compiled using the IMF's Government Finance Statistics (GFS) Classification.
- Agricultural Censuses, Population and Housing Censuses and the Census of Business Establishments have all benefited from United Nations guidelines for conducting the censuses;
- □ The Ministry of Health is using recommendations of WHO in collecting health statistics;
- □ Subject-specific surveys have also benefited from guidelines for conducting such surveys.

Compliance with international standards has made it possible for the country to produce data that are internationally comparable.

3.3 Weaknesses

The NSS has a number of weaknesses which have compromised its effectiveness. The following weaknesses have been identified:

3.3.1 Lack of a Statistical Culture

Lack of a statistical culture is one of the main weaknesses of the NSS. Because of lack of a statistical culture in society, there is *"little feel for numbers, appreciation of appropriate levels of accuracy, the making of sensible estimates, commonsense approach to the use of data in supporting an argument, the awareness of the variety of interpretations of figures, and a judicious understanding of widely used concepts such as means and percentages. All these are part of everyday living"⁸.*

Data suppliers (households and some establishments) do not keep records and often are unable to provide accurate data in censuses and surveys. There is limited capability among a number of data users to interpret and critically evaluate statistical information, and use the information, as it should be. Indeed, there are tendencies to plan and take decisions especially at lower levels of government without statistical data and information.

One main reason why statistical activities are under-resourced is general lack of appreciation about the important role statistical data and information can play in society.

3.3.2 Inadequate Statistical Advocacy

One of the main weaknesses of the NSS is its inability to conduct extensive statistical advocacy. Statistical advocacy involves:

⁸ W.H. Cockroft: Mathematics Counts: Report of the Committee of Inquiry into the Teaching of Mathematics in Schools, HMSO, London, 198

- □ promoting wide use of statistics in society,
- □ making the general case for the importance and role of statistics in informing the process of government (e.g. supporting decentralized governance, accountability and good governance), facilitating better decision-making and hence faster growth and more effective use of valuable resources for development and poverty reduction,
- □ promoting use of statistics in macro-economic management and especially in ensuring economic stability and growth,
- □ demonstrating the use of statistical data for decision-making at sectoral level by presenting examples of how policy-makers can use available data from a range of sources to improve both policy and day-to-day management,
- emphasizing the role of statistics in supporting private sector investment and in promoting the development of effective and efficient markets,
- □ making a case for specific statistical activities e.g. the Population and Housing Census, drawing attention to the range of uses census data could be put to and highlighting the costs and benefits of the census compared to other information sources,
- **u** mobilizing and properly using national and international resources for statistics, and
- □ promoting coordinated investment in developing statistical capacity.

The nature and complexity of statistical advocacy demands that it should be carried out in an inter-disciplinary manner and in partnership, involving statisticians, development partners and policy-makers. This kind of partnership remains to be galvanized for statistical advocacy.

3.3.3 Outdated and rather limiting Statistics Act

The 1957 Statistics Act has a number of weaknesses. The following are some of the weaknesses of the Act which have been identified⁹:

- (i) the Act does not provide for a National Statistical System and its mission as such,
- (ii) under the Act, FOS is required to coordinate the national statistical system but is not provided with any powers to assist with this. For example, FOS has no powers to monitor other data collection activities or even to apply national statistical standards,
- (iii) with inflation, the fixed penalties provided for in the Act are now very low and cannot be considered any kind of deterrent against non-compliance,
- (iv) the Act does not provide for the formal independence of FOS against political interference in either data collection or dissemination. This does not give FOS the confidence to release data without first referring them to political leadership,
- (v) the supremacy of the confidentiality clause over later legislation, for example, on taxation, is not formally established, although FOS does not believe this to be a major problem,
- (vi) the Act does not make provision for funding of statistical activities, and
- (vii) the Act does not set out any performance standards e.g. the requirement that all data collected at public expense should be disseminated to users.

As has been mentioned, some of these weaknesses were identified by FOS, which drafted a new Statistics Act in 1994. The draft was overtaken by political changes in the country. This draft had been used as a basis for writing a more robust Statistics Act that, *inter alia*, defines the NSS and establishes an autonomous agency to coordinate it.

⁹ Graham Eele and Kathy Higgins: Nigeria Federal Office of Statistics, Organization and Management Review, February 2000

3.3.4 Overlapping Roles Among Agencies

Overlapping roles among data producers has been identified as one of the weaknesses of the NSS. Government has created parallel capacities for data collection and management in the country especially at Federal level. For instance, parallel capacity has been built in N.POP.C to collect population-related data and compile migration statistics as well as vital statistics. N.POCP.C has set up a field infrastructure for collecting data. This is a replication of what obtains at FOS. Parallel capacity has also been built in the NDB to pool data from different sources into a national databank and disseminate them among users. FOS does much the same thing, perhaps not as well.

The problem is that available limited resources for statistical production have been spread thin over parallel agencies and this has not augured well for infrastructural and capacity building for statistical production in a sustainable manner. Cost-efficiency and other efficiencies may be achieved by consolidating conduct of the Population and Housing Census and all main national surveys in one Federal agency.

It was also observed especially in the Ministries of Education and Health that the functions of the Statistics Branch to collect data had been taken over by the Sectoral Databank and the National Health Management Information System (NHMIS) thus creating parallel capacities for data collection in the ministries. The databanks and management information systems in sectoral ministries should be part and parcel of the Statistics Barnch.

3.3.5 Insufficient Coordination and Feedback Mechanisms

Legal underpinning

The coordination arrangements mentioned above are administrative and are not underpinned by the Statistics Act. The revision of the Statistics Act will provide for legally establishing coordination arrangements.

Meetings

It was reported that NCS has never met since it was inaugurated. The NACS has met only once since its inauguration. Only the NCCS was reported to be meeting regularly. Failure to meet by these bodies has been attributed to their composition, inadequate funding and failure by Chairpersons to respond to requests by the Secretariat to convene meetings. FOS is the Secretariat for all these bodies.

Number of coordinating bodies and their roles

The number of coordinating bodies is on the high side and their reporting arrangements are not clear. Servicing these Committees can be expensive in terms of time, effort and finances. What is more, the roles of the bodies overlap. Effectiveness may be achieved by reducing the number of these bodies.

The Council, which has not met since its inauguration, may perhaps not be necessary any more if a Board of Directors for the successor body to is established (see details in chapter 4). There should, however, be a reconstituted National Consultative Committee on Statistics which should include data user-producer. This committee should provide data users and producers with a forum to discuss and resolve issues related to provision of adequate official

statistics. This Committee should subsume all the functions currently performed by the four coordinating committees presented above. The Committee should be required to present a report to the Board twice a year. Its functions, composition and reporting arrangements should be provided for in the revised Statistics Act.

Feedback Mechanisms

Two types of feedback can be identified. The first relates to hierarchical planning and control systems designed for industrial age organization vis-à-vis the information-age- organization. The former relates to command and control systems in which departures from planned results do not cause people to question whether planned results are still desirable outcomes, or whether the methods used to accomplish planned objectives are still appropriate, etc. The latter on the other hand, relates to modern management systems in which senior managers: (a) question their assumptions and reflect on whether the theory under which they were operating is still consistent with current evidence, observations and experience, (b) are able to devise new strategies to capitalize on new opportunities, or to counter new threats that were not anticipated¹⁰. There does not seem to be much of this type of feedback among data producing institutions in the country.

The second type of feedback relates to the situation where data are subjected to scrutiny and more detailed analysis, which invariably will highlight faults in the data. The only reported attempt made by FOS in this regard was the publication of the "Review of the Economy". However, this effort was not sustained. If there is a good feedback mechanism, these faults are discussed with data producers with a view to improving future data collections. In particular, the feedback can lead to improved questionnaire design, sample design and use of data collection methods. There do not seem to be well-established mechanisms for this type of desirable feedback.

3.3.6 Lack of clarity of statistical function in line ministries

In a number of line ministries, the statistical functions do not seem to have clarity. In some of them, there is confusion about the role of the Statistics Branch and that of the Data Bank. In yet other line ministries, the Heads of Statistics branches in DPRSs are burdened with responsibilities that cannot be defined as statistical. In yet other line ministries, survey taking is seen as more elegant and attractive than compilation of administrative data that are internally generated. It is important that collecting, compilation, processing, analysing and disseminating administrative data should be given priority in line ministries.

3.3.7 Inadequacy of financial resources and sustainability

Many statistical activities in the country are donor-driven. They have been undertaken to meet urgent and specific data needs. Donor-driven projects and programmes are usually short-term and have sometimes taken precedence over long-term planning and distorted national priorities for statistical production. And invariably, donor-funded activities have ceased when donor assistance has ended.

The expectation has been created that unless a statistical activity is donor-funded, it will not succeed. This is because the government, like in most other countries in Africa, is not

¹⁰ Robert S. Kaplan and David P. Norton: Translating Strategy into Practice, Balanced Scorecard, Harvard Business School Press, Boston, Massachusetts, 1996

investing in statistics. Government generally funds ad hoc data collections when specific data are needed to meet a policy or decision need - "quick fix" approach. This approach, unfortunately, has not conferred lasting benefit to the NSS in terms of capacity building and raising the profile of statistics. At worst, it has distorted national priorities for data production.

Government has not been investing adequately in maintaining the statistical infrastructure and statistical operations. Tables 3.1 and 3.2 below give data on government capital funding (funding other than for salaries) for selected agencies.

Year	Proposed*	Approved	Released
2000		71,555,446	69,706,447
2001		17,236,750	NIL
2002	2,348,771,000	266,000,000	169,000,000
2003	343,8000,330	230,000,000	100,949,000

Table 3.1.FOS capital budget for 2000 -2003

* For 2000 and 2001, the agency was made to propose what essentially had been approved a priori.

Source: FOS records

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

Table 3.1.National Databank capital budget for 1999 -2003

Source: NDB records

The two tables clearly show the extent of government under-funding of agencies that collect and manage data. It can be seen from the table that:

- a) the amounts approved bear no relationship with the amount requested. In the case of NDB, amounts approved are for each of the 5 years, less than half the amount requested. In 2002 and 2003, government did not approve any budgetary capital allocation to NDB.
- b) of the approved capital budget, only about half is released. At FOS, 67% of the proposed budget in 2003 was approved. Of the approved amount, 44% was released. The situation was even bleaker at NDB. In 2001, only 38% of the proposed capital expenditure was approved. Of the approved amount, only 25% was released.

- c) it is not clear what an institution is expected to do if its activities are inadequately funded. For instance, if the budget for a survey is reduced by 50%, should the survey be abandoned because we cannot conduct half a survey; neither can an institution "cut corners" so that it can conduct the survey. There is a minimum budget required for a specified survey.
- d) it was also observed that the timing of the releases is many times inappropriate. Some data collection activities e.g. agricultural surveys must be carried out at specific times of the year. If money for these activities is released when the season is over, it will not help.
- e) with the above levels of funding, sustainability of statistical activities is far cry.

What has been mentioned above applies even more to line Ministries, States and Local Government Areas. In most line Ministries, States and LGSs, there are no budgetary provisions for data collection and compilation.

Effects of under-funding

The aforementioned under-funding has led to a situation where many agencies involved in data production:

- lack the basic infrastructure for the agencies to function well. For instance, the Statistics Branch at the Ministry of Health has one functioning computer, the six statisticians in the Ministry of Education Statistics Branch do not have full access to computers, many professional staff at FOS have no direct access to the computer, etc.; databases have not been built as they should; there are shortages of transport for field work in virtually ever agency that collects data (apart from CBN);
- □ Government agencies that collect and manage data are unable to attract and retain skilled staff. The staff in post are de-motivated and their morale is low;
- □ Very important national statistical activities have had to be postponed or abandoned altogether. At N.POP.C, the national Population and Housing Census which was scheduled for 2001, has now been postponed to the last quarter of 2005. This breaks the periodicity of the census rather than being carried out every 10 years, it will now be carried out after 14 years. At FOS, the statistical activities which have been abandoned due to lack of funding include Agricultural Census, Survey of Hotels and Restaurants, Building and Construction Survey, etc. Under-funding has also affected the ability of FOS to conduct statistical advocacy.
- Poor funding of statistical activities, has compromised data quality. Under-funding of field data collection and follow-up processes has meant that sufficient training for data collection cannot be done, field supervision and spot checks are less intensive than is necessary to produce quality data, data processing is constrained by shortages of computers, publications are not produced or are produced late, etc.
- □ Staff training, motivation and field supervision have taken a back burner due to underfunding and with serious consequences for data quality and integrity.

It is clear from the above that as long as government continues to under-fund statistical activities, it will be difficult to build a robust, self-sustaining and enduring statistical infrastructure and system.

3.3.8 Shortage of human resources in some agencies

Many agencies reported that under-staffing was having deleterious effect on their operations. Those agencies which are not under-staffed reported that they do not have the staff they need in the right mix.

Most agencies do not have a Human Resource Development Strategy (HRDS) to guide management, development and harnessing their human resources. As a result, issues of staff training, career development, staff motivation and retention, etc., which are normally addressed by such a strategy, are handled in an ad hoc and clearly unsatisfactory manner. In some agencies, the absence of a HRDS is reflected in over-employment especially of support staff, low levels of skills, less than satisfactory empowerment and motivation of staff, high staff turnover, etc.

3.3.9 General poor IT application

Most agencies including (FOS, N.POP.C, line Ministries, SSAs, etc.) remain at the margins of the information age – evolutionary level of IT application – very much unable to reap the significant development dividends to the NSS offered by the information revolution. Figure 3.1 below shows the five levels depicting the degrees of business transformation using IT and associated potential benefits. The first two levels are evolutionary meaning that at those levels, application of IT achieves limited goals (low end on the scale of potential benefits). The next three levels are revolutionary levels, which yield progressively substantial benefits from IT application (high end on the scale of potential benefits). Currently, many agencies are operating at localized exploitation stage (lowest stage of IT application) where IT has not been fully integrated into their business processes. As a matter of fact, some agencies reported that they still process some data manually.



Figure 3.1. Five levels of IT-Induced Business Transformation

Available computers in most agencies are too few, old and out-of-date. Most agencies including FOS and N.POP.C do not have:

- (i) a Local Area Network (LAN) let alone Wide Area Network (WAN) which are essential for improving efficiency, optimizing use of IT resources, increasing information sharing and providing connectivity to other institutions,
- (ii) a database which, (a) allows the consolidation of all data in one location, (b) provides powerful, yet easy to use, analytical tools, (c) helps "tell a story" and thus improve decision-making, and (d) facilitate dynamic publishing and web dissemination to various constituencies¹¹.
- (iii) a web site and Internet connectivity.
- (iv) IT policies and strategies to guide their IT and data management operations including standardization of work processes, infrastructure and facilities (hardware, software, maintenance, etc.), and provision of access to shared facilities (e.g. administrative tools); connectivity; etc.

3.3.10 Inadequate Knowledge Management

Knowledge management is a major aspect of statistical governance and is essential for effective performance of any organization or system. It involves promoting integrated approach to identifying, capturing, retrieving, sharing and evaluating organization's information assets. These assets include databases, documents, policies and procedures, library services and tacit expertise and experience stored in peoples' heads.

By and large, knowledge management is not well done in the NSS. Data and information from different sources are not integrated and shared using the Management Information System (MIS), the Local Area Network (LAN) and a comprehensive user-friendly and accessible socio-economic national databases; agency-wide awareness about the need for proper documentation of methodologies, policies and procedures is not given priority - in particular, explicit sets of documents on basic values, purpose and direction for the agencies do not seem to have been produced and communicated to all staff in order to preserve institutional memory; writing skills among staff have not been deliberately developed; step-by-step manuals are not in place or are out of date; and retrieving simple information e.g. number of employees by sex or qualification is not easy.

3.3.11 Poor maintenance of equipment

In many agencies, a lot of equipment bought mainly with donor funding are in a state of disrepair due to lack of maintenance. The work of these agencies in now suffering because of lack of working equipment. There is a need to develop a culture of maintenance and to make sufficient allowances in budgets for maintenance of both physical infrastructure and equipment.

3.3.12 Inadequate Data Management, Analysis and Dissemination

In many agencies, there has been a build up of "mountains" of unprocessed or insufficiently processed and reported data. Where processing has been done, the tendency has been to generate statistical tables, do primary analysis and write reports based on these tables for general use. Often the reports give a commentary on many statistical tables, which are appended to the reports. Not much detailed analysis is done as a matter of course to meet specific needs, interests and perspectives of well-targeted users to create impact. Such analysis is essential to

¹¹ The World Bank: Strengthening Capacity to Improve the Monitoring and Analysis of Poverty and Development, the 2nd Generation LIVE DATABASE

illuminate developmental issues, inform policy design and programme development, and form a basis for advocacy.

Few line ministries have developed functional and accessible data banks for easy data storage and retrieval of.

3.3.13 Inadequacy of Main Statistical Outputs and Data Dissemination to Users

(a) Inadequacy of Main Statistical Outputs

The main weaknesses of statistical outputs include:

(i) Lack of timeliness

Many data users have consistently complained about the perennial problem of lack of timeliness in data. There are many examples of data which are collected regularly but which are published some two years after they are collected or which are not published at all.

Apart from CBN, all agencies involved in data collection/compilation have serious problems meeting the requirement for timeliness of data.

FOS

The following table presents the main FOS regular publications, the frequency with which they should be produced by category, date of release of the latest issue and associated backlog. Publications are the main dissemination medium of the office. The publications are based mainly on household surveys, establishment surveys and administrative records (integrated reports). In addition, statistical bulletins are produced as a vehicle for dissemination of periodic statistical outputs.

It can be seen from the table that statistical production at FOS is in a deplorable state. The last column of the table shows the backlog of publications which should have been produced. The household-based surveys provide data for monitoring poverty levels and MDGs. These surveys have a backlog ranging from 1-5 years to as high as 10 years. The establishment-based surveys, which provide data required for economic management, have not faired any better. Integrated reports which are compiled mostly from administrative records and which are useful for measuring and monitoring macro-economic indicators are very much out of date.

National Population Commission

The Commission has been unable to publish Migration Statistics since it took over this function from FOS in 1997

Line Ministries

Line ministries are expected to be publishing regular statistical yearbooks or bulletins. It can be seen from the following that they have not done any better than FOS.
Ministry of Communication

Digest of Communication Statistics (1995 – 1999) unpublished. Stopped publication due to fund constraint.

Ministry of Aviation Aviation

Annual Statistical Bulletin, last published in 1997

Ministry of Employment, Labour and Productivity

Annual Bulletin of Labour Statistics last published in 2001

Ministry of Commerce

- Quarterly Price Bulletin, backlog of 2 quarters,
- Annual Digest of Statistics, backlog 7 years
- Annual Trade Statistics remain unpublished (?)

Ministry of Education

- Annual School Census last published 1967 (Education Data Bank published an edition in 1988)
- Annual Statistics of Education in Nigeria: last published in 1990

Ministry of Health

Health in Nigeria: last published in 1995

Ministry of Agriculture

- Nigeria Agricultural Statistics (Annual Series) last published in 1997
- Agricultural Outlook Vol. No. 1 published 1997 (no further publication since then)
- Agricultural Summary Performance Report Vol. No. 1 1999 (no further publication since).

States

Some States have done better than line ministries and FOS in the way they publish their data. The backlog of published States' Statistical Year Book and other publications in selected States is as follows:

Gombe State Imo State Niger State Lagos State	Statistical Year Book last published in 2000 Statistical Year Book last published in 2001 Statistical Year Book last published in 2002 Price Statistics last published in 2003 Annual Digest of Statistics last published in 2003
	Annual Abstract of Local Government Statistics (2003 report with publishers)
Akwa Ibom State	data for a number of publications and others yet to be collected
Rivers State	Statistical Year Book last published in 2002
Adamawa State	no backlog
Kogi State	Statistical Year Book last published in 2000 Price Statistics last published in 1999
Anambra State	Statistical Year Book last published in 2001
	Prices last published in 2001
Kaduna State	Statistical Year Book,
	Digest of LG Statistics,

Population projections by District/LG Areas all last published in 1997.

Description of Publication	Required	Latest	Backlog
•	Frequency	Publication	0
1. Household-based Surveys			
1.1 General Household	Annual	1997/1998	5
1.1 National Consumer Survey	5 yearly	1992/1993	1
1.2 Labour Force Survey	Annual	1984	10
1.3 National Agricultural Sample Survey	Annual	1989/1990	3
1.4 Nigeria Poverty Profile	3 yearly	1980/1996	2
1.5 CWIQ Survey	Annual	2002	-
1.6 Multiple Indicator Cluster Survey	2 yearly	1999	1
1.7 The Progress of Nigeria Children	2 yearly	1997	2
1.8 Internal Migration Survey	3 yearly	1986	4
2. Establishment-based Surveys			
2.1 National Census of Industries and Businesses	10 yearly	1997	-
2.2 Annual Industrial Survey Report	Annual	1991/92	11
2.3 Building and Construction Survey	Annual	1976	27
2.4 Survey of Road Transport Operators	Annual	1976	27
2.5 Survey of Distributive Trade	Annual	1980	3
2.6 Survey of Hotels and Restaurants	Annual	1976	27
2.7 Quarterly Survey of Manufacturing	Quarterly	1992	44
3. Integrated Reports			
3.1 Annual Abstract of Statistics	Annual	2001	1
3.2 Digest of Statistics	Bi-annual	1998	10
3.3 Consumer Price Index	Bi-annual	1997	12
3.4 Retail Prices of Selected Items	Quarterly	1996	28
3.5 Facts and Figures about Nigeria	Annual	1998	5
3.6 National Accounts of Nigeria	Annual	1998	5
3.7 Nigeria Trade Summary	Bi-annual	1999	4
3.8 Review of External Trade	Annual	1986	7
3.9 Review of Nigeria Economy	Annual	1999	4
3.10. Nigeria in Numerical News	Annual	1996	7
3.11 Social Statistics in Nigeria	Annual	1996	7
3.12 Women in Numerical News	Annual	1999	3
4. Statistical Bulletins			
4.1 Statistical News: CPI	Monthly	Dec. 2003	1
4.2 Statistical News: Labour Force Survey	Quarterly	March 2002	7
4.3 Statistical News: Merchandise Trade	Quarterly	June 2002	5

Table 3.3: Main FOS regular publication and time lag

Source: Preliminary Input to the Development of a Statistical Master Plan for Nigeria by Prof. A. Fadahunsi and T.O. Offor, January 2004

One main problem with Annual Abstract of Statistics, FOS's flagship and Statistical Year Books, States' flagships is that they lack **metadata**. Metadata are essential for making statistical reports user-friendly as they give explanatory notes on definitions of main concepts, methodologies for data collection, limitations of data, etc. There should also be some commentary on the data – about trends in time series, how the data was collected, the methods used, etc.

(ii) Accuracy

Datasets believed to be accurate

Foreign Trade statistics: Foreign trade data are collected by the Department of Customs in the Ministry of Finance. The data are compiled using ASYCUDA, a robust computer software. FOS then gets the compiled data from the department.

Consumer Price Index (CPI): CPI is computed by FOS in collaboration with CBN. The interventions by UNDP and the CBN in the last 6 years has very much improved the accuracy of the data used to calculate the CPI.

Datasets believed to be inaccurate

Household-based data: The conditions under which these data are collected are such that their accuracy comes into question. Basically, the enumerators who are used are not adequately trained and supervised, are not well paid or remunerated and for some regular surveys e.g. General Household Survey and Annual Agricultural Survey, are over-stretched. In these two surveys, the workload for enumerators has been increased to as many as five Enumeration Areas (EAs) per enumerator. Ideally an enumerator should be covering one EA.

Establishment-based data: Establishment surveys have not been carried out by FOS in many years and until recently, the register of establishments which is the basis for the surveys was very much out of date. In addition, response rates in establishment surveys conducted by FOS and the Manufacturers Association of Nigeria (MAN) are low. For instance, the last Survey of Manufacturing Industries was undertaken by FOS in 1990 and the response rate in that survey was a mere $10\%^{12}$. Response rates in MAN surveys are registering a response rate of about 50%. The CBN, however, has been able to raise the response rates in its establishment surveys to about 65%. Low response rates affect data accuracy.

Population and Housing Census data: The population data from Nigeria Population and Housing Censuses have always been controversial. Census data are important for national development. They are a basis for administration and planning. They are used as a basis for demarcating constituencies, revenue sharing, targeting development programmes, etc. They are also used as the base for most development indicators e.g. poverty rates, proportion of the population who suffer from hunger, literacy rates, mortality and fertility rates, etc. It would appear that the census has been politicized and it is high time it was de-politicized.

(iv) Level of data disaggregation

One major concern of data users especially those involved in development work is that available data are not sufficiently disaggregated by State, Local Government Area, household/community, gender and by other important sub-population classifications for bottom-up planning, targeted interventions and monitoring.

Most nation-wide surveys by FOS, N.POP.C and other agencies give results at National and State level. Also a lot of administrative data available in line ministries are aggregated at national and State level.

¹² FOS: Annual Abstract of Statistics, 2001 Edition, April 2003

Consistency

It was observed that published data are not being checked for consistency. The best example in this regard is the Annual Abstract of Statistics which is published as FOS flagship. The abstract was last published in 2001. There are a number of unexplained inconsistencies in various tables in the Abstract. These inconsistencies could be attributed to the source of the data or to FOS itself. Either way, the figures in the Abstract were not well checked.

In this Abstract, the National Summary of Primary Schools (pages 229-233) gives conflicting figures from two sources – the Federal Ministry of Education (FME) and the National Primary Education Commission (NPEC). For 1996, the FME put the number of primary schools in Abia State at 168 while the NPEC put the figure at 721. No explanation is given about the discrepancy. On page 291 of the same Abstract, the number of first degree awards by Nigerian Universities rose from 19,204 in 1992 to 34,577 in 1993/94, 41,121 in 1995/96, 42,976 in 1996/97 and then dropped sharply to 5,325 in 1997/98 without an explanation.

In addition to agricultural data, the Nigeria Agricultural Statistics Time Series Data gives a number of population parameters without indicating to which year these indicators relate. The same publication gives the population below poverty line as 34%, a figure which is different from figures quoted in other official documents.

Data Gaps

The existing data gaps in the periodically published statistical outputs are due to lack of resources to undertake the regular surveys or to process the available data for publication. Labour Force Survey, Poverty in Agriculture, Health of Nigerian, National Consumer Survey etc fall within the category of FOS NISH based surveys that have been inadequately or not funded. Also the Annual Surveys of Industries and Businesses – Industrial Survey, Building and Construction Survey, Survey of Distributive Trade, Survey of Hotels and Restaurants that have not been published for almost three decades (1976, 1980) can be considered abandoned. The gaps in the provision of the demographic and Social Statistics, and Economic and Financial Statistics constitute major handicaps in policy formulation and monitoring of development process.

There is a unit dealing with Gender Statistics in the FOS. A publication on women in numerical news has been published. A comprehensive publication on gender statistics is not yet available. The only available data on HIV/AIDS knowledge were collected during the NDHS Survey published in 1999. The survey was undertaken in one of the FOS Survey of Households. The National Data Aids Testing:- HIV Seroprevalence is available from the 1999 HIV/syphilis sentinel seroprevalence survey in Nigeria Technical Report of the National AIDS/STD Control Programme of the Federal Ministry of Health (see Multiple Indicator Cluster Survey (1999) by FOS/UNICEF). There are data gaps with respect to disaggregated data to LGA and sub-LGA level, governance, Direct Foreign Investments (DFI), early warning data for food security, household food security, on-farm food stocks, poverty levels, fish farming, post-harvest food losses, forestry, food consumption, etc.

(b) Data Dissemination

A part from the CBN, data producing agencies do not have a well-defined data dissemination policy. Such a policy would provide for advance publication of a release calendar and

simultaneous release of data to all stakeholders – principle of equal access to data consistent with the Fundamental Principles of Official Statistics.

The spirit of the policy would be two fold, namely to make statistical data and information liberally and readily accessible as a "public good" and in a timely manner, and to promote use of existing data. It would stipulate how different media would be used to disseminate the data, it would provide for use of metadata, etc.

3.4 **Opportunities**

There are now tremendous opportunities for developing statistics in the country. The following main opportunities have been identified:

3.4.1 Increased Government Commitment

The Federal government regards the improvement in statistics at the national, state and local government levels as one of the national priorities. On his working visit to the FOS in Abuja on 8 January 2003, the Economic Advisor to the President, Professor Charles C. Soludo, observed that, "As a government, reliable and timely statistics is fundamental to accurate analysis of policy problems, designing and implementing effective reforms and in the evaluation of performance"¹³. He then stated that the "Federal Government will henceforth pay full attention to the preparation of statistics to serve as backbone to the economic reform agenda. …" and announced that government had bought a six-storey building to serve as a permanent office complex for the FOS. This is the first time since FOS was set up in 1947 that it will have its own building.

3.4.2 Increased Demand for Data and Information for Informing Government Programmes

Over the years, especially during decades of military dictatorship, there was little demand within government for good statistics and overtime, funding for production and maintenance of statistics dwindled to almost nothing. At the same time, capacity fell drastically. Following the return to democratic rule, demand for all types of official statistics to inform major government policies and monitor development programmes increased rapidly. In particular, there has been a lot of demand for informing the design of the National Economic Empowerment and Development Strategy (NEEDS) and monitoring MDGs. There is also a lot of demand for data to monitor development indicators on such new areas as democratization, governance, human rights, transparency and accountability, gender, poverty, HIV/AIDS, environment, etc.

3.4.3 Opportunities to Share Experience and Facilities in the African Region and Beyond

Many opportunities exist in the sub-region, African region and beyond for sharing experiences, good practice and facilities with other countries. Nigeria is a member of the Economic Community of West African States (ECOWAS), a sub-regional organization created in 1975 to promote close co-operation and development in all fields of economic activity and foster relations among 16 member countries of West Africa. With funding from EU, ECOWAS has been promoting harmonization of external trade, national accounts and

¹³ This Day Newspaper, Monday 15 January 2004.

price indexes in member countries. It has installed and trained national staff to use ASYCUDA and EUROTRACE software. ASYCUDA handles manifests and customs declarations, accounting procedures, warehousing and import and export licenses. It also has an in-built statistical database, which generates standard reports on imports, exports, exporters, duties and taxes paid. EUROTRACE on the other hand is used to manage external trade data.

Nigeria has also benefited from various programmes of the ECA including its Statistical Training Programme for Africa (STPA). It also attends meetings organized by ECOWAS, ECA, ADB and other international agencies where it shares experience with other countries.

3.4.4 International Frameworks

There are a number of international frameworks on statistics that the NSS can get off the shelf and use. Some of these frameworks have been listed under section 3.2. These and similar frameworks have been accessed and used to improve the quality of national statistics.

3.4.5 International Partnerships for Statistical Development

In the last few years, there has been an increase in international cooperation and partnerships for statistical development to respond to the unprecedented demand for statistics and development indicators in developing countries. One of the leading catalysts in this process is the PARIS21 consortium established in 1999. PARIS21 is a partnership comprising policy makers and statisticians from donor and developing countries, international organizations, professional bodies and academic institutions.

PARIS21 works through: partnerships by bringing together donors and Governments in support of country-owned development strategies; advocacy by demonstrating the power of and use of statistics for policy decisions; resources by assisting to mobilise both national and international resources to enable collection of right information for policy making and especially for informing anti-poverty strategies and programmes; information by providing a platform for open debate, sharing of knowledge and for fostering co-ordination; and strategies by assisting countries to develop well-managed, resourced and sustainable statistical capacity, and by better use of data as a tool for more effective development.

PARIS21 inspired initiatives are funded by the Trust Fund for Statistical Capacity Building (TFSCB) established by the Development Data Group of the World Bank to strengthen the capacity of statistical systems in developing countries. This SMP has been prepared with support from TFSCB.

3.4.6 Advances in IT

Advances in Information technology (IT) (hardware, application systems, communications networks and skilled staff) provide great opportunities for improving the way data are collected, processed, stored and disseminated to users. In particular:

- a) they have made IT hardware more powerful, relatively inexpensive and accessible;
- b) applications have become more user-friendly;
- c) they have led to the possibility to network to improve internal access to data and metadata;
- d) data processing has been speeded up to improve on timeliness,

- e) large datasets can be stored, databases can be created,
- f) platforms and networks can be created for sharing equipment and information,
- g) more imaginative and attractive statistical products can be produced; and
- h) the Internet has made it possible to access information from the outside world in real time.

It is important that the NSS harnesses these advances in IT to improve the statistical processes and delivery of data and information to the users.

3.5 Risks

Possible risks to the development of national statistics include, among others:

3.5.1 Political Interference

Political interference can badly affect the credibility and integrity of official statistics. This point was stressed by Rt. Hon. Clare Short, the then British Secretary for International Development. In 1999 she said, "*Statistics need to be independent of the political processes and people need to have confidence in them. Politicians may not like this but the threat to democracy is great if honest, independent statistics are not produced*"¹⁴.

This risk will be avoided by underpinning production of national statistics with a Statistics Act that provides, *inter alia*, for professional independence of the FOS and de-linking it from the mainstream Civil Service.

3.5.2 Inadequate Funding by Government

Perhaps one of the biggest risks is failure by government to give priority to statistical development and to provide adequate funding for data producers to carry out their functions. This threat will be minimized by carrying out sensitization and awareness programmes as well as keeping abreast of changing Government requirements for statistical information.

3.5.3 Inability to Attract and Retain Staff

Data producing agencies in government agencies will continue to lose high level and skilled statistical personnel due to poor facilitation, motivation and remuneration. This has had deleterious effect on the agencies in terms of sustaining capacity for statistical production. The threat of high staff turnover should be stemmed by improvement in terms and conditions of service, better facilitation, improved training and well-defined career path.

3.5.4 Lack of Commitment to Coordination, Collaboration, Networking and Information Sharing

There is the threat that the "silo mentality" among data producers will make commitment to coordination, collaboration, networking and information sharing a pipe dream and that the factors driving coordination e.g. common audiences, publications requiring synchronizing outputs, etc, will not be there.

¹⁴ Rt. Hon. Clare Short: Statistics for the Elimination of World Poverty, Speech given in Paris, November 1999

This risk will be minimized by FOS playing its coordinating role proactively through sensitization and training, and articulating the virtues of coordination, collaboration, networking and information sharing.

3.6 View of Users

Key agencies involved in data production and management have not been carrying out surveys to: (a) establish public awareness about and familiarity with the agency, (b) establish user satisfaction with products and services offered by the agency, and (c) determine user demand. To that extent, they are not fully aware about user perception about them and their products and services. During consultation with data users, their perceptions about agencies and the data they collect were sought. They include the following:

3.6.1 General perception

The general perception of frequent users is that statistics is an important resource which should be harnessed for national development. FOS is perceived to have a major role to play in this process. Specifically, FOS is seen to be a very important organization with tremendous potential to play a crucial role of informing national development processes. It is, therefore, roundly perceived as worthy of time, support and investment by govenment.

However, this potential is not seen to be fully exploited because resources and support from Government are not seen to be commensurate with the tasks it is expected to undertake. This is particularly critical because while demand for data has increased phenomenally especially in recent past, the rate of increase in resources for data production has been modest.

3.6.2 Professional Independence

Many users would like FOS to exercise a lot professional independence in order to enhance the integrity, impartiality and credibility of official statistics. There is a widely held view that FOS will perform its functions better if it is hived out of the Civil Service and National Planning Commission and made an autonomous government statistical agency with a high profile in society and reporting to the Presidency.

3.6.3 Data Quality

Most users are concerned about lack of timeliness in existing data as well as data gaps in a number of series. They say that lack of up-to-date data from different agencies is hindering their ability to programme, plan, monitor and report. There has been a tendency of some data users to actually mount their own data collections to fill data gaps.

3.6.4 Mountains of Data

There is a perception that there are mountains of data at FOS and other agencies that have not been fully processed, analyzed and disseminated to users. Failure to make full use of existing data is seen as a major weakness arising basically from a producer-driven statistical system that thrives on producing more and more data.

3.6.5 Data Access

Many sectoral ministries and SSAs have not been producing statistical bulletins in a timely manner. In addition, by and large, no operational, accessible and user-friendly sectoral databases have been built. This has made data access by users rather difficult.

STRENGTHS			WEAKNESSES			
1.	Recognition by stakeholders of weaknesses in the	1.	Lack of a statistical culture			
	system and a need for reform	2.	Inadequate statistical advocacy			
2.	Recognition in the system of the pivotal	3.	Outdated and rather limited Statistics Act			
	coordinating role of FOS in development of the	4.	Overlapping roles among agencies			
	NSS	5.	Insufficient coordination and feedback			
3.	Existence of coordinating committees	6.	mechanisms			
4.	CBN, N.POP.C, etc.) to collaborate		Lack of clarify of statistical function in line ministries.			
5.			Inadequacy of financial resources and sustainability			
	personnel	8.	Shortage of human resources in some			
6.	Network of field offices with experienced	9.	agencies			
7.	field officers and permanent field staff		General poor IT application among many institutions			
1.	institutions (FOS, CBN, N.POP.C, some SSAs, etc.)	10.	Inadequate knowledge management			
	for collection and management of some	11.	Poor maintenance of equipment			
	statistics.	12.	Inadequate data management, analysis			
8.	Quality awareness		and dissemination			
9.		13.	Inadequacy of main statistical outputs and data dissemination			
		14.	Lack of data at low levels of aggregation			
		15.	Lack of timeliness in data release			
	OPPORTUNITIES		THREATS			
1.	Government commitment to development of	1.	User despondency in the country			
	statistics	2.	Reduced priority for and investment in			
2.	General interest in statistics for monitoring		statistics			
	among development partners	3.	Failure to implement a new Statistics Act			
3.	Increased demand for data and information	4.	Failure to innovate and perform			
	for Informing Government programmes	5.	Inability to attract and retain qualified staff			
4.	Increased demand for data and information on	6.	Loss of competitive edge by FOS on account			
	non-traditional areas - governance, gender,		of failure to invest in development of new			
_	poverty, HIV/AIDS, etc.	7	methodologies and products			
5.	Access to sub-regional resources and facilities	7.	Lack of commitment to coordination			
6.	Possibilities to share experiences in statistical					
	operations in the sub-region, region and					
_	internationally					
7.	International frameworks and guidelines (e.g.					
	Fundamental Principles of Official Statistics, GDDS)					

Table 3.4. Summary SWOT Analysis for the National Statistical System (NSS)



Statistical Master Plan

CHAPTER FOUR

Outline of the Statistical Master Plan

4.1 Long-term Vision

The long-term vision for the National Statistical System is one of a proactive, coordinated, well-managed and resourced system capable of meeting statistical data and information needs of society towards sustainable national development and poverty reduction.

4.2 Mission

The mission of the National Statistical System will be to:

- (a) raise public awareness about the importance and role of statistical information to society,
- (b) collect, process, analyze and disseminate quality statistical data and information in a coordinated and timely manner,
- (c) promote the use of best practice and international standards in statistical production, management and dissemination,
- (d) promote the use of statistical data and information at individual, Local Government Area, State, institutional and national level, especially for evidence-based policy design and decision-making, and
- (e) build sustainable capacity for the production and use of statistical data and information in the country.

4.3 Core values

The core values of the National Statistical System shall be:

- (a) **Demand for and supply of official statistics**: All activities of the NSS shall aim at generating demand for and supply of good quality official statistics.
- (b) **Credibility and integrity of official statistics:** To create and maintain public trust in official statistics by fully exercising professional independence and by proactively promoting professionalism and transparency in data production and dissemination.

4.4 Strategy, strategic management and strategic outcomes

4.4.1 Strategy

A strategy is a means by which long-term objectives of an organization are achieved. It is a declaration of intent, defining where the organization wants to be in the long-term, and ensures that day-to-day decisions fit in with long-term interests of the organization. The Master Plan aims to create a strategy-focused National Statistical Agency.

4.4.2 Strategic management

The strategic management process which is an objective, logical and systematic approach for making major decisions in an organization will be used to enhance performance of statistical agencies in the National Statistical System. Strategic management has the advantage that it allows organizations to be more proactive than reactive in shaping their future (initiate and influence rather than just respond); allows for identification, prioritization and exploitation of opportunities; provides objective view of management problems; facilitates better communication in the organization (communication is key to successful strategic management); presents a framework for improved coordination and control of activities; allows major decisions to better support established goals and objectives; leads to empowerment of employees which in turn leads to a sense of ownership, more commitment, creativity, imagination, innovation and productivity (ownership of strategies is key to success); helps to integrate the behaviour of individuals into total effort; provides a basis for the clarification of individual responsibilities; provides a cooperative, integrated and enthusiastic approach to tackling problems and opportunities; enhances awareness of external threats; is beginning of efficient and effectual managerial system; helps to view change as an opportunity rather than a threat; and encourages forward thinking.

4.4.3 Strategic Outcomes

The Plan aims to achieve three main strategic outcomes that are essential for the realization of the vision and mission of the National Statistical System. These are:

User satisfaction

Meeting user needs is the *raison d'etre* for the existence of a National Statistical System. It is, therefore, important that one of the strategic outcomes of the Plan should be user satisfaction.

Effective processes

One of the expected strategic outcomes of the Plan is an effective process value chain that starts with innovation processes – identifying current and future user needs and developing solutions to meet these needs – proceeds through operations process - delivering quality value-added statistical products and services to users.

Staff satisfaction

Staff are the most important resource in any system. They will not contribute to organizational success if they are not satisfied i.e. if the organizational climate is not motivating, skilling, empowering or conducive for taking personal initiatives. Staff satisfaction is, therefore, an important strategic outcome of the Plan.

This chapter and the next present the strategic management process planned for the National Statistical System, cascading from vision to mission to core values to strategy and to strategic outcomes as can be seen in the following figure.





4.4.4 Strategic Themes and Goals

The following are the strategic themes and goals or overall accomplishments to be achieved by the Plan in order to realize the above vision and mission for the National Statistical System:

Strategic Theme 1: Organizational Development

Strategic goals:

- 1. Greater awareness about the importance of statistics to society
- **2.** Higher profile and positioning of statistics
- **3.** Greater use of statistics especially for evidence-based policy design and decision-making
- 4. Congenial legal framework
- 5. Coordination, collaboration, networking and information sharing
- 6. Institutional development

Strategic Theme 2: Human Resources Development

Strategic goals

- 7. Strategic skills development
- 8. Staff motivation

Strategic Theme 3: Data Development

Strategic goals

- **9.** Enhanced data quality
- **10.** Censuses and surveys

- **11.** Administrative data
- **12.** New areas

Strategic Theme 4: Data Management, Dissemination and Access

Strategic goals

- 13. Clearing backlog of unprocessed and unreported data
- **14.** Data analysis and reporting
- **15.** Dissemination and access

Strategic Theme 4: Infrastructure and Equipment

Strategic goals

- **16.** Building for the Bureau
- **17.** Transport
- **18.** Stand-by generators
- **19.** IT infrastructure
- **20.** Management systems
- 21. Survey infrastructure

In addition to the above major goals, there will be routine goals and objectives around which activities and products will be established. A number of strategies or overall methods to achieve thee above strategic goals will be pursued. These strategies are given in the next sections.

4.5 Organizational Development

4.5.1 Create greater statistical awareness

The SMP will aim to achieve an appreciable level of statistical numeracy in society, viz. having a feel for numbers, an appreciation of appropriate levels of accuracy, the making of sensible estimates, a common sense approach to the use of data in supporting an argument, the awareness of the variety of interpretations of figures, and a judicious understanding of widely used concepts such as means and percentages. This will be done at both Federal and State level through:

- general statistical awareness programmes on an ongoing basis,
- promoting and demonstrating the use of statistics
- making statistics understandable and readily available to users.

The media – radio, TV, newspapers - will play a big role in this process. As part of Africa Statistics Day celebrations, a data user-producer workshop and a media workshop will be held each year. The Addis Ababa Plan of Action for Statistical Development in Africa in the 1990s which was adopted by the 16th Meeting of African Ministers responsible for Economic Planning and Development in 1992, set aside the 18th of November each year to be celebrated as *Africa Statistics Day* in order to "*increase public awareness about the important role which statistics play in all aspects of social and economic life*". Nigeria has been celebrating this day since 1992. The day will henceforth be celebrated with greater vigour.

Data user-producer workshops are essential for providing a forum for agreeing on actions for improving the use of statistics in policy development and monitoring, agreeing on priorities for national statistical development, assessing stakeholder requirements of information needs to monitor national development initiatives and programmes, and agreeing on institutional arrangements for data collection and management.

For some time now, a media workshop has been held each year. This workshop will be given greater importance. The workshop aims to empower media practitioners to understand and appreciate key statistical indicators which are released from time to time (e.g. GDP estimates, inflation figures, index of industrial production, poverty indicators, etc.) and how, in very general terms, data on these indicators are collected and managed. This will engender better interpretation and use of statistics by the media. On the other hand, data producers need to understand how to better communicate to the ordinary people, how to use "journalistic approach" to disseminate statistical data and information, role and structure of effective news releases, how to hold news conferences, etc. Hence the workshop will help to promote dialogue and enhance the role of the media in the national statistical development.

4.5.2 Higher profile and positioning of statistics

A number of things could be done to raise the profile and position statistics in government and the public including giving statistics more attention, building statistics into major Government programmes and investing more in statistical development.

The present administration in the country has committed itself to giving statistics more attention. On his maiden visit to the FOS on 8 January 2004, the Economic Advisor to the President and Chief Executive Officer of the National Planning Commission is reported to have said, *inter alia*, that, "Government will henceforth pay full attention to the preparation of statistics to serve as backbone to the economic reform agenda"¹⁸. He mentioned that under the current national reform programme, the National Economic Empowerment and Development Strategy (NEEDS), "*restructuring and strengthening the FOS for effectiveness is one of the key elements*". He also mentioned that the President had directed that a six-storey building be purchased to serve as a permanent office complex for the FOS adding that, "this sends a clear message as to the importance the present administration attaches to the issues of FOS to become a first-class institution"¹⁹. There is no doubt that the image and standing of FOS will receive a major boost when the office moves into the new building.

The profile of statistics could be raised by building statistics into major national development programmes not only to facilitate the monitoring of progress but also to achieve the progress. Referring to the importance of statistical information, Hon. Claire Short, the then British Secretary for International Development stated, "....not only are statistics needed to monitor progress towards achievement of development goals but also in order to achieve them..... Good statistics allied to appropriate Government policies can change things radically and for the better"²⁰. The role of statistical information in the monitoring of the implementation of NEEDS has been emphasized by the team elaborating NEEDS.

¹⁸ This Day Newspaper, 8 January 2004

¹⁹ Ibid

²⁰ Clare Short: Statistics for the Elimination of Poverty, Speech delivered at a meeting in Paris, 18-19 November 1999

Another way to raise the profile of statistics is to hive FOS out of the formal Civil Service Structure and turn it into an autonomous, modern, efficient and well-resourced National Bureau of Statistics, reporting directly to the Presidency, capable of hiring and retaining top professionals to meet user needs. The proposed revision of the Statistics Act (outlined below) provides for the establishment of this type of Bureau. The Bureau will have a wellestablished corporate image and an effective public presence that is seen as a trademark of the quality and credibility of official statistics.

4.5.3 Greater use of statistics especially for evidence-based policy design and decisionmaking

The power of statistics to inform the process of government (e.g. democracy, accountability and good governance), facilitate better decision-making and hence faster growth and more effective use of valuable resources for development and poverty reduction will be demonstrated. It is expected that when this is done, it will lead to greater use of statistics in monitoring national development; in supporting private sector investment; in the promotion of effective and efficient markets; in targeting interventions by government and the NGO sector; and in public debate on policy issues.

During the Plan period, targeted workshops, seminars, etc will be held mainly for policy and decision makers in the first instance to empower them to appreciate the importance of statistical information in their work and secondly, to be able to make the best use possible of available statistical information.

4.5.4 Congenial legal framework

The development of an efficient National Statistical System requires that the general policy of government with regard to the key statistical activities - collection, compilation, dissemination, interpretation of statistical information - for all statistics- producing agencies should be embodied in a statistical legislation.

In order to strengthen the institutional and regulatory framework and to enhance the effectiveness of the NSS, the 1957 Statistics Act, which is clearly obsolete, has been reviewed and a new Draft Statistics Act proposed. The proposed Statistics Act will underpin and support statistical operations by providing for:

- (i) the definition of the National Statistical System,
- (ii) more effective coordination of the NSS,
- (iii) transforming the FOS into an autonomous government agency to be called the Nigeria National Bureau of Statistics (NNBS) (the Bureau) and defining its functions, including coordination of the NSS.
- (iv) establishing a Board of Directors (the Board) with a Chairperson and seven other members as the governing body of the Bureau,
- (v) establishing the posts of Statistician General to be appointed by the President on the advice of the Board and the Deputy Statistician General to be appointed by the Board.

The proposed Act also provides for: (i) establishment of a National Consultative Committee on Statistics (NCCS) to coordinate data users and producers, (ii) powers to collect data, (iii) promoting professional independence and probity of official statistics with regard to "the way facts are assembled and combined into statistics, or in the method and timing of their release *to the public*^{"21}, (iv) rules for compliance and statistical confidentiality to ensure that individual records are not accessed by unauthorized individuals and in particular, that they cannot be shared with political authorities or regulatory and tax agencies, (v) data dissemination, (vi) funding of the Bureau, and (vii) transition arrangements from FOS to NNBS. The proposed Statistics Act is given in Annex V.

4.5.5 Coordination/collaboration/networking and information sharing

The NSS in Nigeria is decentralized with many data producers and users. Coordination, collaboration, networking and information sharing are essential for the system to operate efficiently. Mechanisms for better coordination - vertically, horizontally and technically – and greater system-wide effectiveness include the following:

a) Board of Directors of NNBS

The proposed Statistics Act provides for the creation of an autonomous agency, the Nigeria National Statistical Bureau (NNBS) with a Statistician General as the Chief Executive and a Board of Directors as the governing body for the Bureau. This Board will represent a wide range of stakeholders - data producers and data users in government, private sector, civil society and research and training institutions. Among other things, the Board will be tasked to set policies for more effective coordination of the NSS. More details about the Board are given below.

b) National Consultative Committee on Statistics

The proposed Statistics Act provides for the establishment of a National Consultative Committee on Statistics (NCCS) to operationalize Board policies and broad guidelines on coordination, collaboration, networking and information sharing. This will be an operational user-producer forum to be chaired by the Statistician General.

The functions of the Committee will include:

- a) examining the statistical programmes of the various agencies annually (at an appropriate period during the annual budget process) in order to achieve greater coordination and avoid unnecessary duplication of efforts, and evolve a national statistical programme for the approval of the Board of Directors of NNBS;
- b) reviewing and advising on conditions of service of statistical personnel;
- c) examining from time to time the Statistics Act and recommend to the Board any necessary changes; and
- d) developing strategies which will ensure uniform standards and methodology amongst the various agencies with a view to improving on the quality, comparability and timeliness of their statistical output.

c) Structure and staffing of the NNBS

The proposed structure of the NNBS provides for effective coordination of NSS. The structure provides for a Corporate Planning and Coordination Department as one of the four departments of the agency. The functions of this department will include, among other things

²¹ Handbook of Statistical Organization, Third Edition: The Operation and Organization of a Statistical Agency, United Nations Statistic, December 2001

horizontal coordination among agencies at Federal level; **vertical coordination** viz. coordination of data production at federal, State and Local Government levels; internal coordination of statistical work within the agency; and coordination of support from development partners.

The agency will be implementing a **Common Statistical Service** under which NNBS will outpost professional statistical personnel to main line ministries to strengthen and sustain collection and management of administrative data.

d) Compendium on Main Concepts, Definition, Norms and Classifications used in the NSS

The new NNBS will, in close consultation with users and other data producers, prepare a Compendium of Main Concepts, Definitions, Norms and Classifications to be used as a technical coordinating tool in statistical production. This compendium will serve two main purposes. It will ensure that data from different sources are mutually consistent or at the very least comparable. It will help data users as a consistent source of metadata.

The draft compendium will be discussed with stakeholders individually and severally in workshops to build consensus on its content. When it has been finalized, the NNBS will take responsibility for its publication and promotion across the NSS.

e) Up-dating GDDS

Nigeria has been participating in the IMF's General Data Dissemination System (GDDS) since mid 2002. It promotes preparation and dissemination of metadata which is a mechanism used to describe data in a structured way. The first set of metadata covering both economic and financial statistics as well as socio-demographic statistics was published on the IMF's Data Standards Bulletin Board (DSBB) in July 2003. Some assistance to help develop the metadata as well as implement plans for improvement in the different sectors has been provided by a regional technical assistance project financed by the UK Government and implemented jointly by the IMF and the World Bank.

By participating in the GDDS the Government has indicated that it subscribes to the general principles of the system and are endeavoring to improve the quality and coverage of data in key areas. The preparation of the metadata has been an important process of identifying strengths and weaknesses in the different data areas and the plans for improvement have provided the basis for a number of components in the master plan. Continued active participation in the system will provide a mechanism for monitoring progress as well as helping to coordinate statistical activities between different producing agencies.

FOS currently undertakes the coordination of the GDDS and this will continue as NNBS is set up. The coordination mechanisms already established, including the national GDDS committee will be integrated within the various structures proposed here. There is a continuing obligation to review and update the GDDS metadata and this will be an important performance target for NNBS and the NSS. In particular, the metadata will be updated whenever any major changes are put in place in statistical methods and procedures in the different sectors covered by the GDDS. A performance target will be for the metadata to be updated at least once every year.

f) NSS Newsletter

The NSS Newsletter will be produced every quarter as a means to report on the NSS activities and also as a forum for dialogue among stakeholders in the NSS. The Newsletter will have an Editorial Board comprising staff from different stakeholder institutions and with an office at NNBS. Stakeholders will be encouraged to actively contribute to an exchange of ideas, by initiating stimulating discussions, and by sharing information about past and upcoming events and activities of interest to the statistical user and producer community.

g) Local Area Networks (LANs), Wide Area Networks (WANs), Intranets and Internet

There will be increased IT application to improve information sharing and dissemination through Local Area Networks (LANs), Wide Area Networks (WANs), Intranets and the Internet (see Chapter 4).

4.5.6 Institutional Development

A. Nigeria National Bureau of Statistics (NNBS)

(i) Structure

An organizational structure can improve or hinder efficiency in an organization. The structure plays a crucial role in an organization. It defines the allocation of responsibilities and powers, reporting relationships and processes, hierarchy levels and value added, allocation of resources and determining skills requirements and affordability. The current structure of FOS is inappropriate and needs to change. In any case, a change in strategy often requires change in the organizational structures to make it support strategy. Accordingly, a new structure based on function has been proposed for the new agency, taking into account its expected role, status and challenges that lie ahead. The proposed structure of the Bureau is presented in Figure 4.2 below.

(ii) Board of Directors

The proposed Statistics Act provides for the establishment of a Board of Directors (the Board) as the governing body of the Bureau. The Board will be responsible for ensuring that the Bureau fulfills its mission and that its profile is commensurate with its new role in national development. In particular, the Board will be responsible for:

- (1) advise the Presidency on the national statistics policy, procedures, methods and regulations relating to the development of the statistics sector,
- (2) formulate and monitor the implementation of policies for more effective coordination of the National Statistical System,
- (3) monitoring the technical quality of official statistics and promoting adherence to good practice and international recommendations and standards.

Services Division Zonal Branch ation Branch Moni-toring & Evalu-Field Planning Division tegic Issues Train-ing Branch Branch Stra-Metho-dology Division search & Develop Methodo Statis-tical Stan-dards Branch ment Branch logical, Communication & Public Relations Unit Ŗ Corporate Planning and Coordination Coordi-nation Division Department Publication & Dissemination Branch Inter-Agency Coordination Branch Figure 4.2: Proposed Structure of the Nigeria National Bureau of Statistics Finance & Admin Division Finance Branch Admin Branch Financial Statistics Division Prices and **DEPUTY STATISTICIAN GENERAL** Projec-tion Branch Analy-sis & Economic and Financial Statistics Department National Account Division **BOARD OF DIRECTORS** STATISTICIAN GENERAL mates Branch GDP Esti-Business Enterprises Statistics Division Legal Unit Business Registry Branch Indus-trial Statistics and Agric. Statistics Division Census Branch Fores-try & Fishery Branch Annual ∞ŏ Social Statistics Division tics Branch Edu-cation Statis-Population and Social Statistics Department Popu-lation Division Audit Unit tion Branch Analy-sis & Projec-Data Bank Management, Desktop Publishing and Electronic Dissemination Section Population Censuses & Surveys Branch National Data Bank Division Information Technology Department Programming & Operations Division Systems nance Branch Mainteworking Progra mming Branch Net-∞ŏ

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- (4) formulate and monitor the implementation of policies pertaining to the organization and management of the Bureau,
- (5) promote and protect the integrity of official statistics and the professional independence of statistical agencies,
- (6) appoint, promote and discipline senior staff of the Bureau except the Statistician General,
- (7) set guidelines for the recruitment, disciplining and promotion of junior staff,
- (8) provide the President with a Quarterly Progress Report on activities of the Bureau and the entire National Statistical System every quarter,
- (9) review the structure of the Bureau as necessary, and
- (10) approve the corporate plans, work plans and budgets of the Bureau.

The proposed Statistics Act provides for the Board to have eight (8) members of equal representation appointed by the President on such terms as he/she shall determine. The members shall be appointed from among outstanding experts in statistics, be conversant with information technology, economics and related fields, who shall be at sufficiently high level in their respective organizations to commit the organizations. from the following stakeholder groups. The Board will comprise the following members:

- 1) A non-executive Chairperson
- 2) The Statistician General of the Bureau, who will also be the Secretary of the Board
- 3) A representative of the Ministry of Finance
- 4) A Representative of the National Planning Commission or Ministry responsible for planning
- 5) A representative of the Central Bank of Nigeria
- 6) A representative of the organized private sector
- 7) A representative of the civil society
- 8) A representative of research and training institutions.

This composition of the Board is very similar to the composition of Boards created under the statistical legislation of other African countries. The Act also spells out the qualifications one should have to become a member of the Board, the tenure of the Board (3 years), how one's membership ceases, frequency of Board meetings, the conduct of the meetings and remuneration of Board members. The Act provides for the selection of members, based on merit, so as to ensure that all appointees are motivated, and have relevant knowledge and experience. To ensure continuity and more commitment, the Act does not provide for proxy representation except for the Statistician General.

(iii) Statistician General

The new structure provides for a post of Statistician General (SG) as the Chief Executive Officer of the Bureau. The SG shall be appointed by the President on the recommendation of the Board and on such terms as the Board may determine. The Act specifies that for a person to be appointed Statistician General, he/she must have recognized professional qualifications and experience in statistics and/or related fields as well as proven managerial ability. The duties and responsibilities of the SG shall include, among others:

- interpreting Board policies and forming a link between management and the Board,
- □ embodying the status and professionalism of the Bureau, inspiring confidence, providing a vision for the Bureau and the NSS, developing, supporting and promoting organizational culture and championing change,

- □ being a full member of and Secretary to the Board,
- chairing the National Consultative Committee on Statistics,
- chairing senior management team meetings
- □ setting management priorities,
- □ resource mobilization,
- overall accountability for operational and financial performance of the Bureau,
- □ public relations.

The Act also provides for the tenure of office for the SG (four years renewable) and suspension or revocation of the appointment of the SG. To ensure that the SG is not removed from office or his/her appointment is not revoked on for frivolous reasons, the Act gives specific and strong reasons for the suspension or revocation of the appointment of the SG.

(iv) Deputy Statistician General

The holder of this post shall be a highly trained and experienced statistician who will report directly to and act for the Statistician General in his/her absence. While the Statistician General shall be involved in the overall day-to-day management of the Bureau, the Deputy Statistician General shall be responsible for the co-ordination of all the technical Departments of the Bureau. The Deputy Statistician General shall be appointed by the Board.

(v) Departments, Divisions and Branches of NNBS

The proposed structure includes four Departments, namely:

- 1. Population and Social Statistics
- 2. Economic and Financial Statistics
- 3. Corporate Planning and Coordination
- 4. Information Technology

The Departments are divided into Divisions, which are in turn divided into Branches. Details of the proposed Departments, Divisions, Branches and Sections as well as their functions are given in Annex VI. Departments will be headed by Directors who will be at Chief Statistician level while Divisions will be headed by Deputy Directors who will be at Assistant Chief Statistician level. The Branches will be headed by Assistant Directors who will be at Principal Statistician level. The Sections will be headed by personnel at Senior Statistician level.

(vi) Special Units

There will be three special units, which will be reporting directly to the Statistician General. These are Audit Unit, Legal Unit and Communication and Public Relations Unit.

Internal Audit: The NNBS will have an Internal Audit Unit. This Unit will work closely with the Division of Finance and Administration but report directly to the Statistician General. It will be responsible for developing and reviewing the systems of internal controls to ensure that there is no fraud at the Bureau and that the assets of the Bureau are protected. This Unit will review and monitor all financial and accounting information to ensure completeness and accuracy of entries.

Legal Unit: The NNBS will have a legal Unit. This Unit will provide legal services to the Bureau including handling of contractual agreements, handling any litigations, etc. The Unit will be headed by a Legal Officer who will be a qualified lawyer.

Communication and Public Relations Unit: The NNBS will have a Communication and Public Relations Unit. This Unit will be manned by qualified and experienced professional communications experts.

(vii) Zonal Offices

In order to improve field data collection, FOS established 6 Zonal Offices. Each Zone is responsible for data collection in about 6 States, on average. In a State Capital where a Zonal Office is, there will be only one NNBS office that will also be responsible for data collection in the State. The Zonal Offices will be upgraded in order to ensure improvement in field data quality and efficiency in data collection and management. Upgrading will include deployment of more qualified statistical personnel and better facilitation including provision of computers, field vehicles, etc. Apart from handling data collection functions, the Zonal Offices will be tasked to provide States with technical backstopping and support. Data entry will be decentralized to Zones so that data validation requiring field revisits can be done a lot more quickly and easily. Entered data will then be relayed electronically to headquarters.

The Zonal Offices will be treated as Branches within the Corporate Planning and Coordination Department. They will be headed by Assistant Directors. The offices will be lean, well facilitated and efficient.

(viii) State Offices

There will be an office in each State. These offices will be treated as Sections within the Corporate Planning and Coordination Department under direct supervision of Zonal Offices. These offices are an essential component of the FOS's permanent field organization. These offices are responsible for deployment and facilitation of field staff – enumerators and supervisors. These Offices will be supported by provision of office equipment and improved training.

(ix) Staffing matters, indicative staffing levels and staff mix

Staffing matters

At present, FOS is part of the Civil Service where human resource management functions are largely carried out centrally. As an autonomous agency, the NNBS will have to undertake these functions itself. Managing the human resource aspects of the transition from FOS to NNBS and then managing a staff of around 3,500 will be no small task and NNBS will need to have appropriate structures and senior human resource management specialist to help do this efficiently. The human resource management functions including recruitment, promotions, staff development and training, and discipline will be undertaken by the Finance and Administration Division in the Corporate Planning and Coordination Department. There will also be a Staff and Management Committee of the Board to set policies and guidelines to be followed in recruitment, promotions, etc.

Indicative staffing levels

The indicative staffing level for the Bureau are given in figure 4.1 below. The guiding principle in determining the indicative staffing levels for the Bureau was that the Bureau should be lean, more professional, IT-focused and efficient. The staff numbers represent the estimates of the requirements for the regular operation of the Bureau in the relatively short term.

The numbers are presented by staff category, namely top management, professional staff, sub-professional staff and support staff. The required total staff complement is estimated to be about 3,123. Of these, 1317 or 42% will be professionals (currently only 5% of FOS staff are professionals), 1396 or 45% will be sub-professionals and 410 or 13% will be support staff.

The estimates are based on a number of assumptions, viz:

- (1) The Bureau will run a Common Statistical Service at Federal level. It is estimated that it will outpost about 250 professional staff to line Ministries that collect and compile data. Support staff in these Ministries will be provided by the respective ministries.
- (2) The number of positions depends on the organogram and activities to be undertaken,
- (3) Zones and School campuses will be treated as Branches and Sections respectively while State Statistical Offices will be treated as Sections. These levels will need to be enhanced with professional staff.
- (4) There will be 21 Secretaries one each for the Statistician General down to Deputy Directors.
- (5) There will be 57 vehicles with a driver for each vehicle and 7 other drivers as standby (64 in all) stationed at headquarters and one each at the Zonal and State Office.
- (6) There will be 43messengers 6 messengers at headquarters and one at each Zone and State Office.
- (7) There will be 5 Data Entry Operators at each Zonal Office while the rest (84) will be deployed at headquarters.
- (8) Assistant Officers will serve as a small " core team" of permanent field staff. Temporary enumerators will be hired as need for doing so arises.
- (9) States will have a lean team of core staff including about 20 permanent enumerators on average. More enumerators will be hired as need arises.
- (10) Cleaning at headquarters will be contracted out. Each Zonal Office, State Office and School campus will each have 2 cleaners.
- (11) There will be 8 guards at headquarters and 2 at each Zonal Office, State Office and School campus.

Staff mix

The complexity of activities expected to be undertaken by a modern National Statistical Agency requires a wide range of talents to make it sufficiently versatile and effective. Accordingly, the above estimated staff complement will be multi-talented with a variety of

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Table 4.1: Indicative staff numbers



Inclusive of Zones and School Campuses

academic backgrounds including statistics, demography, economics, sociology, IT, cartography, management, mass communication and public relations, marketing, accountancy, etc.

B. Line Ministries

The line ministries, extra-ministerial departments and federal parastatals are mainly responsible for the production of sectoral official statistics for the federal government and other users in Nigeria and abroad. There are presently about thirty (30) federal line ministries whose operations correspond essentially to the activity sector: agriculture, industry, trade, finance and insurance, social services, utilities, transport, communication etc whose activities create the value added, which aggregate to the Gross Domestic Product of the country. Of the thirty (30) line ministries and extra-ministerial departments covered in our survey, four (4) do not have DPRSs, the others exist only nominally.

The capacity of the DPRSs in the line ministries to undertake the production of administrative and survey based statistics have been seriously undermined and constrained for a number of reasons that have brought into question the "integrity, methodological soundness(acceptable national/international standards), accuracy and reliability, timeliness" of their statistical outputs.

Some of the reasons that were already indicated in a UNDP funded study of DPRSs in 1998 include :-

- Generalists rather than professional statisticians head the DPRSs. The Statisticians hardly rise to the level of Head of a Branch, that is, Assistant Director.
- No career prospects for statisticians in most of the DPRSs.
- In many DPRSs, no specific budgetary allocations are made to fund statistical activities. Rather, a few DPRSs resort to foreign donors to fund their statistical activities, training and provision of data processing equipment.
- Many management staff of line ministries and extra-ministerial departments and parastatals also have no appreciation or lack awareness of the need for statistics.
- Enabling environment office space, furniture and equipment for data processing have not been provided for statistical activities in many of the DPRSs.
- Professional Statistician in the DPRSs mostly do not have qualified supporting staff
- In spite of the obvious need for statistics no, organised statistical programme are available in most of the DPRDs
- There are many instances of DPRS lacking clarity of what information is useful for collection and analysis, hence the existence of backlogs in statistical outputs.
- Data entry, analysis and retrieval are still undertaken manually as a result of low level of computerisation in the DPRSs.

The case for drastic substantial capacity building in the line ministries for improved production of administrative and special survey statistics has been made given the factors militating against production of reliable, timely and acceptable methodologically robust statistics. The proposed Statistical Master Plan for the NSS is to address the identified weaknesses. The measures to be taken are provided for in: -

a) Item 2.5 of Activities, Targets and Proposed Budget (see Annex VII) the SMP covers <u>Coordination/networking/information sharing</u>. Co-ordination mechanisms

are to be created using a consultant. At the federal level this will include users and producers of statistics – mainly NNBS/ministries/other agencies.

- workshops will be organized to discuss coordination mechanisms, to build consensus on compendium of "main concepts, definitions and classifications" (using a consultant).
- Update GDDS meta data
- b) <u>Human Resources Development</u> in line ministries will include training for trainers, special trainings in IT, annual training of supervisors/enumerators, and training workshops for data users.
 - <u>Enhancement of Data Quality</u> The SMP undertakes review of current methodologies and instruments for data collection in line ministries.
 - <u>Data Management, Dissemination and Access</u> In line ministries the SMP is to clear backlog of unprocessed data, to undertake data analysis (various), publish various sectoral statistical bulletins and dissemination workshops.
 - <u>Infrastructure in Line Ministries</u>: Provision of computers, printers various software, Local Area network (LAN), office equipment, photo-copiers, telephones, internet connection etc, running and servicing costs of equipment.

C. States

The ministries where the States Statistical Agencies (SSAs) are located vary from one state to the other. They are often located in the Ministry of Finance or Ministry of Budget and Economic Planning and recently in some states they are in the Planning Commission (Office of the Governor). The inconsistency in the location of the SSAs tend to affect the effective performance of statistical activities. There have been instances of survey equipments, especially computers being moved from the SSA to the departments where an overbearing and assertive management staff who is not a professional statistician is being posted to. This rather informal institutional arrangement for statistical activities in the States tend to contribute to the poor quality of statistical outputs.

The SMP is making provision to correct noticeable institutional weaknesses, and the low level of capacity building in the SSAs as well as the generally scanty statistical activities that militate against production of qualitative statistical series on a continuous basis. Some of the measures highlighted for dealing with the problems facing the line ministries will also in many respects be applied to the SSAs. The measures will cover:-

- **□** Coordination, networking and information sharing among the agencies;
- Undertake training needs assessment and develop a training programme using consultant;
- □ To enhance the quality of data, current methodologies and instruments for data collection are to be reviewed using consultant;
- Clear backlog of various unprocessed data and data analysis, as well as unpublished statistical year book;
- □ Arranging for dissemination workshops;

□ Strengthening the infrastructure in SSAs through supply of vehicles for field survey, computers, office equipment (printers, photocopiers, scanners, internet connection, etc).

4.6 Human Resource Development Strategy

Personnel are the most important asset of any system and indeed, human resources development is a critical factor in both the development and sustenance of the NSS. The quality of data and information, to a large extent, depends on how well the capacity to manage the process of data production is developed. And in turn, proper policy analysis, planning and decision-making are facilitated or hampered by availability or non-availability of quality statistical data and information. This underscores the critical need for a comprehensive Human Resource Development (HRD) for the NSS. The strategy should guide and systematize investment in human resources in order to transfer knowledge, broaden the strategic skills base and raise staff motivation.

Staff

Old

The centerpiece of the HRD will be development of strategic skills and staff motivation. The strategy will aim to undertake a systematic and fundamental transition from low skills base and low motivation to a level where staff are more skilled and highly motivated - represented by the shaded quadrant in the Figure 4.3.



Strategic Skills Base

Motivation

Low

High

Figure 4.3 : Human Resource Development strategy

This transition is depicted by the directions pointed to by arrows in the figure. The figure shows that it is not enough to improve skills of current staff (dotted line). They should also be motivated (diagonal movement) where staff have a high level of strategic skills. Strategic skills will be developed through a comprehensive training programme for current and new staff. The training will focus to transfer knowledge, competence and build confidence. In addition to training, staff motivation will be enhanced by having in place competitive Terms and Conditions of Service and an enhanced career path, among other things. The development of these Terms and Conditions of Service should be high on the list of priorities.

Low

4.6.1 Strategic skills development

A huge capacity and skills base will need to be built through skilling and reskilling of employees so that their minds and creative abilities can be mobilized to make the NSS more effective. This will require that comprehensive training be undertaken, not on an ad hoc and intermittent basis as is currently the case, but on an ongoing and priority basis so that statistical personnel can acquire both knowledge and strategic skills – statistics-based as well as management and other people skills that aid the core functions to deliver desired statistical products more effectively and efficiently.

So a major training programme will be put in place. The ultimate objective of the programme will be to continuously improve the quality of statistical outputs and services to the satisfaction of users. The specific objectives of the training programme will be to:

- provide a facility for induction/orientation of new staff and refresher courses for staff already in service,
- training for career development,
- develop a "critical mass" of trained and skilled staff required to manage, improve and sustain the statistical system,
- enhance the capacity to design and effectively manage data production processes,
- enhance computing and analytical skills,
- develop soft skills such as report writing, and
- increase appreciation for and use of statistical data and information.

Emphasis in the training programme will be put on hand-on training. Hereunder the types of training envisaged are highlighted.

(a) Training at the Bureau

Training in management

Managers of the Bureau and other agencies need to use appropriate management principles in their work especially in planning, work programming and budgeting, writing proposals, etc. All staff with management responsibilities will be given training in modern management principles. Most of the training programmes in management will be tailor-made and conducted in-house. There are many national organizations that can be approached to provide training in management. These include the Administrative Staff College of Nigeria, the Lagos Business School, the Nigerian Centre for Economic Management and Administration and the Nigerian Institute of Management.

Induction courses

Induction courses lasting 4 weeks each will be organized for all staff recruited into the Bureau. The course will be conducted periodically in order to introduce the new staff to the Bureau and the NSS. The course will cover such topics as the vision, mission and linkages within the NSS; the mission, vision, core values and primary role of the Bureau; the structures of the Bureau and how its Departments and Divisions interact with each other; etc. The course will also be useful for statistical personnel outside the Statistical Common Service.

Short courses

Various need-based, short-term specialized training will be undertaken in-house to build technical skills among staff in statistics e.g. sampling, data analysis and IT e.g. computer applications, GIS, computer maintenance and desktop publishing. Resource persons will be hired to conduct these courses. In addition, there are many relevant short courses (less then 6 months) which are periodically conducted internationally such as summer courses offered on statistics and data processing at the International Statistical Programs Centre (US Bureau of the Census), the Summer Institute of the Survey Research Center (University of Michigan, USA), Munich Centre for Advanced Training in Applied Statistics for Developing Countries

(Munich, Germany), IMF, etc. The Bureau will take full advantage of these courses to train its staff in various areas of statistical production.

Postgraduate courses

On a selective basis, some staff of the Bureau will be sent out to pursue specialized training leading to the award of post-graduate diplomas and Masters Degrees in various fields such as sampling, economic analysis and modeling, demographic analysis and social statistics. This specialized training will be crucial for development of methodology and improved data analysis and reporting.

Training in soft skills

It is now well recognized that it is not enough to have good data and information. How it is communicated and reported can make a lot of difference. Accordingly, special training will be organized in-house for statistical personnel to acquire soft skills like communication, writing and reporting. This training will also empower statistical personnel to advocate for statistics.

Training for surveys

The quality of field data depends in part on how well the field supervisors and enumerators are trained. At the beginning of each year, there will be training in data collection for all categories of staff involved in field data collection. The training will be appropriate, taking into account the tasks they are supposed to perform. Its timing will also be appropriate. It will last for a week.

This training will be done in a hierarchical manner with Training of Trainers coming first. The trainers will be trained centrally by professional staff who are experienced in the design and/or implementation of field operations. Central training has the advantage that it allows for uniform training from the same instructors. The training will be well organised and outlined with a timetable indicating subjects to be covered in each training session. The subjects to be covered will include, *inter alia*, information on data collection techniques including sample selection, methods of data collection, importance of survey instruments and how to fill them, how to carry out field enumeration, how to minimise non-sampling errors; definition and basic concepts used in surveys; roles of supervisors and enumerators; how to teach and supervise enumerators, etc.; and previous year's experiences in data collection. The training will be evaluated each year.

The trainers will then fan out to zones where they will train field supervisors and enumerators. The supervisors and enumerators will be trained for a week. Their training will more or less cover the training given to trainers.

In addition to the above training, before the start of each survey, there should be training for all staff involved in field data collection. This training will be survey specific and will involve discussion of the questionnaires and other survey instruments to be used.

Study tours and attachment

Short need-based study tours will be organized to give staff opportunities to study statistical systems and methods used elsewhere and learn from the experiences of other countries especially those in the African region, which have similar socio-economic conditions. In addition, some Bureau staff will be attached to some selected statistical agencies in the country, the African region and outside the continent so that they can learn from those agencies by participating in their activities. For this reason, special relationships including

twinning arrangements can be established with different agencies in the African region and countries of the north.

On-the-job training

It will be the policy of the Bureau to require advisors to transfer knowledge and technology to the Bureau staff, through on-the-job one-on-one training. In this connection, the Bureau will as a matter of course attach counterparts to advisors and discourage advisors doing the work

that should be done by national staff. Advisors will, therefore, be required to focus on training and imparting workplace skills and expertise on staff of the Bureau.

Professional seminars and workshops

The Bureau should from time to time organize professional seminars to serve as fora for enhancing discussion on topical issues, the professional exchange of experiences, the discussion of common problems and for the development of new insights and solutions to problems of statistical production. The staff of the Bureau, advisors at the Bureau and experts in areas of interest should be invited to make presentations on different subjects. All professional staff of the Bureau will be encouraged to attend the seminars and to make presentations.

Role of the Training school

The FOS Training School has done a good job in training statistical assistants since its establishment in 1961. Not only has it trained personnel from FOS but from other main data producing agencies - CBN, N.POP.C, Federal and State Government ministries and parastatals. By 1996, the School had trained over 5000 statistical personnel. Clearly the school will continue to play an important role in the development of the NSS. This role will be enhanced by strengthening the School in the first instance and then upgrading it. The Bureau will promote greater use of the School by different agencies.

The School will be strengthened by providing it with better infrastructure, library development and improved supply of teaching materials – books, teaching aids and computers. The strengthened School will then be upgraded to the status of an Institute of Statistics offering courses leading to the award of Professional Diploma in Statistics and Post Graduate Diploma in Statistics. In the past, FOS used to support the Professional Diploma and Postgraduate Diploma Programmes in Statistics at the Department of Statistics of the University of Ibadan.

Services of a Consultant will be required to review the syllabus, conditions of admission to the Institute, review the duration of training course, etc. in preparation for upgrading the School.

(b) Training in Line Ministries and State Statistical Agencies

Training for data collection

Training for data collection by line ministries will follow the training model used by the Bureau. Federal ministry staff will be trained each year in data collection. The Bureau will be involved in this training. The trained staff will then fan out to zones to train staff from States who will be collecting data.

Training for data users

It is known that while there are many data gaps in Nigeria and many African countries, yet not all existing data are being put to use or optimal use. Reasons for this non-use or non-optimal use have been identified. They include, *inter alia*, lack of information about available data series and lack of empowerment and knowledge of how to effectively use data.

In order to promote use of data, workshops will be held for main data users in line ministries and States. The workshops will aim at empowering main data users in the first place to appreciate data and secondly in accessing and using data from statistical reports and existing data banks. These workshops will, therefore, deal with such topics as: importance and value of data; main sources of data; data quality; and data use in planning, decision-making, monitoring, evaluation and forecasting; etc. At least one such workshop will be held each year for selected stakeholders at national level and State level.

(c) Training at Nigerian Universities

Currently, about 6 Universities in Nigeria teach statistics as a major course. However, apart from the University of Ibadan, the Universities do not teach practical-oriented statistics. In particular, they do not teach official statistics. In order to meet the needs for the NSS, it is important that as many Universities as possible teach official statistics at degree level.

The Bureau will work very closely with national Universities to review their teaching programmes, encourage them to use official statistics for teaching practical courses, encourage FOS staff to get engaged in the teaching of some practical courses in some Universities and encourage University staff to play a greater role in the development of appropriate methodologies for data collection and management.

4.6.2 Staff Motivation

Staff motivation is crucial for successful strategy implementation. As Fred R. David contends, "*Objectives, strategies and policies have little chance of succeeding if employees and managers are not motivated.....*"²². In addition to training, other things that will be done to motivate staff include:

- □ staff recruitment and promotion based on merit,
- □ defined career path,
- competitive remuneration, and
- □ rewards and recognitions system to encourage staff to strive towards achieving individual goals related to the strategy.

²² Concepts of Strategic Management by Fred R, David, Sixth Edition, Prentice Hall International, Inc. 1997

(i) Staff recruitment and promotion

As Department of Government, Civil Service procedures were used to recruit, motivate and retain staff. As an autonomous agency, the Bureau will have to work out its own procedures for handling staff affairs. As a knowledge center, the Bureau will have to set high standards for staff recruitment and promotion. In particular, procedures will be established to ensure that the process of staff recruitment and promotion is not externally influenced but is carried out purely on merit.

Given the range of subjects and activities carried out by the office, a variety of skills, talents, academic backgrounds and work experience will be required for the office to function effectively. Special effort will be made to recruit women into the professional ranks of the Bureau. It will also have to put in place an attractive incentives structure so that the very best professionals can be recruited from the open market and retained.

(ii) Career path

Lack of a well-defined and followed clear career path can be a demotivating factor. The following career path (table 4.2) has been proposed to facilitate career advancement for professional staff - statisticians, IT personnel, economists and administrative staff as well as sub-professional staff.

Table 4.2: Proposed career path for Bureau staff

Professional Staff										
Chief	Assistant	Principal	Senior	Grade I	Grade II					
Statistician	Chief									
Sub-professional Staff										
Chief	Assistant	Principal	Senior	Higher	Officer	Assistant				
Statistician	Chief			-		Officers				

For professionals, new graduates will start at the level of Grade II e.g. Statistician Grade II, Economist Grade II, etc. The highest professional grade will be Chief. For sub-professionals, the starting point will be Assistant Officer with a minimum of Ordinary National Diploma (OND) or its equivalent and the highest grade will be Chief.

Competitive remuneration

The Bureau will have to compete on the open market for highly qualified and experienced staff and be able to retain them. This will not be possible unless a competitive and attractive remuneration package is put in place. The new agency will be a scientific and researchoriented organization, very much like Universities and Research institutions like NISER, the Harmonized Tertiary Institution Salary Structure (HATISS) should apply to it.

Staff surveys

The Bureau will carry out regular staff surveys to determine, *inter alia*, areas of weakness that need improvement, areas of strengths that need to be consolidated, general working conditions and to provide their opinion on various aspects of the work of the Bureau. It will be ensured that action is taken on the findings of the surveys. These surveys will make staff

feel that they are consulted on major issues and that their views are taken into account in designing programmes for improvement.

4.7 Data Development

The Plan aims to empower agencies that produce data to do so according to strictly professional considerations, including scientific principles and professional ethics with regard to methods and procedures used for the collection, processing, storage and dissemination of statistical data. Specifically, it will assist to address issues related to data quality, data sources, data management, dissemination and access

4.7.1 Enhance data quality

Data quality is a cornerstone of statistical work in any country. In Nigeria like in most African countries, a number of factors have conspired to compromise data quality. And lack of quality has been identified as one of the factors limiting data use in Nigeria. The Plan will reverse the decline in data quality and enhance data utilization. It will go beyond the usual characteristics of "good data" (coverage, timeliness, comparability, accuracy, accessibility) to include such things as adoption of a set of modern methods and standards for data and metadata collection, storage and dissemination. Specifically, the following will be done to enhance methodological soundness, accuracy and reliability of data.

(a) Review current methodologies and instruments for the collection of data

Different agencies at Federal level and the States are using different methodologies and instruments for data collection. The data collection is done by different grades of enumerators trained using different training methods.

The Plan provides for a thorough review of methodologies and instruments currently in use. The idea is to ensure that the methodological bases for the production of official statistics are sound and conform to international standards, guidelines and current practices. Old methodologies will be replaced by new methodologies. For instance, the methodology used in FOS Industrial Surveys where the response rates have been as low as 11% will be reviewed. Also while crop area measurement in agricultural statistics is done using the method of compass and tape, this methodology has been acknowledged to be cumbersome, time consuming, expensive and clearly unsustainable. This methodology will be reviewed and the possibility of using Global Position System (GPS) equipment for measuring crop area will be investigated. Experiments done in Uganda in recent past show that this use of GPS equipment is faster, easier to use and less expensive. The list is long. It is expected that the review will lead to the development and use of more appropriate methodologies – easier to follow and implement, more cost-effective and sustainable in the long run.

In the same way, instruments in use for data collection and especially questionnaires will be reviewed. It is generally recognised that the success of field data collection depends to a large extent on the quality of the questionnaires used. The questionnaire is the means through which information is transferred from those who have (or should have) it to those who need it. Not only does it inform the respondent about the type of data needed in a survey and standardise the process of obtaining it efficiently, but also it lays out a format for recording responses in an orderly and accurate manner. The review will aim to ensure that practical questionnaire i.e. those questionnaires which will elicit information on a minimum list of survey items carefully worked out to achieve survey objectives and which are both

respondent and enumerator – friendly, are designed and used. For instance, one of the main complaints of establishments is that not only are they bombarded with so many questionnaires from different agencies asking for the same type of information, but also the questionnaires are complex, requiring a lot of time and effort to fill out. It has also been observed that the forms used in health Management Information System are complex and need to be made shorter and simpler.

(b) Assessing the quality of existing data

In connection with the review of the methodologies and instruments in use, a review will be made of the accuracy, reliability and spatial and temporal consistency of existing data. For most users, these are the most sought out quality dimensions. The other data quality dimensions of integrity, serviceability and accessibility are covered in the next section. The assessment will use the IMF's Data Quality Assessment Framework.

The assessment will determine whether the soundness of source data and statistical techniques are available and can provide the basis for compiling data, and whether statistical outputs sufficiently portray reality. The assessment will examine data sets from different sources, carry out plausibility checks and establish to what extent they are consistent among sources and also through time. It will also involve some modeling to make sense of a number of relationships.

The assessment should lead to a policy on data quality. The policy should, *inter alia*, spell out conditions under which data will be published. For instance, the policy may proscribe publishing data from a survey which registers less than 45% response rate or whose data are subject to unacceptably high sampling errors, etc. This is an area where the services of an experienced consultant will be required.

(c) Total Quality Management at the Bureau

As was mentioned earlier, Total Quality Management (TQM) programme was introduced at FOS in 1998 to create data quality awareness and enhancement. TQM will be introduced at the Bureau for much the same purpose. However, TQM will be introduced in a staggered manner and not across the whole organization. Managers will be seeking to establish "pockets of excellence" in a limited number of areas to start with. The influence of these small successes would be expected to spread through the organization over time. TQM will be included in annual work programme and specific areas of GDDS, such as improved access to data, will be established as formal TQM projects²³.

(d) Relationship with data suppliers

The revised Statistics Act will require public authorities, private enterprises and citizens to provide, when requested to do so, information required by authorized agencies. However, respondent cooperation and provision of reliable data will be possible if data producing agencies establish constructive and meaningful relationships with data suppliers. These relationships will be developed and enhanced following the principles recommended by the United Nations²⁴ and other considerations:

²³ Graham Eele. Opt cit.

²⁴ United Nations Statistics Division, Opt. Cit
- (i) Making clear and meaningful the purpose of the data collection.
- (ii) All individual records must be perceived to be held in high confidence and protected from any other party in or out of government. Specifically the respondent will be assured that the information:
 - will not be accessed by any one with malicious intent,
 - cannot be shared with political authorities or regulatory agencies.
- (iii) Establishing, accepting and continually advertising the professionalism and objectives of the statistical agencies
- (iv) Creation of a perception of the statistical agency being thoughtful and concerned about respondent burden. This is best achieved by eliminating duplication of surveys and censuses.
- (v) Making questionnaires more user-friendly. This will be achieved by better design and layout of the questionnaires, making questionnaires shorter and use of terminology that is known to respondents. For businesses, the terminology will be the one used in daily business. For households, the terminology will be the same as what is used by households.
- (vi) Providing enough time for data suppliers to find the information required from them and, where necessary, providing assistance to fill questionnaires.
- (vii) Developing ways of providing feedback to suppliers, when available and possible, results from the information collected.

4.7.2 Censuses and Surveys

A lot of data will continue to be collected from censuses and surveys albeit in a more rationalized and cost-effective manner.

(i) Censuses

Periodic censuses will be carried out to provide benchmark data and a basis for conducting future sample surveys. These censuses will be carried out by the Bureau or by some other agency in close collaboration with the Bureau in accordance with the Statistics Act. The censuses to be carried out include:

Population and Housing Census (decennial)

In Africa, the Population and Housing Census makes a significant contribution to the development of the NSS in general and in particular, to the development of social statistics. It provides benchmark data needed to plan for socio-economic development and to calculate a number of development rates e.g. fertility rates, school enrolment rates, etc.; housing status of households with regard to tenure, type and availability of housing facilities; lists and supplementary data for inter-censal surveys; a complete list of all places and persons, villages and households, and EAs for the whole country; and contributes to the development of national data collection capabilities.

Census taking in Nigeria has tended to be controversial for mostly political reasons. The latest census was carried out in 1991 by the National Population Commission. The next Census is planned for November 2005. Under the SMP, there will be assistance to the census programme to support pre-enumeration activities especially mapping of EAs and post-enumeration activities especially data analysis and archiving.

In anticipation of the census data being used to plan the next Agricultural Sample Census and poverty mapping, the census organizers may wish to consider the following:

- (i) Piggybacking a short agricultural module to the census to collect some basic data on the agricultural activities of households. This information will be very useful in selecting a more efficient sample for the Agricultural Sample Census.
- (ii) deliberately including in the census questionnaire poverty correlates which will enable poverty mapping to be undertaken using census data.

It is important that future censuses are conducted by the Bureau. Then most of the infrastructure and materials used in the census can be used in the follow-up census of agriculture and other surveys.

Agricultural Sample Census (decennial)

This census is conducted to provide data on the organization and structure of the agricultural sector and a benchmark for Annual Agricultural Surveys. The last census was conducted on a sample basis in 199/93. Under the Plan, a fresh census will be carried out in year 3, one year after the Population and Housing Census. It is expected that the technical infrastructure used for the Population and Housing Census will be used for the Agricultural Sample Census.

Census of Business Establishments

This census is conducted to collect data from business establishments - manufacturing establishments, construction establishments, hotels and lodges, etc. It provides information on employment, inputs, gross output and value added by the different sectors and other characteristics of businesses. The Census, which will be conducted every five years, will form a basis for future survey work, feed into National Accounts system as well as serve as a basis for the Index of Industrial Production.

(ii) Household-based surveys

Household surveys have been reckoned by the United Nations (1964) to constitute the only means of obtaining up-to-date and reliable statistics on the household sector in developing countries since other sources of household statistics e.g. population and housing censuses, registration systems and administrative records, do not always provide the required data in a timely manner. Two types of surveys will be conducted. These are household-based surveys and establishment-based surveys. Household surveys are those surveys in which the household is the sampling unit or unit of enumeration or enquiry. There are surveys in which the unit of enumeration or enquiry is not the household as such but rather individual members of the household e.g. eligible women in a fertility survey or children in nutrition surveys. Even in these surveys, however, the individuals are reached through the household as the sampling unit so they also qualify to be household surveys.

A National Integrated Households Survey Programme (NIHSP) will be implemented. Under the NISHP, multi-purpose and multi-round surveys will be carried out to collect integrated and inter-disciplinary data on a continuing basis and on a wide spectrum of subjects with a focus on poverty-related subjects. Integrating surveys has a number of advantages including utilizing scarce resources more effectively, continuity, ability to do cross-survey analyses, etc. Among integrating features of the programme will be "core items" in all the surveys and a Master Sample of EAs. The Living Standard Monitoring Survey will be the core survey of the programme. The add-on modules will include: The Labour Force and Informal Sector Survey, Annual Agricultural Survey, National Service Delivery Survey or Core Welfare

Indicator Questionnaire Survey (CWIQ), National Demographic and Health Survey and Multiple Indicators Cluster Survey.

Living Standard Monitoring Survey

A Living Standard Monitoring Survey (LSMS) to produce statistics on living conditions and poverty in the country as well as provide a basis for revising the weights, basket of commodities, and base year for the Consumer Price Index will be undertaken. The statistics from this survey will also be input into the National Accounts.

This survey is ongoing and is funded by EU, DFID and the World Bank. The next survey has been scheduled for year 5 of the SMP.

Labour Force Survey and Informal Sector Survey

The Labour Force Survey provides information on both current and usual economic activity, obtains measures of the size of employment in the informal sector, provides measures of employment and unemployment and provides measures of cash income from non-agricultural employment of all types including fishing. The Informal Sector Survey, on the other hand, collects data on units engaged in the production of goods or services with the primary objective of generating employment and incomes to the persons concerned, typically households. The 1993 System of National Accounts recommends that where the informal sector is significant in the economy, a distinction should be made in the compilation of national accounts between formal and informal sector. This sector includes unincorporated non-agricultural enterprises owned by households. These enterprises are typically small in size and engage in production of a whole range of items.

In order to realize economies of scale, this survey will be undertaken together with the Labour Force Survey in year 4 of the Master Plan. *Annual Agricultural Survey*

The Annual Agricultural Survey is the main source of current agricultural statistics that are required for monitoring the performance of the agricultural sector. The survey collects data on performance indicators for the agricultural sector. These indicators include, *inter alia*, planted area, yield and production, amounts of inputs used (inorganic fertilizers, pesticides, improved seeds, etc), use of temporary labour, and agricultural prices. This survey will be carried out every year except during the Agricultural Census year.

Service Delivery National Survey (NSDS) will be carried out using a Core Welfare Indicators Questionnaire (CWIQ). CWIQ is a household survey tool developed by the World Bank in close collaboration with UNDP. UNICEF and the ILO. It has been designed to provide countries with an instrument to generate essential and timely statistical data for measuring changes in key social indicators for population different groups specifically indicators of access. utilization and satisfaction with core social and economic services. Additional

modules can be added to collect data on such items as HIV/AIDS, gender etc. While traditionally CWIQ does not

HIGHLIGHTS OF CWIQ

- Uses a short questionnaire (8 pages)
- Collects data for households, household members and children;
- Structured training for filed work and data processing;
- Uses scanning technology for data entry;
- Robust computer in-build data validation checks;
- Data quality is enhanced by early feedback to enumerators from data processing;
- Short mean interview duration of about 40 minutes (with anthropometry);
- Results can be made available in a short time about three months.

collect consumption and expenditure data required for measuring poverty levels, development work is currently underway to equip CWIQ to collect this data²⁵.

CWIQ is a very effective tool for improving project and sector program design and targeting of services towards the poor and most disadvantaged communities. When repeated, the CWIQ becomes a monitoring tool for assessing implementation, effectiveness and impact of programmes/projects on living conditions. The CWIQ Survey has been carried out in some States in Nigeria.

This survey will be conducted every year during the life of the Plan.

National Demographic and Health Survey

The National Demographic and Health Survey is the main source of data on fertility levels and preferences, family planning use, maternal and child health, breastfeeding practices, nutritional status of young children, childhood mortality levels, knowledge and behaviour regarding HIV/AIDS, and the availability of health services within the community.

This survey is generally held every 5 years. It is supported by the USAID through MACRO International. A Demographic and Health Survey has been scheduled for year 5 of the Master Plan.

Multiple Indicator Cluster Survey

This survey was developed by a number of partners in 1998 as a flexible, practical survey methodology for assessing progress towards end-of-the-decade goals set by the World Summit for Children. It became the largest ever data collection exercise in history for

²⁵ The Strategic Plan for the Office of Chief Government Statistician, Zanzibar, 2002

monitoring children's rights and well-being. Through the surveys, data were collected not only on nutrition, health and education, but also on birth registration, family environment, child work and knowledge of HIV/AIDS. This survey has been scheduled for the second and fourth years of the Plan life.

(iii) Establishment-based surveys

In these surveys, the units of enumeration are establishments. During the Plan period, a number of these surveys will be carried out including:

- a quarterly Industrial Survey covering main industries,
- an Annual Industrial Survey covering selected industries including manufacturing, building and construction, road transport, distributive trade, hotels and restaurants, and
- Capital Stock Survey.

These surveys will continue to be carried out by mail questionnaire. However, to improve the response rate that has been a major problem, the questionnaires will be better designed – made shorter, simpler and more attractive to look at.

(iv) Other Surveys

Monthly Retail Price Survey

This is a monthly survey that will be carried out in both urban and rural areas to collect retail prices for purposes of compiling monthly Consumer Price Indexes.

User Satisfaction Survey

This survey has not been carried out in the country before. It will be organized to assess how satisfied users are with the statistical products and services offered by the NSS. During the Plan period, this survey will be carried out by the Bureau every other year.

Table 4.3 below gives a summary of the proposed data collection programme for the FOS (later the NNBS) to be implemented between 2004/5 and 008/9 and when results will normally be expected. This programme will be made known to users so that they can know when to expect different statistical products.

4.7.3 Administrative data

Line ministries both at Federal and State levels as well as other institutions generate a lot of data as a by-product of their operations. Such data are compiled from administrative records and/or collected through reporting systems In order to systematize collection of administrative data, there is increasing use of pre-designed forms for use in reporting systems.

Ser. No.	Censuses and Surveys	Year of Census/Survey	Time results expected after field work*
1.	Agricultural Sample Census	2007/8	8 months
2.	Census of Business Establishments	2005/2006	8 months
3.	National Integrated Household Survey (annual)	2004 - 2009	3 months
4.	Annual Agricultural Sample Survey	••	3 months
5.	National Service delivery Survey (CWIQ)	::	1 month
6.	Living Standard Monitoring Survey	2008/9	2 months
7.	Labor Force and Informal Sector Survey	2007/8	1 month
8.	National Demographic and Health Survey	2008/9	2 months
9.	Multiple Indicator Cluster Survey	2005/6, 2007/8	2 months
10.	Quarterly Industrial Survey	2004 - 2009	1 month
11.	Annual Industrial Survey	::	2 months
12.	Capital Stock Survey	2006/7	3 months
13.	Monthly Retail Price Survey	2004 - 2009	2 weeks after
			survey month
14.	User Satisfaction Survey	2005/6, 2008/9	Within 1 st
			quarter of
			succeeding
			year

 Table 4.3: A summary of the proposed data collection programme for FOS (later NNBS) (2004/5-2008/9)

* Date of release will depend on when the census or survey start

Under the Plan, line ministries, institutions and agencies that compile administrative data will be assisted to increase the scope of data and to build capacity so that more comprehensive, accurate, consistent and real-time data can be collected/compiled following standards that it plans to develop. Where institutions that collect data do not have a Statistics Units, the Bureau will encourage them to have the Units established. The Bureau will also activate State Statistical Agencies in those States where the agencies have been dormant and establish them in those States where they do not exist.

4.7.4 New areas

Research and methodological development work will be undertaken in a number of areas to improve the quality of statistics. The following methodological work will be undertaken:

a) **Poverty Correlates**

Poverty is a multi-dimensional phenomenon that is caused by many factors. It is important that these factors are studied to establish their impact singularly and in combination on poverty levels. This will be done using multiple regression analysis and other analytical tools.

This work will help to include appropriate variables in various questionnaires and other data collection instruments.

b) Poverty and vulnerability mapping

Broadly, the basic methodology in poverty mapping involves linking household survey and large scale data sets (e.g. Population and Housing Census data). Prediction models are derived for consumption or income on the basis of household survey data using variables that are also found in the large data (census) set. The models are used to impute household income or consumption in the large data (census) sets. On the basis of this imputed income for large data (census) sets, poverty measures (e.g. headcount, poverty gap, inequality measures) are obtained. Then poverty maps for various administrative hierarchies are constructed and poverty profiles developed according to user needs.

It should also be mentioned that not only have they been used to analyse and describe the risk factors to which vulnerable population groups are exposed, but also poverty maps are used to simplify the presentation of often complex sets of information and relationships.

Capacity for poverty mapping will be developed at the Bureau in close collaboration with different stakeholders.

c) Agricultural production

Objective estimation of agricultural production requires that we estimate planted area and crop yield and then obtain production as a product of estimated area and yield. Objective estimation of area using compass and tape as recommended by FAO is cumbersome, time consuming and expensive. It has also been realized that it may not give as accurate estimates as theory would have it.

Experimentation will be made on alternative, less cumbersome and in the long run cheaper method of using the Global Positioning System (GPS), which has already achieved good results in Uganda where it has been tested.

d) Social Accounting Matrix

A Social Accounting Matrix (SAM) is a presentation of the system of national accounts in matrix terms that incorporates whatever degree of detail is of special interest including displaying the interconnections, disaggregating the household sector, showing the link between income generated and consumption, etc.

As part of the methodological development work, a SAM will be constructed during the Plan period.

4.8 Data Management, Dissemination And Access

4.8.4 Introduction

Data production is a process with three distinct and yet inter-linked stages, namely:

- planning stage,
- data collection and implementation stage, and
- data processing/analysis/reporting/dissemination stage.

A well-designed data production programme should of necessity make provision for complete implementation of the three stages of the process. It cannot be emphasized enough that this process is not complete until collected data have been processed, analyzed, reported and disseminated to users. There should be a follow-up to know if the disseminated information is being used and how it is being used.

Data processing and analysis have been a major bottleneck in speedy publication and dissemination of data in Nigeria and Africa in general. It was observed that generally, it is with donor funded projects on specific data collections that collected data are rapidly processed and released to users. Otherwise, there are "mountains" of unprocessed, unanalyzed and unreported data at FOS, in line ministries and in States. But even where data have been processed and analyzed, the analysis has been insufficient as can be seen in published reports. End users, mainly policy and decision-makers, expect value-added statistical products which are rich in information and have policy content and which are well packaged and communicated. What they are getting instead are huge reports full of statistical tables. This has been explained by shortage of skills and expertise in data analysis and report writing in many agencies that produce data.

In addition, there are no dissemination policies and strategies in most agencies. Data are released when they are ready and there are no release calendars. It should also be mentioned that often, data are scattered in different forms in producer agencies thereby making it inconvenient to access and use them. Few agencies have data banks that would make data storage and retrieval easy and more accessible.

During the Plan period, the following will be done to reverse this situation.

4.8.2 Clear the backlog of unprocessed data

Different agencies will be facilitated to clear unprocessed, unanalyzed and unreported data. This is important to ensure that time series data are maintained. This will essentially be undertaken by the staff of the agencies.

4.8.3 Data analysis and reporting

Data analysis will be improved by:

(a) building analytical capacities in agencies that collect data.

Analytical capacities will be built among agencies that collect data through the above training programme. The Bureau will have some of its staff go for specialized training in data analysis in relevant institutions. It will also organize short courses on data analysis for its staff and staff of line ministries and States.

(b) Fostering collaboration in data analysis

It will not be possible for data producing agencies to build all the analytical capacities required. These agencies will need to collaborate with those institutions e.g. research institutions like NISER and Universities, which have analytical capacity especially for policy-related analysis. In addition, subject-matter specialists from different institutions will be encouraged to collaborate with the Bureau, line Ministries and State Statistical Agencies to do definitive analysis of data collected in censuses, surveys, etc.

This collaboration will have many benefits for the NSS. First, there will be value added to the data by bringing subject-matter knowledge to bear on the analysis. In particular, the right interpretation will be made of the data. Second, involvement of other agencies in data analysis leads to wider ownership of statistical products. This can be very useful especially when the final products are different from what the government and politicians expect. Third, the process of scrutinizing data during detailed analysis usually identifies weaknesses in the data. When these weaknesses are reported to data producers and acted upon, there can be improvements in future data collections. For instance, the analysts may advise changes in questionnaires or data collection methods, etc.

For this collaboration to work well, there will be a need for a policy on access of microdata, which are required by researchers. There will also be a need for establishment of **Specialist Advisory Groups** involving researchers and academics to llok at specific data sets and activities.

(c) Reporting

Information from data should be appropriately packaged and reported. The Plan will assist agencies to develop the capacity for writing reports in a user-friendly manner, using charts as much as possible and providing metadata on why data were collected, the definitions used, when data were collected, how they were collected, how many people (units) were interviewed, what was the non-response rate, etc. As Ostergren (1997) has pointed out, "without these extra ingredients raw data are of little use to any one other than the person who compiled tables".

In addition to main reports that usually cover a wide range of subjects and are good for general users, the Plan will encourage and support preparation of theme-specific reports to meet specific needs, interests and perspectives of well targeted users to create impact¹. Unlike the main survey reports, theme specific reports will be short, precise and based on policy-related analyses. The Bureau will collaborate with subject-matter specialists and researchers to write these reports.

4.8.4 Dissemination and Access

(i) **Dissemination policy**

It is now widely recognized that information has no value unless it reaches those who need it, is easily understood and is actually used. For this reason, a well-defined dissemination policy will be desirable for the Bureau and the Plan provides for assistance to the Bureau to develop the policy. It is vitally important that all staff are aware of the policy and comply with it. The policy will provide for advance publication of a release calendar and simultaneous release of data to all stakeholders - principle of equal access to data consistent with the Fundamental Principles of Official Statistics adopted by the United Nations Statistical Commission in 1994 and GDDS guidelines. It is important that the Bureau does every thing possible to stick to its data release calendar.

The spirit of the policy will be five fold, namely to:

¹ Guidelines for National Food Insecurity and Vulnerability Information and Mapping Systems (FIVIMS): Background and Principles, Committee on World Food Security, CFS:98/5, FAO, Rome, April, 1998

- a) develop an effective public relations and marketing function at the Bureau,
- b) make statistical data and information liberally and readily accessible as a "public good" and in a timely manner following the GDDS guidelines,
- c) ensure that data are disseminated in a user-friendly manner and that they can be understood and interpreted by users. This will require providing metadata or information about the data to accompany whatever data are disseminated,
- d) disseminate specific statistical products to well-targeted users to meet their specific needs, interests and perspectives and to create impact. In order to do this properly, there will be "market segmentation" after assessment of user requirements so that the Bureau can target particular users, and
- e) provide for which basic statistical information the user community can access freely as a "public good" and what statistical products to sell e.g. reports to the private sector and international organizations.

The NNBS and all statistical agencies will prepare and disseminate in advance release calendars and will be required to publish and update as required information on methods and procedures. The Bureau will be proactive in disseminating statistical data and information by providing more information to users in the form of up-to-date product catalogues, providing access to an enquiry point by telephone, fax, the Internet and electronic mail. It will use main bookshops in key towns in the country to sell statistical reports on a sell-return basis, use Zonal and State Offices as main outlets for statistical reports, and will issue press release whenever new data are formally released. By doing all this, the visibility of the Bureau will be enhanced.

While reports will be the main dissemination medium, other media will be used as well. All major data collections and reports by the Bureau, line ministries and States will be disseminated in appropriately organized stakeholders' workshops. Each survey and census will be followed by a workshop as a matter of course. The Bureau will develop capacity for burning and distributing/selling data on CDs.

Initially, the Bureau will develop a web site and use it to disseminate data (web dissemination). Later, there will be a need to develop a broader web-site for the entire NSS. The web sites should be given prominence and all statistical agencies should make greater use of them to release and disseminate data in electronic rather than written formats.

(ii) Desktop publishing

The public image of any National Bureau of Statistics is largely determined by the products it produces. The reports which are produced by agencies by and large are not well designed. They lack a common feel and touch or standard house styles that is used in all publications and other materials, vary in quality and often lack timeliness.

Under the Plan, the Bureau will be assisted to improve the publication processes, viz. create an integrated publishing environment, templates, standards, software, etc. Ultimately, there will be a one-string-routine from production databases to publication. In the meantime, however, a desktop publishing unit will be established. The staff in this Unit will be given specialized training in desktop publishing. When reports are finalized by subject-matter Divisions, they will be sent to the Unit which will be responsible for standardizing Bureau publications.

(iii) **Publications**

Under the Plan, statistical publications will be improved and made more regular timely. Emphasis will be placed on the following regular publications.

Regular Publication of the Bureau

The Bureau will be producing the following publications:

Quarterly Statistical Bulletin

A lot of data are collected/compiled on indicators which change frequently. Such indicators include prices, production (both industrial and agricultural), imports and exports, attendance at health facilities, etc. Some of the data are collected every month or every quarter. It is very important that once collected and compiled, such data should be made available to users on a quarterly basis. A Quarterly Statistical Bulletin will be started and published with a short time lag of two months.

Annual Abstract of Statistics

The Annual Abstract of Statistics will be the flagship of the Bureau. It will provide annual data on the whole economy. If produced with a short time lag, this abstract will enhance the credibility and image of the Bureau as a dependable source of statistical data and information. It will be important to make the abstract user-friendly with concise and precise commentary on the tables in the publication. The last available abstract is the 2001 edition produced by FOS.

Other publications

Other publications to be produced regularly by the Bureau include:

- Nigeria Trade Summary (annually)
- National Accounts of Nigeria (annually)
- Review of Nigeria Economy (annually)
- Social Statistics in Nigeria (annually)
- Nigeria Statistical Yearbook (annually)
- Statistical fact Sheets (annually)

Publications of line ministries and State Statistical Agencies

With guidance from the Bureau, the regular publications of line ministries and State Statistical Agencies will be improved. In particular, they will be made more user-friendly using graphs, charts and maps. They will also carry concise and precise commentary on the tables in the publications, have metadata and will be made more regular.

The main publications of line ministries will be Sectoral Statistical Bulletins while those of State Statistical Agencies will be State Statistical Yearbooks.

(iv) Library services

As was mentioned earlier, the library is an essential infrastructural component of a statistical institution. It is used as the main depository of textbooks and other reference materials e.g. journals, periodicals magazines, maps etc. The library also stores government publications, reports and materials from U.N. bodies, commonwealth, European Union, etc.

The library services will be strengthened by stocking it with new books, journal and publications. In addition, the library will be computerized to make it provide more efficient services. The staff of the Bureau and the Statistical Common Service will be encouraged to use the library. The library will also be open to the public to use for reference.

(v) Data Banks

In order to improve the management of data and information resources; promote better collaboration, networking and sharing of data and information, and in order to facilitate interlinked analyses for advocacy and informed policy and decision-making, data banks will be built at the Bureau and in line ministries. These will be essentially large, integrated, shared pool of information in forms suitable for storing, up-dating, retrieval and accessing data. What is expected in the end is a constellation of sectoral data banks with connectivity to the National Data Bank – a **data warehouse** – to be developed at the Bureau. This constellation is graphically presented in figure 4.4 below.

It will be important to emphasize that the data in data banks will only be practical if shared by many users. This will require that data be readily accessible; that the data in the data banks are organized so that relationships among the data items can be explored, etc.

Statistical Master Plan for the Nigeria National Statistical System (2004/5-2008/9)

Figure 4.4: Constellation of data banks in the National Statistical System



The main features of data banks will be that data are serviced and continuously maintained and updated; and that data users can access and retrieve data in the data banks to meet their individual needs. In particular, users can view and print off tables and carry out basic statistical analyses. In building data banks, the following will be taken into account:

- a) the data banks will be developed to meet the requirements of users,
- b) the need to create data banks that are easy to up-date and access, and in particular the need for the workstations to provide a simple interface for different purposes and users, and
- c) the cruciality of management resources to the data bank systems.

The data banks will be built in a coordinated manner and connected.

4.9 Infrastructure and Equipment

Good infrastructure and equipment are essential for effective delivery of statistical products and services in the National Statistical System. Indeed, one of the weaknesses of the NSS is that the infrastructure is weak and the equipment is inadequate.

The Plan will assist to rebuild the infrastructure and to equip data producing-agencies to a level where they can be able to produce good data efficiently and in a sustainable manner. In this connection, the following activities will be undertaken:

4.9.4 Building for the Bureau

It was mentioned earlier that the current physical environment for FOS is not conducive to work with offices scattered in different dilapidated buildings in Lagos and Abuja. Fortunately, this state of affairs will soon change as in recent past, government took a decision to acquire a new building for the office. This building will become the permanent home for the Bureau.

It is expected that this six-storey building will have enough room for accommodating all headquarters staff, conference/training rooms, library facilities, stores, etc. Once government has made payment for the building, the building will be customized and refurbished to turn it into an e-building befitting a modern National Statistical Bureau.

4.9.5 Transport

Transport is important and under the Plan, the following will be provided:

Vehicles

Three (3) utility vehicles and two (2) utility buses will be provided for use at the Bureau headquarters. Two (2) field vehicles will be provided to each Zonal Office to facilitate more effective field supervision and backstopping to States. Each campus of the Bureau Training School will be provided with a bus for use by students.

Each Bureau Statistical Office and State Statistical Agency will be provided with a vehicle each to facilitate field supervision.

Motor cycles

Each Bureau State Office will be provided with 3 motorcycles for field work.

Boats

There are six (6) riverline States where data collection requires boats. Accordingly, six (6) boats will be provided for this purpose.

4.9.6 Stand-by generators

The working environment of intermittent electricity supply does not encourage effectiveness in statistical production e.g. meeting set deadlines. Accordingly, generators of different capacities will be provided to the Bureau headquarters, Zonal Offices, State Offices and campuses of the Training School.

4.9.7 IT Infrastructure

(i) IT and other equipment

In most agencies that collect data, computer and other IT equipment are outdated and will need to be replaced. Table 4.4 gives a summary of the items to be bought during the Plan period.

A lot of equipment will be provided to data producing agencies including the Bureau (headquarters, Zonal Offices and State Offices), line ministries and State Statistical Agencies. Also some equipment will be bought for the Departments of Statistics at Nigerian Universities. The equipment will include personal computers and accessories, software and office equipment (printers, photocopiers, scanners, fax machines). Other equipment to be purchased includes GPSs for the annual agricultural surveys that will be conducted by the Bureau.

It is very important that the equipment are well maintained. Accordingly, provision has been made for the maintenance of the equipment during the Plan period. It is hoped that the maintenance will be sustained when the Plan is over.

In addition, the equipment which are lying in a state of disrepair among data producing agencies will be rehabilitated and refurbished even before new equipment is purchased.

(ii) Local Area Networks (LANs), Wide Area Networks (WANs), Intranets and Internet

There will be improved IT application to improve efficiency, optimize use of IT resources, increase information sharing and dissemination through Local Area Networks (LANs), Wide Area Networks (WANs), Intranets and the Internet.

LAN and WAN

A LAN is a computer network (interconnected computers) that spans a relatively small area. Most LANs are confined to a single building or group of buildings. Most LANs connect workstations and personal computers. Each node (individual computer) in a LAN has its own

			atity			
Type of equipment	YR1	YR2	YR3	YR4	YR5	Total
Personal Comupers						
Bureau						
Headquarters	300	100	50	30		480
Zonal Offices	30		30			60
State Offices	74		37			111
Training School	30		30			60
Line Ministries		90		30		10
State Statistical Agencies		111		111		
Departments of Statistics		15		15		30
(Universities)						
Laptops (Bureau)	8	3	3	3	3	17
Computer softwate						
Bureau (various)						
Line Ministries (various)						
State Statistical Agencies (various)						
Office Equipment						
Printers						
Bureau (Headquarters)	155					155
(hdqrt, zonez, states, School)						
Line ministries		30				30
State Statistical Agencies		74				74
Departs. of Statistics (Univ.)		10				10
Photocopiers						
Bureau (Headquarters)						
(hdqrt, zones, States, School)	53					53
Line ministries		30				30
State Statistical Agencies		37				37
Other (various)						
Bureau (Headquarters)						
(hdqrt, zonez, states, School)						
Line ministries						
State Statistical Agencies						

Table 4.3 IT and other equipment to be provided

CPU with which it executes programs but it also is able to access data and devices anywhere on the LAN. This means that many users can share expensive devices, such as laser printers, as well as data. Users can also use the LAN to communicate with each other, by sending emails or engaging in chat sessions. During the Plan period, the Bureau and line ministries will be assisted to network their computers.

A LAN can be connected to other LANs over any distance via telephone lines and radio waves. A system of LANs connected in this way is called a Wide Area Network (WAN). LANs will be built in different agencies. The Bureau will be assisted to develop a WAN connecting its headquarters with Zonal Offices and eventually with State Offices.

Intranet and Internet

The Internet is a global network of networks enabling computers of all kinds to directly and transparently communicate and share services throughout much of the world. Because the Internet is an enormously valuable, enabling capability for so many people and organizations, it also constitutes a shared global resource of information, knowledge, and means of collaboration, and cooperation among countless diverse communities. Many people refer to the Internet as the World Wide Web (WWW).

An intranet on the other hand is a self-contained, internal network linking multiple users by means of Internet technology. In effect, intranets put a fence around the Internet's limitless territory, establishing controlled-access sectors within which users can communicate freely and interact. Intranets will be built among agencies to display general information, share business data and facilitate interactive communication. In particular, the intranets will be used to distribute memos, regular news bulletins and to exchange and review work in progress.

During the Plan period, the Bureau (headquarters, Zonal Offices, State Offices and Campuses of the Training School), line Ministries and State Statistical Agencies will be assisted with Internet access. In addition, the Bureau will be assisted to develop an Intranet.

4.9.8 Establishment of Management Systems at the Bureau

Proper management information systems consistent with good practice will be established at the Bureau. The systems to be established include:

- Recruitment procedures
- Terms and Conditions of Service
- Financial Regulations and Accounting Guidelines
- Procurement Guidelines
- Management Information System (MIS).

The autonomous status of the Bureau means that management of resources, namely funds, equipment and human resources will become the full responsibility of the organization. Accordingly, the Bureau will have to develop systems for managing these resources in an efficient and transparent manner.

The following summarizes the management systems to be developed:

Recruitment Procedures

The Bureau will be a scientific and knowledge center. Given the range of subjects and activities carried out by the office, a variety of skills, talents, academic backgrounds and work experience will be required for the office to function effectively. It will need to be run on scientific lines, ensuring that the process of staff recruitment is not externally influenced, and that only highly qualified personnel are recruited and retained.

In order to make sure that staff recruitment is carried out on merit, it will be necessary to establish recruitment procedures. These procedures will be developed and put in place before new recruitment can be done.

Terms and Conditions of Service

There will be a need to put in place an attractive incentives structure in form of Terms and Conditions of Service as a matter of priority so that the very best professionals can be recruited and retained. The Terms and Conditions of Service will be developed, properly documented and made known to all staff.

Financial Regulations

There will be a need to develop regulations for the management of financial resources of the Bureau. These regulations will cover such things as receipt of funds, storage, disbursement and budgetary controls. The regulations will also indicate the signatories to the accounts and reporting of financial transactions. These regulations will be developed, properly documented and made known to all staff.

Accounting Guidelines

These guidelines lay down procedures for managing accounts records including bookkeeping, payment procedures, payrolls and accounting system. The guidelines will be developed, properly documented and used by all accounts staff.

Procurement Guidelines

These guidelines lay down the procedure to be used in procuring goods and services. They will have cross-referencing to the financial regulations and will be for general use in the Bureau. These guidelines will be developed and properly documented.

Management Information System (MIS)

During the Plan period, a computerized systems to support management and administration of the Bureau will be designed and implemented, including filing, human resource management, accounts, etc. These systems output information in a form that is useable by managers at all levels of the Bureau: strategic, tactical and operational

Consultants will be hired to develop these systems.

4.9.9 Improvement of the Survey Infrastructure

The statistical infrastructure can be seen as the "*professional conscience*" of a National Statistical Agency. The infrastructure includes professional standards, codes and classifications, the field organization, master sample for household-based surveys, register of establishments for establishment-based surveys and the Geographic Information System (GIS). It is important that the statistical infrastructure of the Bureau is strengthened in order to enhance its performance.

This will be done by undertaking the following activities:

a) Code of Practice for Official Statistics

In order to promote high standards and maintain public confidence in official statistics and analyses, the Statistician General will, under the proposed Statistics Act, be required to prepare and issue a Code of Practice for Official Statistics which contains principles and practices to be followed by producers of official statistics. The code will cover main activities involved in producing statistics, from planning through to dissemination. In addition to promoting professionalism, the Code of Practice for Official Statistics will also act as a coordinating tool for the production of official statistics.

b) Development of GIS capability

The geographic Information System (GIS) is a system of computer hardware, software and procedures designed to support the capture, management, analysis, modeling and display of geographically referenced data for decision making. It is a way in which to begin to represent and model the real world. A GIS combines the graphic abilities of a computer-aided design system with the information-storing capacity of a database. Ultimately, GIS is used for decision support and decision-making concerning real-world problems. GIS allows us to produce a model from which decision can be made concerning the real world.

During the Plan period, GIS capability will be developed at the Bureau to improve data analysis and presentation. In particular, GIS will be used to analyse and simplify the presentation of often complex sets of data and information and relationships related to poverty and vulnerability, and to generate improved analytical statistical products like vulnerability and poverty maps. Statistics South Africa has taken leadership in Africa in the production of poverty maps and has got a lot of mileage out of it in terms of advocating for statistics.

c) Development of IT policy and strategy

Information Technology (IT) can very much improve the statistical operations and reduce redundancies in data collection, data processing, data analysis, data storage, data access and data sharing. Advances in IT have made computer equipment powerful, relatively inexpensive and more accessible; led to development of user-friendly application software; created possibilities for networking and sharing of IT equipment; shrunk the effects of time and space.

An IT policy and strategy will be developed to provide overall and long-term development needs in IT to make the Bureau IT-focused. It will cover many areas including infrastructure and equipment, systems (statistics, management and administration) and human resources development. The policy and strategy will aim to standardize and guide acquisition and maintenance of computer hardware and software, computer replacement, virus protection, use of computers and Internet resources. In particular, a coherent IT infrastructure with a standardized platform of basic hardware, network and office automation applications will be created at the Bureau.

In designing an IT policy and strategy, the following will be considered:

- use of IT to strengthen and standardize work processes especially in methods design and development,
- development of inter-linked statistical production process where data and information are collected, shared, processed, stored and disseminated in a uniform manner across the National Statistical System,
- a Wide Area Network (WAN) providing connectivity with Zonal Offices, State Offices and key line Ministries and institutions,
- Internet and Intranet connectivity,
- establishment of own web site,

- development of standardized hardware platform and software,
- training in IT as part of human resource development,
- increased use of IT in administrative systems, and
- development of a socio-economic National Data Bank for monitoring national development.

4.8.7 Other infrastructure

Other important infrastructure already presented in this chapter include a compendium of main concepts, definitions and classifications; a master sample for household-based surveys; and a Register of establishments.

4.9 Assessment Against Alternative Strategic Choices

4.9.1 Data Production and Management

The FOS was established in 1947 as the lead agency for production of official statistics and coordination of the NSS. However, there was precipitous government neglect of the agency especially during years of military rule when there was little demand within government for good statistics. As a result, the capacity of FOS to deliver fell drastically. Rather than strengthen FOS, parallel capacities were created for data collection and management. In particular, the function to conduct the Population and Housing Census as well as population surveys were excised from FOS and reposed in the National Population Commission. The national data banking function was reposed in the National Data Bank.

As we saw in Chapter 2, all these institutions are very much under-resourced. For resources available for statistics to have greater impact, it is important that the function to conduct major national censuses and surveys be reposed in one Federal agency rather than spread thinly over different agencies. It is also important that data banking is done by NNBS.

4.9.2 Centralized versus decentralized statistical system

The option for creating a centralized versus a decentralized NSS was considered. In a centralized NSS, one agency produces and disseminates virtually all broadly used official statistics, as is the case in Canada. In a decentralized system on the other hand, there are many agencies involved in statistical production and dissemination, as is the case in India. While on balance the pros and cons of the two systems seem to present the centralized system as the more efficient organizational model, the idea of a centralized statistical agency was rejected on the grounds that it would, *inter alia*, run counter to the political and administrative set-up of the country. Under the current constitution of the federation, statistics is on the concurrent list i.e. is a responsibility of both Federal and State governments. Secondly, the agency would not have the capacity to collect all official statistics. Thirdly, the agency would not in all cases have comparative advantage say over sectoral ministries and States in production of administrative data, CBN in compiling statistics, customs in compiling foreign trade data, etc. Statutory provisions are made for these institutions to collect data.

On the other hand, it was realized that a decentralized statistical system may not achieve synergy and cost effectiveness, and in fact may lead to conflicting and lower quality data unless the system is well coordinated organizationally and technically. The best way forward,

therefore, was seen to be in coordinating and strengthening the agencies that collect and manage data.

4.9.3 Argument for autonomy of the National Statistical Agency

The option to make the National Statistical Agency autonomous as opposed to keeping it in the mainstream civil service was considered. This was done against the backdrop of increasing tendency to improve the performance of the NSS by, among other things, ensuring in the first place that the National Statistical Agency, as the coordinator of the system, is made proactive, performance-driven, strategy-focused, well-structured, flexible, incentivized and resourced. In terms of improving performance, it is the cultural shift to a performance driven organization that will be the most powerful in achieving actual performance change.

Autonomy gives the National Statistical Agency the best chance of change management and for achieving necessary strategy-focus, organizational flexibility and incentivization in order for performance to be improved as it addresses some of the fundamental problems of the public sector working culture. It must also be realized that autonomy is not an end; rather it is a means by which the agency can become more effective. The status itself will only be effective if it is well exploited.

While re-focusing the structure of the FOS and setting up a new Remuneration and Performance System would help improve performance even if autonomy is not achieved, it would not do it to as great an extent. Similarly, more management and leadership-focused training will help the shift towards a more responsive and efficient NSO at the centre of the NSS.

4.9.4 Combining FOS, National Population Commission and National Data Bank

The option to combine FOS, National Population Commission and National Data Bank was considered. While combining FOS and the National Data Bank would be easy, the National Population Commission has certain non-data collecting functions which include providing policy-advice to government on population issues, sensitization of the population on population issues, advocacy work, etc, etc. These functions are outside the purview of a National Statistical Agency.

The best way forward, therefore, was seen to be in creating a new agency that subsumes all the functions of FOS, National Data Bank and the data collection functions of the N.POP.C. The Bureau will not be a reincarnation of FOS. Rather, it will be a new body with a new mandate, new paradigms and new dynamics.

4.9.5 New Name for the National Statistical Agency

The option to keep or change the name of the National Statistical Agency as Federal Office of Statistics was considered. While the name Federal Office of Statistics is well known, it was felt that the new agency which will have a new image, culture, paradigms should not carry the "old tag" but rather a new tag.

4.9.6 Common Statistical Service

In the past, FOS used to run a Common Statistical Service under which all statistical personnel in Federal government belonged to a pool and they were posted to various

Ministries as the need arose. FOS used this service to promote professionalism and coordinate statistical work in the Federal government ministries. This arrangement, however, ceased when the Planning, Research and Statistics Departments were established in line Ministries by decree and all statistical personnel became full staff of the ministries.

The option to re-establish this service was revisited vis-à-vis the status quo. There were strong arguments for re-establishing the service with the NNBS out-posting staff to line ministries. The advantages of this arrangements were identified, among other things, as better coordination of statistical work in lime ministries; improved career prospects, better prospects for training and professional advancement for statistical staff; and improved quality of administrative data.

4.10 Proposed prioritization and sequencing of activities.

The Master Plan has identified the main activities to in order to realize the vision and mission of the National Statistical System. These activities will help to fill the existing data gaps and to build sustainable capacity for national statistical development. These activities together with targets to be met are presented in Annex VII.

After identifying the data gaps and activities to be carried out to fill the gaps and to build capacity, the next logical step was to prioritize these activities. The activities have been prioritized using the criteria given hereunder, sequenced and then costed.

The following activities have been given higher priority and therefore are undertaken in the first few years of the Plan. Highest priority activities will be undertaken in year one of the Plan period.

- (a) activities that will provide data for informing and underpinning major development initiatives of government such as NEEDS such as the clearing the backlog of data needed to provide benchmarks for NEEDS, surveys that will provide data for monitoring NEEDS e.g. Service Delivery Survey (CWIQ).
- (b) activities aimed at organizational development and building infrastructure and capacity e.g. up-dating the legal framework, raising greater awareness about statistics, giving training in management to leadership of FOS and later NNBS, provision of IT equipment, etc. have been given high priority.
- (C) those activities which will provide a basis for undertaking other activities have been given priority e.g. updating the EA maps before undertaking the next Population and Housing Census in 2005, updating the register of business establishments before the next business surveys start, etc.
- (d) activities which are integrative and which make it possible to realize economies of scale through combining those activities that could be carried out simultaneously or which could be "piggybacked" onto other activities e.g. Integrated Household Survey.
- (e) Ongoing activities e.g. GDP estimation, compilation of Consumer Price Index (CPI) which have to be continued to maintain the series. However, these activities will have to be improved.

4.11 Critical Risk and Mitigating Measures

The following table presents critical risks and mitigating measures.

Table 4.4: Critical risks and mitigating measures.

Risks	Risk Mitigating Measures	Risk Rating with Mitigation
Overall goal		
Commitment of government to support statistical work	 (a) Statistical advocacy including demonstrating the power of statistics and training of officials and users in the use of statistics; (b) increase the quality and quantity of statistical data to promote value of statistical data in monitoring and measuring development policies and initiatives. 	Low
Capacity of the FOS (later NNBS) and other agencies to sustain the development of the statistical system	Capacity will be progressively built at FOS (later NNBS), line ministries and States for data collection and management through: (i) training, skilling and re-skilling; and (ii) provision of various types of equipment	Medium
Strategic Goals		
Absorption capacity of the FOS (later NNBS) and other statistical producing agencies in line ministries and states is insufficient to implement the Master Plan	 (a) Increase the number and capacity of professional staff planned during Plan implementation period (b) Establish a Master Plan Implementation Unit (c) Provide technical assistance in critical areas. 	Low
Recruitment and newly trained staff are not retained in the statistical system	 Improvements in: (a) the incentive structure such as better working environment (better offices, modern equipment), (b) opportunities for further training, and (c) a remuneration scheme that better reflects staff performance and qualification 	Medium
Activities and responsibilities of different statistical agencies are not coordinated	 (a) creation of more effective coordination mechanisms (b) re-establishment of a Common Statistical Service (c) increase communication among statistical agencies. 	Medium

The above rating of risks against mitigating measures shows that the implementation of the Master Plan stands a good chance of success.

CHAPTER FIVE

Implementation Arrangements, Monitoring and Evaluation

The last Chapter presented strategies for strengthening the National Statistical System. It is important to point out that "right strategies" are not all that is needed to realize the above vision and mission and to turn the NSS around. The strategies have to be properly and effectively implemented. The implementation and effectiveness of the Plan will be closely monitored and, at the end of the Plan period, evaluated.

This Chapter presents arrangements for implementation, monitoring and evaluation of this Master Plan.

5.1 Implementation

It has been observed that many effectively formulated strategies fail because they are not successfully implemented; and "*strategies formulated but not implemented serve no purpose*"²⁶ On the basis of their study of portfolio managers and studies done by others, Robert S. Kaplan and David P. Norton conclude that "*the ability to execute strategy is more important than the quality of the strategy itself*"²⁷. Thus implementation of strategies is seen as "*the most important factor shaping management and corporate valuations*"²⁷.

Mater Plan implementation will involve, among other things, mobilizing drivers of strategic success including: establishing a new legal framework; creating strategy-supporting organizational structures; creating strategy awareness; and managing change.

5.1.1 New legal framework

It is important that consensus is built around the proposed Statistics Act before it is submitted to government officially. FOS should take the initiative to organize sanitation meetings about the draft Act. Then the Economic Advisor should be requested to write a Memorandum on the Statistics Act and the Statistical Master Plan for the Council of Ministers.

Using the appropriate machinery, the FOS should get the Act to the Attorney General's Office for drafting into a bill, which should then be taken to Parliament. In the meantime, however, it is important that the good Offices of the Economic Advisor to the President are used in particular to sensitize legislators about the Act and the Statistical Master Plan. It is very important that when the bill has been prepared, FOS staff look at it to make sure that what was intended by different articles is not distorted by the legal language.

²⁶ The Strategy-focused Organization by Robert S. Kaplan and David P. Norton, Harvard Business School Press, Massachusetts, 2001

²⁷ Ibid

²⁷ Ibid

5.1.2 Creating Plan-supporting organizational structures

(i) Structure of NNBS

Strategy implementation invariably requires change of organizational structures to take account of their new role, status and challenges that lie ahead. The structure defines the allocation of responsibilities and powers, reporting relationships and processes, hierarchy levels and value added, allocating resources and determining skills requirements and affordability.

An appropriate structure was proposed for the NNBS in chapter 4. The new structure provides for further professionalization of the Bureau and a conducive career path for all staff of the Bureau. Provision has been made in the Plan to support new structures with new and more modern management systems and procedures and enabling infrastructures (physical and technical

As much as possible, building bureaucracy, autocracy and top-down management style should be avoided in preference for streamlined, participatory and coordinated style of management that breaks down organizational silos and encourages cross-functional and problem-solving teamwork. To do this, a number of layers of management will be developed. This will be done by developing different layers of management as well as working groups to handle specific cross-functional tasks. In particular, this will be done by developing the following layers of management:

Management Team: will be constituted comprising of Heads of Departments and specialized Units and will meet regularly, say once every week, under the chairpersonship of the Statistician General to discuss main issues and coordinate the Bureau's activities. It is important that the meetings of the Management Team are taken seriously and are held as planned. In some institutions, a day is set aside for holding these meetings and no other activities are scheduled on that day for the concerned officials.

Departmental Teams: will be constituted comprising of the Head of the Department, Divisions and Sections. This team will be required to meet regularly to discuss issues and matters affecting the Departments and feed their deliberations into the Management Team meetings.

Standing Committees and temporary working groups: These will be established to handle specific cross-functional tasks.

Proposals are also made in the last chapter on streamlining and professionalizing the statistics functions of line ministries.

Until the NNBS is established, however, the Federal Office of Statistics (FOS) will be responsible for coordinating the implementation of the Master Plan.

(ii) Steering Committee for the Statistical Master Plan

As mentioned earlier, FOS) and later the Nigerian National Bureau of Statistics (NNBS) will have overall responsibility for coordinating the implementation of the Master Plan. A number of processes will be put in place to coordinate activities. A Steering Committee on the Statistical Master Plan (SCSMP) will be set up at an early stage to include up to 15 senior representatives from all the agencies involved in implementation.

Composition

The composition of the Steering Committee will be as follows:

- National Planning Commission Chair and Secretariat
- Federal Office of Statistics/NNBS
- Federal Ministry of Finance
- National Planning Commission
- Office of the Secretary to Government (Presidency)
- National Population Commission
- Federal line ministries involved in implementation
- Representatives of State Statistical Agencies
- Representative from the private sector and civil society organizations
- Implementing agencies and donors as observers

Representation will be at the level of Director or above

Functions

The functions of the Committee will be:

- To review progress with the implementation of the Master Plan
- To monitor progress with the implementation of donor funded projects supporting implementation, including the World bank's STATCAP project
- To approve work programs, procurement plans, budgets etc.
- Address critical issues that could hinder the implementation of the Master Plan
- Approve progress reports, etc.

Meetings

The Committee will meet as required, but at least it will meet once every three months initially, until the NNBS Board is established and functioning

Reporting

Initially SCSMP will report and make recommendations to the Chief Economic Adviser to the President. Once the new Statistics Act comes into effect and NNBS and its Board have been established, the Committee will advise the Board and will report to the Presidency, which will be responsible for Statistics.

(iii) Master Plan Implementation Unit

To coordinate and manage day-to-day activities, and especially the various donor-funded projects supporting implementation, including the World Bank STATCAP project, a Master Plan Implementation Unit (MPIU) will be established in FOS.

Functions

The MPIU will have day-to-day responsibility for supporting the implementation of the Master Plan and especially for managing the various donor-funded projects. Its main functions will include the following.

- Coordinate project activities as well as the activities of all beneficiary agencies.
- Manage activities such as procurement, in line with the rules and procedures agreed with donors.
- Manage reporting and auditing activities, ensuring the timely preparation and dissemination of reports on activities and financial reports as required by the SCSMP and the agreements with donor agencies.
- Ensure compliance with donors' procurement and financial management requirements and keeping and maintaining appropriate records and documentation.
- Arrange external audits as required.
- Act as the secretariat for the SCSMP and other structures and processes established to support the implementation of the Master Plan.
- Prepare work programs, budgets, procurement plans, etc.
- Prepare regular reports and other project monitoring activities

Composition

The MPIU will be headed by a Coordinator who will be the Director for Corporate Planning and Technical Coordination and will have a full-time staff of up to nine other people as set out below. In addition to the Coordinator, there will be a Project Officer, who will deputize for the Coordinator as required, an Assistant Project Officer, a Finance Officer and Assistant Finance Officer, a Procurement Officer and an Assistant Procurement Officer, an Internal Auditor, a Secretary and an Office Assistant. Terms of reference for these posts are given in Annexes VIII.

To support the initial implementation of the Master Plan, especially the transformation of FOS into NNBS, an external advisor will be recruited for a period of two years initially, to advise the Director General and senior Management of FOS and the other implementing agencies. This person will be recruited under international terms and conditions and terms of reference are attached.

Establishment

The MPIU will need to be established before implementation on the Master Plan and the donor-funded projects become effective. In particular the posts will be established and the Coordinator, Project Officer, Finance Officer and Procurement Officer will all be in post. All the staff of the MPIU will be members of staff of FOS/NNBS and will be subject to the same terms and conditions of employment as all other staff members.

(iv) Technical assistance

There will be a need for in-process guidance and hands-on technical assistance in those areas in which there is limited capacity or no capacity at all (new areas). This assistance will be particularly crucial in the early stage of Plan implementation. A total of 61 person-months of technical assistance in different areas have been identified and are presented in table 5.1 below.

Short-term, international						
Develop coordination mechanisms	2	0	0	0	0	2
Compile compendium of methods etc	1	2	0	0	0	3
Human resource development strategy	2	0	0	0	0	2
Development of training program	1	1	0	0	0	2
Review FOS schools syllabus	0	2	0	0	0	2
Review data methodology and instruments	2	2	2	2	2	10
Data dissemination policy	2	0	0	0	0	2
NEEDS monitoring system	0	2	0	0	0	2
Update national master sample	2	0	0	0	0	2
Develop GIS capability	0	2	2	0	0	4
Integrate gender issues	0	2	1	0	0	3
Develop IT Strategy	2	1	1	0	0	4
Total	14	14	6	2	2	38
Short-term, national						
Develop LAN. WAN and web-site	3	3	0	0	0	6
Establish management systems	8	0	0	0	0	8
TQM development at NNSB	0	0	3	1	1	5
Procurement consultant	4	0	0	0	0	4
Total	15	3	3	1	1	23
Grand Total	29	17	9	3	3	61

Table 5.1: Technical assistance for the implementation of the Master Plan

Most of the inputs by consultants will be made in the first three years -47.5% in the first year alone, 27.9% in the second year and 14.6% in the third year. Altogether, 90% of the inputs by consultants will be made in the first three years of the Plan. These inputs will be required to build capacity and establish systems. Of the identified inputs, about 38 will be made by national consultants.

5.1.3 Achieving strategic alignment (creating Plan awareness)

Often strategies are designed but not communicated to the workforce. In a study contrasting high- and low-performing organizations, Kaplan and Norton (1996) show that in 67% of well-performing organizations, staff have a good understanding of overall organizational goals and 26% of senior managers are highly effective communicators as opposed to 33% and 0% in poorly-performing organizations respectively. It is important, therefore, that everyone in the Bureau and all stakeholders in the NSS including policy and decision - makers get educated about and understand and share the vision and mission of the NSS, the strategies for achieving them and how their individual actions and those of others will contribute to the success of the strategies in the Plan. Strategy awareness will, therefore, be created in the Bureau, line ministries and States. It will be made everyone's everyday job, as is now the norm in strategy-focused organizations.

Communication being key to successful strategy awareness, an extensive and consistent communication programme will be mounted to develop an understanding of the Plan strategies throughout the Bureau, mobilize staff to support them, educate staff about management systems and provide for feedback about the strategies. Creation of strategy awareness will be followed by testing if staff understand the message (strategy mind share), checking that staff believe the strategies are being followed (strategy loyalty) and determining how many are teaching others about the strategies (becoming strategy missionary). The communication programme will aim to use different communication media including seminars and workshops, newsletters, brochures and bulletins, electronically through Intranet, etc. The Master Plan has made provision for facilitating this type of communication.

It should be emphasized that the communication programme will also aim to break communication barriers (the silo mentality) at the Bureau and in the NSS; encourage a two-way free flow of information and ideas on initiatives for achieving the objectives of the Plan, viz. top-bottom and bottom-top; change the work ethics and mindsets; and create a strong strategy-supportive culture. The Plan will also be publicized among the public as part of repositioning the Bureau²⁸.

5.1.4 Managing change

It cannot be emphasized enough that change is a way of life; it is the way to stay competitive and to grow. Indeed, breakthroughs in performance require that major changes be undertaken as drivers of strategic success. Change is always underway with all organizational systems and processes intrinsically subject to constant review caused the ever-present social, economic and technological trends in society. While change is an opportunity, it is usually viewed as a threat and is always resisted. Indeed "*resistance to change can be considered the single greatest threat to successful strategy implementation*"²⁹. This makes change management an important issue in the implementation of the Master Plan. Fred R. David (1997) has identified main causes for resistance to change as feeling of loss of status, implied criticism of present competence, fear of failure on the new situation, annoyance at not being consulted, lack of understanding of the need for change, or insecurity in changing from well-known and fixed methodologies or false comfort in the status quo and working with a fixed mindset.

It is, therefore, very important that the Master Plan is implemented in such a way that change is well managed so that individuals can see it as an opportunity to enrich their careers and personal lives. Change will be managed, among other things, by anticipating the focus of resistance, eliminating unnecessary resistance caused by misconceptions through communication and creating a situation of participation and full explanation when changes are envisaged. Change-oriented thinking will be made to become a habit for every body.

5.1.5 Strategic learning process

It is important that the Bureau should be an information-age strategic learning organization. It will be necessary for managers to question their assumptions and question whether the theory under which they were operating is still consistent with current evidence, observations and experiences. They will need to devise new strategies and capitalize on new opportunities or counter new threats. Objectives in the learning and growth process are drivers for achieving good outcomes in different work areas.

Kaplan Robert S. and David P. Norton (1996) give three essential ingredients that will be followed in creating and sustaining a learning Bureau, namely:

(a) a shared strategic framework that communicates the strategy and allows each participant to see how his /her activities contribute to achievement of the overall strategy,

²⁸ Draft Strategic Plan Document for the central Bureau of Statistics, Kenya 2003

²⁹ Robert S. Kaplan and David P. Norton, opt. cit.

- (b) a feedback process that collects performance data about the strategy and allows the hypothesis about interrelationships among strategic objectives and initiatives to be tested, and
- (c) a team problem-solving process that analyses and learns from performance data and then adapts the strategy to emerging conditions and issues.

5.1.6 Developing business plans and resource allocation

The Plan provides strategic directions. However, for its day-to-day implementation, the Plan will need to be translated into business plans or annual work programmes and budgets, with appropriate mechanisms for monitoring and assessing progress. The annual business plans constitute a tool for internal business management, informing users and other data producers regarding agencies' products and are the key documents for negotiating with government and donors for resources. Specifically, the business plans are essential for:

- □ defining annual objectives,
- guiding and representing a basis for resource allocation
- focusing activities towards meeting strategic goals
- establishing priorities and for outlining indicators for measuring progress
- serving as major instruments for setting standards of performance and for monitoring progress towards achieving long-tem goals and objectives.

Each Department at FOS (and later NNBS) will be required to develop its own annual objectives and a business plan, with detailed business objectives that are linked to the Master Plan. Every effort will be made to ensure that the annual objectives and business plans are well conceived and consistent with the overall goals and objectives of the Plan. The business plans will be compiled outlining the specific actions to be taken, when and by whom in order to achieve the Bureau's goals within the budgetary and resource framework and will be monitored through quarterly reports. Each member of staff will be required to have a clear idea of what they are supposed to achieve and how their individual performance will be assessed. Managers will need to be assured that they will have the resources needed to achieve set goals and targets. The successful completion or progress towards achieving the business objectives will ensure that the organization's strategic goals are being achieved. Furthermore each business plan will be attached to the respective owner's business plan performance schedule.

Resource allocation

All organizations have at least four types of resources that can be used to achieve desired goals. These are financial, physical, human and technological resources. Allocation of these resources is a central management activity that allows for strategy implementation. Every effort will be made to minimize the factors that commonly prohibit effective resource allocation including too much emphasis on short-run financial criteria, organizational politics, vague strategy targets, a reluctance to take risks and a lack of sufficient knowledge³⁰.

³⁰ *Fred R. David opt cit.*

5.2 MONITORING AND EVALUATION

The implementation of the Master Plan will be effectively monitored and at the end of the Plan period, its impact evaluated. Monitoring is essential: (i) to ensure that stated goals are being achieved, (ii) for tracking inputs, activities and outputs, (iii) to determine if implementation is on course or not, (iv) to alert management to problems or potential problems before the situation becomes critical, and (v) for taking corrective actions to ensure that performance conforms to strategy or that the strategy is revised in light of new experience.

There will be many factors such as ineffectual policies, unexpected turns in the economy, ineffective strategies, which can result in unsatisfactory progress towards meeting goals. Also problems can result from ineffectiveness (not doing the right things) or inefficiency (doing the right things poorly). Monitoring will keep track of these factors and changes and enhance the ability to adapt successfully to these changes. Such changes will include for example alterations to the structure in agencies, replacing one or more key individuals, establishing or revising objectives, devising new policies, allocating resources differently or developing new performance incentives. Monitoring will be done on a continuing basis to keep close to the pulse of the Bureau

Hence by monitoring the implementation of the Plan, managers will be able to get a picture of whether set goals and targets are being achieved or are likely to be achieved. Monitoring will be ineffective unless there are actions taken in response to what is measured and reported. There will thus be a need to learn from insights and experiences. For instance, if monitoring shows that a particular activity is on a wrong track, corrective measures will need to be taken or the implementation strategies will need to be revised. In that sense, the Master Plan will be a living document that will require adjustments as objective conditions change. Monitoring will also be essential for providing information that is required for accountability purposes.

Different monitoring indicators will be used based mainly on the IMF's Data Quality Assessment Framework and the PARIS21 consortium Statistical Capacity Building Indicators. Both qualitative and quantitative indicators covering the external environment, the statistical processes including managerial and technical support, and outputs will be used to monitor and measure performance/ progress. In particular, system-wide indicators will be used to provide an overview of the statistical production across the NSS, agency-related indicators will be used to provide a pointer to the breadth and depth of statistical activities undertaken within the NSS while output indicators will provide an overview of the internal capacity of agencies producing them.

For meaningful monitoring, however, only a few indicators selected on each of the five strategic themes will be monitored. These indicators are presented in tables 5.2. For some activities, quantitative targets have been set and these are presented in table 5.3 below.

At the end of the Plan period, there will be an evaluation to assess the most significant constraints, the most successful activities and generally to assess how well the strategies in the Plan will have met the set goals. It has been observed that evaluation works best when the emphasis is on learning for the future. Evaluations of the Plan will very much take this into $\operatorname{account}^{31}$.

³¹ Why invest in good statistics? PARIS21 advocacy brochure.

The above indicators will be supplemented by information from other sources, including IMF ROSCs (Reports on Observance of Standards and Codes), IMF multi-sector statistical mission reports, surveys of users of statistical products, and an independent assessment of statistical products against the Master Plan, audits of management/staff/facilities/, human resource training records and GDDS metadata.

Benchmarking will be systematically undertaken. Benchmarking is a method of making systematic comparisons in specific areas with other relevant organizations and especially with those organizations with best performance. Two types of benchmarking will be done, namely internal and external benchmarking. Internal benchmarking will be done to compare results from different Departments, Branches and Sections with reference to such things as timeliness, user satisfaction. This will be a basis for assessing performance and for improvements. External benchmarking on the other hand will be done to compare the Bureau's performance with that of high performing National Statistical Agencies in the sub-region, region and internationally.

The following reports will be prepared on the implementation of the Master Plan:

Quarterly Progress Report

The Statistics Act provides for the Board of Directors of the Bureau to present to the Presidency a Quarterly Progress Report (QPR) covering all statistics activities undertaken during the quarter, constraints and successes, and highlighting plans for the next quarters.

In addition to this report, the PIU will prepare and submit to the World Bank a Quarterly progress report covering all project components. The report will include:

- (i) progress achieved against agreed implementation and disbursement schedules and key performance indicators; and
- (ii) work programmes and cost estimates for the coming quarter and for the whole project.

This report will be submitted to the World Bank within one month after the end of each quarter.

Project Management Report

A Project Management Report (PMR) with key financial data for the quarter and budgeted activities for the next two quarters will be prepared. The main purpose of this report will be to provide managers and the Steering Committee with timely and updated information on implementation of project components, highlighting issues and problem areas, recommending actions and commenting on progress in implementing previous recommendations.

Annual Review

In addition to the QPR and PMR, there will be a need for an annual process of monitoring the implementation of the SMP, with mechanisms for changing activities and targets, if this proves necessary. The Annual Review (AR) will be undertaken by the National Planning Commission, Ministry of Finance and representatives of development partners.

Mid-term Review

The Mid-term Review (MTR) is a more formal process that will be undertaken to ensure that the SMP is still relevant and for agreeing changes in both the strategy and work programmes, where these are needed and justified. In addition, the mid-term review will reallocate resources according to performance and needs A mid-term review of the Master Plan will be undertaken in the first quarter of 2007.

The MTR will be undertaken by the National Planning Commission, Ministry of Finance and representatives of development partners.

Terminal Review (TR)

At the end of the Plan, there will be an external evaluation, Terminal Review (TR), which will be carried out again by the National Planning Commission, Ministry of Finance and the representatives of development partners.

The external reviews will also use the identified performance indicators.

Benchmarking

Benchmarking is a method of making systematic comparisons in specific areas either within an organization or with other relevant organizations and especially with those organizations with best performance. The aim is to determine areas where improvements can be made. Internal benchmarking will be done by incorporating existing best practice and comparing results from different Departments, Branches and Sections with reference to such things as timeliness, user satisfaction, etc. The benchmarking will form a basis for assessing performance in different work areas. On the other hand, international benchmarking will be done to compare the Bureau's performance with that of National Statistical Agencies in the ECOWAS sub-region and the African region where some of the above developments are more advanced and which might be able to provide some data for benchmarking progress. Also a peer review process will be initiated whereby a "peer review team" of experts is invited to review strategic goals and objectives, strategic targets, etc.

Table 5.2:	Framework for Plan monitoring and evaluation
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Plan Development Goal	Outcome Indicators	Use of results information		
National Statistical Agencies to provide reliable, timely, and accurate economic, financial, socio-demographic and other data, in line with international good practice and frameworks and user needs	 Access to information/dissemination Increase in the rate of user satisfaction (include consultation, usefulness of products, etc.) Targeted statistical products are easily accessible in relevant media with metadata and interpretation of findings, etc. Coverage/Accuracy / Reliability: Data sources are sound and relate to the targeted coverage Validation is carried out for at least 90% of data sources and statistical products 	vant YR3: no improvement in these results indicates that the project components and the		
	<i>Timeliness:</i>5. Reduction in time lag between data collection and dissemination6. Statistical outputs are released within the time limits and with frequency meeting GDDS requirements	YR5: these results are compared with baseline data to evaluate the project impact.		
Intermediate result one per component	Results Indicators for Each Component	Use of Outcome Monitoring		
1. Regulatory and institutional frameworks are improved for national statistical agencies to be more effective	 Statistical legislation and regulations provide for institutional and regulatory framework and safeguarding confidentiality of source data Mechanisms for effective inter-agency coordination are established and operational Duplication of data collection among agencies is eliminated at national and regional level Mechanisms for effective dialogue between the data users and producers are operational. Cost effective and efficient methods used for statistical operation 	YR1-YR5: absence of these results may flag that the legal and institutional framework to assure efficient statistical operations is not in place.		
 Management and human resources are in place to meet statistical demands of the public, especially of the policy makers Main statistical agencies have developed/upgraded and put into operation their core statistical programs and disseminated the results 	 2.1 % of staff who have acquired skills 2.2 % of staff audited who use and upkeep acquired skills 2.3 % of users with improved analytical capabilities 2.4 % of staff of data producing agencies who feel management is responsive to their work needs and problem solving oriented 3.1 Internationally accepted standards and methodologies are used in data production 3.2 Targeted sampling frameworks for surveys compiled and applied 3.3 Required economic and social classifications adapted 3.4 Sound and well-accepted statistical techniques are used for data collection, compilation, and validation 3.5 Targeted surveys conducted and results disseminated 3.6 Targeted sectoral statistics produced 	YR1-YR5: low levels or absence of these results may flag that statistical outputs do not meet internationally accepted standards. YR1-YR5: low levels or absence of these results may flag that the statistical system may not be able to produce targeted statistics required for policy making.		
4. Investment in physical infrastructure and equipment to facilitate the production and dissemination of data by statistical agencies are undertaken and adequately maintained	 3.7 Increase in the rate of data provision of administrative statistics 4.1 Physical infrastructure is adequate and well maintained 4.2 IT infrastructure is adequate and well maintained 4.3 Data Banks developed and maintained 	YR1-YR5: absence of these results may flag that the statistical system may not be operating efficiently.		

Table 5.3: Results monitoring table

			Tai	rget Va	lues		Data Col	ting		
Outcome Indicators	Baseli ne	'04	'05	'06	'07	'08	Frequency and Reports	Data Collection Instruments	Responsibi lity for Data Collection	
Access to information/ dissemination 1. Rate of user satisfaction increases (include consultation, usefulness	TBD in YR1	4	2	2	2	2	Yearly cumulative reports. The report for YR1 describes baselines and reports for	1. Survey of users of statistical products/or outcome of	FOS and PIU	
of products, etc.) 2. Targeted stat products are easily accessible in relevant media with metadata and interpretation of findings, etc.	TBD YR1	4	4	4	4	4	subsequent years evaluate progress against baselines/targets.	user/producer workshop 2. Independent assessment of statistical capacity and	Same as above	
Coverage/Accuracy/ Reliability:	IMF GDDS and	3	3	3	3	3		products against original master plan	Same as above	
 Data sources are sound and relate to the targeted coverage Increase in validation 	ROSC report TBD	5	-	-	-	2		3. Same as above	Same as above	
carried out for data sources and statistical products	YR1 IMF GDDS							4. Same as above	Same as above	
<i>Timeliness:</i> 5. Reduction in time lag between data collection and dissemination	and ROSC report							5. Same as above	Same as above	
 Statistical outputs are released within the time limits and with frequency meeting GDDS requirements 	Same as above	5	4	4	4	4		6. Same as above		
Results Indicators for Each Component										
1.1 Statistical legislation and regulations provide adequate institutional and regulatory framework and ensure efficient and coordinated statistical operations 1.2 Mechanisms for effective inter-agency coordination are established and operational and duplication of data	Assess ment in SMP and IMF GDDS and ROSC report Same as above	2	2	2	- 2	2	Yearly cumulative reports. The report for YR1 describes baselines and reports for subsequent years evaluate progress against baselines/targets.	1.1 Review of regulatory framework for production and dissemination of information 1.2 Review of coordinating framework for production and dissemination of information 1.3 Review of coordinating	FOS and PIU Same as above Same as above Independen	
collection among agencies is eliminated at national and state level 1.3 Mechanisms for effective dialogue	Same as above TBD	2	4	4	4	4		framework for user-producer dialog 1.4 Workplace audit	t auditing body	
between the data users and producers are operational	YR1									

1.4	Cost effective and		2	-	-	-	-			
	efficient methods used									
	for statistical operation									
2.1	% of staff who have*	TBD						Yearly cumulative	2.1 Post training	Independen
	required skills	YR1						reports showing	evaluation,	t
2.2	% of staff audited who	TBD						evaluation by	individual HR	evaluation/
	use and upkeep	YR1						auditors. The	assessment or	auditing
	acquired skills*							report for YR1	HR training	body
2.3	% of users with	TBD						describes baselines	records	
	improved analytical	YR1						and reports for	2.2 Staff	
	capabilities*							subsequent years	workplace audit	
2.4	% of staff of data	TBD						evaluate progress	2.3 Post training	
	producing agencies who	YR1						against	evaluation	
	feel management is							baselines/targets.	2.4 Staff	
	responsive to their work								workplace audit	
	needs and problem									
2.1	solving oriented*	A	1	1	1			X las	2.1. Statistical	EQC1
5.1	Internationally accepted	Assess	1	1	1	-	-	Yearly cumulative	3.1 Statistical	FOS and
	standards and	ment						reports. The report for YR1 describes	capacity/product	line
	methodologies are used	in							assessment	ministries
2.2	in data production	SMP	2	2	2	2	2	baselines and	against original baseline.	(MEBA, MoH,
5.2	Targeted sampling frameworks for surveys	and IMF	2	2	2	2	2	reports for	3.2 Same as	MoA,
	compiled and applied.	GDDS						subsequent years	above	MoA, MoEW,
2.2	Required economic and	and						evaluate progress against	3.3 Same as	MoEw, MoT,
5.5	social classifications	ROSC						baselines/targets.	above	MoTAD)
	adapted	report						basennes/targets.	above	MOTAD)
31	Sound and well-	Same							3.4 Same as	
5.4	accepted statistical	as							above	
	techniques are used for	above							above	
	data collection,	Same							3.5 Same as	
	compilation, and	as							above	
	validation	above								
3.5	Targeted surveys	TBD	20	24	21	23	21		3.6 Same as	
	conducted and results	YR1	-						above	
	disseminated								3.7 Same as	
3.6	Targeted sectoral	TBD	20	24	26	30	30		above	
	statistics produced	YR1								
3.7	Increase in the rate of	TBD	57	61	63	67	67			
	data provision of	YR1								
	administrative statistics	TBD								
		YR1								
4.1	Physical infrastructure	Assess						Yearly cumulative	4.1 Facility and	Independen
	is adequate and well	ment						reports showing	equipment audit	t
	maintained	in						evaluation by	4.2 IT	evaluation/
4.2	IT infrastructure is	SMP						auditors. The	equipment audit	auditing
	adequate and well	and						report for YR1		body
	maintained	IMF						describes baselines		
		GDDS						and reports for		
		and						subsequent years		
		ROSC						evaluate progress		
		report						against		
		Same						baselines/targets.		
		as								
		above								

* Training Needs Assessment to be undertaken in YR1 will determine targets for skills development.

CHAPTER SIX

Proposed Budget and Financing Plan

This section provides indicative costs of the Plan and proposes funding arrangements. The costs are required to give an indication of the required level of investment for effective implementation of the Plan and the development of the National Statistical System. Various considerations and assumptions made in the budgeting process are presented.

6.1 **Proposed Budget**

The proposed budget for the SMP is divided into two parts, recurrent and development. The recurrent budget includes salaries and overhead costs while the development budget includes expenditures on organizational development, human resource development, data development, infrastructure and equipment and MPIU.

6.1.1 Recurrent budget

Size of budget

Table 6.1 presents a summary of the annual recurrent budget for the Bureau. The estimated annual recurrent expenditure is estimated at \mathbb{N} 1,205,576,626 or \$9,273,666.4 (at \$1= \mathbb{N} 130). Personnel costs will account for 79% of the budget and overhead costs for 21%.

Assumptions about the budget

As already mentioned, the NNBS will be a scientific and research-based organization, therefore its salary structure is drawn from the "Harmonised Tertiary Institutions Salary Structure (HATISS) of the Federal government³². The salaries of the "Top Management Cadre of the Office were equally based on the Government's Harmonised Salary structure and allowances for Top Federal Public Office Holders"³³.

It was mentioned in chapter 3, that the highest professional rank in any profession within the Bureau is Chief. Thereafter, rise to the position of from Assistant Director to Director is by appointment by the Board.

For Top Management positions, the salaries are inclusive of all allowances; for professional and sub-professional cadres, step 9 of the relevant HATISS grade levels were used. In the case of support staff, secretaries and data entry operators, their salary levels are assumed to rise from

³² Harmonized Tertiary Institutions Salary Structure (HATISS) for the Federal Public Service, Circular EWS.04/Vol.V/197

³³ Harmonized Salary Structure and Allowances for Top Federal Public Office Holders, Circular No: SWC.04/Vol. IV/136

HATISS 06 to 12 and since their total number has not been spread among these grade levels, grade level 09, step 9 was used to do the estimate.

Posts	No	Salary N	Total N
		(per annum)	
SG	1	3,020, 256	3,020,256
DSG	1	2,510,982	2,510,982
Director	4	2,400,000	9,600,000
Deputy Director	15	2,220,000	33,300,000
Asst Director	46	2,000,000	92,000,000
Chief HATISS 15	20	676674	13533480
Asst Chief HATISS 14	40	603675	24147000
Principal HATISS 13	79	532794	42090726
Senior HATISS 12	159	457732	72779388
Grade I HATISS 10	312	378015	117940688
Grade II HATISS 8	635	263521	167335835
		Sub-Total	578,258,355
Sub-Prof			
Chief HATISS 12	12	457732	5,492,784
Asst Chief HATISS 11	22	416629	9,165,838
Principal HATISS 10	44	378015	16,632,660
Senior HATISS 09	88	305732	26,904,416
Higher HATISS 08	176	263521	46,379,696
Officer HATISS 07	351	223067	78,296,517
Asst Officer HATISS 06	703	174935	122,979,305
	Total		305,851,216
Support Staff			
Secretary, HATISS 06-12	21	305732	6,420,372
Data Entry Operators, 06-12	114	305732	34,853,448
Drivers HATISS, 02-06	64	133119	8,519,616
Messengers, 01-06	43	108549	4,667,607
Security Guards,01-06	88	108549	9,552,312
Cleaners, 01-06	80	108549	8,683,920
Sub	- Total		72,697,275
Overa	all Total		956,806,846

The drivers are assumed to enter at grade level 02 and rise to grade 06. Grade level 05, step 9 was used to estimate their salaries. Messengers, security guards and cleaners will start from GL01 and end at GL 06. GL04, step 9 was used to calculate the emolument for staff in each of these groups. Allowances of professionals, sub-professionals and support staff have not been factored in the calculation (could not get relevant information).

Finally, it was assumed that overhead cost is like the cost of maintaining the personnel. Therefore we applied the formula of determining the maintenance cost of equipment just purchased i.e. 20% of the cost of the equipment so 20% of the personnel cost was used to estimate the overhead costs. It must however be said that this is rough estimate. The actual budgetary cost will be calculated when the Board of NNBS has set salaries and allowances of the staff and the allowances of Board members.

It is important to mention that the above budget does not include the cost of the building for FOS, which the Federal government is purchasing this financial year at a cost of about \mathbb{N} -1.2 billion or about US\$ 9.2 million.

6.1.2 Development budget

Table 6.2 presents the summary of budgeted amounts for funding by development partners. The detailed budget giving costs of activities under each of the main components of the SMP is given in Annex VII.

Table 6.2:	Summary	development	budget	(US\$, '000)
1 abic 0.2.	Summar y	uevelopment	Duugei	$(03\phi, 000)$

Component	Year 1	Year 2	Year 3	Year 4	Year 5	Total
A. Organizational Development	831	474	335	316	113	2069
A1. Legal Framework	22	0	0	0	0	22
A2. Institutional Framework	809	474	335	316	113	2047
B. Human Resource Development	606	694	592	558	516	2965
B1. Human Resources Development Framework	90	30	0	0	0	120
B2. NNBS	200	384	251	253	225	1313
B3. Line Ministries	50	50	75	75	25	274
B4. State Statistical Agencies	216	180	216	180	216	1008
B5. Local Government Statistical Units	30	30	30	30	30	150
B6. University Statistics Departments	20	20	20	20	20	100
C. Data Development	4263	3837	3027	6488	4041	21656
C1. Enhancement of Data Quality	60	60	105	75	75	375
C2. Censuses and Surveys	2825	2595	1863	5677	3299	16261
C3. Data Management Dissemination and Access	1378	1181	1059	736	667	5020
D. Infrastructure and Equipment	11105	3881	861	1052	567	17467
D1. NNBS	8924	806	454	363	160	10707
D2. Line Ministries	72	1350	198	258	198	2076
D3. State Statistical Agencies	2109	1641	209	431	209	4600
D4. University Statistics Departments	0	84	0	0	0	84
E. Project Management and Implementation	491	284	35	35	35	880
E1. Implementation Unit	491	284	35	35	35	880
Grand Total	17296	9169	4850	8449	5272	45036

The total development budget amounts to US\$45.036 million. The data development component which includes the cost of censuses and surveys, accounts for the biggest part (48%) of the budget followed by the infrastructure and equipment, human resources development, organizational development and project management and implementation components which account for 39%, 6.5%, 4.5% and about 2% respectively.

The bigger part of the budget (38%) will be spent in the first year. Expenditures in subsequent years will account for 20%, 11%, 19% and 12% of the budget in YR2, YR3, YR4 and YR5 respectively.

6.2 Investment Plan

The following table presents the proposed investment plan for the SMP.

Source	Pre-	YR1	YR	YR3	YR4	YR5
	Plan					
A. Recurrent budget		9.3	9.5	9.7	9.9	10.1
B. Development budget						
Donor						
(a) Design of SMP	0.185					
(b) <i>SMP implementation</i>		17.3	8.2	2.9	5.5	1.7
Government						
(a) Purchase of building for	9.2	-	1.0	2.0	3.0	3.5
FOS						
(b) SMP implementation						
Sub-total	9.385	17.3	9.2	4.9	8.5	5.2
Grand Total		6.26	18.7	14.6	18.4	15.3

 Table 6.3: Proposed investment plan (million US \$)

The budget for the Master Plan will be met from two sources, namely donors and the government. It is expected that donors will assist government with grants and loans to invest in statistical development using the Statistical Master Plan framework. Already the World Bank has funded the preparation of the SMP to the tune of US\$ 185,350. A World Bank STATCAP Project has been prepared for possible funding using the STATCAP lending program for supporting statistical capacity building in developing countries. Other donors are being approached to support the SMP.

Government will be expected to fund the recurrent budget. Government has already made a decision to spend heavily on the purchase of the office block for FOS this financial year at a cost of US\$ 9.2 and it is not expected to maintain this level of expenditure on activities of the National Statistical System. So, the contribution of development partners will be high in the first years of the Plan and government will increasingly shoulder the responsibility of funding the system and its activities as funding by development partners reduces. In YR 5 for instance, it is expected that government will be meeting all recurrent budget and up to 67% of the development budget.

6.3 Sustainability

Many statistical activities especially those started using donor funds have tended to stop once donor assistance ended. It is crucial that the NSS becomes sustainable over the long-term. This is possible if organizational structures and cultures are dynamic and responsive, if requisite capacity can be built, and if the government can progressively increase it's funding for the activities originally funded by donors. This Plan provides for all this to be done thereby increasing the prospects for the sustainability of activities started under the Plan.