FOREWORD

At the time my Government came into office the country had no development plan. My New Deal Government recognises the need for planning as a process that is cardinal in our efforts to improve the living conditions of our people. The planning process is central in ensuring the optimal allocation of our limited resources and more importantly charting the right path towards poverty reduction. In this regard, my Government is implementing the Poverty Reduction Strategic Paper (PRSP) and the Transitional National Development Plan. (TNDP).

My Government, therefore, embarked on preparation of a three-year transitional development plan whose preparation required a lot of statistics. It was discovered that a lot of statistics was not available due to numerous reasons. My Government recognises the important role statistics plays in preparing a development plan in its implementation and in monitoring the programmes/projects that my Government is undertaking.

The Central Statistical Office (CSO) and the National Statistical System (NSS) in Zambia, like elsewhere in Africa, are facing a crisis of expectation. In recent past, there has been unprecedented increase in demand for statistical data and information to design and monitor the implementation of the Poverty Reduction Strategy Paper (PRSP) (2002-2004), Transitional National Development Plan (2003-2005) and other national development initiatives. These demands have presented major challenges to already weak and vulnerable NSS. However, they have also presented opportunities, particularly with respect to raising the public profile of statistics and harnessing both national and international resources for statistical development. It is of vital importance, therefore, that these opportunities are seized and taken advantage of in order to reverse the decline in production of quality national statistics.

As the focal point for national statistics, the CSO will play a crucial role in coordinating and delivering the NSS, which will be central to monitoring the implementation of the PRSP and other national development initiatives. However, this will be possible only when the CSO itself is strengthened and its role is underpinned by an up-dated statistical legislation reinforcing its coordinating role. In order to provide a framework for strengthening the CSO, it was decided that a medium-term (5-year) Strategic Plan for the office should be developed with special emphasis on capacity building and work programming to meet prioritized user needs. The Plan would provide a "road map" for the development of the office and a framework for harnessing resources to support the said development.

It is in this light therefore, that my Government decided to approach cooperating partners to help us come up with a strategic plan for a National Statistical Service. I would like to express my appreciation to the British Department for International Development (DFID) and Zambia Social Investment Fund (ZAMSIF) for their support in the preparation of this strategic plan. I would also like to thank the consultants (Prof. Ben Kiregyera of Uganda who was a Team Leader, Mr. Moses Lubaale of

Uganda, Ms Celestina L. C. Kabalu and Mr. Mwikisa L. Likulunga both of Zambia), on a job well done. I wish also to express my appreciation to all officials from various institutions including CSO that the consultants visited for their co-operation, which made the production of this strategic plan a reality.

It is my sincere hope that co-operating partners will support this plan so that my Government's efforts in combating poverty could be realised.

Levy Patrick Mwanawasa, SC
PRESIDENT OF THE REPUBLIC OF ZAMBIA

MARCH 2003

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ABBREVIATIONS

AIDS	-	Acquired Immune Deficiency Syndrome
AMIC	-	Agricultural Market Information Centre
AER	-	Annual External Review
ARS	-	Agricultural Reporting Service
ASIP	-	Agriculture Sector Investment Project
BESIP	-	Basic Education Sub-sector Investment Programme
BOZ	-	Bank of Zambia
CBOH	-	Central Board of Health
CBS	-	Central Bureau of Statistics
CFS	-	Crop Forecasting Survey
CIDA	-	Canadian International Development Agency
CLUSA	-	Cooperative League of the United States of America
COICOP	-	Classification of Individual Consumption According to Purpose
COMESA	-	Common Market of Eastern and Southern Africa
CPI	-	Consumer Price Index
CRBE	-	Central Register of Business Establishments
CSO	-	Central Statistical Office
DANIDA	-	Danish International Development Agency
DDCCs	-	District Development Coordinating Committees
DFID	-	Department for International Development (British Government)
DPU	-	Data Processing Unit
DSBB	-	Dissemination Standards Bulletin Board
EA	-	Enumeration Area
EASTC	-	Eastern Africa Statistical Training Centre
EBZ	-	Export Board of Zambia
ECA	-	Economic Commission for Africa
ECZ	-	Examination Council of Zambia
EEC	-	European Economic Commission
EU	-	European Union
EWCC	-	Early Warning Coordinating Committee
FAO	-	Food Agricultural Organization
FAS	-	Food and Agricultural Statistics
FASAZ	-	Farming Systems Association of Zambia
FHANIS	-	Food Security, Health and Nutrition Information System
GDDS	-	General Data Dissemination System
GDP	-	Gross Domestic Product
GF	-	Geographical Frame

GFS	-	Government Finance Statistics Classification
GIDD		Gender In Development Division
GIS	-	Geographic Information System
GPS	-	Global Positioning System
GTZ	-	Germany Technical Assistance
HIV	-	Human Immune Virus
HMIS	-	Health Management Information System
HS	-	Harmonized System
IIP	-	Index of Industrial Production
ILO	-	International Labour Organization
IMF	-	International Monetary Fund
IMS	-	Information Management System
ISAE	-	Institute of Statistics and Applied Economics
ISIC	-	International Standard Industrial Classification.
IT	-	Information Technology
ITB	-	Information Technology Branch
JICA	-	Japan International Cooperation Agency
LAN	-	Local Area Network
LCMS	-	Living Conditions Monitoring Survey
MDGs	-	Millennium Development Goals
MIS	-	Management Information System Ministry of Education
MOH	-	Ministry of Health
NCDP	-	National Commission for Development Planning
NCEW	-	National Committee on Early Warning
NCEW	-	National Committee on Early Warning
NEWUs	-	National Early Warning Units
NFNC	-	National Food and Nutrition Commission
NGOs	-	Non-Governmental Organizations
NIS	-	Nutrition Information System
NSS	-	National Statistical System
OLAP	-	Online Analysis Processing
OMR	-	Optical Marker Recognition
PAOs	-	Provincial Agricultural Officers
PARIS 21	-	Partnerships in Statistics for Development in the 21st Century
PDCCs	-	Provincial Development Coordinating Committee
PFO	-	Permanent Field Organization
PHS	-	Post-Harvest Survey
PRSP	-	Poverty Reduction Strategy Paper
PSOs	-	Provincial Statistical Offices
PSRP	-	Public Service Reform Programme

PWAS	-	Public Welfare Assistance Scheme
QPR	-	Quarterly Progress Report
RDBMS	-	Relational Database Management System
REWS	-	Regional Early Warning System
SADC	-	Southern Africa Development Community
SAP	-	Structural Adjustment Programme
SG	-	Statistician-General
SITC	-	Standard International Trade Classification
SNA	-	System of National Accounts
SSC	-	SADC Statistics Committee
STD	-	Sexually Transmitted Diseases
SWOT	-	Strengths, Weaknesses, Opportunities and Threats
TB	-	Tuberculosis
TNDP	-	Transitional National Development Plan
TR	-	Terminal Report
TSED	-	Tanzania Socio- Economic Database
TOT	-	Training of Trainers
UNCTAD	-	United Nations Conference on Trade and Development
UNDP	-	United Nations Development Programme
UNFPA	-	United Nations Fund for Population Activities
UNHCR	-	United Nations High Commission for Refugees
UNICEF	-	United Nations Childrens Fund
UNZA	-	University of Zambia
USAID	-	Untied States Agency for International Development
USS	-	Unified Statistical Service
WAN	-	Wide Area Network
ZAMSIF	-	Zambia Social Investment Fund
ZDES	-	Zambia Demographic and Education Survey
ZDHS	-	Zambia Demographic and Health Survey
ZSBS	-	Zambia Sexual Behaviour Survey
ZIC	-	Zambia Investment Centre
ZNFU	-	Zambia National Farmers Union
ZNWLG	-	Zambia National Women's Lobby Group

EXECUTIVE SUMMARY

1. Purpose of the Strategic Plan

This Strategic Plan was designed for the Zambia National Statistical System focusing on the Central Statistical Office to halt the decline in provision of official statistics and to lay a basis for a more efficient statistical system and service capable of meeting the information needs for the Poverty Reduction Strategy Paper (PRSP), the Transitional National Development Plan (TNDP and other national development initiatives.

This Plan sets strategic directions and a "road map" for raising the profile of statistics in the country and building capacity to provide a broad range of statistical data and services to stakeholders in an efficient and user-focused manner. It proposes major changes in the way statistical data and information are produced and made available to users in the country.

The Plan was designed in a consultative manner with national staff involved in the diagnosis of what has gone wrong with production of official statistics and in building consensus on a prescription. A broad stakeholders' workshop on strategic management was organized, followed by more focused smaller workshops and group discussions to address different aspects of the Plan. This approach created opportunities for staff empowerment, participation, ownership of both the process and the product (Plan). These are essential ingredients for successful strategic management.

A **needs assessment** was carried out to determine current and future data needs of main stakeholders and to find out how the NSS should galvanize itself in terms of organization, capacity and data collections in order to be able to satisfy the user needs within the limitations imposed by resource constraints. The needs assessment was done by having discussions with main data users and producers. There has been consensus that the prescription for the ailing NSS does not lie in "*doing more of the same thing*" or "*running faster*" or "*taking incremental steps to move the system from present position to desired future positions*" but in **strategic management** in order to make a quantum leap and breakthrough performance in value creation and meeting user needs.

The Plan which has been developed provides a vision, mission and corporate values for the CSO; strategic objectives; prioritized, costed, sequenced and timetabled work and capacity building programmes. In addition, strategies for implementation of the Plan and its measurement and evaluation have been provided.

2. Vision

To become a centre of excellence in statistical production and a standard setter and coordinator of the National Statistical System.

3. Mission

To provide for a comprehensive national statistical database yielding high quality statistical information for use by the Government, private sector and the wider national and international community for planning, policy, decision-making, research and informed debate, and to promote the use of statistics in all walks of life.

4. Core values

Core values identified for the organization include User-focus (PRSP compliance), Quality consciousness, Integrity and credibility, Empowerment.

5. Strategic themes

In order to realize the long-term vision (see following figure), a number of interlinked strategic themes and objectives have been identified. The objectives are SMART *i.e.* ***Specific***, ***Measurable***, ***Achievable***, ***Relevant*** *and* ***Time bound***.

Strategic Theme 1: Improvement of public awareness about statistics

Objective 1.1 Creating awareness about statistics
Objective 1.2 Raise the profile of statistics and position of the CSO
Objective 1.3 Increase use of statistics in evidence-based decision-making, planning, administration, monitoring and evaluation

Strategic Theme 2: Development and promotion of an effective National Statistical System

Objective 2.1: Enhance capacity for data production and use
Objective 2.2: Improve arrangements for coordination, collaboration, Networking and information sharing
Objective 2.3: Improve data consistency and integration

Strategic Theme 3: Enhancement of quality of statistical products and services

Objective 3.1: Better assessment of user needs
Objective 3.2 Provide accurate and reliable data
Objective 3.3 Provide more disaggregated data by important domains
Objective 3.4: Timely delivery of data

Strategic Theme 4: Harnessing Information Technology (IT)

Objective 4.1 Create a coherent IT infrastructure
Objective 4.2 Develop an Information Management System
Objective 4.3 Aligning IT to statistical operations

Strategic Theme 5: Development of human capacity and organizational effectiveness

Objective 5.1 Improve staff recruitment and promotion
Objective 5.2 Build a "critical mass" of skilled and motivated personnel
Objective 5.3 Improve statistical governance
Objective 5.4 Improve management systems
Objective 5.5 Build an office block

Activities to operationalize the vision, mission and Plan objectives have been identified. So too have the expected outputs, performance indicators and measures/verification as well as assumptions. These are summarized in a logical framework matrix.

6. Work and capacity building programme

These programmes serve as coordinating tools for the Bureau and the NSS to achieve synergy and cost-effectiveness in statistical production in the country. The work and capacity building programmes essentially present activities to be undertaken, expected outputs and indicators.

Work programme

Activities were prioritized using a number of criteria including, (a) need for the activities to be PRSP compliant, (b) collecting data for which the Bureau will have comparative advantage to collect leaving other data collection activities to line Ministries and other data producers, (c) giving priority to activities which are less cost intensive relative to other possible data sources or which are integrative, making 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, (d) existing institutional and technical capacity for implementing activities and the potential for their sustainability, (e) ongoing activities e.g. GDP estimation, compilation of CPI which must be continued to maintain data series, (f) giving priority to those activities which need to be undertaken to provide a basis for subsequent activities e.g. updating the CRBE before the Economic Census can be conducted, updating the EA maps before undertaking the next Population and Housing Census, training in GIS and poverty mapping before poverty maps can be produced, etc. , and (g) giving priority to activities aimed at building capacity and infrastructure e.g. recruitment of staff, training, office space, etc. have been given higher priority.

The focus of the work programme is to provide statistical data and information required for the PRSP programme implementation and monitoring as well as monitoring other government development initiatives and to improve the quality, efficiency and timeliness in delivering national statistics. The work programme is divided into periodic and ongoing activities, and new activities. Under each of these categories, planned secondary data collection, survey, census and other activities are presented.

Capacity building

The capacity building programme of the Strategic Plan centers on issues of staffing, training, infrastructure and management systems.

Staffing

Over the Plan period, the staffing complement will go up by 75 to 731. Of this staff complement, 132 or 18.1% will be professionals, 254 or 34.7% sub-professionals, 137 or 18.7% technical staff and 208 or 28 5% support staff.

Training

Training will be an ongoing process in tandem with all other Bureau activities of a recurrent nature, in order to continuously improve the quality of statistical outputs. The training programme will aim 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 of professional staff, develop soft skills such as report writing, and to increase appreciation for and use of statistical data and information. It will be tailor-made, practical-oriented, hands-on and largely in-house. Higher priority will be given to on-the-job skills development over mainstream academic training. The training programme will be well structured and managed. In particular, the In-Service Training Programme will be resumed as soon as possible with a senior officer assigned to manage it.

Apart from training in statistics and IT, there will be training in management and other areas for different Bureau personnel including administrative staff, accounts staff, etc. As part of this training, staff will be empowered to use the skills once acquired to advocate for statistics. Training will also be given to main data users to empower them to appreciate data and secondly to be able to access and use data in their work.

The programme of building the capacity for the Bureau includes creating a conducive working environment for staff. This includes offices, IT equipment and transport. Priority will be given to sourcing funds to complete the construction of the office block early on in the Plan period and acquiring more office space in provinces. The installation of a LAN and similar networks like Wide Area Networks (WAN) will be done to improve the efficiency of the office, optimize the use of resources and increase information sharing. It will also facilitate development of skills in knowledge sharing and management through establishment of groupware that facilitate file sharing and online working groups.

The Bureau will need new equipment like computers, photocopiers, etc; transport like vehicles and boats: etc. The requirements for these have been determined, taking into the work programme, existing equipment and number of new staff to be recruited.

In order to address these weaknesses and lay a basis for further statistical development, the Plan addresses a range of issues, including supporting all key developments across the office. Technical assistance will be required in the following areas: GIS, Informal Sector Survey, Labour Market Information Systems (advise on establishment of the system), IT and Data Management (design an IT Policy and Strategy), Statistical Organization and Management (advise on operationalization of the Plan) and on printing (advise on modernizing the Printing Press). Also proper management information systems consistent with good practice will be established.

7. Plan Implementation

A strategic management process will be used to ensure that the Bureau's high-level mission statement is translated into action and work to be performed by frontline and back-office employees. The **Balanced Scorecard** strategic management system that ensures the implementation, communication and alignment of strategies to objectives will be adopted and used to implement the Plan. It enables balanced result management to be done – the balance is provided between short- and long-term objectives, between lagging and leading indicators, between external and internal performance, etc. It thus describes the multiple indirect linkages required to connect improvements in an organization's intangible assets – the ultimate drivers of knowledge-based strategies.

A new Census and Statistics Act has been proposed to enhance the effectiveness of the NSS. It provides for, among other things, (a) transforming the CSO into a "semi-autonomous" government agency, to be called the **Central Bureau of Statistics (CBS)**, in order to make provision of official statistical data and services more efficient and responsive to user needs, (b) establishing a **Statistical Policy Board** (the Board) with seven members as the governing body of the Bureau, (c) establishing the post of **Statistician-General** to be appointed by the President and approved by Parliament.

Effective implementation of a strategy requires that the organizational structure be aligned to the strategy. A structure for the Bureau has been proposed. The structure includes the Board of Directors, Statistician-General, Deputy Statistician-General, five Directorates to be headed by Directors, Branches and Sections.

Other important activities to be undertaken in strategy implementation will include creating strategy awareness first among all employees of the Bureau and then with other stakeholders, managing change, creating a strategy –supportive culture, enhancing statistical governance (increasing the relevance of data; improving coordination, partnerships, networking and information sharing; improving knowledge management; improving data analysis; improving information dissemination and

access including establishment of a well-defined dissemination policy and programme, establishment of a comprehensive National Statistical Database etc); development of an IT Policy and Strategy; developing a Human Resources Development Strategy.

Systems for management of Bureau resources including personnel and funds will be established including Recruitment Procedures, attractive Terms and Conditions of Service, Financial Regulations, Accounting Guidelines, Procurement Guidelines and Management Information System (MIS).

Special attention will be given to motivating personnel. In addition to the Terms and Conditions of Service, other motivating factors will include, *inter alia*, clear career path, leadership, facilitation, rewarding of quality and promoting professionalism and encouraging innovation and creativity.

8. Monitoring and Evaluation

It will be necessary to assess how much is being achieved vis-à-vis the Plan objectives. This will make it possible for corrective measures to be taken or for implementation strategies to be revised if it should appear that implementation is off track. A monitoring schedule has been prepared that includes using Plan-related performance indicators to track progress. As much as possible, implementation should stick to the established implementation schedule. Any lapses in the implementation of activities will not only upset the coordination arrangements with related activities but will also upset the budget. At the end of the Plan period, there should be an evaluation of the extent to which the Plan achieved its objectives.

Performance reviews will include a Quarterly Progress Report (QPR) and an Annual Progress Report (APR) to the Minister as a statutory requirement, an Annual External Review (AER) to be carried out by the Ministry of Finance and National Planning together with development partners, and a Terminal Review (TR) to be carried out again by the Ministry of Finance and National Planning together with development partners.

Benchmarking is a method of making systematic comparison in specific areas with other relevant organizations and especially with those organizations with best performance. The aim is to determine areas where improvements can be made. Both internal and external benchmarking will be done.

9. Tentative Budget.

The total budget for the work programme amounts to K98.4 billion over a period of 5 years. This averages about K20 billion per year. The budget for 2003 of K 43.5 billion is much higher than in other years because of the Living Conditions Monitoring Survey (LCMS) – to cost K3.75 billion (funded), Economic Census – K4.6 billion, Census of Agriculture and Livestock – K20 billion and the Agricultural Special Supplementary Survey – K1.5 billion (funded).

The capacity building programme is heavy but adjustable. The budget for 5 years is K217 billion of which 77% is for staff salaries and wages. The budget also includes the funds required for training (K16.5 billion); completing the office block and renting (K15.9 billion); communication, equipment and transport (K15.4 billion), development of management systems (K0.23 billion) and technical assistance (K1.1 billion).

It is proposed that this amount of money should be raised by Government and the donor community.

"*If you can't measure it, you can't manage it*"

One

BACKGROUND

1.1 THE COUNTRY

Zambia is a former British colony. It gained independence in 1964. The country is a landlocked Sub-Saharan country sharing boundaries with Malawi, Mozambique, Zimbabwe, Botswana, Namibia, Angola, Democratic Republic of the Congo and Tanzania. The country covers a land area of about 752,612 square kilometres.

Population

Zambia is one of the most urbanized countries in Sub-Sahara Africa with about 40 percent of the population living in urban areas. The rest of the population (60 percent) live in rural areas. The 1980, 1990 and 2000 censuses estimated the population of Zambia to be at 5.7, 7.8 and 9.3 million respectively. Zambia is a sparsely populated country with an overall population density of 12.4 persons per square kilometre in 1996.

Administration

Administratively, the country is divided into nine provinces, namely Central, Copperbelt, Eastern, Luapula, Lusaka, Northern, North-Western, Southern and Western provinces. These provinces are further divided into a total of seventy-two (72) districts. Lusaka is the capital city of Zambia and seat of government. The government comprises of the Central and Local government.

Natural resources

Zambia's vegetation is mainly made up of savanna woodlands and grassland. The country has a tropical climate with three distinct seasons; the cool and dry season, the hot and dry season and the hot and wet season.

The country has abundant natural resources. There are five main rivers, namely Zambezi, Kafue, Luangwa, Luapula, and Chambeshi rivers in Zambia. In addition to these rivers, the country also has the lakes Tanganyika, Mweru, Mweru Wa Ntipa, Bangweulu and the man-made lakes Kariba and Itezhi Tezhi.

The country has some of nature's best wildlife and game reserves affording the country with abundant tourism potential for earning foreign exchange. A good number of rural households subsist on these resources by way of fishing and hunting as their main economic activities. The country is also endowed with various minerals and precious stones such as copper, emeralds, zinc, lead and cobalt.

Economy

Zambia has a mixed economy where government organizations coexist with privately owned firms. Mineral mining still constitutes the backbone of the country as it accounts for over 70 percent of the total export earnings. Since the 1970s, both the price and volume of copper have shown a general tendency to decline, leading to reduced foreign exchange earnings. This decline has partly been responsible for the poor performance of the real sectors of the economy that mainly rely on imported raw materials and capital items. In recent years, the mining sector has generally proved to be an increasing cost industry precipitated by high production costs and diminishing output.

The country's balance of payment status has mainly depended on the performance of the mining industry. Despite the additional foreign exchange earnings from non-traditional exports, the country still continues to pay more to the outside world than it earns from it's exports; hence the poor balance of payments performance. During the recent drought years, food imports have continued to be high mainly due to the drop in domestic agricultural output.

In order to reduce the dependence on the mining sector and food imports, the New Deal Government has embarked on policies aimed at transforming the agriculture sector into one of the country's main foreign exchange earner and base for the overall development of the economy.

Since 1991, the country has strictly and vigorously implemented the Structural Adjustment Programme (SAP) with the intention of creating macro-economic stability in the economy. Measures taken have included liberalization of trade, prices, interest and foreign exchange rates, removal of subsidies, privatization, reduction in public expenditure, public sector reforms and liberalization of the marketing and pricing of agricultural produce. These measures are intended to put the Zambian economy on the path towards economic development by way of arresting economic decline and restoring growth in the long term. The rationale is to make the general economy operate at a level that can provide maximum welfare for its people.

During the early phase of the adjustment period, the government implemented stringent monetary controls with the aim of reducing inflation. These anti-inflationary policies paid off by introducing monetary stability in the economy. However, these policies led to high interest rates that in turn restricted borrowing for recapitalization and output expansion. The overall result of the anti-inflationary policies has been low levels of investment and employment, which according to economic doctrine, is expected.

In 1992, the government embarked on the privatization exercise aimed at forestalling competition and efficiency in various sectors of the economy. This has led to the decisive closure of some enterprises and the free entry of new firms (foreign investment) in the economy. A number of people have been laid off as a result of this policy. The Government also started a slow pull-out from sectors serving households such as education and health sectors by reducing funding and introducing cost-

sharing methods. This has been achieved by creating education and health boards that work out ways of sharing the running costs of education and health institutions with various users.

Many enterprises previous government owned or controlled have been successfully sold-off either through management buy-outs or open bidding. The setting up of an enabling environment by the Government was meant to attract additional direct foreign investment that would absorb the excess labour resulting from privatization. While most of the unemployed people have found their own ways of working and sustaining their livelihood, hence the development of the informal sector, a deliberate programme has been put in place to try and assist victims of redundancies and retrenchments and other vulnerable groups.

Besides the effort to maintain macroeconomic stability and restore investor confidence, the Government has also recognized the fact that, in the short to medium term, measures taken during the period of adjustment will have adverse impacts on some segments of the population. While some socio-economic problems resulting from the adjustment might have been familiar, solutions are still very elusive.

1.2 CHALLENGES OF NATIONAL DEVELOPMENT

Zambia is facing the following major development challenges:

Poverty

Poverty is a serious problem in Zambia. In 1998 the percentage of the population below the established **poverty line** stood at 73% having soared from 69.7% in 1991. The quantification of poverty by the Central Statistics Office (CSO) determines the poverty line as the amount of monthly income required to purchase basic food to meet the minimum caloric requirement for a family of six. Care is called for on how much value is placed on this form of quantification for, quite often, the full picture is not captured. In the Zambian case, the situation is, in reality, worse since the 'food basket' used to arrive at the poverty line is very modest and based on a predominantly minimal caloric requirement that is vegetarian and excludes meat, chicken and fish. The Zambia measurement has also not fully factored in such basic needs of the people as shelter, education, health care, lighting, clothing, footwear and transport. Human freedoms are also remotely linked to the current definition of poverty.

A series of national surveys conducted by the CSO – the Social Dimensions of Adjustment Priority Surveys of 1991 and 1993 and the Living Conditions Monitoring Surveys of 1996 and 1998 in particular- provide trends in the various dimensions of poverty in Zambia through the decade of the 1990s. Data from these surveys show that, in general, poverty in most of the critical dimensions increased during the decade. Table 1.1 below portrays the changes in selected indicators of money-metric poverty. The statistics are based on poverty datum lines determined by the CSO. They are fixed at K32,861 and K47,188 for extreme poverty and moderate poverty respectively, per adult equivalent unit per month, for assessing poverty based on the

data from the 1998 Living Conditions Survey. In order to ensure comparability of results over time, these poverty lines were the same as those adopted in previous surveys in 1991, 1993 and 1996. The same basket of food has been used throughout, but the poverty lines were adjusted to 1998 prices from the 1991 prices. Similar adjustments were made for the poverty lines in 1993 and 1996, also from the 1991 prices.

Table 1.1: Overall and extreme poverty in Zambia, in rural and urban areas, 1991-1988

Year	Zambia		Rural		Urban	
	Overall Poverty	Extreme Poverty	Overall Poverty	Extreme Poverty	Overall Poverty	Extreme Poverty
1991	69.7	58.2	88.0	80.6	48.6	32.3
1993	73.8	60.6	92.2	83.5	44.9	24.4
1996	69.2	53.2	82.8	68.4	46.0	27.3
1998	72.9	57.9	83.1	70.9	56.0	36.2

Source: *Central Statistical Office: Living Conditions Monitoring Survey in Zambia, 1998; The Evolution of Poverty in Zambia 1990-1996.*

Distribution of poverty

Just as all socio-economic groups do not uniformly experience poverty, it is also not uniformly spread across the country. There is greater concentration of poverty in various forms in the rural areas than in the urban areas, and in the provinces outside the country's main line of rail than in the provinces along the line of rail. There are also intra-provincial disparities. Table 2 below indicates where the poor are located.

Table 1.2: Overall and extreme poverty in Zambia in rural and urban areas, 1998 (percentage of population)

Location	Overall Poverty	Extreme Poverty
Rural areas	83	70
Urban areas	56	36
Central Province	77	63
Copperbelt Province	65	47
Eastern Province	80	66
Luapula Province	81	69
Lusaka Province	52	34
Northern Province	81	67
Northwestern Province	76	63
Southern Province	76	60
Western Province	89	78

Source*: Central Statistical Office: Living Conditions inZambia Zambia, 1998*

The distribution of Zambia's poor by province in table 2 above shows that the poorest provinces are Western, Luapula, Northern, Eastern and Northwestern. However on account of their relatively smaller population sizes, they do have the greatest share of the country's poor. Table 3 below shows this distribution.

Table 1.3: Distribution of Zambia's poor by province, 1998 (percentage population)

Province	Total Poor	Extremely Poor
Central	10	11
Copperbelt	18	15
Eastern	13	15
Luapula	7	8
Lusaka	15	9
Northern	12	14
Northwestern	5	6
Southern	13	13
Western	7	10

Source*: Central Statistical Office: Living Conditions in Zambia*

The above distribution of poverty does not of course show the incidence of poverty at district level. This information is important for correct interventions on poverty reduction.

Poverty reduction is the overarching national development goal.

In addition to poverty, the PRSP process has identified the following as the main challenges to development: lack of economic growth, high inequality, debt burden, excessive external dependence, unsatisfactory prioritization, inadequate social safety nets and HIV/AIDS and tripod of barriers.

Lack of Economic Growth

The foremost challenge to moving out of poverty in Zambia is the lack of sustained levels of positive growth. This has been exacerbated by increased income inequality, the persistence of discrimination against women and girl child, insufficient investment in economic and social infrastructure to keep pace with requirements for rapid growth and the HIV/AIDS pandemic.

Significant poverty reduction requires a substantial injection of resources into poverty reduction activities and that is not possible without growth. In its absence, there can be little increase in domestic resources either through savings or tax revenues.

High Inequality

A high level of inequality stymies the prospects for growth as well as the subsequent impact of any growth on poverty reduction. There is ample research that shows that where initial inequality in respect of income, education, and assets is high, growth does not easily occur.

Income inequality has been very high as shown by the value of Gini Coefficient (a commonly used measure of inequality) of 0.5 or more. Rural-Urban, inter-provincial, and inter-social strata disparities are already evident from the statistics analyzed so far. Another crucial conclusion of empirical research is that historically unequal situation might perpetuate itself unless changed by government policy, such as redistribution.

The main reason why inequality tends to beget more inequality is the unequal access to credit. The poor cannot easily access credit owing to little or no wealth to provide collateral and hence continue to languish in near or below subsistence state. The rich on the other hand, have easy access to credit and hence are able to build up further on their already substantial wealth. This is one of the reasons why small-scale farmers constitute the poorest social stratum in Zambia, and why perhaps poverty has come down among large-scale farming households. Another group that is also poor for a similar reason is that of female-headed households.

Debt Burden

Another major factor that has reduced resources for poverty reduction is the heavy debt burden, which has exerted a significant crowding out effect on social expenditures. Over the years debt service has on average accounted for 10 percent of the GDP while all the social sectors together have accounted for only 5 percent. The inadequate expenditures on economic and social services have contributed to the debilitation of the country's stock of human and economic capital and this in turn has constrained growth. Zambia needs debt relief.

Excessive External Dependence

The absence of growth and the huge debt burden have made external funding a necessity. External funding constituted, for instance, 89 percent and 84 percent respectively of the total spending in the water and sanitation sector in 1995 and 1996, compared to 31 percent in 1990. In 2001, 53 percent of the national budget was expected to be funded from outside.

External funding, however, has tended to create a paradoxical situation in Zambia. Funds from international cooperating partners would be forthcoming only if the country is current on debt servicing. As a result, nearly half of the inflow of external assistance has tended to flow out again in the form of debt service payments.

External funding also depends on the donors and the Zambia Government being congruent in their views on economic and political governance. The lack of such congruence has led to a drastic reduction in donor assistance since the later half of the 1990s. In any case, Zambia is today dangerously dependent on aid, but still cannot finance all her needs. Should donor reduce aid further then poverty will increase sharply.

Unsatisfactory Prioritization

Even within the limited resources, poverty reduction may not get its due share with wrong Prioritization, misdirection of resources, and lack of transparency in their utilization. For instance, to date Zambia has severely fallen short of fulfilling the benchmarks for allocation to areas of priority human concerns prescribed by the Human Development Ratio and the 20:20 Initiative.

Inadequate Social Safety Nets

The provision of social safety nets has been relatively limited vis-à-vis the pervasive poverty situation. Social safety net expenditures over the years have been declining in real terms. Between 1998 and 1999 for instance, the community, social and personal services sector that includes activities in the area of community development and social services registered a decline in real value added from K178.8 billion to K175.8billion.

The main avenue through which social safety net activities are undertaken is the Public Welfare Assistance Scheme (PWAS). While the PWAS does cover a broad canvas of activities, the financial allocations made are meagre. In 1999, only K2.8billion out of a K4 trillion budget was allocated. Of this amount only 54 percent was actually released by mid-December, 1999. Furthermore, the number of applicants for assistance has been increasing over the years rendering the PWAS increasingly inadequate. Of the 228,558 applicants who sought assistance in 1999, only 29% received assistance.

One safety net measure that was introduced in the health sector is a policy of exemptions from payment of user fees introduced in 1993.There are four groups of exemptions based on age, disease, disaster or accident and income. Children under the age of 5 years and the elderly aged over 65 years and above are exempted. All antenatal and postnatal episodes as well as chronic illnesses such as TB, STD and HIV/AIDS are exempted. Those who are unable to pay can seek exemption under the Health Care Cost Scheme operated through the PWAS. In addition, all those affected by disaster or involved in accidents are also exempted from paying user charges. However, there have been inequities in the manner in which the exemption policy has operated. Research has shown that there have been very high errors of exclusion and inclusion. Those who can afford to pay or are ineligible under the criteria have been included while many that were eligible have been excluded.

Exemption mechanisms, even if worked as intended, could contribute to service provision but would not necessarily address inequalities in the use of services related to income or distance to health facility. The poorest sections of the population are found in remote areas that are not easily accessible. For example, households in several districts in Central, Northern, and Western Provinces have an average of more than 60 kilometres to the nearest health facility and an average of more than 50 kilometres to the nearest transport facility. Exemption schemes can barely benefit them.

The government has set up The Zambia Social Investment Fund (ZAMSIF) in the Ministry of Finance and National Planning with the World Bank support. One of the main objectives is to achieve sustainable improved availability and use of quality basic social services by beneficiary communities and specific vulnerable groups.

HIV/AIDS and the Tripod of Barriers

Human capital formation that is necessary to generate sustained growth is impeded not only by lack of adequate social sector expenditures but also by another major factor namely the high incidence of HIV/AIDS. Sixteen percent of the adult population is stricken by this disease and related opportunistic infections.

In essence the high levels of poverty, the high debt burden and the high incidence of HIV/AIDS are mutually reinforcing and together constitute a tripod of formidable barriers to the country's development. Hence efforts aimed at poverty reduction cannot bear sufficient fruit unless complemented by simultaneous efforts to address the problems of debt and HIV/AIDS.

1.3 NATIONAL DEVELOPMENT FRAMEWORK

a) Poverty Reduction Strategy Paper (PRSP)

The Poverty Reduction Strategy Paper (PRSP) covering the 2002-2004 period is a multi-pronged initiative aimed at addressing the serious poverty situation in Zambia.

The preparation of the PRSP involved many stakeholders thus enriching it and grounding it's ownership in the country. Stakeholders were involved at every stage of preparation including at the level of conceptualizing its roadmap through a national sensitization workshop. This collaboration was extended into formation of sector working groups drawing participants from different interest groups to design sector specific programmes for poverty reduction, which became the main ingredients of the PRSP. The document has also benefited from wide consultations with rural areas, political leaders and previous consultative process.

To reverse Zambia's deteriorated socio-economic conditions, a balanced and multi-pronged approach will be used based on three broad assumptions.

Firstly, the PRSP is not a substitute to the much needed macroeconomic stability and structural reforms that are so pivotal to both growth and poverty reduction. Alongside this, growth-stimulating interventions are being placed at the centre of the PRSP together with pro-poor interventions that have been carefully chosen. In this regard, the PRSP is putting in place effective and monitorable poverty reducing projects in general, and in particular projects that are properly targeted at the vulnerable and disadvantaged groups and will ensure that project selection criteria are clearly specified.

Secondly, under PRSP it is planned to carefully channel the scarce national resources only to meet those goals and objectives that have been agreed upon through the consultative process that characterized the preparation of PRSP. Although a good number of the interventions that have been included are already ongoing, such interventions are to be streamlined into the overall planning framework.

Lastly, PRSP primarily, though not exclusively, targets agricultural development as the engine of income expansion for the poor and is thus perceived to possess the best opportunities of enhancing the poor's livelihood. In this regard, to the extent that income poverty has been singled out through the PRSP process as one of the major constraints to improved social welfare, particular effort will be directed towards agricultural growth stimulation that is sensitive to equity in resource access and use. Other economic sectors that complement this effort either directly or indirectly through inter- linkages are tourism, manufacturing, mining and energy. The issues dealing with the growth of the Zambian economy are appropriately termed the "economic theme of the PRSP".

Zambia's current macroeconomic framework covers the period 2001 to 2003 and is supported by the World Bank, the IMF, and other multilateral and bilateral cooperating partners. The country now plans to enter into a new programme for the period 2002-2004 with the following envisaged macroeconomic indicators against which the PRSP assumptions are being made:

- An annual average growth rate of 4.3 percent in 2002 and 4.0 percent each in the years 2003 and 2004.
- The external current account and the overall balance of payments to improve to minus $597 million and minus $99 million in 2004 from an estimated minus $665 and minus $420 million in 2002 respectively.
- By 2004, end year inflation is planned to drop to 5 percent.

The PRSP is Zambia's development planning and resource programming tool and as such, it is the overall framework for national (both government and non-government) planning and intervention for development and poverty reduction. It will roll over every three years and will continue to solicit for broader stakeholder input in its planning, implementation, monitoring and evaluation. It is the nation's medium-term development framework. The PRSP is not independent of other public planning instruments and processes such as national development visioning, public investment programming, sector investment programmes and strategic as well as the national budgeting process.

b) Transitional National Development Plan (TNDP)

The Transitional National Development Plan (TNDP) covers a four-year period from 2002 to 2005. It will be followed by a 5-year national development plans starting in 2006. The drafting of the TNDP drew heavily on the PRSP. However, it goes beyond the PRSP to include aspects on national life such as foreign affairs, defense and security, and law and order. It also includes chapters on development of each province. The TNDP was launched in July 2002 following the re-introduction of planning process in the country after planning in the country had been abandoned for over ten years.

The theme of the TNDP is to achieve sustained economic growth, employment creation and poverty reduction. Thus the overall goal is to reverse Zambia's deteriorating socio-economic conditions and stimulate economic growth, create

employment and thereby reduce poverty. Agriculture is to be the engine of income expansion in the economy. The other complementary sectors are tourism, manufacturing, mining and energy.

With regard to Information System for planning and implementation, the overall vision in the planning period is to create a system of information collection, analysis and dissemination among all stakeholders at the district, provincial and national level for decision making in the process of implementation and evaluation of the TNDP.

1.4 MONITORING AND EVALUATION OF NATIONAL DEVELOPMENT

Monitoring and evaluation are essential components of well-designed development programmes and projects. Monitoring enables tracking use of resources, increasing accountability and enhancement of decision-making. Monitoring provides information required to adapt policy, monitor progress and target new interventions. The information is available between beneficiaries, service providers and policy-makers to ascertain that implementation of the programmes is on track. It should also indicate how effective the programmes are by revealing the degree to which declared objectives and agreed performance indicators are being met. Evaluation on the other hand aims to assess the impact of the programmes especially on the well-being of the population as a result of the said programmes.

(i) PRSP

The PRSP has identified a number of key indicators to be tracked over time and space to investigate levels, changes and causes of poverty, including the success or failure of public actions in each main sector of national life intended to reduce poverty. Also indicators for cross-cutting issues e.g. HIV/AIDS have been identified. The selection of indicators followed recommendations of PRSP thematic working groups and fieldwork to ascertain what indicators were actually collected and monitored by various institutions. It also took into account the need to monitor progress by Zambia towards achievement of Millennium Development Goals (MDGs) which include: achieving Universal Primary Education, promoting gender equality and empowering women, reducing child mortality, improving maternal health, and combating HIV/AIDS, malaria and other diseases; ensuring environmental sustainability; and developing a global partnership for development.

The following table presents levels of poverty 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*"[1].

[1] ***Zambia: Poverty Reduction Strategy Paper 2002 –2004, Ministry of Finance and National Development, May 2002.***

Table 1.4: Levels of poverty monitoring and evaluation

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

Poverty is a complex multi-dimensional phenomenon. Monitoring and evaluation of poverty and action plans requires availability of a variety of data. The data will come from different sources, namely administrative records and Management Information Systems (MISs) of line Ministries especially those of Health, Education, Agriculture, Water and Transport and Communication; national censuses; household surveys; other surveys; and qualitative poverty assessments. These different sources of data provide opportunities for combining and comparing information from different sources to check consistency, improve the design of data collection instruments and introduce new analytical products.

The information on the above levels of poverty monitoring and evaluation should be appropriately packaged and then fed into the planning, political and administrative processes, and should be acted on.

(ii) TNDP

In order to ensure that the implementation of the TNDP is on course and desired results are achieved, monitoring and evaluation will be undertaken. The process involved in the selection of the indicators is the same as for the PRSP described above.

(iii) Challenges

Monitoring the PRSP and other national development initiatives have presented major challenges to the NSS, but also presented opportunities, particularly with respect to increasing demand for a variety of information and raising the public profile of statistical work as will be shown in the next chapter.

Two

NATIONAL STATISTICAL SYSTEM

2.1 ROLE OF STATISTICAL INFORMATION IN NATIONAL DEVELOPMENT

Information is the cutting-edge resource of the 21st century that cannot be ignored by any country. Such a resource needs to be harnessed for national development. Dr. Carlos M. Jarque the Minister of Social Development in Mexico and previously the President of the Mexico Statistical Office has argued that, "*Information has become the strategic technological platform of our time…. In the near future, the societies that have full command of the new information technologies will have a comparative advantage in pursuing their development……..*"[2].

Referring to the importance of statistical information, Hon. Claire Short, the 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*"[3]. She has argued that surveys that described and quantified poverty in Britain at the turn of the 20th century led to introduction of legislation to reduce poverty and widen access to health. *"Improved statistics*", she said, "*were crucial to reform and advance for the mass of the people*"[4].

There was fundamental agreement at an IMF/UN Consultative Seminar on Governance of National Statistical Seminar held in Singapore in May 2002 that "*high-quality official statistics are a key to component of sound policy-making and effective decision-making and thus represent a crucial building block in the economic and social development of any country*"[5].

The above statements underscore the role of official statistical data and information in national development. **Official statistical information** refers to statistical information produced/compiled by Central Statistics Office (CSO) and government Ministries and institutions e.g. Bank of Zambia, Export Board of Zambia, Zambia Investment Centre, Zambia Tourist Board, etc.

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[2] ***Mexico's Statistical Information System Towards the 21st Century by Carlos M. Jarque, Joint IASS/IAOS Conference, Mexico, September 1998.***

[3] ***Clare Short: Statistics for the Elimination of Poverty, Speech delivered at a meeting in Paris, 18-19 November 1999.***

[4] ***Ibid***

[5] ***IMF Survey, July 2002***

2.2 NATIONAL STATISTICAL SYSTEM

A National Statistical System (NSS) is defined by a legal framework, infrastructure and institutional arrangements for collection, management and dissemination of official statistics.

(a) Legal framework

The legal mandate for the NSS is articulated in Part IV of the 1964 Census and Statistics Act, Chapter 425 of the Laws of Zambia, which established the CSO. The Act empowers the Director of the CSO to "*generally organize a coordinated scheme of social and economic statistics relating to Zambia*" [6].

(b) Components of the NSS

There are essentially three components of the NSS, namely data users, data producers and data suppliers.

Data Users: Previously, official statistics catered mainly for Government Ministries and especially the Ministry responsible for Planning. Today, the number of users of official statistics has proliferated and it includes researchers; public & private sector operators; civil society (organized pressure/interest groups, NGOs, the media); donors, international organizations; and the public.

Data producers: The CSO does not have the mandate nor the capacity to produce all required official statistics. So in addition to the CSO, there are many other data producers that include line Ministries, public sector, civil society (NGOs, etc.)

Data suppliers: These include households, farmers, establishments and institutions.

(c) What should a 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 government, 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;

[6] ***Census and Statistics Act, Chapter 425 of the Laws of Zambia, Republic of Zambia***

- 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.

(d) Need for coordination, collaboration, networking and information sharing within NSS

Co-ordination, collaboration, networking and sharing of information among data producers, between data producers and users, between data producers and research/training institutions, and among donors are essential to render the NSS effective and efficient. In particular, these lead to:

- achievement of synergy and cost-effectiveness in statistical production,
- avoidance of working at cross-purpose and production of conflicting data,
- promotion of use of "*best practices*" and quality enhancement in statistical production, and
- build a robust capacity to respond quickly to emerging issues/challenges.

Coordination of official statistics was given a shot in the arm when Government established a **Unified Statistical Service (USS)** in 1960s. In the context of the USS, those key Ministries with higher data requirements in their work created Statistical Units. These included Ministries of Education; Health; Agriculture; Labour; Commerce and Industry; and Science and Technology. The CSO seconded staff at the level of Senior Statistician, Statistician and Statistical Officer to these Units. The staff appointments and progression was through the CSO. These staff acted as CSO's focal points in these Ministries. The work of out-posted staff at the Ministries was tailored to the needs of the respective Ministries. This work was coordinated with the overall CSO work programme. The quality of statistical collections in Ministries improved because the out-posted staff were trained in statistics and could be backstopped by the CSO as and when need arose. What is more, these out-posted staff closely participated in questionnaire design and analysis of data at CSO.

2.3 MAIN SOURCES OF OFFICIAL STATISTICS

There are basically three main sources of official statistics. These are: administrative records, censuses and surveys.

(a) Management Information System (MIS)

Administrative records are the simplest and cheapest source of official data that are provided routinely as by-products of administrative processes in Government Ministries and Departments. Much of the data from this source are collected and compiled primarily for internal use including planning, administration, decision-making and reporting. Realizing that a lot of data from this source remain in raw form and are not turned into information for management, increasingly, their collection and management are being systematized, published and made available for use by other

stakeholders. Indeed, **Management Information Systems (MISs)** have been established in many line Ministries especially those of Health, Education, Agriculture, Tourism, Finance, etc. for this very purpose. These MISs are a rich source of statistical information that will be invaluable in sector-specific poverty monitoring and especially of intermediate programme indicators i.e. physical deliverables resulting from government spending.

The following summary presents management information systems in key government Ministries and their relevance to the monitoring and evaluation of the PRSP:

(i) Education Sector

The education sector has received prominence in the PRSP. Poverty in this sector is reported to manifest itself in many ways including low enrolment, low progression, high dropout rates, poor performance, poor attendance, poor learning environment, etc. A variety of PRSP strategies on education have been planned and these need to be monitored and evaluated.

The Ministry of Education (MOE) has a Statistics Section within the Directorate of Planning. This Section is responsible for the collection and compilation of data on the education indicators that are useful in the monitoring and evaluation of the education system in the country.

Data collection at the Ministry

The main source of data at the Ministry is the Annual **School Census**. This census collects data on pupils (age, grade, gender, nationality, impairment, repeaters, drop outs, deaths, pregnancies); staff (age, gender, qualification, date of appointment, employment status); infrastructure; finances; and books. The census involves the Ministry dispatching census questionnaires to all head teachers in government schools through Provincial Education Offices and District Education Offices. The head teachers are supposed to fill them and return them. Previously, all head teachers in government schools used to get training on how to fill the questionnaire and about the importance of the census and the need to ensure that the questionnaires were properly filled out and returned. Resource constraints have made it difficult to continue to train head teachers for the said purpose. As a way around the problem, the Ministry in 2002 organized training for District Education Officers on how to fill the questionnaires in anticipation that they would in turn train head teachers on how to fill the questionnaires.

Data from the census are processed and analyzed at Ministry headquarters and then reported in the **Education Statistics Bulletin.** The Bulletin is used by Parliament, researchers, cooperating partners, donors and the general public. In addition, some reports are produced on demand. It was, however, reported that no systematic list of users exists.

The census has been characterized by the following problems:

Coverage: In the past, the census covered only government-aided schools. However in 2001, the Ministry adopted a policy of covering all schools irrespective of ownership. This has necessitated administering three questionnaires: for 1) Community Schools 2) Basic Education (grades 1-9), and 3) Higher/Secondary (grades 10-12). This started with primary schools but will eventually cover the secondary and tertiary institutions that are not government.

Non-response: For some time, non-response was a serious problem. Where there was no response, the previous years figures would be used. In order to improve response rates, government decided to tie school grants to the returns of the questionnaires. This has very much improved response rates that now stand at about 98% (2001).

Accuracy: It was reported that a lot of questionnaires are returned either incomplete or with a lot of inconsistencies. A lot of data cleaning has to be done to make them usable. These have been attributed to lack of training of head teachers, lack of supervision and lack of "on spot" checks.

Timeliness: Timeliness in production of the Bulletin remains a serious problem. The last publication was reported to have come out in 1995. It was reported that most of the backlog has been cleared and beginning from next year, it should be possible to release the Bulletin in a timely manner. It is expected that the Bulletin for 2002 will be released in March 2003.

Staffing

Previously, this Statistics Section was manned by staff out-posted from the CSO. Following the withdrawal of CSO staff from the Ministry, low staffing levels have greatly affected the operations of the Section. Currently, there are 8 personnel in the Section - one Senior Statistician (still on secondment from CSO), one systems analyst and 7 data entry operators. It was reported that the Ministry is at an advanced stage of restructuring that will provide for the positions of: Senior Statistician, Statistician, Senior Statistical Officer, and two Assistant Statistical Officers. The Section has also been reported to be affected by inadequate funding for its statistical programmes.

Data management

The Section has 10 computers many of which are used for data entry. It is planned to decentralize data processing in order to reduce the time lag in the production of education statistics. The Ministry has large datasets but has yet to develop an appropriate database. There is a Local Area Network at the Ministry and this has helped to improve information sharing. The Ministry is currently working on installing a wireless connectivity network, initially at provincial level and later at district level. With the assistance of USAID, Eastern and Southern provinces will be used as a pilot for this network. When the network is functional, data entry into the computer will be decentralized to district level.

Data from other sources

For the core education indicators, the Ministry relies on Population Census data from CSO, disaggregated by age, sex and geographic location. In addition, to the population census, other data are compiled from surveys such as the Living Conditions Monitoring Survey, Demographic Health Survey and the Demographic Education Survey, which is being undertaken this year for the first time.

Collaboration with CSO

The Ministry's relationship with CSO was described as being less than satisfactory. This is in spite of the fact that from the Basic Education Sub-sector Investment Programme (BESIP), the Ministry has financed the ongoing Zambia Demographic Education Survey (ZDES) that CSO is conducting. The Ministry reported the following problems when using CSO data:

- limited levels of data disaggregation, which makes it difficult for the Ministry to satisfy some users' needs such as indicators that require data at constituency level;
- lack of timeliness in the release of census data leaves the Ministry no option but to use population projections which overtime, render indicators and rates questionable;
- unsatisfactory dissemination of CSO products;

It was also reported that there is limited participation by Ministry staff in the design and implementation of statistical activities carried by CSO even when such activities collect information on education. A case in point is the ongoing Living Conditions Monitoring Survey, which has a module on education. The Ministry staff have not made much contribution to the design and implementation of the module. It was also mentioned that coordination between CSO and other institutions in the analysis of census data has been weak.

(ii) Ministry of Finance and National Planning

The Planning and Economic Management Department at the Ministry of Finance and National Planning is mainly responsible for planning and strategic plans; cross-cutting issues including population, governance, gender and HIV/AIDS; and coordination of the PRSP through its Economic Management Unit. In particular, the Department coordinates structures set up during the preparation of PRSP. These structures have been converted into implementation structures to assist identify gaps regarding definition and measurement of poverty indicators.

Staffing within the Department

It was reported that the Department is new and that its capacity requires substantial beefing up with regard to staffing levels. The Department has an establishment of sixty (60) employees but only eighteen (18) positions have been filled. Proposals have been made to address this problem. In addition to the staffing problems at headquarters, it was reported that programmes in the provinces are constrained

because there are no structures in existence at that level ever since the National Commission for Development Planning (NCDP) was abolished.

Statistics Unit

A Statistics Unit has recently been established in the Department. There are two statisticians at the Unit. One is abroad pursuing a Masters degree and the other one has just joined the Department from CSO. The Unit is responsible for compiling statistics from different institutions (including CSO). The statistics are published in the Department's monthly report, the **Macroeconomic Indicators**. The Report provides information on prices and exchange rates, money and banking, external sector, government finance, debt and the real sector.

Collaboration with other institutions and concerns about information flow

The Department is also represented on the Economic Statistics Committee comprising of CSO, Ministry of Commerce, Trade and Industry, Ministry of Agriculture and Cooperatives and Bank of Zambia. The department also attends a Committee on Statistics at Bank of Zambia.

The Department has the following concerns about information flow:

CSO data: It was reported that there is need for improvement as regards the quality, timeliness (frequency) and level of detail (desegregation) of data produced by CSO. To this effect, it was reported that consultancies have been commissioned funded by the EU and GTZ to look at the possible ways of improving the flow of statistics between the Department and CSO and to see how the information flow at lower levels can be enhanced.

Linkages: The need to have very clear linkages between the sectors and also to determine how these sectors link with each other was highlighted.

Reporting systems: The need for clear and strong bottom-up information flow in the data collection process was stressed. For instance, it was recommended that information should flow to the District Development Coordinating Committees (DDCCs) for informing planning and decision-making at that level. The DDCCs should also be involved in the preparation and implementation of development indicators.

(iii) Agriculture Sector

Agriculture in Zambia has the potential to enhance economic growth and reduce poverty. This is because there is a direct link between agriculture on the one hand and poverty and food insecurity on the other. Agriculture is an important sector of the national economy because the majority of Zambians depend on agriculture-related activities for their livelihood.

The importance of agriculture to the national economy, therefore, makes the sector the key to general improved economic performance, increased incomes and raising of standards of living of households as well as poverty eradication and increased

food security in the country. For designing and developing "sound" evidence-based poverty reduction and food security strategies within the broad context of sustainable development, there is a need for comprehensive food and agricultural statistics (FAS). FAS contribute towards creation of poverty and vulnerability profiles.

The Ministry of Agriculture and Cooperatives has an Agricultural Reporting Service (ARS) that collects a variety of food and agricultural data. The ARS mainly uses its extensive network of field staff to file reports at regular intervals of time. Usually the reports are filed monthly, quarterly, half yearly and annually on land utilization, rainfall conditions, crop plantings and production of food and cash crops, livestock and poultry data as a matter of course. Data from the field are collated by Provincial Agricultural Officers (PAOs) who then pass them on to the Ministry headquarters where they are compiled into reports mainly for internal use. They are also used to compile the Ministry's annual report that is sent to Parliament.

There are two key data sets at the Ministry that are published for use by stakeholders. These are Crop Forecast Survey (CFS) data and Post-Harvest Survey (PHS) data.

Crop Forecast Survey

The Ministry has been undertaking the Crop Forecast Survey (CFS) annually since 1982/1983 agricultural season in order to provide estimates on food crops grown at household and community levels. The estimates form the basis for early warning and intervention measures in case food shortages are forecast. The estimates are also used to construct the National Food Balance Sheet.

Before 1993/94 agricultural season, the CSO was also carrying out the same survey using a different methodology and the two institutions were coming up with conflicting estimates which was confusing to policy and decision-makers. In 1993/94, it was decided to make CFS a joint survey with the Ministry exercising the mandate to carry out the survey and CSO providing the data collection machinery. In addition, the Ministry takes responsibility for data analysis.

The survey is carried out around March/April before the main crop matures. Previously, the survey used to be carried out twice a year with a Preliminary CFS being carried out in January/February, soon after planting and the Final Crop Forecast in March/April, just before harvest. Due to funding problems, the survey is now carried out only in March/April.

The surveys cover all large-scale farmers and a sample of about 13,000 small and medium scale farmers. Data are collected from these farmers on area planted to 8 major crops, expected production, expected sales and amount of fertilizer applied.

Results from the survey are approved by an inter-Ministerial and inter-agency **National Committee on Early Warning (NCEW)** that is chaired by the Permanent Secretary, Ministry of Agriculture. The Committee makes policy pronouncements on the basis of the results from the survey. A survey report is then published.

This survey is fully funded by Government and has been experiencing serious funding problems.

Post-Harvest Survey (PHS)

The **Post-Harvest Survey (PHS)** which covers small and medium scale farmers is undertaken by CSO on an annual basis since early 1970's. The survey provides annual indicators on the changes taking place from one season to the next in the small and medium scale sub-sector of agriculture. It also serves as input into the compilation of sectoral National Accounts.

Although the Ministry is not directly responsible for this survey, it funded it through the World Bank supported Agriculture Sector Investment Project (ASIP) from 1996 to 2000. When the project ended, resources to continue the survey became difficult to get from the Treasury. In 2001, the PHS was funded by a USAID supported Food Security Research Project.

Market Information Centre

The Ministry also has an Agricultural Market Information Centre (AMIC) which collects and issues every week a summarized version of market information on stocks, purchases and sales prices of cereals, maize and its products as well as rice, wheat, millet and sorghum.

Database and Early Warning Unit

This Unit in the Planning and Policy Department is responsible for handling agricultural statistics at the Ministry and is the main contact point for CSO. The Unit is small, weak and has had a high staff turnover. It has seven (7) establishments including a Database Manager, 2 Senior Economists, 1 Computer Programme, 1 Senior Statistician and 1 Statistician. There is a need to upgrade the skills of existing staff.

There are 30 computers at the Ministry and they are all connected to a LAN. The main software used is EXCEL. It was reported that a lot of the time, information sharing in the Ministry and between the Ministry and other institutions is not satisfactory.

The Unit coordinates all early warning activities in collaborating institutions that include the Ministry of Agriculture and Cooperatives, CSO, Department of Meteorology, Ministry of Health, public and private organizations, NGOs, donors and international organizations.

The Unit is linked up to the Southern Africa Development Community (SADC) Regional Early Warning System (REWS). The system comprises a Regional Early Warning Unit (REWU) and autonomous National Early Warning Units (NEWUs) in each of the original member countries. The main objective of the SADC REWS is to provide member states and the international community with advance information on food security prospects in the region through assessments of expected food

production, food supplies and requirements. The REWS has developed methodologies (e.g. crop forecasting, compilation of Food Balance Sheets) and properly documented them, conducted training and backstopping services, provided various types of equipment (e.g. computers, vehicles, communication facilities e.g. fax and e-mail, etc). In addition, the REWS has developed a comprehensive regional database for food security. From 1987 to December 1995, the Unit received financial assistance from the Government of Denmark and technical assistance from FAO.

The Unit publishes a **Food Security Bulletin** every quarter and distributes it widely among stakeholders, mainly government, donor community, international organizations, NGOs, SADC Regional Early Warning Unit, FAO Global Information and Early Warning System and private sector operators. The Bulletin contains comprehensive information on agro- meteorological conditions throughout the growing season; the food supply (domestic supply and imports) and demand situation at national level; food imports situation; farm input supplies situation. It also highlights actions that call for policy decisions and actions e.g. decisions to import food or export food, etc. This production of this Bulletin has been irregular. It was last produced in 1999.

(iv) Health Sector

The PRSP recognizes that meeting the health needs of the poor is important for preventing increase in poverty. As part of the recent restructuring of the Ministry, a Central Board of Health (CBoH) was created. Its mandate includes ensuring equitable access to cost-effective, quality health care as close to the family as possible while the Ministry is responsible for policy and overall supervision of the sector. The PRSP chapter on Health links up PRSP indicators with the National Health Strategic Plan (2001-2005) and the PRSP supports the ongoing programmes in the sector.

Before the reforms that restructured Government Ministries, the Ministry of Health had a Health Information Unit that was manned by staff out-posted from CSO. After the reform, this Unit was phased out.

Health Management Information System (HMIS)

The main source of information for the health sector is the Health Management Information System (HMIS) under the Directorate of Public Health of CBoH. The HMIS is a routine monitoring system, playing an essential role of monitoring service delivery and providing warning signals. It uses selected indicators and routinely collects data related mainly to outputs from health facilities in districts.

Indicators which were selected for ease of collection and which therefore are not comprehensive cover general morbidity, top ranked diseases and service delivery indicators (e.g. drug availability, under 5 underweight, etc).

Data for the HMIS are collected from each facility on a quarterly basis using two structured forms – a Disease Aggregation Form and a Service Delivery Aggregation Form. The data from facilities are collated by District Health Information Officers. Each district has computer facilities. Rolling out the HMIS to districts involved

training of these officers as well as 3-4 nurses in hospitals and records clerks in district facilities.

Previously, the information system was extractive, with information collected passed on to higher levels of administration. Now HMIS emphasizes information utilization for planning at every level – catchment area level, district level, provincial level and national level.

There are two types of reporting systems. For notifiable diseases, reports are expected immediately. For other health events, data, which are collected on a quarterly basis, are published in an **Annual Health Information Bulletin.** The Bulletin is based on an impressive response rate of 98% recorded both in 1999 and 2000. The last report was produced in August 2001.

The CBoH has a database and a local area network.

Staffing

At headquarters, a qualified statistician heads the HMIS. The HMIS also has a documentalist, two other staff and a data entry clerk.

Data from other sources

In addition to data collected by the HMIS, the health sector depends on data from other sources including sentinel surveillance with a focus on such diseases as HIV/AIDS., Immunization Campaigns, line Ministries e.g. Ministry of Agriculture and other data producers like CSO and NGOs. In addition to using data from the CSO (e.g. population data), the CBoH collaborates with CSO in the implementation of specific surveys like Demographic and Health Survey (DHS). It was reported that a lot of information from other data producers including the CSO generally lack timeliness and moreover, in some cases are not available in a form that is suitable for use by the CBoH. It was also reported that some times it is not known which information are available and how they can be accessed.

(iv) National Food and Nutrition Commission

The National Food and Nutrition Commission (NFNC) is a statutory body established by an Act of Parliament in 1967 to advise government on food and nutrition matters, carry out research, create awareness about nutrition matters and provide guidance on food and nutrition.

The NFNC advice, guidelines and advocacy need to be based on sound data. So it carries out surveys especially on intake and impact of micronutrients. For instance in 1993, it carried out an Impact Study on Iodine Deficiency Disorder in Zambia, a National Baseline Study of Iodine Deficiency Anemia in 1993, a national Survey on Vitamin A Deficiency in Zambia in 1997, etc.

In addition to its own data, NFNC uses a lot of nutrition-related data from various sources including CSO (Living Conditions Monitoring Survey and other surveys), Ministry of Agriculture and Cooperatives (Crop Forecast Survey), HMIS, Ministry of

Education, etc. Currently, the Commission is developing a Nutrition Information System (NIS). This will lead to the development of a comprehensive nutrition database.

The main challenges facing the NFNC include the following:

(a) A number of nutrition activities hinge on food consumption data. However, there are no food consumption indicators. The last food consumption survey was carried out in 1970 with assistance from FAO. A proposal has been drafted to carry out a new food consumption survey.
(b) While there is information on nutrition status of the under 5s, there is no information on nutrition status of adults and especially of adolescents and women.
(c) There is lack of baseline data on main nutrients for the PRSP. This will make monitoring these indicators difficult.
(d) There is a need to update food composition tables to ease interpretation of food consumption results. It will need more analytical capacity and more equipment. Currently the Commission has a specialist nutritionist but no statistician.
(e) Data from different institutions do not meet NFNC's requirements. The Commission plans to buy into CSO's surveys.

(vi) Tourism Sector

The tourism sector plays a vital role in national economic growth, which is the main thrust of PRSP. The PRSP has identified programmes in tourism that will make it possible for this sector to contribute to national income expansion. Under the PRSP, the sector will facilitate private sector involvement through investment promotion, marketing, provision of infrastructure and supportive legislation. Measurable indicators will be required to monitor and evaluate the performance of the sector

The Ministry of Tourism has recently been merged with that of Environment and Natural Resources. The Statistics Units of these two Ministries still operate independently as the process of merging is not yet completed.

Information Database Section

This section is responsible for production and compilation of tourism statistics. The Section is manned by a Data Manager, two Statisticians, two Systems Analysts, four Statistical Officers and the new structure has also included three Data Entry Operators. Currently, data collected is captured by temporary staff at points of entry.

For data collection purposes, the country is divided into four regions. Each region is manned by a Statistical Officer. The regions are: Lusaka, Central and Eastern; Southern and Western; Copperbelt and North-Western; and Luapula and Northern.

Two sets of data collection instruments are used, namely a form filled in by all people arriving in Zambia and the other is a form sent to hotels, lodges, hostels, car hire and travel agencies to fill and return to the Ministry. While the response rate for forms which are filled in by all people arriving in Zambia is good, that from establishments

is poor – a mere 35%. It was also reported that it has been difficult to get information on earnings from tour operators because often payments by tourists are made abroad. The Ministry is working closely with Bank of Zambia to sort out this problem.

A separate Unit called Tourism Development and Research does the analysis of data and report writing. Tourism statistics are supposed to be reported on a quarterly, half yearly and annual basis. However, the Ministry is now only able to report on an annual basis. A database on planning and information has been developed in the Ministry. In addition, the Ministry has a web site that it uses for dissemination of information.

Other Sources of Data

Prior to 1995, most of the data used was from CSO. However, due to delays in producing data by CSO, the Ministry was forced to start collecting its own data. This has caused a duplication of effort because CSO has continued producing these same data. Harmonization of work between the two institutions would save resource which could be used elsewhere. The Ministry, nevertheless, has continued using some CSO data. Further, the Head of Statistics at the Ministry is a member of National Accounts Committee of CSO.

The other institutions that provide data are:

- Zambia wildlife Authority,
- Zambia National Tourist Board
- National Heritage Conservation commission
- National Museums Board
- Hotels and Tourist Training Institute Trust

(vii) Ministry of Commerce, Trade and Industry.

The Ministry uses a lot of official statistics especially those relating to imports and exports. Most of the data used by the Ministry comes from CSO. Since CSO does not provide data in required form, the Ministry has worked out an arrangement under which CSO supplies to the Ministry semi-processed data electronically. In addition to trade data, the Ministry gets from CSO data on economic indicators, production figures and company registers. The Ministry has found company registers to be out of date. For instance, the Ministry has found that some companies no longer in operation are still appearing on the registers while new companies are not on the registers.

The Ministry has a Department of Planning and Information. The department has two (2) Statisticians and two (2) Statistical Officers. It also has an Information Technology Unit with one (1) Senior Information Systems Officer, a Computer Programmer and two (2) Data Entry Operators. The Ministry has a total of 30 computers and these are connected to Internet. It has a server and a LAN.

The Ministry used to produce a Quarterly Statistical Bulletin but since 1999, it has not been possible to produce the Bulletin because of lack of funds. The Ministry

plans to develop an Industrial Data Base. Once a database is set up, less sensitive data will be posted on the internet.

The Ministry is conducting a survey called "2002 manufacturing sector survey". The survey is funded by a World Bank project. This survey started in May and was supposed to end in August but due to financial problems, only five (5) provinces have been done. These include Copperbelt, Eastern, Lusaka, North-western and Southern. Funds are being sought so that the survey can be done in the remaining four (4) provinces.

The survey is based on a frame obtained from CSO which has been supplemented by a list of manufacturers from Zambia Association of Manufacturers to get a complete picture. CSO did not respond in time to the invitation to participate in the survey so the Ministry is conducting the survey on its own.

(viii) Environment and Natural Resources

Environment has been recognized by the PRSP as a cross-cutting issue and a number of programmes on environment and poverty linkages have been designed. Environment and natural resources are now handled by the combined Ministry of Tourism, Environment and Natural Resources.

Apart from tourism which has been covered above, the Ministry has a lot of statistical requirements on the state of natural resources. The concern of the Ministry is the stock of natural resources and how these are changing and what factors are leading to the changes of these resources. The current CSO data collection programme and those of other data producers do not provide the data to inform policy and decisions on the above issues. As a result, it is not possible to carry out natural resources accounting and produce a balance sheet on the utilization of the natural resource. This would show not only the contribution of the natural resource to GDP but also the cost of environmental degradation. Hence the need for inventory of the natural resource which would give baseline information on where the resource is, the estimated quantity and the contribution to GDP.

Some data are generated internally but this activity has been constrained by lack of appropriate qualified personnel in both data collection and analysis. The data generated are mainly for internal use in the areas of tourism (tourists arrivals), environment (forestry resource) and wild life (wild life population). Currently, there is only one (1) systems analyst and one (1) statistician. However, the new structure provides for additional eight members of staff comprising two (2) systems analysts, two statisticians and four (4) assistant statisticians.

(IX) Bank of Zambia

The Bank of Zambia (BOZ) internally generates data mainly on monetary figures such as money supply growth, interest rates, etc. The Bank also conducts a Lusaka Weekly Price Survey and using CSO CPI, produces an indicative inflation rate.

The Bank coordinates the Balance of Payments Committee. Recently National Accounts Committee was instituted to be chaired by the Ministry of Finance and National Planning. However it has for various reasons made a slow start.

In addition to its own data, the Bank requires and uses a lot of data from CSO and other data producers. The relationship between the Bank and CSO was described as close. The main areas on which various statistical data are needed from CSO include inflation, GDP, balance of payments accounts, employment, agriculture and income indicators. The Bank produces a Quarterly Statistical Review, an Annual Report and a Monthly Newsletter.

BOZ faces a number of problems associated with the statistical data obtained from CSO and these are outlined below.

Inflation: The problem with inflation data is one of timeliness and accuracy. BOZ requires inflation figures to monitor inflation rates on a weekly basis but CSO can only supply this information on monthly basis. Even on monthly basis, CSO is unable to provide this data on time, the data are often supplied later than a month. Furthermore, there is the issue of accuracy as CSO uses "outdated" weights by using 1994 as the base year for its computation of inflation figures.

GDP: It is felt at BOZ that contribution to GDP by a number of sectors is not accounted for. For instance, economic activity involving trading firms such as Shoprite and Game are not included in the estimate of GDP. It is hoped that the Economic Census to be undertaken soon will address this problem. Further the inability by CSO to provide GDP figures on quarterly basis makes it difficult for BOZ to keep truck of the trend of GDP growth during the year.

Index of industrial production: The concern with this index is that it is based on data collected using an outdated register. Moreover the rate of response to CSO's questionnaire is understood to be very low, rendering the estimates made not to reflect the economic activity in this sector.

Employment: Although employment or the unemployment rates are key indicators, BOZ does not have the actual figure on these indicators. This is because CSO does not provide up to date data on employment.

Agricultural production forecasts: The accuracy of agricultural production forecasts have been questioned. For instance, it was forecast this year that the estimated production of 634,000 tonnes of maize would be depleted by September this year. This has turned out not to be true because up to date (November) millers are still milling local stocks and not imported maize.

(X) Weaknesses of Management Information Systems for Poverty Monitoring.

While MISs can be an important source of statistical information for poverty monitoring, their value may be reduced by the following generic problems which need to be addressed in order to enhance the effectiveness of the MISs:

Consistency

Data are autonomously collected by different Ministries using their own definitions, classifications, methodologies and time frames. This makes it difficult to integrate data from different institutions. In addition, different MISs have developed databases without a common point of reference and this is bound to lead to conflict and to make connectivity difficult.

Facility-basedness

A lot of the data in MISs are facility-based. They, therefore, provide information on the sections of the population already accessing the facilities and not on those without access. Often it is those sections of the population without access to facilities that are the target of the poverty-related policies and interventions.

Facility-based information will need to be complemented with community-based information collected from surveys and censuses.

Institutional constraints

There are many problems arising from institutional constraints such as inadequate logistical support in terms of funds, equipment, personnel and skills, transport, etc. These constraints lead to poorly recorded data that at the same time are incomplete, untimely and inaccurate. For instance, the annual Education Statistics Bulletin was last published in 1995**,** the quarterly Food Security Bulletin was last published in 1999, while tourism statistics are supposed to be reported on a quarterly and half yearly basis, in practice the Ministry can only produce an annual report. The last report was released in 2000**.** The Ministry of Commerce, Trade and Industry used to compile a Quarterly Statistical Bulletin but since 1999, it has not been possible to produce the Bulletin because of lack of funds. Lack of timeliness is negatively impacting planning processes and decision-making.

For effective poverty monitoring to be done, it will be necessary to remove the said constraints and to improve the quality of data from MISs.

Level of reporting

The statistics from MISs tend to be highly aggregated. This makes them unsuitable for targeting intervention and resources for poverty reduction and other purposes.

(a) Censuses

A census is another source of official statistics. A census is a statistical enquiry that involves ***complete enumeration*** of the whole population (or universe). From censuses, we obtain basic data needed for planning for socio-economic development.

Censuses have a number of advantages. These include:

- provision of basic or benchmark data;
- provision of highly disaggregated data i.e. estimates for various domains – geographical, agro-ecological, administrative or some other domain (e.g. gender);
- provision of supplementary information that is required for efficient planning of sample surveys (see later);

The main disadvantages of censuses as a source of official statistics include high cost which makes it difficult to carry out the censuses frequently, lack of timeliness, less accuracy.

The most important censuses carried out in the African region are the ***Population and Housing Census,*** the ***Agricultural Census*** and the ***Economic Census***.

(b) Sample surveys

Sample surveys are enquiries in which data are collected from a sample (or subset) of the population rather than the whole population. On the basis of sample observations, inference or general statements are made about the whole population and its characteristics. It is, therefore, important that as much as possible, the sample should represent the population from which it is drawn.

Sample surveys have a number of distinctive advantages over censuses. Sample surveys are less costly, lead to increased accuracy and do provide data in a more timely manner. However, sample surveys have a number of limitations. They are unable to provide highly disaggregated data (e.g. local area data). They are also subject to **sampling errors**. However, the magnitude of these errors can be controlled and measured when the surveys are based on samples that will have been randomly (scientifically) selected.

Two main types of surveys are carried out in the country. These are household-based surveys in which the units of enumeration are households or household members and institution-based surveys in which the units of enumeration are institutions. Main household-based surveys which are carried out in the country include Demographic and Health Surveys, Sexual Behaviour Survey, Household

Budget Survey (or Income and Expenditure Survey), Agricultural Surveys, Labour Force Surveys, Nutrition Surveys, etc. Institution-based surveys include Income and Earnings Surveys, School Surveys, Surveys of Health Facilities, etc.

2.4 MAIN USERS AND USES OF OFFICIAL STATISTICS

The following table presents a summary of main data users and uses for official statistics. Users need data at different levels within the country – national, provincial, district and community level while data characteristics (e.g. degree of disaggregation, accuracy, frequency of data collection, etc.) required at each level may vary.

In addition to the institutions presented in sub-section 2.3 which are both producers and users of official statistics, a number of other users were visited and hereunder a summary of their requirements for official statistics and how they use them is presented. A full list of data producers and users visited is given in Annex IX.

Table 2.1: Main users and uses of statistical data and information

User	Use
Government (*Central and Local***)** • Policy makers, • Decision makers, • Analysts (*e.g. poverty and gender analysts*) • Administrators	❑ Main uses: policy design, planning, administration, decision-making, plan implementation, monitoring and evaluation, reporting ❑ Main Government policy initiatives requiring statistical data and information: PRSP, TNDP**,** decentralization, governance, etc.
Private sector • Investors • Traders	❑ Assess product demand ❑ Assess investment opportunities, risks and prospects ❑ Planning, decision-making, monitoring, evaluation ❑ Reporting
Research and training organizations	❑ Teaching aids ❑ Planning and decision-making ❑ Research ❑ Analysis
Civil society (*organized pressure/interest groups, NGOs, the media*)	❑ Assess opportunities, risks and prospects ❑ Planning, decision-making, monitoring , evaluation ❑ Reporting
Donors and international organizations	❑ Assess requirements for assistance and/or Participation in development initiatives ❑ Planning and decision-making ❑ Monitoring, evaluation ❑ Reporting
The wider public	❑ Variety of reasons including public debate

(a) Cabinet Office (Gender in Development Division)

The Gender in Development Division (GIDD) within Cabinet Office is mandated to coordinate the National Gender Policy, and facilitate research and resource mobilization for implementation of gender and poverty programmes. Further, GIDD also liaises and networks with national, regional and international organizations. Other national players involved in the gender advocacy are the Gender Consultative Forum, sector Ministries, Parliament and various civil society organizations. At provincial and district level, the Provincial and District Coordinating Committees

(PDCCs and DDCCs) spearhead the implementation of gender responsive poverty reduction programmes, projects and activities.

It is worth noting that gender-related issues have been identified as being cross-cutting in nature by the PRSP. Specifically, the main objective is to promote gender balance so as to ease the burden of poverty, especially of women, at household, community and national level.

Information management

The GIDD has an Information and Documentation Unit which collects and collates gender-related information from Gender Focal Points at national and provincial level. Also the Unit carries out micro demand driven studies. The Unit also compiles information from administrative records such as the courts of law. However, the main source of gender-related information is obtained from various CSO surveys and censuses. The statistics from these sources are reflected in the annual Gender Statistics Report. The last report was published in 1996.

Constraints and Problems

The major problem that GIDD faces with regard to collated information from CSO is that the information is highly aggregated usually at national and provincial levels only. In addition, the data do not reflect relevant and topical gender issues. For example, statistics on trade and commerce are not disaggregated by gender to show the contribution of either men or women to the national wealth. What is more, published reports from CSO are said to lack timeliness.

The other limitations GIDD reported to be experiencing are those of not having capacity to carry out huge surveys that would meet their gender interests because of resources, physical infrastructure and inadequate human resources. GIDD also acknowledged its own failure to play an active and forceful role of ensuring that the right and relevant questions pertaining to gender issues are asked in all censuses and surveys undertaken by CSO. In addition, GIDD admitted failure to hold gender sensitization workshops representing all government line Ministries and Departments as a way of ensuring that gender issues are mainstreamed in all the programmes of the Ministries and Departments.

(b) Chongwe District Council

The Council uses statistics in the process of discharging its main function of providing services to communities e.g. sinking bore holes, distribution of relief food, conduct of elections, etc. In addition, the Council prepares development plans. For instance, it has just prepared a Draft Development Plan covering the period 2003-2007. While the Council uses statistics mainly from CSO, there are certain situations when the statistics are not available or are available but not in a form that renders them usable. In such situations, the Council compiles its own data. The council collects its own data through four main departmental Heads, namely District Planning Officer (Information Centre), Director of Works (Land), Treasurer and Personnel. In addition the District Planning Officer is the secretary to the District Development Coordinating Committee (DDCC) that is chaired by the District Administrator. Sometimes, the Council collects statistics with partners. For instance,

the Council is currently involved in the distribution of relief food in collaboration with World Vision Zambia but accurate statistical data on population size in the affected areas cannot be obtained from CSO. So the Council with assistance of World Vision has had to collect statistics on affected households.

The Council has serious problems getting appropriate statistics to manage its programmes. The basic problem is that available data from CSO and other data producers are highly aggregated and local area statistics are hard to come by. The Council stressed the need to provide local area statistics. It also recommends that District Councils be regarded as important stakeholders in the national statistical development, and be consulted as much as possible when programmes for data collection are being designed. They also should collaborate with CSO and other producers in data collection.

(c) Farming Systems Association of Zambia (FASAZ)

The Association was founded in 1996 and has a current total membership of 78 comprising of researchers in various fields with a common interest of carrying out research not only in agriculture systems but in other areas as well.

The formation of FASAZ was prompted by the realization that there were gaps in information being provided by the government. There is, however, a great degree of collaboration between FASAZ and the government such that the association has been provided with free accommodation within agriculture research centres. The Association is affiliated to both local and regional bodies and its work is tailored to the members needs. The members participate in research work.

FASAZ is currently involved in the following research/programmes: Impact of HIV/AIDS on agricultural production and food security funded by FAO; Management of Food Security Programme in Luapula Province, funded by FAO; Project design and baseline data on village extension models in Chongwe district, Lusaka Province, funded by JICA; Natural Resource Management under the Cooperative League of the United States of America (CLUSA), funded by USAID.

In addition to its own research data, the association also uses data from CSO, Ministry of Agriculture and Cooperatives, Zambia National Farmers Union (ZNFU) and CLUSA. The association emphasized the need for standardized data collection instruments. To achieve this they have decided to request CSO to look at their questionnaires and also draw samples for them. It is their view that all the institutions collecting statistics must standardize and this will make information from different institutions comparable. The standards should be set up by CSO.

The association further advocates for a data National Data Bank/Warehouse that must be managed by CSO. A law should be put in place to compel all those who collect data to send it to the National Data Bank/Warehouse where it can be easily accessible by other users. Currently an in-house database is being put in place at FASAZ. In addition arrangement are under way to place the association on web site.

FASAZ finds a lot of existing data to be inadequate especially in terms of level of disaggregation. The accuracy of some data in some cases is also questionable. Worse still, a lot of data lack timeliness.

(d) Zambia Investment Centre (ZIC)

The Zambia Investment Centre (ZIC) is an investment promotion agency. Its mission is "*To provide efficient and effective service in promotion and facilitation of productive and development-inducing investments in the country for sustainable economic growth and human development*".

The institution has very limited capacity to collect its own data but uses data from other institutions both local and international. The main local sources of data include CSO, Bank of Zambia, Export Board of Zambia, Lusaka Stock Exchange, Zambia Electricity Supply Corporation, Lusaka Water and Sewerage Company, Government Ministries especially Ministry of Finance and National Planning as well as Ministry of Tourism, Environment and Natural Resources.

The international sources include the web sites of UNDP, UNCTAD, World Bank, IMF, COMESA and SADC.

ZIC has a Department of Research and Policy Analysis that deals with statistics. It is headed by a manager and assisted by two officers. ZIC is a member of the "Inter Agency Technical Statistics Committee" at the Bank of Zambia. This committee has sorted out the inconsistencies in data and also harmonizes the data collection instruments. The data collected is updated every month because investors require very up to date information. BOZ (fortnightly) and EBZ (monthly) provides data on a timely basis but there is room for improvement.

ZIC produces the following publications:

- Investor Guide
- Zambia Factor Costs and
- General Information on Zambia.

There are also two publications that are produced monthly (a newsletter) and quarterly (a magazine).

(e) Zambia National Women's Lobby Group (ZNWLG)

Zambia National Women's Lobby Group (ZNWLG) is a non-governmental organization formed in 1991 by women from different non-governmental organizations and political parties who were concerned about the discrimination against women and poor representation in government and other public offices. The lobby group seeks to get more women into decision-making positions by creating awareness among policy makers on gender issues.

The organization uses data mainly from CSO and Electoral Commission (Elections Office) though CSO is the major supplier of the data required. ZNWLG has found existing data to be very inadequate. The organization requires data mainly on women but it is difficult to find the data in a form and at a level of disaggregation

required. For example, during and after the 2001 elections, data were needed on the number of women registered as voters and those that actually voted. Who did the women vote for (male or female) and what is the level of education of women who vote.

The organization has a Research, Information and Documentation Department which is headed by a gender specialist and who is assisted by a Research and Information Officer who is a journalist. In addition three provincial offices have been opened in Western, Eastern and Copperbelt while Northwestern office is just being set up. The provincial offices mainly collect and maintain an update of basic data on ZNWLG membership as well as on men's networking membership. They also keep track of the statistics on councilors and MPs at local level. The lobby plans to establish a database as and when resources permit

The organization recommends that CSO and other data producers should carry out sensitization workshops on existing data.

The Lobby does not produce a regular publication but produces reports on specific activities undertaken.

2.5 IMPACT OF THE PRSP ON THE NATIONAL STATISTICAL SYSTEM

The PRSP process will have profound impact on the NSS. Two major effects, namely immediate effect on the demand for data and longer-term effect on data supply, have been identified and documented by Christopher Scott (2000)[7].

(a) Immediate effect on the demand for data

There is an **immediate effect** on the demand for data through promoting evidence-based policy-making. This additional demand can be broken down into six stages of a (roughly) chronological sequence of the **PRSP data cycle**.

Stage 1: Establishing a poverty baseline
Stage 2: Setting poverty reduction targets
Stage 3: Defining pro-poor development strategy
Stage 4: Monitoring progress
Stage 5: Feeding back results of monitoring into policy-making
Stage 6: Evaluating the impact of policy on poverty reduction

(b) Longer-term effect on the supply of data

In the longer-term, data supply is affected by mobilizing and catalyzing both national and international resources for statistical capacity building. There are international initiatives including PARIS21 and the World Bank's Trust Fund for Statistical

[7] ***Christopher Scot: PRSPs and National Information Systems: Challenges and Opportunities, World Bank, November 2000***

Capacity Building that are expected to affect data supply in the longer-term. These initiatives seek to:

- Widen the coverage of data
- Improve the timeliness of information
- Increase the reliability of data
- Reduce the costs of data collection & processing
- Improve the dissemination of information
- Develop new products, such as disaggregated poverty maps

There may be a short-term effect on the supply side as statistical capacity is switched from non-PRSP related work into PRSP work. This is difficult to avoid and is not necessarily undesirable. One way to mitigate the potential conflict between short and long-run objectives of the NSS might be to include indicators of statistical capacity in the list of PRSP indicators. This would at least make the trade-off between different objectives explicit.

Finally, the PRSP may affect the institutional mechanisms for setting data priorities by improving resource allocation to/within the NSS. Possible initiatives in this area might include establishment of User-Producer Committees to make the producers of data more customer-oriented and the users of data more aware of the processes through which information is generated. This will also help to create and sustain a climate in which transparency and accountability in statistical production is possible.

Three

CENTRAL STATISTICAL OFFICE

3.1 FOUNDATIONS OF A NATIONAL STATISTICAL OFFICE

The United Nations Statistical Division has given a set of fundamental values and principles which a National Statistical Office should have in order for the public to have trust in official statistics it produces. These include independence, relevance, credibility and respondent relations. These principles have been codified in the "**Fundamental Principles of Official Statistics**"[8].

Independence

There should be professional independence of the national statistical office in order to protect the credibility and integrity of official statistics. Characteristics related to independence of the office include[9]:

- authority for professional decisions over the scope, content and frequency for data compilation,
- authority for selection and promotion of professional, technical and operational staff,
- recognition by policy makers outside the office of the authority to release statistical information without prior clearance, and
- adherence to predetermined schedules in public.

Relevance

Relevance refers to the appropriateness or comprehensiveness of statistical products. Relevance of statistics to national development processes is more assured if policy and decision makers as well as other key stakeholders are fully involved in the development of national statistical programmes. That way, statistical production will become demand-driven rather than supply-driven leading to better response to user requirements for statistics.

Credibility

Credibility and integrity refer to professionalism, transparency and ethical standards that help to create a brand name, and define independence and separation from pernicious political influence.

[8] ***United Nations Statistics Division: Handbook of Statistical organization: The Operation and Organization of a Statistical Agency, 3rd Edition, December 2001***

[9] ***Ibid***

The likelihood of data credibility and integrity is more assured if:

(a) production of official statistics is free (and seen to be free) from political interference. This should be underpinned by an appropriate statistical legislation which provides for the independence and probity of official statistics. The independence is with regard to "***the way facts are assembled and combined into statistics or in the method and timing of their release to the public***"[10];
(b) the statistical office enjoys a high profile;
(c) "best practices" and highest professional standards are used to collect and handle data;
(d) there is transparency of sources, methods and procedures. Publication of metadata in this respect will help a lot to enhance data credibility; and
(e) there is a well-defined dissemination policy which provides for advance publication of a release calendar and simultaneous release of data to all stakeholders – equal access to data.

Respondent relations

Respondent relations 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.

The Handbook on Statistical Organization identifies a number of principles of respondent relations dealing with data suppliers. These include:

a) Making clear and meaningful the purpose of the data collection;

b) All individual records must be perceived to be held in strictest confidence and protected from any other party in or out of government. Specifically the respondent is assured that the information provided:
   - will not be accessed by any one with malicious intent,
   - cannot be shared with political authorities or regulatory agencies;

c) Establishing, accepting and continually advertising the professionalism and objectives of the statistical office;

d) Creation of a perception of the statistical office being thoughtful and concerned about respondent burden. This is best achieved by eliminating duplication of surveys and censuses; and

e) Using of terminology that is known to respondents. For businesses, the terminology should be the one used in daily business. For households, the terminology should be the same as what is used by households.

These same principles will apply in the restructuring of the CSO.

[10] ***Ibid***

3.2 ESTABLISHMENT AND LEGAL FRAMEWORK

The CSO was established in 1964 after attainment of independence to collect and provide statistical data and information mainly to meet planning needs of Government. Currently, CSO is a Department in the Ministry of Finance and National Planning.

Almost all countries have an enduring legislative framework to ensure uttermost effectiveness and credibility of a national statistical office by underpinning its professional independence, institutional arrangements for the collection, management and dissemination of official statistics. The professional independence enhances the integrity, impartiality and credibility of official statistics. The legal framework outlines: the objects and functions of the national statistical office; its role in the NSS, its institutional and financial set up; powers to collect data, which data to be collected and their accessibility; safeguards data confidentiality; and provides penalties for failure to provide required data and unauthorized release of data about individuals and enterprises.

The CSO is operating under the Census and Statistics Act of 1964. This act is outdated and no longer able to provide for the policy, administrative and economic changes that have taken place in the country since 1964. In particular, the Act does not provide for:-

- an elaborate ethical code of conduct for staff;
- many areas of comprehensive social and economic statistics;
- provision of data for non-centralised planning;
- an institutional arrangement for a NSS which facilitates a statistical policy formulation and implementation; and
- elaborate sections and sub-sections which are commensurate with the current institutional arrangements with regard to data collection, penalties, fines, etc.

The Strategic Plan provides for enactment of a new Census and Statistics Act to provide an enhanced and more up-to-date legal framework for the NSS.

3.3 ORGANIZATIONAL STRUCTURE OF CSO

In 1992, the Zambia Government initiated a Public Service Reform Programme (PSRP) as part of its adjustment programme. The purpose for the PSRP was to improve the efficiency and performance of the Civil Service. Since then, the need to restructure the CSO was under discussion until 2000 when the Department was partially restructured. The restructuring upgraded a number of posts but it also led to downsizing the office. CSO has 656 establishments compared to 1,340 employees before restructuring. This restructuring was an interim measure pending the amendment of the current Statistics Act.

The CSO is currently headed by a Director and is divided into four broadly defined subject-matter Divisions, namely:

- Economic and Financial Statistics Division;
- Social Statistics Division;
- Agriculture and Environment Statistics Division; and
- Research, Dissemination and Data Processing Division.

Each Division is headed by a Deputy Director who is also responsible for respective sectoral statistical production. Divisions are sub-divided into Branches and Sections. Besides the subject-matter Branches and Sections, there are Units which are referred to as Service Units and which principally service the day-to-day operations of subject-matter Divisions. These include: Operations; Research Group; IT; Administration; Transport; Accounts; Internal Audit; and Security.

In addition, CSO has an office in each of the nine provinces. Under the new structure, Provincial Statistical Offices are headed by Principal Statisticians.

Figure 3.1 depicts a simplified current structure of CSO.

3.4 INVENTORY OF RESOURCES AND INFRASTRUCTURE

(a) Human resources

(i) Staff Inventory

The CSO has a total of 656 establishments. Of the established posts, 547 or 83.4% are filled. However the office was in the process of filling in all the vacant posts at the time of undertaking the consultancy. Of the filled posts, 98 or about 18% are filled by women and 449 by men. This shows a gender imbalance in staffing at CSO. The staff are categorized as professional, sub-professional, technical and support. Table 3.1 presents CSO establishments by category.

Table 3.1: Current CSO Establishments

Staff Category	Established posts		Number filled			Vacant	% Filled
	Number	% of total	Males	Females	Total		
Professionals	80	12	47	13	60	20	**75.3**
Sub-professionals	207	32	109	42	151	56	**73.1**
Technical staff	110	17	91	3	94	16	**85.5**
Support staff	259	39	202	40	242	17	**93.4**
Total	656	100	449	98	547	109	**83.4**

Professional staff

Professional staff are graduates with University degrees in statistics or related fields e.g. demography, computer science, economics and mathematics. Professionals also include degree holders in accounts, management, sociology and library science.

Professional staff operate at a higher level. The current establishment provides for 80 professional staff or 12.3% of the total establishment. Of the professional posts, 60 posts or 75.3% of the total are filled. However, of the 60 filled professional posts, 13 posts or 21.3% are filled by females.

Sub-professionals

These are holders of a diploma in various subjects. They generally perform at lower and intermediate levels and moreover in supportive roles to professional staff in such areas as data collection, compilation, computing, etc. There are 207 established posts for sub-professional staff or 31.6% of the total establishments. This works out to be about three (3) sub-professional for every professional. Of these posts, 73.1% are filled.

Of the 151 filled sub-professional posts, 41 posts or 27.6% of the posts are held by females. This is the highest percentage of females in any of the staff categories.

Technical staff

These are holders of various qualifications in technical fields including cartography, printing, mapping and repairs of various types. There are 110 technical posts in the establishment. Of these posts, 85.5% are filled. The number of females in this category is only 3 or 3% of the total staff in the category. Table 3.1 presents CSO establishments by category.

Support staff

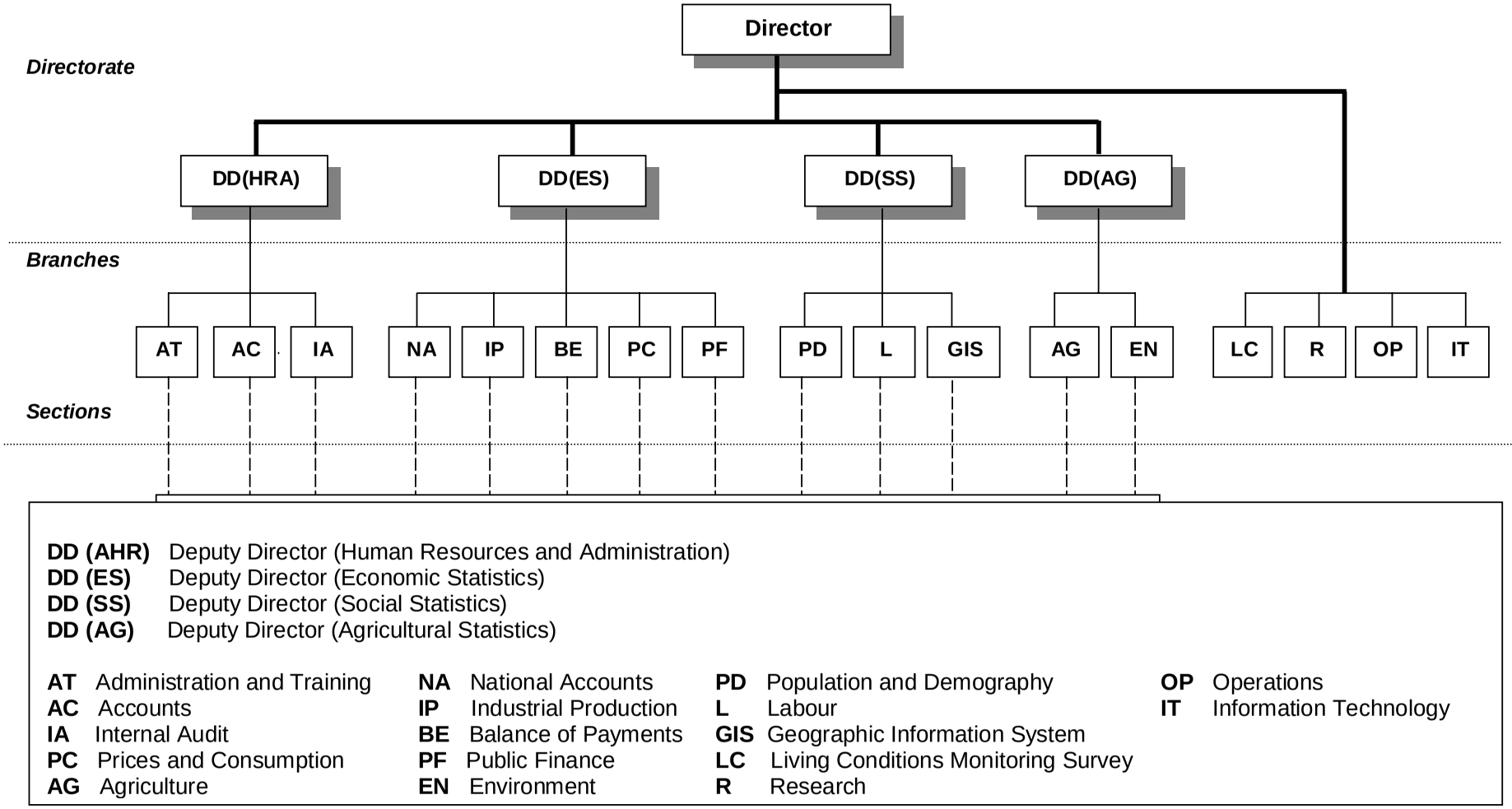
There are 259 established support staff positions. These represent 39.4% of the total establishments, making this the biggest staff category. Of these posts, 93.4% are filled. The percentage of females in filled positions in this staff category is 16.5%.

(ii) Capacity building programme

The main statistical capacity building programme of CSO was the In-Service Training Programme. The programme was started in July 1975 with financial and technical assistance from UNDP in order to improve data collection and processing in the country. Government undertook to fund the programme when UNDP assistance came to an end in 1984. However, in 1994, the British Overseas Development Agency (ODA) sponsored the programme through a Household Budget Survey that had included training.

Under the programme, training was undertaken at two levels, namely Primary Level which lasted for six (6) months and Intermediate Level which lasted for nine (9) months. The programme was open to all CSO non-University graduate staff. The programme was also open to staff from Statistical Units in Government Ministries, parastatal organizations and private sector. Outside the CSO, the main beneficiaries of the programme were the Ministries of Health and Education. After about two sessions, it became clear that those without grade XII had a lot of difficulties to follow the lectures and their failure rate was very high. This resulted in the entry requirements being raised to grade XII school level. Those who passed with either distinction or credit or got a good pass qualified for intermediate level.

Figure 3.1: Current Structure of CSO



Only UNDP provided a full time Training Advisor. Teaching in the programme was mainly done by CSO professional staff (mainly heads of Sections) who gave lectures in their areas of competence and specialisation. Further, the Assistant Director in-charge of training served as a counterpart to the Advisor. This shows the importance CSO attached to the programme.

By the time the programme had closed in 1995, a total of 15 sessions at Primary Level and 8 sessions at Intermediate Level had been undertaken. This saw a total of 304 staff trained at Primary Level and 223 at Intermediate Level. The training introduced the participants to main statistical concepts and definitions; questionnaire design; data collection, processing and analysis. At intermediate level, a good part of the training was a field project. The programme was practical and very relevant to the work of participants.

The training programme led to improvements in statistical production among participating institutions that are major suppliers of some data. Questionnaires sent to these institutions were now better filled because the staff had been empowered. There was therefore an improvement in data quality. In addition, the programme enhanced collaboration between CSO and these institutions.

The programme was also very successful in career development for participating individuals. Those who successfully completed the intermediate level gained entry into other institutions for further studies as follows: 13 went for Intermediate course in India; 29 for a Diploma Course at the Eastern Africa Statistical Training Centre (EASTC) in Tanzania; and 9 for a degree course at Makerere University in Uganda. Although figures were not available, it is known that a number of the successful participants progressed to Universities in the U.K. for Masters degree courses while others went to the International Statistics Training Centre in the U.S.A. The staff also benefited in terms of progression in the service. A good number of staff currently in CSO management are a product of the programme. In the case of lecturers, the programme worked as a refresher course through reading materials when preparing lecture notes. As was mentioned earlier, all heads of Divisions/Sections became automatic lecturers and a few professionals taught in their areas of specialisation such as statistics, mathematics and demography.

The programme faced a number of problems. Firstly, the lecturing job in the programme was an added responsibility to the usual day-to-day work but was not compensated. The lecturers were expected to come up with handbooks. The writing of handbooks and lecture notes was time consuming and taxing but did not attract compensation. Secondly, reading materials were not easily found, because what the office had was inadequate. Thirdly, since the programme was closed to serving people working in government, CSO had trained almost everyone so numbers of people to train had reduced greatly. The training could not be opened up to school leavers because it was not legalised i.e. the CSO was not recognised as a training centre. As a result of these and other problems, the programme ended in 1995.

b) Financial resources

From treasury

Like for all Government Departments, the main source of funds to run CSO has been Government. In nominal terms, the subvention from Government to CSO has been going up as can be seen from the following table. The huge increase in the subvention in 2001 and 2002 was due to the restructuring of the Department whose main implementation began in 2002. For instance, the wage bill increased by 50% between 2000 and 2002. These figures exclude Government contribution to the Population and Housing Census as well as the Economic Census.

Table 3.2: Government subvention to CSO 1998-2002

Year	1998	1999	2000	2001	2002
Amount (Kwcha '000,000)	2,316	2,804	3,457	7,919	11,057

Donor contribution

Several donors have played a key role in the development of CSO statistical programmes over the years. The following table shows the activities that have been fully or partially funded by donors in the last four years and the amount of support.

Table 3.3: Role of donors in CSO statistical activities

Activity	Year	Donor	Amount
1. Census of Population and Housing	1998	UNFPA	K629,117,191.00
	1999	UNFPA	K713,447,147.71
	2000	Finland	US$110,000.00
		UNFPA	K1,150,822,047.34
		UNHCR	K200,000,000.00
		DFID	US$2,367,627.00
		Denmark	US$56,000.00
		Netherlands	K1,080,664,901.36
		Germany	US$20,000.00
		Norway	K1,352,672,746.00
		Japan	K1812,948,917.00
		University of Michigan	US$6,000.00
		USAID	US$500,000.00
	2001	Canada	C$608,461.02
2. Living Conditions Monitoring Survey	1998	Norway	US$900,000.00
		London School of Hygiene and Tropical Medicine	US$25,000.00
3. Agriculture and Environment	1999/2000	World Bank (ASIP)	US$274,060.00
4. Zambia Sexual Behaviour Survey	2000	USAID	K576,044,993.00
5. Zambia Demographic and Health Survey	2001	JICA, DANIDA, UNDP, UNFPA, USAID	K3,682,827,360.00
6. Zambia Demographic and Education Survey	2002	USAID	US$250,572.00

From the above table, it can be seen that in the last four years, total donor contribution to CSO activities has been of the order of about US$8,632,232.

c) Infrastructure

Infrastructure plays a crucial role in enabling an organization to function efficiently or inefficiently. It also plays an integrative role in business management. What sort of infrastructure is available to CSO to be able to carry out its work? This question is answered by looking at three main types of infrastructure, namely the physical infrastructure, survey infrastructure and IT infrastructure.

(i) Physical Infrastructure (Office Space)

The work of any organization can be supported or hindered by the physical environment in which it operates. The CSO has never had a home purposely built for it. Since its establishment in 1964, the CSO has been occupying former military barracks with many temporary structures. Since September 2001 when construction of the new offices for CSO started, staff have been scattered. Some are in the old buildings, some including management are in the former National Commission for Development Planning (NCDP) building and some are in rented premises in town. This has created immense management and communication problems for the office. What is more, there is now no suitable space for the Library which was previously located in one of the temporary buildings which has been demolished to create room for the new office block.

The Provincial Statistical Offices (PSOs) are also facing a serious problem with office space. Eight (8) of the nine (9) PSOs are in rented premises and only one is housed in Government premises. The following table gives the number of staff and available office space in each PSO.

Table 3.4: Office space in Provincial Statistical Offices

No.	Province	Ownership	No. of rooms	No. of staff	Average no of staff per office
1.	Central	Government	5	40	8.0
2.	Copperbelt	Rented	10	43	4.3
3.	Eastern	Rented	10	46	4.6
4.	Luapula	Rented	10	33	3.0
5.	Lusaka	Rented	15	44	2.9
6.	Northern	Rented	13	45	3.5
7.	North-Western	Rented	9	38	4.2
8.	Southern	Rented	7	43	6.1
9.	Western	Rented	6	42	7.0
Total			**85**	**374**	**4.4**

It can be seen from the table that on average, there are at least 4 members of staff per office. The average size of office rooms in the provinces and districts is about 9m2. The problem is worst in Central Province, Western Province and Southern Province where the average number of staff per office is 8, 7 and 6 respectively.

(ii) Printing

The CSO has a well-established printing press, which makes the organization self-sufficient in printing. The press is able to handle all CSO's publications. The only service it outsources is colour separation. The type of work it does varies from full colour to single colour production. It mainly produces brochures, fliers, calendars, posters and covers of reports in full colour. Bulky production of survey questionnaires and other related survey instruments are produced in a single colour (black).

The press is a Section in the Publication and Marketing Branch. Due to recent restructuring, the Section has only two permanent members of staff. It is relying heavily on students on industrial attachment from Evelyn Hone College.

The press has recently been overhauled and gives the CSO excess printing capacity which could be used to earn revenue for the CSO by taking on outside printing work.

(iii) Library Services

Demand for information makes libraries desirable in organizations. Libraries have a role of collecting, storing, preserving and disseminating information. CSO library provides a valuable source of information to the public, policy makers, students and researchers concerning issues on population, agriculture, economic and gender issues, etc. Government in particular benefits greatly from statistics in planning. The library helps in making available published statistical information. It also serves as a reference and depository center for all statistical information for local and international statistical information, thereby reinforcing capacity of the institution in providing and responding to information demands from the international community and the public.

The CSO library has an estimated collection of well over 8,000 copies. The clientele for CSO library includes, CSO staff, researchers from both private and government institutions, students from different institutions especially those from the University of Zambia – Demography department, Non-Governmental Organizations (NGOs), International Organizations and agencies, and the public at large.

A new system of sending (a weekly list of new publications received) to staff has been introduced. Members of Staff are sent titles with short abstracts of publications received either on intranet (to be introduced) or as hard copies. In the past, staff had to visit the library to be able to know what had been received. Computerization of CSO library has been going on since July, this year. However the exercise has taken long because of inadequate staff. Currently the library only has 2 library assistants working in the library. There has been no librarian or assistant librarian for a long time now.

The original library building has been demolished to pave way for a modern structure. This has adversely affected library services with the library being temporarily housed in the former canteen, which is inappropriate.

d) Survey Infrastructure

(i) Permanent Field Organization

A Field Organization plays a crucial structural role as the main link between data producers and data suppliers. Its main objective is to handle field data collection operations including controlling the flow of information to and from the headquarters; recruitment, 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 filled questionnaires; and co-ordination of all other functions associated with field work.

The CSO has a well established Permanent Field Organization (PFO). It opted to establish a PFO as opposed to a temporary FO because a PFO has the possibility to acquire experience and competence in planning and efficient execution of programmes of field work and the possibility to plough this experience back to improve the quality of data from subsequent field operations; more easily assess and control non-sampling errors; creation of a robust capability to respond to data users' requirements and, in particular, demands for urgently needed data; to make more thorough and cost-effective follow-up or call-back and hence greater control of non-response; achieve cost-effectiveness in field data collection.

The PFO comprises a Provincial Statistical Office (PSO) headed by a principal statistician, a systems analyst, statisticians and statistical officers, statistical clerks and data entry operators, a cartographer, mappers, and clerical staff. Altogether, there are 403 officers or 60% of all CSO staff in the PFO. The PFO has clearly defined roles as well as logistical support complement in form of vehicles, motorcycles and bicycles, computers, etc. Enumerators and field supervisors are hired on a temporary basis to execute censuses and surveys.

Originally data cleaning and entry into the computer was done centrally in Lusaka. However, in recent past, this function has been decentralized to provinces. It is also expected that with up-grading of provincial statistical offices, it will be possible to begin to do data analysis at these offices and write provincial reports for use within provinces.

(ii) Geographical Frame

CSO has developed a **Geographical Frame (GF)** to support household-based data collection activities. In order to carry Censuses of Population and Housing, it is common practice to divide the whole country into compact and well-defined small areas, each corresponding to the workload of one enumerator. These are called Enumeration Areas (EAs). The Geographical Frame includes a list of these EAs together with supplementary information about them including number of households and facilities in each one of them.

The EAs are mapped and are updated on a continuing basis by mapping staff from the PSOs. The GF is used as a sampling frame for household-based surveys including the Population and Housing Censuses, agricultural survey, Living Conditions Monitoring Survey, Demographic and Health Survey, etc. In addition, the

GF makes it possible to do spatial referencing and analysis through the Geographic Information System (GIS). It cannot be emphasized enough that the GF also plays an essential coordinating role.

Following completion of 2000 Population and Housing Census, CSO has embarked on an exercise to transform EA boundaries into digital database, create a statistical database linked to the geography of the country, produce the census atlas and various survey thematic maps, generation of community statistics wall maps showing location of amenities in communities, and carry out spatial analysis of social demographic, poverty mapping and economic trends using the GIS tools.

(iii) Central Register of Business Establishments

CSO has established a Central Register of Business Establishments (CRBE) as a comprehensive database holding information on registered business establishments in the country. The information held by the CRBE, includes information on: location, type of ownership, legal status, economic activity engaged in and total number of employees engaged.

The CRBE 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 CRBE is a basis for collecting reliable economic statistics in the country. The following CSO surveys are based on samples selected from the CRBE:

- Employment and Earnings Inquiry (quarterly survey)
- Economic Census (annual)
- National Income Enquiry (annual)
- Agricultural Surveys (large scale holdings) (annual)

In addition, the CRBE is used importantly for statistical purposes by researchers at the University, Ministry of Commerce, Trade and Industry, Zambia Revenue Authority and other Government and private organizations. The CRBE has served the purpose of serving as a coordinating tool for statistical production.

Before 1991, the CRBE was kept on hard copy and was difficult to maintain. Now the CRBE, which contains about 26,000 records, is fully computerized. The last comprehensive updating of CRBE was done in 1991. In 1998/99, there was an annual up-date. A comprehensive up-date will be part of the Economic Census since the CRBE will be the basis for the census.

(iv) Population census data

Population census data are used as a basis for calculating many rates used to monitor socio-economic indicators. It is, therefore, is part of the whole national statistical infrastructure. The data are collected in a decennial Population and Housing census. The last such census was conducted by CSO in 2000.

e) IT Infrastructure

Information Technology (IT) has presented major opportunities to organizations and individuals to enhance their performance. IT can dramatically affect organizations' products and services, and has become a powerful tool for making organizations more responsive, efficient and flexible. It offers important benefits at both personal and organizational level.

The CSO used to have a Data Processing Unit (DPU) whose functions were limited to data processing. A fully-fledged Information Technology Branch (ITB) has now been established to provide IT solutions to the organization. In addition, substantial investment has been made into computer equipment and networking.

The IT infrastructure includes:

IT Standards and Policy

The ITB has prepared a comprehensive **IT Standards and Policy** document. However, the document has not yet been ratified. The document sets standards and guidelines for: computer hardware and software, computer replacement, virus protection, use of computers and internet resources and electronic mail.

Computer equipment

CSO has 80 computers in good working conditions. Because the above computer standards and policy are not yet adopted and implemented, CSO has a variety of computers that include Dell Tower, IBM, Compaq, Mecer, HP. Of the 80 computers, 9 are in the provinces. Of the 69 computers for which purchase details were available, 49 computers or 71% of the total were bought in 2002, 8 computers or 12% in 2001, 3 computers or 4% in 2000, 2 computers or 3% in 1998 and 2 computers or 3% in 1996. All computers except 19 or 26% of the total use Windows 2000. The 19 computers use Windows 98. All computers use Norton virus guard.

There is no regular timetable for servicing the computers. They are serviced on request or when they have broken down. In order to minimize computer downtime, CSO established a Computer Maintenance Unit in early 1990s. The Unit is run by four computer technicians

Local Area Network

Stephen R. Gordon *et al* observed in 1996 that "*Information and resource sharing systems are as important to modern organization as are human nervous systems to human beings*"[11]. Local Area Networks (LANs) facilitate sharing of resources which include data, computers, applications and printers. CSO has been able to complete the first phase of installing such a LAN. The LAN links Demography, Cartography, IT Branch and the Directorate. The staff connected through the LAN, are able to quickly and easily share files, modify databases, send memos, run programs on remote computers and get access to information in databases that would be too massive to

[11] ***Steven R. Gordon et al., Information Systems : A Management Approach (1996)***

fit on a small computer's hard drive. Because of the scattered nature of the office, only 33 computers or 41% of the total are connected to the LAN. Further extension of the LAN will await completion of the new CSO office block. There are also plans to establish a Wide Area Network (WAN) covering all PSOs.

Database

CSO has many rich subject-based datasets which have been built over time through surveys and censuses. These datasets are found in different Divisions of the organization. In addition, CSO collects a lot of secondary data from various sources. Although there has been much talk since 1994 about developing a database that can hold existing and future datasets, this has not been done. Development of such a database would eliminate data inconsistencies, make it easier to access data and to do inter-linked analysis, including modeling. In particular, such a database would act as a one-stop-centre for official statistics in the country.

There are plans to establish statistical databases within subject-matter areas in 2003 and to network these databases.

Web site

CSO is now developing a web site with good search facilities and links. It is expected that the site will be launched by the end of this year. A lot of CSO data will be disseminated using the site which users will be able to access online.

Staffing

An ideal structure for the IT Branch that is expected to be responsive to IT needs of CSO has been proposed. In this structure, new posts have been identified. These include: network administrator, database administrator, PC support technicians, network support technicians and web development officers. The IT Branch, at the moment, has staff that lack specialized IT skills, the CSO needs to be able to take full advantage of advances in IT. Training needs for IT staff have been identified and some training has already occurred.

e) Knowledge management

Knowledge management among data producers in African countries is unsatisfactory. Knowledge management is a major aspect of governance and is essential for effective performance of institutions. It has been given the following explanation: "*Knowledge management promotes an integrated approach to identifying, capturing, retrieving, sharing, and evaluating an organization's information assets"* [12]*.* These assets include customer (users) relationships, documents, policies and procedures, innovative products and services, high quality and responsive operating systems, information technology and databases, uncaptured tacit expertise and experience stored in individual worker's heads and employee capabilities, skills and motivation. *"The integration of information sources*

[12] ***The eMarketplace: Strategies for Success in B2B eCommerce by Warren D. Raisch, MacDraw-Hill, 2001***

is at the heart of knowledge management" [13]. The pre-requisite to efficient knowledge management is a "*culture of sharing and team work that is conditioned by socio-cultural environment*"[14].

Like other national statistical offices in Africa, CSO's record in knowledge management shows inadequate documentation of methods/procedures, storage of expertise and experience as well as institutional memory in people's heads and inadequately developed and managed databases. It was also mentioned earlier that library services are now virtually non-existent at CSO.

3.5 SUMMARY OF CURRENT STATISTICAL ACTIVITIES AT CSO

(a) Secondary data compilation

CSO compiles a lot of secondary data - already collected from source especially by various institutions and Government Ministries. Secondary data are compiled on: migration and tourism, vital events, education, health, employment, electricity, exports, transport and communication, finance, forestry, weather and climate, environment, fisheries, marketing, money supply, balance of payments, motor accidents, etc.

These data are published by CSO in its Quarterly Digest of Statistics. It is important to note that a lot of these data will be required for monitoring the implementation of the PRSP.

(b) Sample surveys

CSO collects up-to-date and reliable socio-economic data from periodic surveys. Some of these surveys are periodic while others are ad hoc. These surveys and especially the periodic ones will be the main source of information on final level indicators on poverty and access/utilization of social services. The periodic surveys which have a nation-wide coverage include:

Crop Forecast Survey (annual): This survey collects data on food crops grown in advance of crop harvest. The data are used for early warning purposes.

Post-Harvest Survey (annual): The survey collects data on food production. The data are used to confirm figures produced earlier and for construction of National Food Balance Sheet. This survey will provide data required to monitor agriculture-related poverty indicators.

Demographic and Health Survey (quinquenial) collects 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, etc. The survey has been conducted in 1992, 1996 and 2001/2002. There are plans to conduct it in 2003. This survey will be invaluable in monitoring key social indicators with a strong health dimension.

[13] ***Consultative Seminar on Governance of National Statistical System 28 – 30 May 2002, Singapore, Draft Summary of the Proceedings***

[14] ***Ibid***

Living Conditions Monitoring Survey is a successor to the Social Dimension of Adjustment Priority Survey carried out in 1991 and 1993. It collects data on living standards of households and persons in the areas of education, health, income levels and sources, food production and consumption, access to clean and safe water and sanitation, housing, and access to various economic and social facilities and infrastructure such as schools, health facilities, transport, etc. The survey has been carried out in 1996 and 1998. The survey is being repeated in 2002/2003 as an Integrated Household Survey. This survey will be the main source of quantitative information on final level poverty indicators. It has been decided to carry out this heavy survey every 5 years and in between to carry out a light Indicator Monitoring Survey.

Employment and Earnings Inquiry (quarterly) collects data on the size of employment and unemployment and provides measures of cash income, etc. The survey has been conducted annually since 1991. Although this is a quarterly enquiry, CSO could only carry it out on a half-yearly basis. It was last carried out in April 2002.

Consumer Price Survey (monthly) collects data on consumer prices from 10 major towns and households in rural areas of the country. Data are collected on food, beverage and tobacco; clothing and footwear; rent and household energy; furniture and household goods; medical care; transport and communication; other goods and services.

Household Budget Survey (3-5 years) is carried out generally to: (a) provide estimates on the level and distribution of household expenses, (b) provide the basic information needed to revise the consumption basket and weights for the consumer price index, (c) provide data to improve estimates of household final consumption expenditure component of the GDP through expenditure approach, and (d) provide as a by-product, indicative data on some of the socio-economic aspects of the households and activities of household members.

Although this survey is supposed to be carried out every after 3-5 years, because of its time and cost-intensity, many years elapse before it is repeated. The last Household Budget Survey was carried out in 1993/94. The previous one had been carried out in 1974/75. The 2002/2003 LCMS has incorporated this survey component.

(c) Censuses

CSO carries out periodic censuses to provide benchmark data and a basis for conducting future surveys. The censuses carried out by CSO 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; 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.

The latest census was carried out from 16 October to 5 November 2000. This was the fourth census since independence in 1964. The other censuses were conducted in 1969, 1980 and 1990. The census was conducted with little technical assistance. Apart from one long-time advisor in data analysis and a couple of short-term advisors especially in cartography, the census was mainly carried out by Zambians. The de facto population of Zambia released in November 2002 is 9.3 million. Operational problems have led to delays in data analysis and release. In November 2002, a report with core indicators (mainly for monitoring PRSP) was released and all other analytical reports are expected to be released in March 2003.

Agriculture and Livestock Census (decennial) is conducted to provide data on the organization and structure of the agricultural sector and a benchmark for Crop Forecast Survey and the Post-Harvest Survey. The last census was conducted in 1991/92. A fresh census is planned for 2002-2005.

Economic Census (annual) is conducted to collect data that will measure the value added in all the sectors of the economy vital for the production of a full set of National Accounts including Gross Domestic Product (GDP). This census should be carried out annually but it was reported that it has never been conducted in Zambia before. It is planned to be conducted in 2003.

f) Other Statistical work

In addition to the above activities, CSO carries out a number of statistical activities on a continual basis. These activities include up-dating the Central Register of Business Establishments (CRBE); compiling National Accounts; compiling the Consumer Price Index (CPI); compiling the Index of Industrial Production; up-dating of EAs; development of statistical methods and standards for data production; data analysis.

e) Compliance with international standards

It is important to mention that in carrying out the above activities, CSO uses internationally recommended standards, classifications, guidelines and methodologies especially those of the United Nations. Where necessary, all these are adapted to national conditions.

In particular:

- The foundations of the Office are rooted in the Fundamental Principles of Official Statistics adopted by the United Nations Statistical Commission in 1994;
- CSO 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;

- CSO is still using the 1968 System of National Accounts (SNA) with a few modifications based on 1993 SNA. Full implementation of 1993 SNA is contingent on the Economic Census being done in 2003;
- Classification of Individual Consumption According to Purpose (COICOP) is used for recording prices and expenditure;
- CSO uses International Standard Industrial Classification (ISIC) Rev.2 for classifying commodities;
- Before 1996, CSO used Standard International Trade Classifications (SITC) to harmonize trade statistics. Since 1996, it has been using Harmonized System (HS – 1996);
- Public finance statistics are compiled using the IMF's Government Finance Statistics (GFS) Classification. Although the GFS classification was updated in 1993 through GFS-2000, CSO and other national offices in the sub-region have not yet migrated to the updated version;
- Agricultural Censuses, Population and Housing Censuses and the Census of Business Establishments have all benefited from United Nations guidelines for conducting the censuses;
- Subject-specific surveys have also benefited from guidelines for conducting such surveys.

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

3.6 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 is desirable for a national office. Such a policy is essential to provide a **release calendar**, to indicate what information should be given out in press releases and what should be disseminated through statistical reports, and what costs should be attached to access of different types of statistical information, and should provide for **metadata** (information about the data). This is the essence of GDDS.

The CSO, however, has not developed a clear-cut dissemination policy to-date and Divisions have been left to disseminate reports they produce and publish. These reports lack a common feel and touch, vary in quality and often lack timeliness. The problem has been exacerbated by a high turnover of skilled staff.

Following the July 2001 restructuring, a Dissemination Unit was established at CSO to work closely with the Publications and Marketing Branch. The Unit was established to spearhead the dissemination of data and information from all Branches and Divisions in CSO. However, until an officer is appointed to take charge of the Unit, the Publications and Marketing Branch will remain responsible for dissemination. This is especially crucial with the pending dissemination of the 2000 Census results.

When the Publications and Marketing Branch was established in 2001, it started an activity to release a biannual Publications List giving information on available publications (title and cost), forthcoming publications (title and costs) and an order

form. The first Publications List was produced in 2001. The updated list was distributed on 18 November 2002 when the CSO was celebrating Africa Statistics Day.

For each survey and census, CSO releases a statistical report. In addition to these reports, the organization produces two periodic reports that are flag bearers of the organization, namely:

Quarterly Digest of Statistics: This digest presents socio-economic data which change frequently e.g. consumer prices, agricultural production, electricity supply, crime rates, etc. as well as annual time series data. This quarterly digest was last printed for the third and fourth quarters of 2000.

Zambia in Figures: This annual publication presents annual data on the whole economy. It was, however, last published in 2000.

CSO STATS Newsletter: This publication is planned to be produced twice in a year. It was last published in September 2001.

3.7 COORDINATION ARRANGEMENTS

The CSO is mandated to coordinate the NSS – data producers, users and suppliers of data. This is a heavy responsibility that calls for well-defined coordination arrangements. The main arrangement for foster dialogue between data producers and users has been User-Producer Committees. Formation of these Committees is one of the main pillars of the **Addis Ababa Plan of Action for Statistical Development in Africa in the 1990s**. The Plan was adopted by the African Ministers responsible for planning in 1992 to halt the decline in statistical production in the 1970s and 1980s and to lay a firm basis for development of national statistics in African countries.

Two types of User-Producer Committees have been formed, namely ad hoc and standing committees. The ad hoc committees have been established to play short-term advisory roles and have been disbanded after playing their roles. A good example in this respect is the Inter-Ministerial 2000 National Census Committee. A good example of a standing committee is the National Committee on Early Warning (NCEW) that is chaired by the Permanent Secretary, Ministry of Agriculture and Fisheries. This inter-Ministerial and inter-agency committee was established in 1982 to approve crop forecast estimates and to make policy pronouncements on matters of food security. This Committee meets at least once a year. CSO is a very important member of this Committee. Other standing committees include the inter-institutional Balance of Payments Committee and User-Producer Committee on Poverty Monitoring and Analysis Component of Zambia Social Investment Fund (ZAMSIF)

3.8 NATIONAL COLLABORATION

In the past, the **Unified Statistical Service (USS)** played a big role in fostering collaboration between CSO and line Ministries. CSO has continued to pursue collaboration and coordination with not only line Ministries but also with other national institutions.

The following are some examples of the more enduring collaboration arrangements between CSO and national institutions.

Collaboration with Ministry of Agriculture and Cooperatives

Before 1992/93, the Ministry of Agriculture, Food and Fisheries and the CSO were carrying out separate and independent crop forecast surveys. The two surveys used different methodologies, with the Ministry of Agriculture purporting to do complete enumeration of all categories of farmers while CSO was collecting data from only a sample of farmers. The two surveys were not rationalized or coordinated with the result that the resulting output were not consistent. To arrive at the "official forecasts", the Early Warning Coordination Committee (EWCC) would make a qualitative evaluation of the two sets of data from the two surveys, taking into account factors that directly affect crop production e.g. agrometeorological conditions, input supply, availability of credit, etc. Since 1993/94 agricultural season, the two surveys have been integrated and the Integrated Crop Forecast Survey is jointly carried out by CSO and the Ministry.

Collaboration with the Examination Council of Zambia (ECZ)

In order to speed up the processing of data from the 2000 Population and Housing Census, CSO took a strategic decision to use Optical Marker Recognition (OMR) technology to scan census questionnaires. It took the cue from the Examination Council of Zambia (ECZ) that had been using the technology for 10 years to mark student examinations. The CSO staff were attached to ECZ for nine months to learn how the technology works and to test its suitability for census work.

The CSO collaborated with ECZ to design the census questionnaires and to capture data using scanning facilities at ECZ. Government upgraded the equipment at ECZ and there is an agreement between CSO and ECZ for ECZ to maintain the equipment so that it can be used in the next census.

Collaboration with Research and training institutions

There is evidence that data users and subject-matter specialists from different research and training institutions (e.g. Universities) are increasingly playing a role, as indeed they should, in analysis of national data and reporting. Where this has been done, it has very much enriched the analysis and added value to the original data.

One such institution is the Institute of Economic and Social Research at the University of Zambia. Among other things, this Institute was involved in the sector performance analysis of the Agricultural Sector Investment Programme (ASIP) that the Ministry of Agriculture and Cooperatives implemented from 1996 to 2000. The Institute did quantitative analyses using data collected mostly in the Post-Harvest Agricultural Survey which CSO in collaboration with the Ministry of Agriculture and Fisheries carries out every year as part of its integrated agricultural survey programme. The Institute was able to propose improvements in the questionnaire and this feedback was very helpful to CSO in improving its fieldwork.

However, funding constraints have made it difficult for this collaboration to continue.

Collaboration with Central Board of Health and University of Zambia

CSO conducted the Zambia Sexual Behaviour Survey in 2000 in collaboration with the Central Board of Health (CBoH) and University of Zambia (UNZA), Demography Unit to assess knowledge, attitudes, practices and behaviour related to HIV/AIDS among individuals, families and communities. Technical assistance was provided by USAID through MEASURE Evaluation Project of the Carolina Population Centre, University of North Carolina.

Collaboration with international agencies in Zambia

CSO has collaborated with many international agencies to carry out specific surveys and/or analyze existing data. These agencies include ODA (now DFID), UNFPA, EEC, UNICEF, ILO, USAID, Macro International Inc, etc.

3.9 INTERNATIONAL COLLABORATION

CSO is a collaborator in a number of international statistical development programmes which include the following:

With Southern Africa Development Community (SADC)

The CSO is a member of the **SADC Statistics Committee (SSC)**. The Committee was established in 1996 to coordinate the development of statistics in SADC member countries. Membership of the Committee includes: All 14 Directors of National Statistical Offices, SADC institutions (*Commissions, Sector Coordinating Units but excluding Secretariat*), Central Banks, Chambers of Commerce, etc. The Committee has sub-committees and/or constitutes task forces as and when need arises. Representatives of selected international and regional organizations are invited to attend meetings of this Committee as observers. The Committee meets 3-4 times a year.

In the 1999-2000 Work Programme, the Committee chose five priority areas for its work, namely: harmonization of Population and Housing Census 2000 round, harmonization of national accounts statistics, harmonization of SADC statistics, development of regional statistical database, SADC statistical training and informal sector[15]. The Committee has been able to assist countries improve their statistical production and to rationalize use of international resources (technical and financial) for the benefit of member countries. Zambia has been a beneficiary of these programmes. In addition, Zambia has benefited from membership of the Regional Early Warning System (REWS) for food security that was established in 1987. The REWU has developed methodologies, provided training and backstopping services and provided various types of equipment to national Early Warning Units.

[15] **SADC:** ***Facts and Figures 1999, SADC Statistics, Gaborone, Botswana***

With Common Market for Eastern and Southern Africa (COMESA)

Zambia is a member of the Common Market for Eastern and Southern Africa (COMESA). COMESA has been promoting harmonization of external trade statistics in member countries. Since 1998, CSO has been supported by COMESA in its development of external trade statistics. This support has included supply of computers, training and EUROTRACE software package that is used to manage external trade data. The package was developed by CESD-Communautaire on behalf of the Statistical Office of European Community (EUROSTAT). This package allows:

- more rapid access to data,
- avoidance of repetitive manual calculations,
- thus reducing the risk of errors,
- easier detection of recording errors,
- reduction in time taken to prepare provisional statistics,
- management and storage of long series of historical data.

United Nations Economic Commission for Africa

Over the years, CSO has benefited from Zambia's membership in the United Nations Economic Commission for Africa (ECA).

During the period 1970-93, ECA launched five regional technical assistance programmes with the support of bilateral and multilateral cooperation agencies. These programmes had great impact on the development process of African statistics including statistics in Zambia. The programmes were: the African Census Programme, the African Household Survey Capability Programme, the National Accounts Capability Programme, the Statistical Training Programme for Africa and the Statistical Development Programme for Africa.

The assistance ECA has given to the CSO and national statistical offices in member countries includes, but is by no means limited to: development of concepts, definitions and classifications suited to the African region; provision of advisory services; preparation of guidelines in respect of national statistical development plans; preparation and adaptation of handbooks and manuals; and co-ordination of technical cooperation.

DFID/IMF GDDS Project

The International Monetary Fund (IMF) has developed a **General Data Dissemination System (GDDS)** to, (i) encourage member countries to improve data quality, (ii) provide a framework for evaluating needs for data improvement and setting priorities in this respect, and (iii) guide member countries in the dissemination to the public of comprehensive, timely and accessible statistics. The GDDS has four main dimensions, namely, data characteristics (coverage, periodicity and timeliness), data quality (including plans for improvement), data access and data integrity.

Now in its fourth year, the GDDS is proving useful in offering a sound framework for developing better quality and more timely statistics to support policy development and monitoring. There are now 39 IMF member countries participating in the GDDS. These countries now have descriptions of their statistical practices and plans for improvements ("metadata") posted on the Fund's Dissemination Standards Bulletin Board (the DSBB at www.dsbb.imf.org).

Since February 2002, Zambia has been benefiting from participation in the DFID/IMF GDDS Project that covers 14 Anglophone countries. CSO is the coordinator of the Zambia GDDS Team where the main institutions include CSO, Bank of Zambia and Ministry of Finance and National Planning. Other institutions involved include CBoH, Ministry of Education and Lusaka Stock Exchange.

3.10 USER PERCEPTION OF CSO

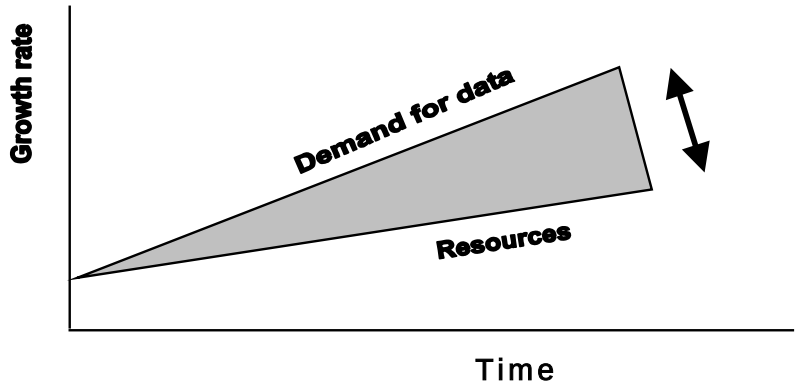
CSO has not been carrying out surveys to establish public awareness about familiarity with the institution, frequent user satisfaction with her products and services, and to determine user demand. So it is not fully aware about user perception of it as an organization and its products and services. During the exercise of designing this Strategic Plan, the perception of frequent users of CSO products was accessed. These users include line Ministries, government institutions, private sector operators, civil society (NGOs and the press), research and training organizations, donors and international organizations.

General perception

The general perception of frequent users is that statistics is an important resource which should be harnessed for national development. CSO is perceived to have a major role to play in this process. Specifically, CSO 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.

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 CSO 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 as can be seen in the following figure. The effect has been failure to build requisite sustainable capacity to meet user needs, retain highly qualified and skilled staff, conduct critical surveys or repeat such surveys and produce accurate and timely data.

Figure 3.1: Growth in demand for data and resources for their production



Professional independence

There is the perception that CSO is not fully exercising its professional independence and some users question the integrity of CSO's estimates of such important indicators as GDP growth rate, Consumer Price Index (CPI), Index of Industrial Production (IIP), etc. Unfortunately, some questions have also been raised about the integrity of data from the 2000 Population and Housing Census.

CSO needs to correct this perception and be seen to exercise professional independence without interference from political processes in order to enhance the integrity, impartiality and credibility of official statistics. In his opening address at an Indicator Workshop in Pretoria, in April 2002, the South African Minister of Finance stressed the need for good practice in official statistics. He said, *" I like good news, I would like to tell good stories about how well we are performing as a country, but that is not what I need, so I expect statistics to give me what I need and not what I like*". The same point has been underscored by the Secretary of State for International Development in the British Government. 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*"[16]. Professional ethics demand that CSO remains ever conscious of the need to produce and release statistics that are needed even when such statistics are not liked especially by politicians.

Data quality

Some sophisticated users (analysts) who have had access to CSO's raw data have found that the quality is not always good as it could be. Some of these users reported finding many errors in datasets that CSO used to run off final tables and to do analysis. For instance, one user reported that many errors were found in the 1991 and 1993 Priority Survey raw data files and in the 1996 and 1998 Living Conditions Monitoring Survey raw data files. These errors were attributed to inadequacy of data entry programmes to track and flag these errors.

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

These same users have also questioned the quality of data e.g. CPI based on outdated weights derived from the 1993/94 Household Budget Survey or the Index of Industrial Production (IIP) based on an outdated register of business establishments. There have been many changes in the economy in the intervening time periods.

Timeliness of Data

Lack of timeliness is mentioned by many users as a serious problem with CSO data. Many users reported that it is difficult to get up-to-date data from CSO for programme planning, monitoring and reporting. For instance, the Bank of Zambia requires CPI figures to monitor inflation rates on a weekly basis but CSO can only supply this information on a monthly basis. Even then, CSO is unable to provide this data on time; the information is often supplied later than a month. The Ministry of Finance and National Planning publishes a monthly report on Macroeconomic Indicators for which it requires a lot of data from CSO and other data producers on a monthly basis. The Ministry does not always get the required data on a monthly basis.

Oceans of data

There is a perception that there are oceans of data at CSO 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. This problem has been attributed to limited analytical capacity at CSO and especially policy-related analysis. It was pointed out, for instance, that while the 2002 Human Development Report claimed that data on survival rate for the under fives was not available, the rate can be calculated from existing data from the 1992, 1996 and the 2001/2002 ZDHS.

Four

STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS (SWOT) ANALYSIS

4.1 INTRODUCTION

A Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis is a powerful diagnostic tool used to assess the organization and its environment. With regard to the organization, the analysis identifies and evaluates controllable activities within the organization that are performed especially well (Strengths) or poorly (Weaknesses). The strategy is to build on organization's strengths and mitigate or eliminate weaknesses.

The SWOT analysis also involves environmental scanning which identifies and evaluates those economic, social, environmental, political, legal, governmental, technological trends and events that could benefit (Opportunities) or harm the organization (Threats). These trends and events are largely beyond the control of a single organization. The strategy is to take advantage of opportunities and avoid or reduce impact of threats

The SWOT exercise was conducted in a participatory manner by a Stakeholders' Workshop on Strategic Management and the analysis was finally refined by a smaller group of CSO staff. The analysis was done with regard to the perspectives of: data users, business processes, governance and people. A summary of the SWOT analysis is given in table 4.1 at the end of this chapter.

4.2 STRENGTHS

The CSO has a number of strengths that need to be built upon to enhance its effectiveness. The following were identified as CSO's main strengths:

Versatility

CSO has a multi-talented staff complement with a variety of skills and academic backgrounds. There are statisticians, demographers, economists, sociologists, computer scientists, cartographers, library scientists, etc. This is a distinctive strength of the CSO to the extent that a modern national statistical office requires a wide range of talents to make it sufficiently versatile and effective.

Leadership

Past assessments of statistical development in Africa have identified lack of good leadership of national statistical offices as one of the main constraints to

statistical development. The United Nations Statistics Division concurs and asserts that "*Strong leadership is key to the effective performance of a modern statistical office*"[17]. A leader develops, supports and promotes organizational culture;

embodies the status and professionalism of the organization; inspires confidence, provides a vision for the organization and champions change; and articulates the organization's strategy.

The CSO has new leadership that has the right disposition and which, therefore, should champion the changes necessary to enhance performance in the provision of national statistics and statistical services.

Core competencies

CSO has core competencies or unique capabilities that give it comparative advantage over other organizations in the country in performing certain statistical functions. For instance, there is no organization in the country other than CSO that can compile GDP estimates or conduct a national Population and Housing Census.

New management structure

The restructuring process of CSO in 2000 as part of the Reform Programme created new branches and sections, namely: Living Conditions Monitoring Branch; Food Security, Health and Nutrition Information System (FHANIS) Branch; Publications and Marketing Branch; and Transport Section. It also created senior, administrative and other positions, and upgraded others both at headquarters and in the provinces. For instance, what used to be the post of Assistant Director was upgraded to Deputy Director. Senior professionals now head Provincial Statistical Offices (PSOs), etc.

These changes have strengthened CSO and increased capacity to perform its functions.

Ability to implement large-scale field operations

CSO has a Permanent Field Organization that gives it a robust capability to be able to conduct a large-scale survey even at short notice. This gives the CSO a comparative advantage over other data producers in the country**.** Some field staff are very experienced in field data collection and are in fact used by other institutions for collecting field data.

Survey infrastructure

In addition to the Permanent Field Organization, the CSO has developed a geographical frame, a Central Register of Establishments and has census information. These make it easy and cost-effective to select random samples for

[17] ***Handbook of Statistical Organization: The Operation and Organization of a Statistical Agency, 3rd Edition, United Nations Statistical Division, December 2001***

use by various surveys conducted both by CSO and other institutions in the country. Random samples are necessary for valid estimates and inferences to be made about the population on the basis of data collected in a sample.

Comparative advantage in development and promotion of concepts, frameworks and methodologies for data collection and analysis

CSO has a concentration of specialized and scarce human resources, technological infrastructure and know-how, and recognition as the setter of standards for production of official statistics in the country. This gives the CSO a comparative advantage over other data producers in the development and promotion of concepts, frameworks and methodologies for data collection and analysis.

4.3 WEAKNESSES

CSO has many weaknesses that have made the impact of the office much less than it could have been if these weaknesses were not there. The weaknesses need to be mitigated or eliminated altogether. The weaknesses include the following:

Outdated Statistics Act

As was pointed out earlier, CSO is still operating under the Census and Statistics Act of 1964. This act is outdated and no longer able to underpin the role CSO is expected to play, given policy, administrative and economic changes that have taken place in the country since 1964.

Inadequate positioning

It is important that CSO has effective public presence beyond that of a Government department that conducts censuses. It should have a corporate image, a brand or trademark that is a stamp of quality and credibility of official statistics. It should, therefore, be carrying out an image promotion exercise to position its existence, functions, capabilities and products in the public eye. It should also be carrying out periodic surveys to establish public awareness about familiarity with her products, frequent user satisfaction with her products and services, and to determine user demand.

CSO has not adequately carried out an image promotion exercise to put it in the public eye or user satisfaction surveys. So its existence, functions and capabilities are not widely known to the public. It does not have an effective public presence beyond that of a Department that counts people; neither is CSO's name associated with a brand or trademark that is a stamp of quality and credibility of official statistics.

Insufficient assessment of user needs

It is essential that data production is relevant and user-driven. Ensuring this relevance calls for engagement of users in dialogue on an ongoing basis. It is also important that regular and systematic user needs assessments are carried out by CSO. Interviews with various users showed that when such consultations have been held, they have not been structured, have been few and far between. Some characterized the CSO as a **producer-driven** department. As a result, there has been insufficient analysis of ever changing and increasing demand for statistical data and information.

Because of this insufficient needs assessment, there are serious gaps both in the statistical system and data. In addition, client response time in providing some statistical data and information has not been good. This can be illustrated by the fact that the latest Quarterly Digest of Statistics was last printed for the third and fourth quarters of 2000.

Inadequate statistical advocacy

Statistical advocacy is important for promoting "statistical thinking", demonstrating the power and use of statistics, promoting a culture of evidence-based policy and decision-making and mobilizing national and international resources for statistics.

CSO has not done enough to advocate for statistics. This can in part be attributed to lack of capacity on the part of CSO staff to carry out advocacy as well as lack of good advocacy tools and materials.

Limited management capacity and skills

It was observed that CSO management had not developed a comprehensive work programme appropriately matched with its human resources. Such a programme would be prioritized and contain detailed job descriptions of each member of staff, expected outputs and performance indicators. In addition, the office has not had a shared vision and set of values to guide statistical development. Staff career development is not straightforward. All these and more are signs of limited management capacity and skills at CSO. Many managers come through statistical ranks and are placed in management positions without suitable training or experience.

The situation was not made easier by the fact that in recent past, the former Director was spending a lot of the time at the Ministry of Finance acting as Permanent Secretary without a suitable replacement at CSO.

Insufficient coordination with other data producers

Statistical production in the country was well coordinated by CSO when under the Unified Statistical Service, CSO had out-posted staff in key line Ministries. Since the service ended, CSO has not worked out a suitable substitute arrangement to ensure continued coordination of statistical production. The

situation was not made easier by the discontinuation of the In-service Training Programme that among other things was serving a coordination function. So the work of CSO and other data producers is by and large uncoordinated both horizontally and technically. Horizontal coordination is coordination between institutions aimed to ensure that they do not work at cross-purpose. Technical coordination on the other hand aims to ensure that data from different institutions are mutually consistent or comparable, achieved by service-wide adoption of standardised concepts, definitions and classifications.

Since different institutions use different methods for data collection and handling, and have different capacities for data production as well as management, it is becoming increasingly difficult for various institutions to produce consistent or comparable data.

Insufficient coordination within CSO

In addition to lack of coordination between CSO and other data producers, the coordination within CSO itself has been less than desirable. This is in part reflected in the way the work programmes and other activities are developed. The situation has been made worse by less than satisfactory top-bottom and bottom-up communication on one hand and between branches/divisions on the other.

The establishment of the LAN in recent past has improved the communication situation at CSO.

Lack of a comprehensive strategic plan and reliance on ad hoc approaches

The CSO has not had a Strategic Plan that would be a sound technical basis for developing and sustaining capacity necessary for the production of national statistics and for providing efficient and demand-driven statistical services. Such a Plan would provide a framework for prioritizing user requirements and for coordinating national statistical production with the office providing necessary leadership. It would also provide a guide to Government and donors as to areas and levels of support required.

In the absence of such a Plan, the CSO has been using ad hoc approaches to meet urgent data needs. Short-term projects and programmes have generally taken precedence over long-term planning**.** This approach has in a number of cases distorted national priorities for statistical production.

Inadequate funding from Government

Government can be complimented for the financial support it has been giving to CSO. However, the CSO work programme has not been fully funded by Government. Two immediate reasons for this include Government's limited resource envelope, which makes it difficult to fund all worthy development programmes, and CSO's inability to provide Government and other

stakeholders with a fundable Strategic Plan that lays out the organization's work and capacity-building programmes for an extended period.

The immediate results of inadequate funding by government include failure by CSO to attract, train and retain skilled staff; carry out a number of statistical surveys; and adequately coordinate the NSS. A number of statistical activities that have suffered from limited Government funding include a full-fledged Labour Force Survey that was last conducted in 1986 and the full updating of the CRBE which was last done in 1991. The first ever Economic Census to be undertaken in Zambia was originally scheduled for 2000 but had to be postponed due to lack of funding. Subject to availability of funding, this census shall be undertaken early 2003. Also FHANIS, an innovative programme started in 1993, ceased around 1999 due to lack of funds.

Lack of IT strategy

It was pointed out that CSO has no operational IT strategy. Because of lack of such a strategy, application of IT has been fragmented and not guided by a strategic approach aligned with the core business requirements. So there is lack of IT standardization and guidelines for computer hardware and software, computer replacement, virus protection, use of computers and Internet resources.

Lack of human resource development strategy

People are the most important resource of any organization. It is important, therefore, that the organization should have a strategy for harnessing and developing this resource. CSO does not have a coherent and proactive human resources development strategy. Such a strategy is essential to provide for recruitment, orienting, training and acquisition of knowledge and skills, developing, caring for, retaining, evaluating, rewarding, disciplining and promoting staff. Development of human resources has largely been ad hoc and unsystematic. This has resulted in uneven skills development with a shortage of critical skills in a number of areas, unmotivated staff and lack of creativity and innovation.

Inadequate knowledge management

It was mentioned earlier that like other national statistical offices in Africa, CSO's record in knowledge management shows inadequate documentation of methods/procedures, storage of expertise and experience as well as institutional memory in people's heads, and inadequately developed and managed databases. It was also mentioned earlier that library services are now virtually non-existent at CSO.

This weakness detracts on the CSO's corporate agility and capacity to handle adverse effects such as high staff turnover.

Lack of a dissemination policy

Statistical data are of no value unless they are disseminated to those who need them and are actually used. CSO lacks a dissemination policy to guide information release. It cannot be emphasized enough that some statistical information loses value unless it is produced in a timely manner.

It should be noted in particular that CSO has no release calendar and this in part explains why some data series lack timeliness.

Lack of a databank

As was mentioned earlier, CSO has over the years built subject-specific datasets. Although the need to organize these datasets into comprehensive database has been recognized over the years, no such database has been established. Consequently, management of these datasets has become increasingly difficult. In particular, data access by users has become difficult, inter-linked data analysis as well as time series analyses have become difficult, etc.

Inability to monitor and measure organizational performance

CSO has not developed objectives and associated performance indicators against which its performance can be monitored and measured periodically. So the organizational performance is not monitored or measured. As a result, it has not been possible to alert CSO management to problems or potential problems before the situation becomes critical or to take corrective actions to ensure that performance is according to plans. And without measuring performance, it becomes difficult to plan for improvements in future work and activities.

4.4 OPPORTUNITIES

There are tremendous opportunities for statistical development in Zambia. These opportunities offer possibilities or chances which, if taken full advantage of, will increase the quantity and quality of official statistics in the country.

Demonstrable Government commitment to statistical development

Government commitment is a *sine qua non* for the development of national statistics. There is demonstrable government commitment to the development of statistics. This is reflected in the commitment to using national statistics in macro-economic management, programme implementation and monitoring, and reporting; increased funding to CSO; and making the CSO a full participant in the development of a range of Government programmes. This, however, does not mean that the CSO gets all the money it requests from Government, a point made earlier.

Increased demand for statistical information

The new government has re-introduced national development planning with the PRSP and the Transitional National Development Plan (TNDP) as key planning frameworks. The PRSP process and the new emphasis on tracking progress towards attainment of national development goals as well as the Millennium Development Goals (MDGs), have created a quantum leap in demand for statistical information in terms of quantity, type and quality. Such information are required on the economy, social development, business, governance and democratization process. The good news is that this demand is accompanied by tremendous opportunities for national statistical systems to "break out of the vicious spiral of inadequate resources and poor performance" which in the past have crippled national statistical systems.

A Monitoring and Evaluation Component has been built into the PRSP and the TNDP and resources will be appropriately allocated to CSO and other data producers for purposes of meeting the immediate data needs and for building capacity and infrastructure for sustainable development of statistical systems.

Increased 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. These members have practical experience and wish to collaborate to improve policy making through reliable and pertinent statistics. The mission of PARIS21 is to help promote a culture of evidence-based policy making and monitoring in all countries, but especially in poor developing countries.

PARIS21 works through: **P**artnerships by bringing together donors and Governments in support of country-owned development strategies; **A**dvocacy by demonstrating the power of and use of statistics for policy decisions; **R**esources 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; **I**nformation by providing a platform for open debate, sharing of knowledge and for fostering co-ordination; and **S**trategies 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.

It should be mentioned that PARIS21 organized a SADC Sub-regional Workshop in Lusaka in 2000 and this was followed by a National User-Producer Workshop in 2001.

Advances in information technology

Advances in information technology (hardware, application systems and communications networks) have made computers more powerful, fast, relatively inexpensive and accessible, and computer applications more user-friendly. The said advances have also made it possible to network to improve internal access to data and metadata, and the internet has made it possible to access information from the outside world in real time.

The CSO has started to take advantage of these advances to improve the statistical processes and delivery of data and information to the users.

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. In the sub-region, a SADC Statistics Committee (SSC) coordinates the development of statistics in member countries by contributing to the harmonization process of SADC statistics; enhancing the cooperation between national statistics organizations in order to rationalize the use of two critical resources: regional expertise and external financing; improving the capacity building process in the national statistics organizations; and creating a network of knowledge partnership for statistics in SADC region. At the level of COMESA, CSO has benefited from using institutions like East African Statistical Training Centre (EASTC) in Dar es Salaam, Tanzania and the Institute of Statistics and Applied Economics (ISEA) at Makerere University in Uganda to train its personnel in official statistics at sub-professional and professional level respectively.

At the level of the African region, CSO has been involved in the activities of the Statistics Division of the Economic Commission for Africa including hosting regional workshops and attending regional meetings.

CSO was a member of the United Nations Statistical Commission from 1987 to 1991. Through the meetings and reports of the Commission, CSO was able to benefit from sharing experience with countries in and outside Africa.

International frameworks, standards and guidelines

The CSO has developed its own frameworks, standards and guidelines. In addition, it uses international frameworks, standards and guidelines for the development of official statistics. These were outlined in the last chapter.

4.5 THREATS

There are a number of threats to the implementation of the Strategic Plan. The strategy is to avoid or reduce the impact of these threats. The threats which have been identified include the following:

Political interference

There is the threat that the professional independence of the office will be compromised by pernicious political interference thereby eroding the credibility and integrity of official statistics.

This threat will be minimized by strict adherence to the provisions of the Statistics Act and professional ethics.

Reduced demand for statistical data and information from CSO

There is a threat that there will be reduced demand for statistical data and information for policy formulation, decision-making and for monitoring progress towards meeting set goals and especially those in the PRSP. This could partly be brought about by the inability of the office to produce timely, reliable and usable data. This would lead to users turning to other sources of data.

This threat will be reduced by enhancing the capacity of the CSO to produce a wide-range of statistics and make them available for informing the PRSP and other development processes. The enhanced CSO also will improve the way it analyses, reports and disseminates statistical information. This Strategic Plan aims to strengthen CSO and make it better positioned to meet user needs.

Reduced priority for and investment in statistics

There is a threat that the main users of data such as Government, international organizations, donor community and others will not give priority to statistical development and budgetary support to build institutional capacity for production of statistics.

This threat will be minimized by carrying out sensitization and awareness programmes. CSO will also minimize this threat by keeping abreast of changing user requirements and advocating for statistics.

Inability to attract and retain staff

CSO will have to stem staff attrition and especially of high level and highly skilled staff who are leaving for other institutions in search of better paying jobs. This has had deleterious effect on the Office in terms of sustaining capacity for statistical production. This problem, however, is not limited to CSO alone but is widespread in government institutions.

This threat will be minimized if the proposal to turn the CSO into a semi-autonomous corporate body is approved. The body will establish improved working conditions and create prospects for improved staff remuneration and minimization of risks of staff retention.

Lack of commitment to coordination

While the need for commitment is always talked about, many times and for various reasons, coordination among institutions has been elusive in many African countries. Without the said commitment, CSO will find it difficult to coordinate the NSS and to get the NSS to meet user requirements.

There is a threat that commitment to coordination will not be forthcoming and that the factors driving coordination e.g. common audiences, publications requiring synchronizing outputs, etc, will not be there.

CSO will minimize this threat by championing and demonstrating the importance, benefits and virtues of coordination.

(g) Failure to Enact and Implement a New Statistics Act

There is a threat that Government will not take the bold step to establish a semi-autonomous Bureau of Statistics and that the status quo will persist. But even when the Bureau is established by an Act of Parliament, there is the threat that the Act will not be fully implemented thereby making it difficult for the Bureau to benefit from anticipated dividends that accrue to autonomous status of statistical organizations.

This threat will be minimized by advocacy and full commitment of CSO senior management to foster change as a performance driver.

The following table presents a summary of the SWOT Analysis.

Table 4.1: Summary of SWOT Analysis

Strengths	Weaknesses
• **Versatility** • **Leadership** • **Core competencies** • **New management structure** • **Ability to implement large-scale field operations** • **Survey infrastructure** • **Comparative advantage in development and promotion of concepts, frameworks and methodologies for data collection and analysis**	• **Outdated Statistics Act** • **Inadequate positioning** • **Insufficient assessment of user needs** • **Inadequate statistical advocacy** • **Limited management capacity and skills** • **Insufficient coordination with other data producers** • **Insufficient coordination within CSO** • **Lack of a comprehensive strategic plan and reliance on ad hoc approaches** • **Inadequate funding from Government** • **Lack of IT strategy** • **Lack of human resource development strategy** • **Inadequate knowledge management** • **Lack of a dissemination policy** • **Lack of a databank** • **Inability to measure organizational performance**

Opportunities	Threats
• **Demonstrable commitment to statistical development** • **Increased demand for statistical information** • **Increased international partnerships for statistical development** • **Advances in technology** • **Opportunities to share experience and facilities in the African region and beyond** • **International frameworks, standards and guidelines**	• **Political interference** • **Reduced demand for statistical data and information** • **Reduced priority for and investment in statistics** • **Inability to attract and retain staff** • **Loss of competitive edge** • **Lack of commitment to coordination** • **Failure to enact and implement a new Statistics Act.**

4.6 NEED FOR A STRATEGIC PLAN

The above information about the CSO and the NSS point to the need for early introduction of strategic management at CSO and for turning the CSO into a strategy-focused organization. There is enough evidence to show that organizations using strategic management are more successful than those that do not.

Introduction of strategic management at CSO will, *inter alia*[18]:

- allow CSO to be more proactive than reactive in shaping its future (initiate and influence rather than just respond to user requirements);
- allow for identification, prioritization and exploitation of opportunities for national statistical development;
- provide an objective view of management problems of the office and how these can be solved;
- minimize effects of adverse conditions and changes;
- facilitate better communication in the organization - *communication is key to successful strategic management*;
- present a framework for improved coordination and control of statistical activities at the office and in the NSS;
- allow for making major decisions to better support established objectives;
- allow more effective allocation of time and resources to identified opportunities;
- lead to understanding and commitment from managers and staff;
- empower employees and management, leading to a sense of ownership which will in turn lead to more commitment, creativity, imagination and innovation and productivity - *ownership of strategies is key to success*;
- helps integrate the behaviour of individuals into total effort;

[18] ***Fred R. David: Concepts of Strategic Management, International Edition, Prentice Hall International, Inc. , 1996***

- provides a basis for the clarification of individual responsibilities;
- provides a cooperative, integrated and enthusiastic approach to tackling problems and opportunities;
- provides the beginning of efficient and effectual managerial system;
- helps to view change as an opportunity rather than a threat;
- encourages forward thinking and planning.

As part of strategic management, this Strategic Plan has been prepared for CSO. The Plan sets strategic directions for the provision of a broad range of statistical data and services to stakeholders and for enabling CSO to acquire and sustain optimum capacity over the plan period (2003 - 2007) to provide these data and services in an efficient and user-focused manner. It also provides a mechanism for harnessing a critical mass of both national and international resources within a clear time frame and in order to achieve intended, precise and measurable objectives and targets.

FOREWORD

At the time my Government came into office the country had no development plan. My New Deal Government recognises the need for planning as a process that is cardinal in our efforts to improve the living conditions of our people. The planning process is central in ensuring the optimal allocation of our limited resources and more importantly charting the right path towards poverty reduction. In this regard, my Government is implementing the Poverty Reduction Strategic Paper (PRSP) and the Transitional National Development Plan.(TNDP).

My Government, therefore, embarked on preparation of a three-year transitional development plan whose preparation required a lot of statistics. It was discovered that a lot of statistics was not available due to numerous reasons. My Government recognises the important role statistics plays in preparing a development plan in its implementation and in monitoring the programmes/projects that my Government is undertaking.

The Central Statistical Office (CSO) and the National Statistical System (NSS) in Zambia, like elsewhere in Africa, are facing a crisis of expectation. In recent past, there has been unprecedented increase in demand for statistical data and information to design and monitor the implementation of the Poverty Reduction Strategy Paper (PRSP) (2002-2004), Transitional National Development Plan (2003-2005) and other national development initiatives. These demands have presented major challenges to already weak and vulnerable NSS. However, they have also presented opportunities, particularly with respect to raising the public profile of statistics and harnessing both national and international resources for statistical development. It is of vital importance, therefore, that these opportunities are seized and taken advantage of in order to reverse the decline in production of quality national statistics.

As the focal point for national statistics, the CSO will play a crucial role in coordinating and delivering the NSS, which will be central to monitoring the implementation of the PRSP and other national development initiatives. However, this will be possible only when the CSO itself is strengthened and its role is underpinned by an up-dated statistical legislation reinforcing its coordinating role. In order to provide a framework for strengthening the CSO, it was decided that a medium-term (5-year) Strategic Plan for the office should be developed with special emphasis on capacity building and work programming to meet prioritized user needs. The Plan would provide a “road map” for the development of the office and a framework for harnessing resources to support the said development.

It is in this light therefore, that my Government decided to approach co-operating partners to help us come up with a strategic plan for a National Statistical Service. I would like to express my appreciation to the British Department for International Development (DFID) and Zambia Social Investment Fund (ZAMSIF) for their support in the preparation of this strategic plan. I would also like to thank the consultants (Prof. Ben Kiregyera of Uganda who was a Team Leader, Mr. Moses Lubaale of Uganda, Ms Celestina L. C. Kabalu and Mr. Mwikisa L. Likulunga both of Zambia), on a job well done. I wish also to express my appreciation to all officials

from various institutions including CSO that the consultants visited for their co-operation which made the production of this strategic plan a reality.

It is my sincere hope that co-operating partners will support this plan so that my Government's efforts in combating poverty could be realised.

Levy Patrick Mwanawasa, SC

PRESIDENT OF THE REPUBLIC OF ZAMBIA

MARCH 2003

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ABBREVIATIONS

AIDS	-	Acquired Immune Deficiency Syndrome
AMIC	-	Agricultural Market Information Centre
AER	-	Annual External Review
ARS	-	Agricultural Reporting Service
ASIP	-	Agriculture Sector Investment Project
BESIP	-	Basic Education Sub-sector Investment Programme
BOZ	-	Bank of Zambia
CBOH	-	Central Board of Health
CBS	-	Central Bureau of Statistics
CFS	-	Crop Forecasting Survey
CIDA	-	Canadian International Development Agency
CLUSA	-	Cooperative League of the United States of America
COICOP	-	Classification of Individual Consumption According to Purpose
COMESA	-	Common Market of Eastern and Southern Africa
CPI	-	Consumer Price Index
CRBE	-	Central Register of Business Establishments
CSO	-	Central Statistical Office
DANIDA	-	Danish International Development Agency
DDCCs	-	District Development Coordinating Committees
DFID	-	Department for International Development (British Government)
DPU	-	Data Processing Unit
DSBB	-	Dissemination Standards Bulletin Board
EA	-	Enumeration Area
EASTC	-	Eastern Africa Statistical Training Centre
EBZ	-	Export Board of Zambia
ECA	-	Economic Commission for Africa
ECZ	-	Examination Council of Zambia
EEC	-	European Economic Commission
EU	-	European Union
EWCC	-	Early Warning Coordinating Committee
FAO	-	Food Agricultural Organization
FAS	-	Food and Agricultural Statistics
FASAZ	-	Farming Systems Association of Zambia
FHANIS	-	Food Security, Health and Nutrition Information System
GDDS	-	General Data Dissemination System
GDP	-	Gross Domestic Product
GF	-	Geographical Frame
GFS	-	Government Finance Statistics Classification
GIDD		Gender In Development Division
GIS	-	Geographic Information System
GPS	-	Global Positioning System
GTZ	-	Germany Technical Assistance
HIV	-	Human Immune Virus

HMIS	-	Health Management Information System
HS	-	Harmonized System
IIP	-	Index of Industrial Production
ILO	-	International Labour Organization
IMF	-	International Monetary Fund
IMS	-	Information Management System
ISAE	-	Institute of Statistics and Applied Economics
ISIC	-	International Standard Industrial Classification.
IT	-	Information Technology
ITB	-	Information Technology Branch
JICA	-	Japan International Cooperation Agency
LAN	-	Local Area Network
LCMS	-	Living Conditions Monitoring Survey
MDGs	-	Millennium Development Goals
MIS	-	Management Information System
MOE		Ministry of Education
MOH	-	Ministry of Health
NCDP	-	National Commission for Development Planning
NCEW	-	National Committee on Early Warning
NCEW	-	National Committee on Early Warning
NEWUs	-	National Early Warning Units
NFNC	-	National Food and Nutrition Commission
NGOs	-	Non-Governmental Organizations
NIS	-	Nutrition Information System
NSS	-	National Statistical System
OLAP	-	Online Analysis Processing
OMR	-	Optical Marker Recognition
PAOs	-	Provincial Agricultural Officers
PARIS 21	-	Partnerships in Statistics for Development in the 21st Century
PDCCs	-	Provincial Development Coordinating Committee
PFO	-	Permanent Field Organization
PHS	-	Post-Harvest Survey
PRSP	-	Poverty Reduction Strategy Paper
PSOs	-	Provincial Statistical Offices
PSRP	-	Public Service Reform Programme
PWAS	-	Public Welfare Assistance Scheme
QPR	-	Quarterly Progress Report
RDBMS	-	Relational Database Management System
REWS	-	Regional Early Warning System
SADC	-	Southern Africa Development Community
SAP	-	Structural Adjustment Programme
SG	-	Statistician-General
SITC	-	Standard International Trade Classification
SNA	-	System of National Accounts

SSC	-	SADC Statistics Committee
STD	-	Sexually Transmitted Diseases
SWOT	-	Strengths, Weaknesses, Opportunities and Threats
TB	-	Tuberculosis
TNDP	-	Transitional National Development Plan
TR	-	Terminal Report
TSED	-	Tanzania Socio- Economic Database
TOT	-	Training of Trainers
UNCTAD	-	United Nations Conference on Trade and Development
UNDP	-	United Nations Development Programme
UNFPA	-	United Nations Fund for Population Activities
UNHCR	-	United Nations High Commission for Refugees
UNICEF	-	United Nations Childrens Fund
UNZA	-	University of Zambia
USAID	-	Untied States Agency for International Development
USS	-	Unified Statistical Service
WAN	-	Wide Area Network
ZAMSIF	-	Zambia Social Investment Fund
ZDES	-	Zambia Demographic and Education Survey
ZDHS	-	Zambia Demographic and Health Survey
ZSBS	-	Zambia Sexual Behaviour Survey
ZIC	-	Zambia Investment Centre
ZNFU	-	Zambia National Farmers Union
ZNWLG	-	Zambia National Women's Lobby Group

EXECUTIVE SUMMARY

1. Purpose of the Strategic Plan

This Strategic Plan was designed for the Zambia National Statistical System focusing on the Central Statistical Office to halt the decline in provision of official

statistics and to lay a basis for a more efficient statistical system and service capable of meeting the information needs for the Poverty Reduction Strategy Paper (PRSP), the Transitional National Development Plan (TNDP and other national development initiatives.

This Plan sets strategic directions and a "road map" for raising the profile of statistics in the country and building capacity to provide a broad range of statistical data and services to stakeholders in an efficient and user-focused manner. It proposes major changes in the way statistical data and information are produced and made available to users in the country.

The Plan was designed in a consultative manner with national staff involved in the diagnosis of what has gone wrong with production of official statistics and in building consensus on a prescription. A broad stakeholders' workshop on strategic management was organized, followed by more focused smaller workshops and group discussions to address different aspects of the Plan. This approach created opportunities for staff empowerment, participation, ownership of both the process and the product (Plan). These are essential ingredients for successful strategic management.

A **needs assessment** was carried out to determine current and future data needs of main stakeholders and to find out how the NSS should galvanize itself in terms of organization, capacity and data collections in order to be able to satisfy the user needs within the limitations imposed by resource constraints. The needs assessment was done by having discussions with main data users and producers. There has been consensus that the prescription for the ailing NSS does not lie in "*doing more of the same thing*" or "*running faster*" or "*taking incremental steps to move the system from present position to desired future positions*" but in **strategic management** in order to make a quantum leap and breakthrough performance in value creation and meeting user needs.

The Plan which has been developed provides a vision, mission and corporate values for the CSO; strategic objectives; prioritized, costed, sequenced and timetabled work and capacity building programmes. In addition, strategies for implementation of the Plan and its measurement and evaluation have been provided.

2. Vision

To become a centre of excellence in statistical production and a standard setter and coordinator of the National Statistical System.

3. Mission

To provide for a comprehensive national statistical database yielding high quality statistical information for use by the Government, private sector and the wider national and international community for planning, policy, decision-making, research and informed debate, and to promote the use of statistics in all walks of life.

4. Core values

Core values identified for the organization include User-focus (PRSP compliance), Quality consciousness, Integrity and credibility, Empowerment.

5. Strategic themes

In order to realize the long-term vision (see following figure), a number of interlinked strategic themes and objectives have been identified. The objectives are SMART *i.e.* ***Specific***, ***Measurable***, ***Achievable***, ***Relevant*** *and* ***Time bound***.

Strategic Theme 1: Improvement of public awareness about statistics

Objective 1.1 Creating awareness about statistics
Objective 1.2 Raise the profile of statistics and position of the CSO
Objective 1.3 Increase use of statistics in evidence-based decision-making, planning, administration, monitoring and evaluation

Strategic Theme 2: Development and promotion of an effective National Statistical System

Objective 2.1: Enhance capacity for data production and use
Objective 2.2: Improve arrangements for coordination, collaboration, Networking and information sharing
Objective 2.3: Improve data consistency and integration

Strategic Theme 3: Enhancement of quality of statistical products and services

Objective 3.1: Better assessment of user needs
Objective 3.2 Provide accurate and reliable data
Objective 3.3 Provide more disaggregated data by important domains
Objective 3.4: Timely delivery of data

Strategic Theme 4: Harnessing Information Technology (IT)

Objective 4.1 Create a coherent IT infrastructure
Objective 4.2 Develop an Information Management System
Objective 4.3 Aligning IT to statistical operations

Strategic Theme 5: Development of human capacity and organizational effectiveness

Objective 5.1 Improve staff recruitment and promotion
Objective 5.2 Build a “critical mass” of skilled and motivated personnel
Objective 5.3 Improve statistical governance
Objective 5.4 Improve management systems

Objective 5.5 Build an office block

Activities to operationalize the vision, mission and Plan objectives have been identified. So too have the expected outputs, performance indicators and measures/verification as well as assumptions. These are summarized in a logical framework matrix.

6. Work and capacity building programme

These programmes serve as coordinating tools for the Bureau and the NSS to achieve synergy and cost-effectiveness in statistical production in the country. The work and capacity building programmes essentially present activities to be undertaken, expected outputs and indicators.

Work programme

Activities were prioritized using a number of criteria including, (a) need for the activities to be PRSP compliant, (b) collecting data for which the Bureau will have comparative advantage to collect leaving other data collection activities to line Ministries and other data producers, (c) giving priority to activities which are less cost intensive relative to other possible data sources or which are integrative, making 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, (d) existing institutional and technical capacity for implementing activities and the potential for their sustainability, (e) ongoing activities e.g. GDP estimation, compilation of CPI which must be continued to maintain data series, (f) giving priority to those activities which need to be undertaken to provide a basis for subsequent activities e.g. updating the CRBE before the Economic Census can be conducted, updating the EA maps before undertaking the next Population and Housing Census, training in GIS and poverty mapping before poverty maps can be produced, etc. , and (g) giving priority to activities aimed at building capacity and infrastructure e.g. recruitment of staff, training, office space, etc. have been given higher priority.

The focus of the work programme is to provide statistical data and information required for the PRSP programme implementation and monitoring as well as monitoring other government development initiatives and to improve the quality, efficiency and timeliness in delivering national statistics. The work programme is divided into periodic and ongoing activities, and new activities. Under each of these categories, planned secondary data collection, survey, census and other activities are presented.

Capacity building

The capacity building programme of the Strategic Plan centers on issues of staffing, training, infrastructure and management systems.

Staffing

Over the Plan period, the staffing complement will go up by 75 to 731. Of this staff complement, 132 or 18.1% will be professionals, 254 or 34.7% sub-professionals, 137 or 18.7% technical staff and 208 or 28 5% support staff.

Training

Training will be an ongoing process in tandem with all other Bureau activities of a recurrent nature, in order to continuously improve the quality of statistical outputs. The training programme will aim 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 of professional staff, develop soft skills such as report writing, and to increase appreciation for and use of statistical data and information. It will be tailor-made, practical-oriented, hands-on and largely in-house. Higher priority will be given to on-the-job skills development over mainstream academic training. The training programme will be well structured and managed. In particular, the In-Service Training Programme will be resumed as soon as possible with a senior officer assigned to manage it.

Apart from training in statistics and IT, there will be training in management and other areas for different Bureau personnel including administrative staff, accounts staff, etc. As part of this training, staff will be empowered to use the skills once acquired to advocate for statistics. Training will also be given to main data users to empower them to appreciate data and secondly to be able to access and use data in their work.

The programme of building the capacity for the Bureau includes creating a conducive working environment for staff. This includes offices, IT equipment and transport. Priority will be given to sourcing funds to complete the construction of the office block early on in the Plan period and acquiring more office space in provinces. The installation of a LAN and similar networks like Wide Area Networks (WAN) will be done to improve the efficiency of the office, optimize the use of resources and increase information sharing. It will also facilitate development of skills in knowledge sharing and management through establishment of groupware that facilitate file sharing and online working groups.

The Bureau will need new equipment like computers, photocopiers, etc; transport like vehicles and boats: etc. The requirements for these have been determined, taking into the work programme, existing equipment and number of new staff to be recruited.

In order to address these weaknesses and lay a basis for further statistical development, the Plan addresses a range of issues, including supporting all key developments across the office. Technical assistance will be required in the following areas: GIS, Informal Sector Survey, Labour Market Information Systems (advise on establishment of the system), IT and Data Management (design an IT Policy and Strategy), Statistical Organization and Management (advise on operationalization of the Plan) and on printing (advise on modernizing the Printing Press). Also proper management information systems consistent with good practice will be established.

7. Plan Implementation

A strategic management process will be used to ensure that the Bureau's high-level mission statement is translated into action and work to be performed by frontline and back-office employees. The **Balanced Scorecard** strategic management system that ensures the implementation, communication and alignment of strategies to objectives will be adopted and used to implement the Plan. It enables balanced result management to be done – the balance is provided between short- and long-term objectives, between lagging and leading indicators, between external and internal performance, etc. It thus describes the multiple indirect linkages required to connect improvements in an organization's intangible assets – the ultimate drivers of knowledge-based strategies.

A new Census and Statistics Act has been proposed to enhance the effectiveness of the NSS. It provides for, among other things, (a) transforming the CSO into a "semi-autonomous" government agency, to be called the **Central Bureau of Statistics (CBS)**, in order to make provision of official statistical data and services more efficient and responsive to user needs, (b) establishing a **Statistical Policy Board** (the Board) with seven members as the governing body of the Bureau, (c) establishing the post of **Statistician-General** to be appointed by the President and approved by Parliament.

Effective implementation of a strategy requires that the organizational structure be aligned to the strategy. A structure for the Bureau has been proposed. The structure includes the Board of Directors, Statistician-General, Deputy Statistician-General, five Directorates to be headed by Directors, Branches and Sections.

Other important activities to be undertaken in strategy implementation will include creating strategy awareness first among all employees of the Bureau and then with other stakeholders, managing change, creating a strategy –supportive culture, enhancing statistical governance (increasing the relevance of data; improving coordination, partnerships, networking and information sharing; improving knowledge management; improving data analysis; improving information dissemination and access including establishment of a well-defined dissemination policy and programme, establishment of a comprehensive National Statistical Database etc); development of an IT Policy and Strategy; developing a Human Resources Development Strategy.

Systems for management of Bureau resources including personnel and funds will be established including Recruitment Procedures, attractive Terms and Conditions of

Service, Financial Regulations, Accounting Guidelines, Procurement Guidelines and Management Information System (MIS).

Special attention will be given to motivating personnel. In addition to the Terms and Conditions of Service, other motivating factors will include, *inter alia*, clear career path, leadership, facilitation, rewarding of quality and promoting professionalism and encouraging innovation and creativity.

8. Monitoring and Evaluation

It will be necessary to assess how much is being achieved vis-à-vis the Plan objectives. This will make it possible for corrective measures to be taken or for implementation strategies to be revised if it should appear that implementation is off track. A monitoring schedule has been prepared that includes using Plan-related performance indicators to track progress. As much as possible, implementation should stick to the established implementation schedule. Any lapses in the implementation of activities will not only upset the coordination arrangements with related activities but will also upset the budget. At the end of the Plan period, there should be an evaluation of the extent to which the Plan achieved its objectives.

Performance reviews will include a Quarterly Progress Report (QPR) and an Annual Progress Report (APR) to the Minister as a statutory requirement, an Annual External Review (AER) to be carried out by the Ministry of Finance and National Planning together with development partners, and a Terminal Review (TR) to be carried out again by the Ministry of Finance and National Planning together with development partners.

Benchmarking is a method of making systematic comparison in specific areas with other relevant organizations and especially with those organizations with best performance. The aim is to determine areas where improvements can be made. Both internal and external benchmarking will be done.

9. Tentative Budget.

The total budget for the work programme amounts to K98.4 billion over a period of 5 years. This averages about K20 billion per year. The budget for 2003 of K 43.5 billion is much higher than in other years because of the Living Conditions Monitoring Survey (LCMS) – to cost K3.75 billion (funded), Economic Census – K4.6 billion, Census of Agriculture and Livestock – K20 billion and the Agricultural Special Supplementary Survey – K1.5 billion (funded).

The capacity building programme is heavy but adjustable. The budget for 5 years is K217 billion of which 77% is for staff salaries and wages. The budget also includes the funds required for training (K16.5 billion); completing the office block and renting (K15.9 billion); communication, equipment and transport (K15.4 billion), development of management systems (K0.23 billion) and technical assistance (K1.1 billion).

It is proposed that this amount of money should be raised by Government and the donor community.

"***Without a strategy, an organization is like a ship without a rudder, going around in circles***" **- Joel Ross and Michael Kami**

One

VISION, MISSION AND STRATEGIC OBJECTIVES

1.1 INTRODUCTION

This Strategic Plan is based on wide consultations with major stakeholders in and outside Government. It has taken into account previous studies on the restructuring of CSO and current strengths, weaknesses, opportunities and threats to the development of national statistics. It has also been informed by experience in strategic planning for national statistical offices from the region.

This Plan sets strategic directions and a "road map" for raising the profile of statistics in the country and building capacity to provide a broad range of statistical data and services to stakeholders in an efficient and user-focused manner especially for monitoring national development goals such as poverty reduction. "Breakthroughs in performance requires major changes"[1]. The Strategic Plan, therefore, proposes major changes in the way statistical data and information are produced and made available to users in the country.

(a) The process

The Plan was designed in a consultative manner with national staff involved in the diagnosis of what has gone wrong with production of official statistics and in building consensus on a prescription. A broad stakeholders' workshop on strategic management was organized, followed by more focused smaller workshops and group discussions to address different aspects of the Plan. This approach created opportunities for staff empowerment, participation, internal and external communication and ownership of both the process and the product (Plan). These are essential ingredients for successful strategic management.

In addition, a **needs assessment** was carried out to determine current and future needs of main stakeholders and to find out how the NSS should galvanize itself in terms of organization, capacity building and data collections in order to be able to satisfy the user needs within the limitations imposed by resource constraints. Thus the assessment aimed to establish the following, among other things:

- major users of official data, taking into account the increased role being played by the private sector and civil society in national development;
- major uses to which official statistics are put;
- extent to which data providers interact with each other and with data users;
- what official statistics have to-date been made available to users;
- what data have been used in the past and to what extent they have satisfied user needs;

[1] ***Robert S. Kaplan and David P. Norton: Translating Strategy into Action: Balanced Scorecard, President and Fellows of Harvard College, 1996***

- past and expected future data gaps and the constraints these gaps have placed (will place) on the work of users;
- current and future data needs of main users and what priorities are to be attached to these and to what extent users do value timeliness, completeness of coverage, accuracy and other aspects of statistical quality relative to the cost of achieving such quality;
- data duplication and inconsistencies and the extent of collaboration between different data producers;
- data collection methods (extent of data integration, degree of harmonization of questionnaires, problems of timeliness and quality of responses in data collection);
- infrastructure and institutional capabilities relating to data collection and management including data processing, analysis and dissemination;
- what will be the statistical programme to satisfy the user requirements and what changes will be required to existing statistical programmes (e.g. cancellation of certain data series, revision of others, introduction of new data series, improved use of existing resources, etc.).

It is important to mention that until a few years ago, user orientation of statistical systems "was an abstract concept: one "*knew*" what users wanted, indeed "*one knew better*" than users"[2]. It is now widely accepted that users and their requirements can no longer be assumed; rather they have to be determined through a needs assessment which now plays a pivotal role in the development of NSSs.

The needs assessment was done by having discussions with main data users and producers. In order to ensure that no major categories of data users were left out, data users were classified into broad user groups and information was collected from institutions selected from each group. The following grouping was done for this exercise:

Group I:	Government ministries/institutions
Group II:	Provincial and District officials
Group III:	Private sector operators
Group IV:	NGOs
Group V:	Research and training organizations
Group VI:	Donors and the international organisations
Group VII:	The press

A summary of what has gone wrong with production of official statistics as identified in the stakeholders' workshop and through interviews with main data producers and users is presented in the section of Weaknesses under SWOT analysis (Chapter 4). The prescription was found not to lie in "*doing more of the same thing*" or "*running faster*" or "*taking incremental steps to move the system from present position to desired future positions*" but in **strategic management** in order to make a quantum leap and breakthrough performance in value creation and meeting user needs. Strategic management is about "*integrating management, marketing,*

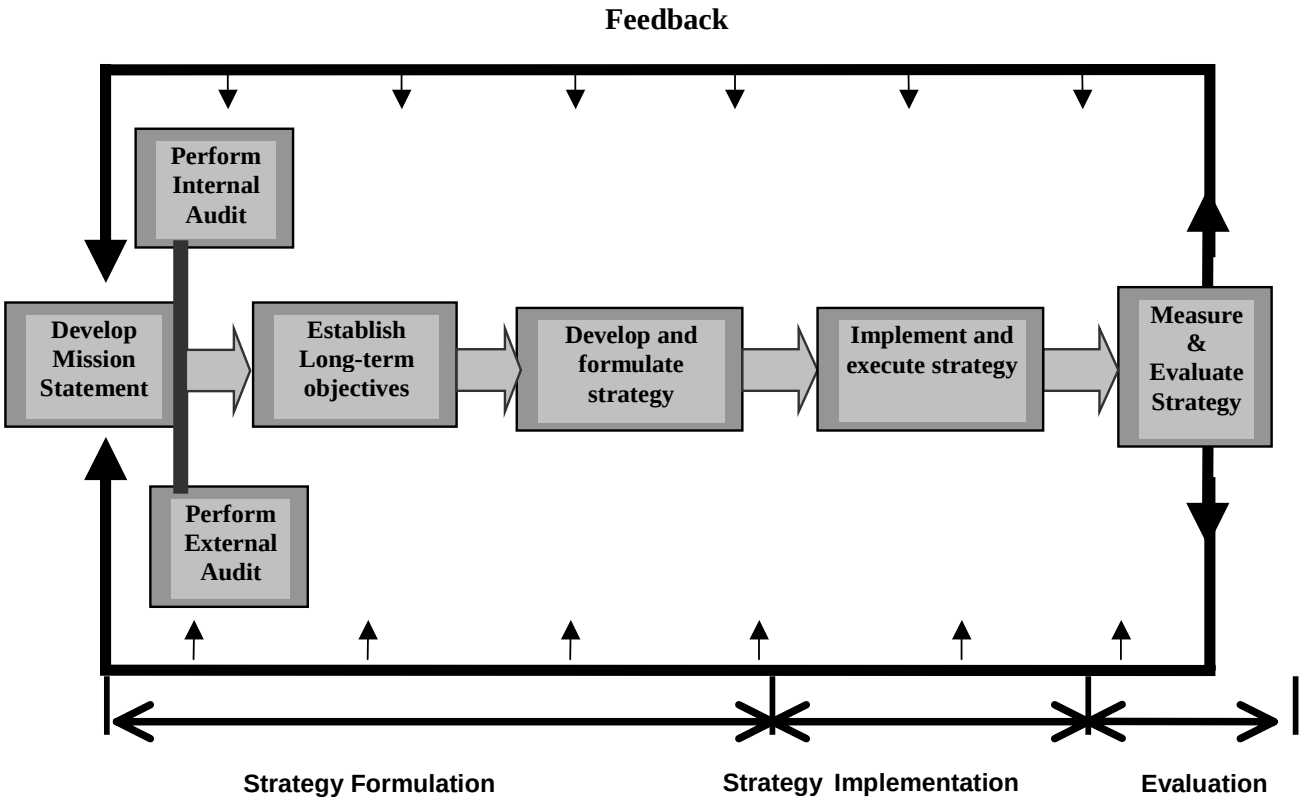
[2] ***Felligi, I.P., Characteristics of an Effective Statistical System, International Statistical Review, Vol. 64, No. 2, 1996.***

finance/accounting, production/operations, research and development and computer information systems to achieve organizational success"[3]*.*

(b) Strategic Management Model

The design of the Plan followed the following generic Strategic Management Model.

Figure 1.1: Strategic Management Model



As can be seen from the figure, the strategic management model has three stages:

Strategy formulation: development of a vision and mission, performance of internal and external audit, establishment of long-term objectives and generation/selection of appropriate strategies.

Strategy implementation: establishing annual objectives, devising policies, designing process and management systems, staff motivation, resource allocation, developing a strategy-supportive culture, etc.

Strategy measurement and evaluation: monitoring, performance measurement, taking corrective action and evaluation.

[3] ***Fred R. David: Concepts of Strategic Management, Prince Hall International, Inc., International Edition, 1997***

The Plan which has been developed provides a vision, mission and corporate values for the CSO; strategic objectives; prioritized, costed, sequenced and timetabled work and capacity building programmes. In addition, strategies for implementation of the Plan and its measurement and evaluation have been provided.

1.2 VISION, MISSION AND CORE VALUES

(a) Vision

To become a centre of excellence in statistical production and a standard setter and coordinator of the National Statistical System.

(b) Mission

To provide for a comprehensive national statistical database yielding high quality statistical information for use by the Government, private sector and the wider national and international community for planning, policy, decision-making, research and informed debate, and to promote the use of statistics in all walks of life.

(c) Core values

An organization needs **core corporate values** to guide the conduct and behaviour of staff and decision-making, and also which inspire and galvanize individual efforts towards improved performance. The following four values have been identified for CSO:

User-focus: users are the reason for statistical production. All activities of the organization will be focused on meeting user expectations and needs. In particular, the design of the Plan has been made PRSP compliant.

Quality consciousness: the quality of statistical products and services enhance the image of an organization. All corporate efforts will be geared towards promoting production of high quality statistical products and services that meet the standards of relevance, consistency, accuracy, timeliness, completeness, disaggregatability and accessibility.

Integrity and credibility: refer to professionalism, transparency and ethical standards that help to create a brand name, and define independence and separation from pernicious political influence.

Empowerment: is the act of strengthening an individual's sense of effectiveness. Empowerment of staff will be key to corporate agility and effectiveness in meeting user needs.

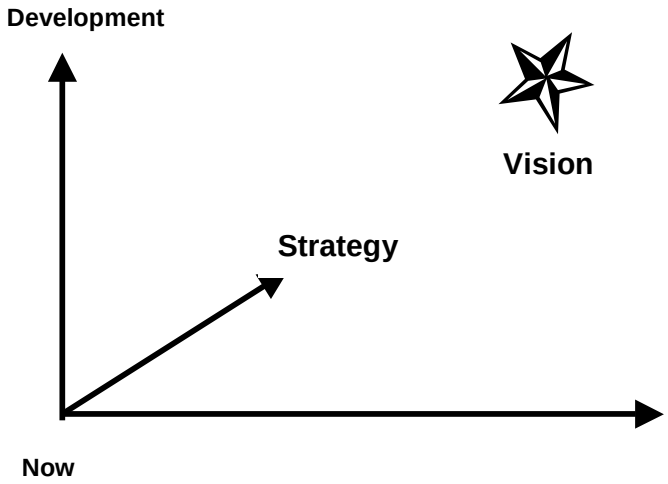
1.2 STRATEGIC THEMES AND OBJECTIVES

(a) Strategic themes

In order to realize the long-term vision (see following figure), a number of strategic objectives have been identified. Often there is a conflict between long-term and short-term priorities and trade-offs are called for. In order to allow the CSO deal with such conflicts, the objectives have been separated into focused but interlinked themes. The themes show what must be done internally to achieve strategic outcomes. They "*describe the "recipe" for combining the intangible ingredients of skills, technologies, and organizational climate with internal processes*" to achieve desired performance. Each of these themes provides a "pillar" for the Strategic Plan.

Expected outputs, activities, performance indicators and measures/verification, and assumptions have been specified. These are summarised in a logical framework matrix which is presented in Annex I.

Figure 1.2: Strategy and vision



The strategic themes are:

Strategic Theme 1: Improvement of public awareness about statistics

Like in other least developed countries, the role and importance of statistics is still not yet appreciated in Zambia. There are planners, administrators, decision-makers, etc. who do not always see statistics as vital for good governance and management of public affairs, and managers both in public and private sectors do not always see much relevance of statistics in their work. Secondly not enough work is being done by the CSO and other data producers to advocate for statistics and to promote their

use in society. And the CSO has not carried out an image building exercise to put it in the public eye.

Objective 1.1: Creating awareness about statistics

Awareness about the importance of statistics in managing the affairs of society will be created. "Statistical thinking" and use of statistics at all levels of society including schools will be promoted. Major statistical awareness programmes will be undertaken in order to achieve this objective.

Objective 1.2: Raise the profile of statistics and position the CSO

This objective will aim to raise the profile of statistics and better position the CSO and its standing in the eyes of other Government bodies and the public. The CSO products will be made to have a "brand name" that is instinctively recognized. Transforming the CSO into a semi-autonomous Central Bureau of Statistics (CBS) with representation on important Government Committees will help to raise the profile of statistics. It will also make the CBS more efficient and responsive to user requirements. Autonomy in statistical production will in addition ensure that official statistics have **integrity**, **impartiality** and **credibility**.

Objective 1.3: Increase use of statistics in evidence-based decision-making, planning, administration, monitoring and evaluation

Under this objective, the power of statistics to inform the process of government (e.g. supporting decentralization, 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. The role of statistics in supporting private sector investment and in promoting the development of effective and efficient markets will be demonstrated.

Strategic Theme 2: Development and promotion of an effective National Statistical System

The National Statistical System (NSS) is fragile and vulnerable. It lacks defined and shared objectives as well as a strategic direction both of which are essential for performance enhancement. The effectiveness of the NSS has been adversely affected by the restructuring of Government that has created problems of coordination and harmonization. The NSS has also been largely donor driven with short-term objectives to meet immediate data needs sometimes distorting national objectives and long-term planning.

Objective 2.1: Enhance capacity for data production and use

This objective aims to build capacity in all Statistical Units in all line Ministries, provinces and other organizations that collect national data through training and synergy. It also aims to enhance capacity of main data users to appreciate data and to be able to use them in their work.

Objective 2.2: Improve arrangements for coordination, collaboration, Networking and information sharing

A framework for improving the effectiveness of the NSS will be established including arrangements for coordination, collaboration, networking and information sharing among data producers, between data providers and users, between data providers and research/training institutions, and among donors. In particular, this objective aims to mainstream data users so that they can play a proactive role in the development of national statistics, develop a sense of ownership of the system and commit themselves to using its products.

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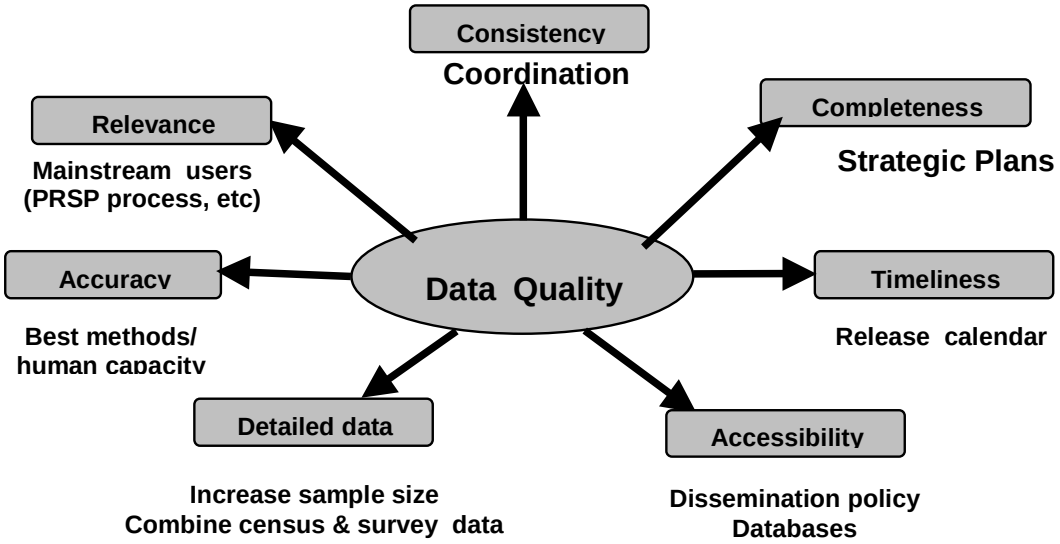
Objective 2.3: Improve data consistency and integration

This objective aims to ensure that data produced by different institutions in the NSS are consistent across sources and through time. At the very least it aims to ensure that data from different sources are comparable. This will be done by standardization of main concepts, definitions, classifications and norms; promotion of use of "best practices" and training of staff in different institutions. Not only will conflict data between sources be minimized but also their collection will take advantage of opportunities for realizing synergy and cost-effectiveness. Such data will be easy to integrate into main statistical frameworks like National Accounts.

Strategic Theme 3: Enhancement of quality of statistical products and services

Non-use or less than optimal use of statistical data has been attributed to lack of quality in some data series. The quality of statistical data and services will be enhanced by addressing the quality dimensions given in figure 5.3 below: relevance, accuracy, detailed data (disaggregation), consistency, completeness, timeliness and accessibility. Under each dimension, possible action to take is indicated.

Figure 1.3: Quality Dimensions



Objective 3.1: Better assessment of user needs

To enhance the relevance of data, it is important that key stakeholders take ownership and play a greater and pro-active role in the development of official statistics and the NSS in general. In particular, policy and decision-makers should be kept in the loop and engaged to make national data production policy relevant and their production sufficiently funded.

User needs keep changing. A mechanism for assessing user needs on a continuing basis will be established.

Objective 3.2 Provide accurate and reliable data

The likelihood of producing accurate data is more assured if “best practices” and appropriate methods are used, data collection instruments are properly designed and administered by the right personnel, and if the collected data are properly handled during the post-enumeration period. This objective will aim to promote use of “best practices” in data production. In addition, it will encourage research work and experimentation in order to develop appropriate methodologies and to apply quality control procedures in data production processes.

Objective 3.3 Provide more disaggregated data by important domains

There is a lot of demand for highly disaggregated data by main domains e.g. gender and lower administrative units (district, constituency, etc.). Such data are needed for various purposes including policy analysis and design; administrative and planning functions at lower administrative units in view of decentralization of government; targeting of relief assistance and other intervention programmes during droughts or other calamities; and project planning, monitoring and evaluation to be able to measure level, pace and impact of projects/programmes usually on the community in which the projects/programmes are located.

This objective aims to provide more disaggregated data through expanded sample sizes, combining data from censuses and surveys and reviving/using community-based systems e.g. vital registration system.

Objective 3.4: Timely delivery of data

Data relevance and utility tapers off with passage of time following their collection. Some data are of little use if not produced in real time. This is the case with crop forecast data and data required for reporting. Many data users complained about the considerable time lag between completion of data collection and data release which has constrained planning and reporting processes. Much of the delay in releasing data is usually due to constraints in post-enumeration data handling, including retrieving of completed questionnaires from the field, data processing, data analysis, report writing and printing. There are many cases where these activities have not been properly planned for in advance.

This objective aims to get advance publication of a **release calendar** and to do every thing possible to stick to it. It will also aim at application of the principle of equal access to data by simultaneously releasing data to users.

Strategic Theme 4: Harnessing Information Technology (IT)

Objective 4.1 Create a coherent IT infrastructure

This objective will aim to create a coherent IT infrastructure at CSO with a standardized platform of basic hardware, network and office automation applications.

Objective 4.2 Develop an Information Management System

This objective will aim to develop an Information Management System (IMS) that uses IT to capture, transmit, store, retrieve, manipulate, display and most importantly manage information used in one or more organizational processes. The system includes people, methods, and procedures for doing things with information.

In recent years, IMSs have acquired permanent and recognized position in a number of organizations. The systems are principally meant to facilitate data management and retrieval, which include Relational Database Management Systems (RDBMS), Geo Information Systems (GIS) and the like.

Objective 4.3 Aligning IT to statistical operations

Statistics can benefit from IT through improving the operations and reducing redundancies in data collection, data processing, data analysis, data storage, data access and data sharing.

This objective aims to align IT with statistical operations.

Strategic Theme 5: Development of human capacity and organizational effectiveness

Objective 5.1 Improve staff recruitment and promotion

As Department of Government, Civil Service procedures were used to recruit, motivate and retain staff. When the CBS is established, it 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. It will also have to put in place an attractive incentives structure so that the very best professionals can be recruited and retained.

Objective 5.2 Build a "critical mass" of skilled and motivated personnel

In order to meet the huge demand for official statistics, the office will need to build a huge skills base. This objective, therefore, aims at ensuring that a "critical mass" of skilled personnel is developed through acquisition of knowledge and strategic skills. A major training programme will be established and under the programme, training, skilling and re-skilling will be priority activities to be undertaken on an ongoing basis.

Objective 5.3 Improve statistical governance

This objective aims to address a number of issues related to statistical governance including updating the 1964 statistical legislation; making the office accountable to a multiplicity of data users and not just Government; improving data relevance; improving coordination, networking, partnerships and information sharing; improving benefits from technical assistance; improving knowledge management; improving data quality; improving data analysis; improving information dissemination and access; and having better data management

Objective 5.4 Improve management systems

Management of CSOs in Africa has been characterized as being generally poor. This objective aims to address management problems. The objective will be to ensure that good staff recruitment and promotion procedures are established and documented; attractive staff terms and conditions of service are established; general guidelines for the management of financial resources are developed; guidelines laying down procedures for managing accounts records including bookkeeping, payment procedures, payrolls and accounting system are established and properly documented; guidelines laying down the procedure to be used in procuring goods and services are established and followed; and that technical assistance is put to best use possible.

Objective 5.5 Build an office block

Construction of the office block for the CSO has stalled. This objective aims to get construction work going so that the building can become available for use within two years.

Two

STATISTICAL WORK AND CAPACITY BUILDING PROGRAMMES

2.1 INTRODUCTION

The mission and strategic objectives need to be operationalized for results to be achieved. This has been done by designing work and capacity building programmes. These programmes will also serve as coordinating tools for the Bureau and the NSS to achieve synergy and cost-effectiveness in statistical production in the country. The work and capacity building programmes essentially present activities to be undertaken and targets to be achieved.

Given resource constraints, the said activities were prioritized. The following criteria were used for prioritization of the said activities:

(a) The *raison d'etre* for the Strategic Plan is to support national development and especially the PRSP. Hence the priorities for the work programme have been tailored to the data needs for informing and underpinning the PRSP and other development initiatives. Some new activities to provide benchmarks for the PRSP will have to be undertaken.

(b) The Bureau will collect those data for which it has comparative advantage in collecting and leave other data collection activities to line Ministries and other data producers. However, it will set standards, promote use of best practices and coordinate national statistical production.

(c) Priority has been given to activities which are less cost intensive relative to other possible data sources or which are integrative, making 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 – activities have been rationalized.

(d) The programmes have taken account of existing institutional and technical capacity for implementing activities and the potential for their sustainability. Where capacity is lacking, it will be built first.

(e) Ongoing activities e.g. GDP estimation, compilation of Consumer Price Index (CPI), Index of Industrial Production (IIP), etc will be continued to maintain the series. However, these activities will have to be improved.

(f) Some activities need to be undertaken to provide a basis for subsequent activities e.g. updating the CRBE before the Economic Census can be conducted, updating the EA maps before undertaking the next Population and Housing Census, training in GIS and poverty mapping before poverty maps can be produced, etc.

(g) Activities aimed at building capacity and infrastructure e.g. recruitment of staff, training, office space, etc. have been given higher priority.

The activities in each programme are appropriately sequenced and charted out. The activity charts which are given in Annex - II and Annex - III plot a "**critical path**" for Plan execution and help to better achieve coordination in the implementation of planned activities. Annex - IV gives numerical targets and a tentative budget for the Work Programme while Annex – V gives numerical targets and a tentative budget for the Capacity Building Programme. Needless to say the targets are necessary for budgeting purposes and for monitoring and eventual evaluation of the Plan.

2.2 OUTLINE OF THE STATISTICAL WORK PROGRAMME

A detailed outline of major statistical activities that the Bureau will undertake during the Plan period is presented at Annex II. This outline is based on detailed work programme prepared for 2003 by line managers before the start of the Consultancy mission and projected to 2007 with the assistance of these managers. The activities are prioritized on the basis of the above criteria.

The focus of the work programme is to provide statistical data and information required for the PRSP programme implementation and monitoring as well as monitoring other government development initiatives and to improve the quality, efficiency and timeliness in delivering national statistics.

The work programme is divided into periodic and ongoing activities, and new activities. Under each of these categories, planned secondary data collection, survey and census activities are presented. A condensed outline of these categories is presented hereunder.

a) Periodic and ongoing statistical activities

i) Secondary compilation

Government Ministries and agencies will continue to be the main source of secondary data on migration, vital statistics, education, public health, trade, transport and communication, agriculture, environment, energy, water supply, currency and banking, public finance, etc. Secondary data will be collected, processed and published by the Bureau.

ii) Surveys

The Bureau shall continue to conduct annual surveys on economic, agriculture and environment statistics as well as social and demographic statistics.

iii) Censuses

The Bureau shall complete the data analysis and dissemination of the 2000 population census and plans to carry out economic census and also censuses of agriculture and livestock.

iv) Other Activities

The Bureau shall carry out other statistical work e.g. National Income Inquiry, Labour Market Information System, Poverty Mapping, etc.

b) New Statistical Activities

The Bureau intends to produce statistics being currently demanded by users in economic agriculture and environment as well as social and demographic areas.

c)Relevance of CSO to PRSP Monitoring

The Bureau will provide indicators for monitoring of the implementation of the PRSP. The following table gives the PRSP indicators that will be monitored by some of the CSO statistical activities:

Table 2.1: Relevance of CSO to PRSP monitoring.

PRSP Indicators		CSO Activities
1.	Real Annual GDP Growth Rate	GDP Estimation
2.	Incidence of Poverty	LCMS)/IMS/FHANIS
3.	Urban Incidence of Poverty	LCMS)/IMS/FHANIS
4.	Poverty Gap (Incidence and Depth)	LCMS/IMS/GDP
5.	Gross Domestic Investment	GDP Estimation
6.	Inflows of Foreign Direct Investment	Economic Census
7.	Annual Growth in the Value of Exports	Trade Statistics
8.	Annual Rate of Inflation	Consumer Price Index
9.	Real Annual Growth in Agricultural	GDP/CFS/PHS/Agriculture Census
10.	Percent of Food – Insecure households	LCMS/FHANIS
11.	Total Employment in Agriculture Sector (Formal and Informal)	PHS/LCMS/Agriculture Census
12.	Earnings from Agriculture	Export Trade Statistics
13.	GDP Growth in the Food, Beverage and Tobacco Sub-sector	GDP Estimation
14.	Food Reserve	CSO/Food Reserve
15.	Growth Rate of Manufacturing	GDP/Index of Industrial Production
16.	Growth Rate in Manufacturing Employment	CRBE/Employment
17.	Growth in Value of Manufactured Exports	Trade Statistics
18.	School Attendance Rates	Census/LCMS
19.	Annual Growth in value added of restaurants, bars and hotels (used as proxy for tourism)	Tourism Survey
20.	Rural-based Industrial Enterprises	Economic Census
21.	Employees in Rural-based Enterprises	Economic Census
22.	Literacy Rate (population aged 15 and over)	Census/LCMS
23.	Life Expectancy	Census
24.	Children who are stunted	ZDHS/LCMS

As mentioned earlier, the Work Programme targets as well as the tentative budget are given in Annex IV. It can be seen from the table that altogether, 234 main activities will be undertaken during the Plan period - 54 in 2003, 51 in 2004, 43 in each of the remaining years.

6.3 CAPACITY BUILDING PROGRAMME

Any work programme should take into account the capacity for its implementation. It can be seen that the above programme is heavy and will require a lot of technical and infrastructural capacity. Fortunately, some of the required capacity exists within the CSO even though it needs to be enhanced. Some of it will have to be built during the Plan period. The critical path for the capacity building programme is given in Annex III.

The capacity building programme centers on issues of staffing, training, infrastructure and management systems.

(a) Staffing

It has been estimated that in order to implement the above programme and maintain optimum capacity for sustainable national statistical production, a total of 731 personnel will be required as compared to the current establishment of 656. Over the Plan period the staffing complement will therefore go up by 75. Of these, 132 or 18.1% will be professionals, 254 or 34.7% sub-professionals, 137 or 18.7% technical staff and 208 or 28.5% support staff as per the following table.

Table .2.2: Schedule for Current and Additional Staff Requirements

Staff Category	Current Establishment (2002)	Currently Filled (2002)	Proposed Staff Requirement (2003-2007)	Establishment Increase (2002-2007)
Professional	80	60	132	52
Sub-professional	207	151	254	47
Technical	110	94	137	27
Support staff	259	242	208	-51
Totals	**656**	**547**	**731**	**75**

The recruitment of staff into the Bureau should be staggered over the period 2003 – 2007 as per following table.

Table 2.3: Schedule for recruitment of staff

Year	Professionals	Sub-Professionals	Technical staff	Support	Total
2003	20	20	10		**50**
2004	20	10	10		**40**
2005	22	10	7		**39**
2006	10	7			**17**
2007					
Totals	**72**	**47**	**27**		**146**

(b) Training

As was mentioned in Chapter 3, CSO has not had a training programme for some years now and whatever training has taken place has been ad hoc, unplanned and undirected. The impact of such training has been less than desired. In order to realize the long-term vision and the mission of the Bureau and in order to build an effective and sustainable NSS, this training programme has been proposed.

Training will not be a **one-off activity** but rather an **ongoing process** in tandem with all other Bureau activities of a recurrent nature, in order to continuously improve the quality of statistical outputs.

(i) Objectives of the training programme

The **development objective** of the training programme is to underpin the development of the Bureau and the NSS by providing integrated, accurate and timely statistical data and information required for planning, implementation, monitoring and evaluation of national development policies, initiatives and programmes.

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 will be developed,
- enhance the capacity to design and effectively manage data production processes,
- enhance computing and analytical skills of professional staff,
- develop soft skills such as report writing, and
- increase appreciation for and use of statistical data and information.

(ii) Nature of the training programme

The hallmark of the training programme is that it is:

- tailor-made,
- practical-oriented,
- hands-on,
- largely in-house, and
- ongoing.

The programme gives higher priority to on-the-job skills development over mainstream academic training. Such a programme will have the effect of immediately impacting workplace staff performance. Also emphasis will be put on group training as this has the advantage of being cost-effective and producing trained personnel in greater numbers. However, on a selective basis, mainstream academic training will be undertaken in order to strengthen the capacity to design surveys and censuses, and to do data analysis.

(iii) Management of the Training Programme

Training will be a Section under the Human Resources Branch of the Finance, Human Resources and Administration Directorate. A Training Officer will be appointed to handle all training related matters.

(iv) Components of the Training Programme

The training programme will have the following components:

- induction/orientation course
- on-job training
- training for data collection
- staff rotation
- study tours and staff exchange
- certificate course
- s*hort courses, training seminars and workshops*
- *diploma courses*
- *degree courses*
- *training for data users*

(v) Induction/orientation course

This course will be compulsory for all staff recruited into service. The course will be conducted periodically in order to introduce the staff to the Bureau. The course will cover such topics as the NSS; the mission, vision, core values and primary role of the Bureau; its structure and how its various branches interact with each other; and the NSS.

Since the Bureau will be coordinating and supervising the NSS, new staff recruited into Statistics Units in line Ministries will also be required to undergo this induction.

The duration of the course will be one week. It is expected that during the Plan period, 80 personnel will undergo induction courses in 2003, 50 in 2004, 50 in 2005, 35 in 2006 and 20 in 2007. Some of the inductees will come from line Ministries.

(vi) On-job training

On-job training will essentially be a one-on-one training involving skills, knowledge and technology transfer to subordinate staff by their supervisors and also by experts and advisors who, from time to time, will be providing technical assistance to the Bureau. The main disadvantage of this type of training is that it is limited in scale (benefits one or two people at a time) and is generally too specific.

(vii) Training for data collection

It is good practice to train all staff to be involved in a census or survey before field work starts. It is important that this training is not done for its sake but is structured, standardized, timetabled and its impact is evaluated at the end of the training session.

Training for data collection is usually best done in a hierarchical manner with Training of Trainers (TOTs) being done first and cascading down to training of enumerators.

Training of Trainers (TOT): Trainers for data collection will be senior professional staff with a lot of experience in planning and management of large scale data collections. In each case, these Trainers will be trained centrally in Lusaka. This has the advantage that it allows for uniform training from the same instructor(s). This training should aim to empower Trainers to appreciate what it takes to collect quality data and in turn, to empower field supervisors and enumerators to do the same.

Training of Field Supervisors and Enumerators: After their training, the Trainers will train supervisors and enumerators. The training of the two groups of field staff together will facilitate understanding of roles and relationships between them. This training will also aim to equip field staff with enough knowledge to be able to appreciate the importance and uses of data as well as methods for their collection.

(viii) Staff rotation

Some form of staff rotation will be done to enable some categories of members and especially new staff, to acquire the widest possible experience in the shortest time by moving from one job to another. This will make it possible to develop versatility among staff. However, this will be done without losing sight of the need to maximize benefits from specialized staff. Specialization results from learning more and more about ones respective area of responsibility e.g. economic statistics, health statistics and agricultural statistics).

(ix) Study tours and staff exchange

The study tours are meant to give staff an opportunity to study statistical systems and methods used elsewhere and learn from the experiences of other countries especially those in the sub-region which have similar socio-economic conditions. The Bureau will organize study tours for staff and attach some of them for some time to those national statistical offices in the African region which are deemed to be doing well in particular areas.

Six (6) study tours have been scheduled for 2003 and seven for each year thereafter up to 2007. Two members of staff will go on staff exchange each year of the Plan period.

(x) In-Service Training Course

The gap left by the discontinuation of the In-Service Training Programme is now being felt. With the high staff turnover, CSO and line Ministries have continued to recruit school leavers. These school leavers need basic training in statistics and related subjects for them to be able to work efficiently.

It is, therefore, important that re-opening this programme albeit in an improved form, is given high priority. One part of the programme should concentrate on training of school leavers at certificate and intermediate level and induct new staff. The other part should aim to offer professional staff specialised training on new developments in statistics and information technology. The programme should also schedule outside training at diploma and degree level.

The new programme should be institutionalised within CSO. To sustain the programme, reasonable user fees should be charged and lecturers should be remunerated for participating in the programme. On a selective basis, some external lecturers especially from the University of Zambia will be hired to carry out specialized training in specific areas.

Certificate level training

This certificate course will lead to career development and, therefore, it will be linked to the scheme of service (promotion prospects) within Bureau. In this context, the Bureau should have the certificate recognized by relevant institutions in the country.

- **Course duration and participation**

Again the course will be carried out on a full-time basis and last for nine (9) months . divided up into three terms; with three weeks break between terms. The bulk of the participants in the course will come from Bureau (head office and provincial offices) and various partner agencies participating in the NSS.

- **Structure of the Course**

The course will have a practical orientation and will cover the following subjects:

- Statistics (*official statistics, statistical theory and methods, applied statistics*)
- Mathematics
- Computing
- Economics (*economic theory and applied economics*)
- Practicals
- Field Project

As already mentioned above, the course will be practical-oriented and its graduates will be encouraged to go for diploma training at the East African Statistical Training Centre in Dar es Salaam, Tanzania and other institutions where appropriate training can be done.

- **Teaching Materials**

One of the problems experienced in the past in running this course was non-availability of appropriate/relevant teaching materials. While some textbooks will be purchased for use by the trainees on borrow-return basis and statistical publications acquired from international organizations (principally the United Nations and its agencies), staff of the Bureau will be required to prepare step-by-step manuals for use in the programme.

- **Numbers**

It is expected that about 25 personnel will be trained each year up to intermediate level.

Short courses, seminars and workshops

Through the training programme, short courses, seminars and workshops will from time to time be conducted in-house for professional staff on specialized or new areas of statistics including sampling methods, survey design and implementation, data analysis, data interpretation, report writing, use of analysis computer packages, GIS, crop forecasting, environmental statistics, data warehousing and mining, etc.

(xi) IT Resource Centre

With the changing focus of the statistical office, the horizon for IT support is even wider. The IT support towards a National Statistical System requires a systematic coordination. There will be need to keep everyone concerned i.e. within the statistical office and collaborating partners, abreast with the fast changing IT issues and also in the area of statistical processing so as to ensure quality work throughout the NSS.

The IT resource center will be set up complete with its own library. Its primary role will be to ensure that IT is taught to personnel involved in statistical work. It will also provide an opportunity for revenue collection by providing IT related services to those outside the organization.

Initially, the center will be run by someone reporting to the Manager in charge of Technical Operations.

(xii) Short Courses, Occasional Seminars and Workshops

In addition to the above internally organized programmes, there are international training programmes that offer short courses 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), Munich Centre for Advanced Training in Applied Statistics for Developing Countries (Munich, Germany), etc. The Bureau will take full advantage of these courses to train its staff in various areas of statistical production.

(xiii) Diploma and degree courses

Like in the past, graduates of the In-service Training Programme and other staff of the Bureau will be encouraged to go for higher training. This training will be organized in such a way that no activities suffer because the responsible personnel have gone for training.

The choice of training centers will be judicious. Priority will be given to those centers with practical-oriented training programmes and which are also in the African region like the EASTC in Dar es Salaam (for diploma) and the Institute of Statistics and Applied Economics (ISAE) at Makerere University (for degree).

Training at masters level will be undertaken in IT or statistics with specialization in such areas as national accounts, sampling, data mining, agricultural statistics, economic statistics, etc. During the Plan period, some staff members will take up courses leading to the award of Ph.D degrees in various subjects.

It is expected that 10 members of staff will be trained at diploma level in statistics, 5 in IT and 4 in other subjects; 5 will be trained at Bachelor's degree level, 4 at M.Sc. level and 1 at Ph.D level in each year during the Plan period.

(xiv) Degree training in official Statistics at UNZA

The best way to ensure a sustainable supply of professional statistical personnel is to develop a statistical training programme leading to the award of a degree in statistics at the University of Zambia (UNZA). Currently, statistics is taught as a subject in the Mathematics Department in the School of Natural Sciences. It is taught to almost all first year students admitted into the school. A few students do continue with statistics as a major subject for their undergraduate degree. The majority take statistics as a minor subject with majors such as Economics, Agriculture, Engineering, etc. The statistics training is academic and does not produce graduates trained in official statistics. At UNZA, the Demography Division in the Department of

Social Studies carries out training up to degree level in Demography. It also carries out short-term training programmes.

The Bureau will work closely with UNZA to start a degree course in statistics with a focus on official statistics.

(xiv) Other training

Management

Apart from statistical work, Directors and Heads of Branches and Sections carry out management functions. They need to use appropriate management principles in their work especially in planning, work programming and budgeting, writing proposals, etc. Tailor-made training programmes in management will be organized for them. The National Institute of Public Management is prepared to design such programmes.

Training for non-statistical personnel

The Bureau cannot function properly without capacity in areas other than statistics and IT. The capacity of administrative staff, accounts staff, computer personnel, etc will also have to be improved through training. The Bureau will ensure that all staff get appropriate training.

Soft skills

Special training will be organized for all personnel to develop soft skills like communication, writing and reporting. As part of this training, staff will be empowered to use the skills one acquired to advocate for statistics.

(xv) Training for Data Users

It is known that while there are many data gaps in many African countries including Zambia, 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, inter alia, include 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, **informational workshops** will be held for main data users. The workshops will aim at empowering main data users in the first place to appreciate data and secondly in accessing and using data from MISs and the National Central Database (once this has been designed). 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 two (2) such workshop will be held each year for selected stakeholders at national level and two (2) at provincial level.

The following table gives training targets for the Plan period.

(c) Infrastructure

The programme of building the capacity for the Bureau includes creating a conducive working environment for staff. This includes offices, IT equipment and transport

(i) Offices

It was mentioned earlier that because of the construction of the office block which has stalled, staff are scattered in different buildings, the library is not functional and not all computers are on the network (LAN).

Priority will be given to sourcing funds to complete the construction of the office block early on in the Plan period. A total amount of K16 billion is required to complete the construction work.

Table 2.4: Training targets

Training	2003	2004	2005	2006	2007	Total
Induction Courses	80	50	50	35	20	**235**
Study tours	6	7	7	7	7	**35**
Exchange	2	2	2	2	2	**10**
Certificate course	25	25	25	25	25	**125**
Diploma courses						
Statistics	10	10	10	10	10	**50**
IT	4	4	4	4	4	**20**
Bachelors degree specializing in statistics	5	5	5	5	5	**25**
M.Sc (Statistics)	4	4	4	4	4	**20**
Ph.D	1	1	1	1	1	**5**
Short courses	12	9	9	8	8	**46**
Informational workshops and seminars						
National level	200	200	200	200	200	**1000**
Provinces	900	900	900	900	900	**4500**

(ii) Installation of Local and Wide Area Network (WAN)

It is expected that the installation of LAN and similar networks like Wide Area Networks (WAN) and Internet will improve the efficiency of the office, optimize the use of resources and increase information sharing. It will also facilitate development of skills in knowledge sharing and management through establishment of groupware that facilitate file sharing and online working groups.

As was mentioned earlier, a LAN has been installed but it does not cover all computers. The work of getting all computers on the LAN will continue. In addition, a WAN will be developed to take care of Provincial Statistical Offices and other key users of the Bureau data like Ministry of Finance and National Planning.

(iii) Procurement of Communication, Equipment and Transport

The need to equip the Office with communication, equipment and transport for it to function efficiently has been justified in the preceding sections. The requirements have taken into account the work programme, existing equipment and number of new staff to be recruited.

During the Plan period, it is planned to procure 224 desktop computers, 150 UPSs, 5 computer servers with Operating System and Backup power, 20 laptops, 5 network printers, 20 printers, 1 communication system, computer software (1SAS, 1SPSS), 4 heavy duty photocopiers, 12 medium size photocopiers, 10 fax machines, 10 Diazo printing machines, 50 fans, 10 plain paper cutting machines, 30 air conditioners, 15 fridges, 13 shredders, 35 vehicles, 50 motor cycles, 14 boats and 130 bicycles.

(a) Establishment Management Systems

Proper management information systems consistent with good practice will be established as a resource. 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 Office means that management of funds, equipment and human resources at the Bureau which has partly been the responsibility of the Public Service, will now become the full responsibility of the organization. Also as a Department of Government, the CSO has been using government financial regulations. As a semi-autonomous agency, the Bureau will have to develop its own systems for managing resources including personnel and funds.

The following systems will be developed to facilitate better management of the Bureau:

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 should be put in place before new recruitment can be done. It has been proposed that development of these procedures should start in the 3rd quarter of 2003.

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. These terms should be properly documented and made known to all staff.

Financial Regulations

There will be a need to develop general guidelines for the management of financial resources of the Bureau. These should cover such things as receipt of funds, storage, disbursement and budgetary controls. The regulations should also indicate the signatories to the accounts and reporting of financial transactions. These should be 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 should be 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 have cross-reference to the financial regulations and are for general use in the Office. These should be properly documented.

Management Information System (MIS)

In collaboration with the IT Directorate, computerized systems to support administration of the Bureau will be designed and implemented, including filing, human resource management, accounts, etc.

National Consultants will be hired to develop these systems.

(e) Technical Assistance

The weaknesses of the CSO have been comprehensively reviewed in Part I. In order to address these weaknesses and lay a basis for further statistical development, the Plan addresses a range of issues, including supporting all key developments across the office. Areas where technical assistance will be required have been identified. These include:

- GIS and poverty mapping
- Informal Sector Survey
- Labour Market Information Systems (advise on establishment of the system)
- Consultant in IT and Data Management (design an IT policy and Strategy)
- Statistical Organization and Management (advise on operationalization of the Plan)
- Printing (advise on modernizing the Printing Press)

General Terms of Reference for these Consultancies are given in Annex VI.

6.4 Tentative Budget

This section provides indicative costs of the Plan. The costs are required to give an indication of the required level of investment for the implementation of the Plan. A number of considerations and assumptions in the budgeting process are given in table 6.6 (work programme) and table 6.7 (capacity building programme).

The full budget is presented in Annexes V and VI. The total budget for the work programme amounts to K98.4 billion over a period of 5 years. This averages about K20 billion per year.

The budget for 2003 of K 43.5 billion is much higher than in other years because of the Living Conditions Monitoring Survey (LCMS) – to cost K3.75 billion (funded), Economic Census – K4.6 billion, Census of Agriculture and Livestock – K20 billion and the Agricultural Special Supplementary Survey – K1.5 billion (funded).

The capacity building programme is heavy but adjustable. The budget for 5 years is K217 billion of which 77% is for staff salaries and wages. The budget also includes the funds required for training (K16.5 billion); completing the office block and renting (K15.9 billion); communication, equipment and transport (K15.4 billion), development of management systems (K0,23 billion) and technical assistance (K1.1 billion).

It is proposed that this amount of money should be raised by Government and the donor community. It is expected that the Government, among many, will contribute in the following areas :

- Paying salaries and other remunerations to staff;
- Staff recruitment;
- Creating a conducive environment for the statistical operations to be effectively conducted;
- Provision and maintenance of infrastructures for the office, which include refurbishment and office;
- In-country training;
- Compilation of secondary statistics; and
- Other operational costs e.g. telephone and electricity bills.

It is expected that the development partners will among mant contribute in the following areas:

- Technical assistance;
- Surveys and censuses;
- Off-shore training;
- In-country training;
- Procurement of equipment, vehicles and motorcycles;
- Remuneration to staff.

It is proposed that development partners assist in the payment of remuneration of staff. This support should continue during the first three (3) years of the plan period while possibilities of income generating activities are being explored to re-position the Bureau into a partly self-financing institution.

The envisaged resource gaps in the above areas for the year 2003 are indicated below in table 2.5 (work programme) and table 2.6 (capacity building programme).

Table 2.5: Resource Gaps For The Financial Year 2003 (Work Programme)
K' million

Activity	Source of funding	Total cost	Amount Funded			Resource Gap
			Donor	GRZ	Total	
Economic census	GRZ/Donor	4,627	0	0	0	4,627
Census of Agriculture & Livestock	GRZ/Donor	20,000	0	0	0	20,000
Labour Force Survey	GRZ/Donor	700	0	0	0	700
Informal Sector Survey	GRZ/ILO	956	956	0	956	0
Pilot Manpower Survey	GRZ/Donor	577	0	0	0	577
Crop Forecasting Survey	GRZ/Donor	850	0	0	0	850
Post Harvest Survey	GRZ/Donor	1,000	0	0	0	1,000
Agriculture Special Supplementary Survey	GRZ/Michigan University	1,500	1,500	0	1,500	0
Zambia Demographic and Health Survey	GRZ/Donor	2,503	0	0	0	2,503
Zambia Demographic and Education Survey	GRZ/Donor	1,742	0	0	0	1,741
Index of Industrial Production survey	GRZ/Donor	577	0	0	0	577
Zambia Sexual Behaviour Survey	GRZ/USAID	150	150	0	150	0
Living conditions Monitoring Survey	GRZ/World Bank	3,750	3,750	0	3,750	0
Indicator Monitoring survey	GRZ/Donor	1,500	0	0	0	1,500
FHANIS	GRZ/Donor	650	0	0	0	650
Tourism Survey	GRZ/Donor	923	0	0	0	923
Population Registration (Pilot Survey)	GRZ/Donor	500	0	0	0	500
National Income Enquiry	GRZ/Donor	500	0	0	0	500
Comprehensive Listing of Business Establishments	GRZ/World Bank/EU	955	290	0	290	665
Time Use Survey	GRZ/ILO	1,250	1,250	0	1,250	0
Analysis and Dissemination of 2000 Census	GRZ/Donor	803	0	0	0	803
Updating of Census maps and infrastructure	GRZ/Donor	300	0	0	0	300
Development of GIS Database	GRZ/Donor	350	0	0	0	350
Data Warehousing and Web Dissemination	GRZ/Donor	360	0	0	0	360
Marketing, Sales of Publications, Cataloguing	GRZ/Donor	150	0	0	0	150
Africa Statistics Week	GRZ/Donor	200	0	0	0	200
Totals		44,623	7,896	0	7,896	39,126

Table 2.6: Resource Gaps For The Financial Year 2003 (Capacity Building Programme) K million

Activity	Source of funding	Total cost	Amount Funded			Resource Gap
			Donor	GRZ	Total	
Staff Emoluments	GRZ/Donor	27,218	0	4,873	4,873	22,345
Training	GRZ/Donor	3,488	0	353	353	3,135
Office Building, Communication, Equipment and Transport	GRZ/Donor	9,174	0	4,844	4,844	4,330
Development of Management Systems	GRZ/Donor	225	0	0	0	225
Technical assistance	GRZ/Donor	680	0	0	0	680
Totals		40,785	0	10,070	10,070	30,715

Notes on the budget

Hereunder, in a summary form, are considerations and assumptions that were subject-wise taken into account when preparing budgets for the work and capacity building programmes:

Table 2.7: Considerations and assumptions in budgeting for the work programme

Work Programme Budgeting	
Compilation of Secondary Statistics	**Surveys and Censuses**
The budget in this category considered the following: • Stationary for printing data collection forms; • Data collection; • Transport for field work; • Computer consumables; • Allowances for personnel used; • Printing and publication; and • Other expenses.	The budget estimates were made based on the CSOs experience with data collection procedures and benchmarking with similar surveys conducted in the sub-region. The following items were considered in the estimates: • Preparatory costs; • Development of the survey/census materials/instruments; • Conducting pilots, listing and training of field staff; • Cost of enumeration (field work); • Costs of processing and publication; • Costs for technical assistance in some specialized areas.

Other activities	
The estimates were based on the following: • Ongoing activities that have already been paid for by the Government, for example, estimation of GDP and CPI. • Activities that are being done jointly with other institutions e.g. ZDES with Ministry of Education. • Activities that are already funded by development partners like the Agriculture Special Supplementary Survey • Activities which will need technical assistance to build the related capacity at CSO, like development of IT Policy and Strategy, development of GIS and Poverty Mapping	

Table 2.8: Considerations and assumptions in budgeting for capacity building programme

Capacity Building Programme	
Staff requirement	**Training**
The budget assumes that the Government will be responsible for employing the extra-required staff. Levels of salaries and wages have been arrived at by benchmarking with national institutions in the same category as the planned Bureau such as Bank of Zambia and other statistical offices in the sub-region.	The following considerations have been taken into account: • Training for data collection will be undertaken in-house. The rate used considers allowances for trainers and training materials; ***NOTE :*** *The programme gives room for a person to attend more than one course.* • The costs for study tours are standard costs for three-week tours • Costs for Diploma course rates are for EASTC; First and Masters degree rates are based on training costs at Makerere University (Uganda); and costs for Ph.D training are standard for U.K institutions. • Short-term training and in-house specialized courses are standard rates for courses conducted in-country.
Technical assistance	**Office infrastructure**
• Consultants will be engaged on short missions and the budget assumes an average daily honorarium rate of US$500 for experienced consultants plus a DSA of $150 per day..	• **Office block:** The budget is based on the current contract which has stalled. • Cost of rentals is based on what CSO is currently paying for rent (increased by 40%) • **LAN :** The item has not been budgeted for as it depends on the architecture of the new buildings.
Equipment and transport	**Development of Management Systems**
The requirements are based on the inventory analysis and the costs are based on the current market prices for different items.	The rate applied is consistent with rates charged by National Consultants and CSO rates.

Three

IMPLEMENTATION, MONITORING AND EVALUATION

3.1 INTRODUCTION

It is important to appreciate that the right strategy is not all that is needed to realize the vision and mission of an organization and turn it round. The strategy has to be properly implemented. Although strategy formulation and implementation are inextricably linked, they are fundamentally different. Strategy formulation involves positioning forces before action, focuses on effectiveness, requires good intuitive and analytical skills, and requires coordination among a few individuals. Strategy implementation on the other hand is about managing forces during action, focuses on efficiency, requires special motivation and leadership skills, and requires coordination among many people[4].

It has been observed that, "*strategies formulated but not implemented serve no purpose*"[5]. Indeed it has been observed that many effectively formulated strategies fail because they are not successfully implemented. 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*"[6]. Thus strategy implementation is seen as "*the most important factor shaping management and corporate valuations*"[7]

3.2 STRATEGY IMPLEMENTATION

(a) Strategic Management Process

A strategic management process will be used to ensure that the Bureau's high-level mission statement is translated into actions and work to be performed by frontline and back-office employees. Robert S. Kaplan and David P. Norton present a logical continuum in Figure 7.1 below that makes it possible to do this.

The Bureau will adopt this process that is presented. It should be noted from the figure that the process starts with identification of user needs and cascades down to the vision and mission, core values, strategy, balanced score card, operational plans and personal objectives which lead to strategic outcomes that include delighted users, effective processes and motivated and skilled staff.

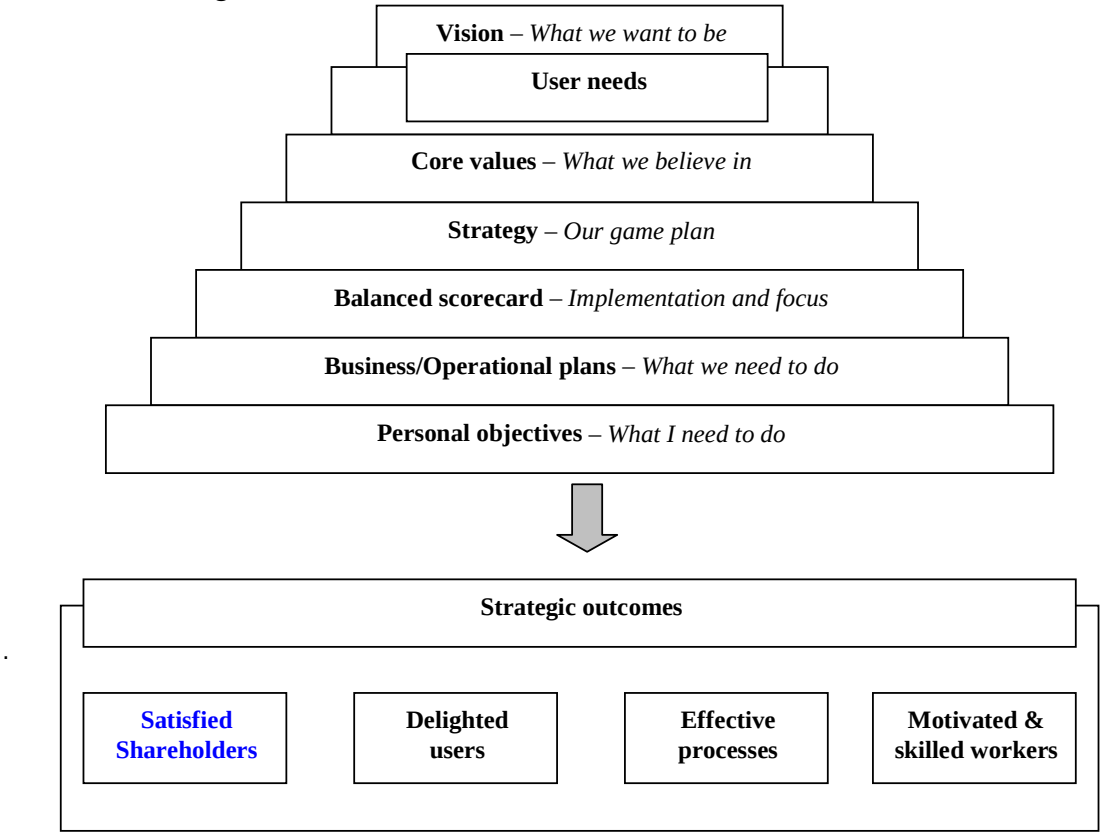
[4] ***Concept of Strategic Management by Fred R. Davis, Sixth Edition, Prentice Hall International, Inc., 1997.***
[5] ***Ibid.***.
[6] ***The Strategy-focused Organization by Robert S. Kaplan and David P. Norton, Harvard Business School Press, Massachusetts, 2001***
[7] ***Ibid***

The **Balanced Scorecard** is a cutting-edge strategic management system that ensures the implementation, communication and alignment of strategies to objectives.

It was designed initially for private sector companies but used extensively in government and non-profit sector. The Balanced Scorecard enables balanced result management to be done – the balance is provided between short- and long-term objectives, between lagging and leading indicators, between external and internal performance, etc. It thus describes the multiple indirect linkages required to connect improvements in an organization's intangible assets – the ultimate drivers of knowledge-based strategies. The advantages of the Balanced Scorecard are that it:

- cascades strategic objectives to sections, teams and individuals,
- helps understanding of strategy amongst managers,
- aligns projects and initiatives to strategy,
- aligns strategy and operational effectiveness,
- facilitates communication of the strategy, and
- allows measurement, monitoring and management of strategy.

Figure 3.1 Strategic management process that translates the mission of the organization into desired outcomes



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The following is an example of a template that can be used to design a Balanced Scorecard for the Bureau.

Table 3.1: Template for a Balanced Scorecard for the Bureau

Perspective	Strategic Objective	Measure	Target	Activity	Accountable
Users					
Business processes					
Governance					
People					

Management issues considered to be central to the implementation of this Strategic Plan include:

- Establishment of a new legal framework
- Aligning the organizational structure to Strategic Plan
- Creating awareness about the Plan
- Change management
- Creating a strategy-supportive culture
- Enhancing statistical governance
  - ✓ Improving relevance
  - ✓ Improving coordination, networking and information sharing
  - ✓ Improving knowledge management
  - ✓ Improving data quality
  - ✓ Improving data analysis
  - ✓ Improving information dissemination and access
- Developing an IT Policy and Strategy
- Human Resources Development
- Management Systems

(b) Establishment of a new legal framework

In the context of the Strategic Framework, a new Census and Statistics Act has been proposed to enhance the effectiveness of the NSS. The proposed Act provides for, among other things:

(i) transforming the CSO into an "autonomous institution" government agency, to be called the **Central Bureau of Statistics (CBS)**, in order to make provision of official statistical data and services more efficient and responsive to user needs. This is consistent with the recommendation of a management audit of the Ministry of Finance and National Planning to transform CSO into a fully fledged "autonomous institution" under a "Board of Directors" reporting to the Minister.

(v) the Bureau will be responsible for co-ordinating and supervising the NSS.

(vi) establishment of a **Statistical Policy Board** (the Board) as the governing body of the Bureau to be appointed by the Minister responsible for statistics. The functions of the Board are presented below.

(vii) The position of Statistician-General to be appointed by the President and approved by Parliament.

(c) Aligning the organizational structure to strategy

Effective implementation of a strategy requires that the organizational structure be aligned to the strategy for a number of reasons. Among them, the structure determines how objectives and policies will be established, and how resources will be allocated. The structure should, therefore, be designed in such a way as to support implementation of the strategy.

The current structure of CSO will be inappropriate for the Bureau. For a start, it is top heavy with four (4) Deputy Directors. Secondly, it is not rationalized. For instance, a single survey, the Living Condition Monitoring Survey, is a Branch in its own right, and the other many surveys are not. IT is a Branch with all sorts of sections under IT which do not cohere, including Printing, Publications, Dissemination and Library Services. A new structure for the Bureau has been proposed and is presented in Figure 3.2.

Board

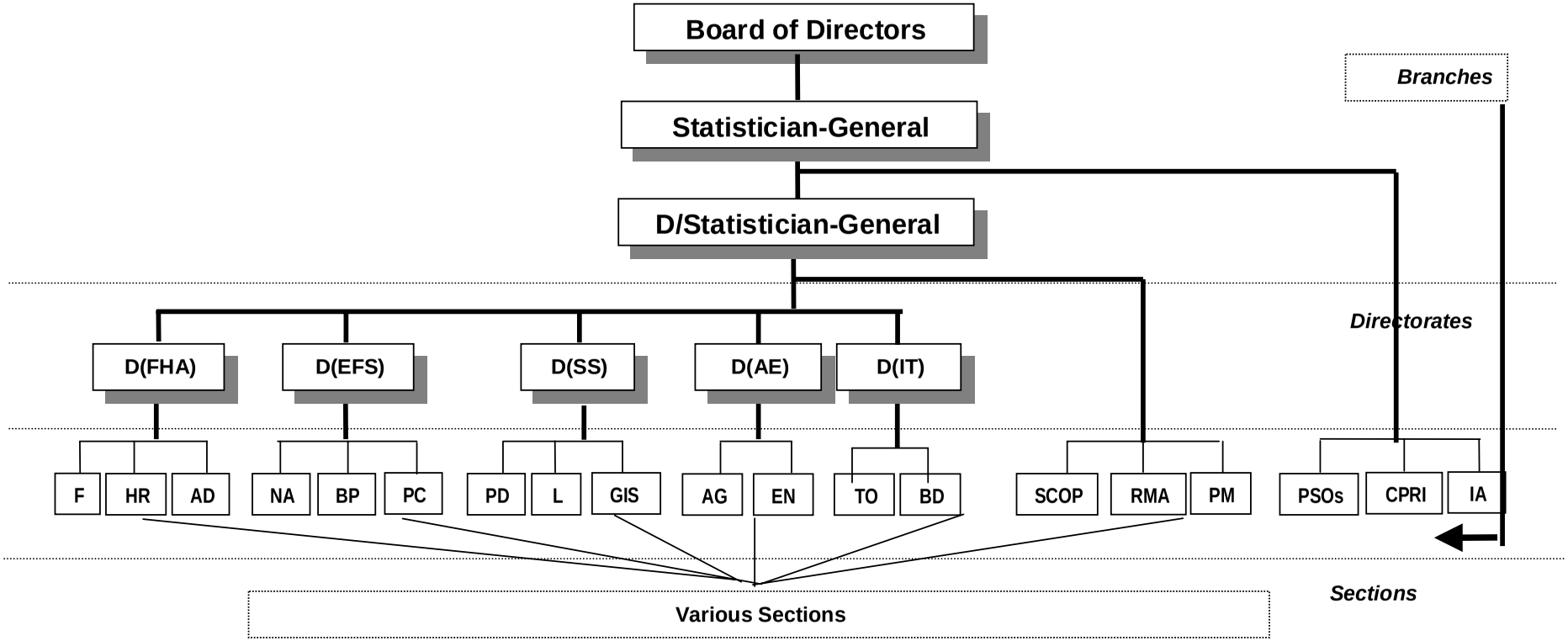
The proposed Statistics Act provides for the establishment of a Board of Directors with seven members of equal representation of relevant institutions drawn from government, the private and public sector institutions, the civil society, the Statistician-General (will also act as Secretary to the Board) as well as one distinguished individual appointed at the discretion of the Minister. The Board should have the following seven members:-

- One from Ministry of Finance and National Planning;
- One from Civil Society;
- One from the Economics Association of Zambia;
- One from the Central Bank; and
- One from the University of Zambia (*Department that teaches statistics*);
- One distinguished individual (from the public) and
- Statistician-General.

The proposed functions of the Board include:

- Advising the Minister on the National Statistics Policy, Procedures, Methods and Regulations;
- Monitoring the development and functioning of the National Statistical System including the National Statistical Database;
- Formulating and monitoring the policy framework within which the Bureau will operate;
- Determining from time to time the Bureau's structure, staffing levels and Scheme of Service for staff;
- Approving the Bureau's programme of activities;
- Setting out key performance indicators to monitor and assess the performance of the Bureau;
- Approving the Bureau's estimates of income and expenditur

Figure 3.2: Proposed Structure of the Central Bureau of Statistics



D (FHA)	Director (Finance, Human Resource & Administration)	**F**	Finance	**BP**	Balance of Payments
D (EFS)	Director (Economic and Financial Statistics)	**HR**	Human Resource	**PC**	Prices and Consumption
D (SS)	Director (Social Statistics)	**AD**	Administration		
D (AE)	Director (Agricultural and Environmental Statistics)	**NA**	National Accounts		
D(IT)	Director (IT)	**PD**	Population and Demography	**L**	Labour
GIS	Geographic Information System	**AE**	Agriculture and Environment	**EN**	Environment
TO	Technical Operations	**BD**	Business Development	**IA**	Internal Audit
SCOP	Surveys, Censuses and Operations	**RMA**	Research, Methods, Standards, Coordination and Analysis	**PM**	Publications and Marketing
PSOs	Provincial Statistics Offices	**CPRI**	Communication, Public and International Relations		

- Appointing all senior members of staff of the Bureau except that of Statistician-General;
- Promoting and disciplining senior staff of the Bureau;
- Setting guidelines for the recruitment and disciplining of junior staff of the Bureau;
- Providing the Minister with a Quarterly Report on activities of the Bureau in that quarter;
- Providing the Minister within 180 days after end of each financial year, with an Annual Report on activities of the Bureau in that financial year.

Statistician-General

The new Structure provides for a post of Statistician-General (SG) as the Chief Executive Officer of the Bureau. The President shall appoint for a period not exceeding five years, a person with recognized professional qualifications and experience in statistics and related fields to be the Statistician-General. The functions of the SG are spelt out in the Act. They include, among others:

- Interpreting the Board policies and forming a link between management and the Board,
- Being Secretary to the Board,
- Chairing Senior Management Team Meetings
- Setting management priorities,
- Resource mobilization,
- Overall accountability for operational and financial performance of the Bureau,
- Public relations.

The SG will be a full member of the Board.

Deputy Statistician-General

The holder of this post shall be a highly trained and experienced statistician who will report directly to the Statistician-General. 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 directorates of the Bureau.

Directorates

The Bureau will have five (5) Directorates each of which will be headed by a Director. Directors will be responsible for defining corporate and directorate work, managing and monitoring performance, allocating resources to Sections, supervision and coordination of management and broad programme activities.

Each Directorate will be divided into Branches and Sections. Branches will be headed by Principal Statisticians who will be responsible for defining branch and section work plans, resource allocation to sections, supervision, analysis and

reporting. At Provincial Statistical Office, the Principal Statisticians will also be responsible for production of provincial reports. Sections will be headed by Senior Statisticians.

Some cross-cutting functions will be handled by Branches directly reporting to the Statistician-General or his Deputy. The proposed structure of the Bureau is presented in Figure 3.2.above.

1. Finance, Human Resources and Administration

This directorate will perform the following functions:

- Prepare and present annual recurrent and development budget estimates for the Bureau.
- Ensure control in expenditure and maintaining a credible financial management system within established financial regulations of the Bureau.
- Formulate and implement human resources development strategy.
- Ensure safe custody and usage of all Bureau properties.
- Prepare legal notices and provide legal interpretation in the formulation and implementation of policies by the Board of Directors.
- Keep a record of the minutes of the Board.
- Preparation of detailed work plans, progress reports and other documents concerning activities of the Bureau.

The Directorate will have the following Branches and Sections:

1.1 Finance
- 1.1.1 Budget and Purchase
- 1.1.2 Salaries
- 1.1.3 Loans and Claims

1.2 Human Resources Management and Development
- 1.2.1 Human Resources Development
- 1.2.2 Training
- 1.2.3 Records Management
- 1.2.4 Secretarial Services

1.3 Administration
- 1.3.1 Office Management
- 1.3.2 Transport
- 1.3.3 Stores
- 1.3.4 Security

2. Economic and Financial Statistics

This Directorate will perform the following functions:

- collect, compile, analyze and disseminate economic and financial statistics,
- improve the on-going Economic and Financial Statistics data collection methodology,

- harmonize and standardize data collection methodologies, concepts and definitions of Economic and Financial Statistics in liaison with other departments,
- initiate research activities in economic and financial Statistics,
- embark on a comprehensive generation of Local Government Statistics, and
- conduct surveys and censuses,
- and monitor living conditions of the Population.

It will have the following Branches and Sections:

2.1 National Accounts
- 2.1.1 National Accounts
- 2.1.2 Industrial Statistics
- 2.1.3 Public Finance

2.2 External Trade and Balance of Payments
- 1.2.1 External Trade
- 1.2.2 Balance of Payment

2.1 Prices and Consumption Studies
- 2.1.1 Prices
- 2.1.2 Living Conditions Monitoring Survey
- 2.1.3 FHANIS

3. Social Statistics

This Directorate will perform the following functions:

- collect, compile, analyze and disseminate social statistics.
- co-ordinate and harmonize concepts and definitions as applied in social statistics.
- study and interpret various policies on social aspects with a view to establishing statistical needs.
- conduct surveys and censuses,
- initiate research and development in the area of social statistics.
- develop a framework for HIV/AIDS survey undertaking in collaboration with mainly, Ministry of Health (MOH), Social and Population Unit (MOFNP), Ministry of Community Development, AIDS Council.

It will have the following Branches and Sections:

3.1 Population and Demography
- 3.1.1 Migration and Tourism
- 3.1.2 Demography (Vital Statistics, Education Statistics and Health Statistics)

3.2 Labour Statistics
- 3.2.1 Manpower
- 3.2.2 Central Register of Business Establishment and Employment

3.3 Geographic Information System
- 3.3.1 Community statistics
- 3.3.2 Cartographic Information Technology
- 3.3.3 Cartographic mapping

4. Agriculture and Environment

The Directorate will perform the following functions:

- create/develop cost effective and up-to-date agriculture, environment and fisheries statistics data collection methodologies.
- co-ordinate and plan all agriculture, environment and fisheries censuses and surveys.
- provide a database necessary for agriculture policy planning and decision making at both national and community levels.
- monitor Food Security at national level.

The Directorate will have the following Branches and Sections:

4.1 Agriculture
- 4.1.1 Small and Medium Scale Holdings
- 4.1.2 Large-scale Holdings

4.2 Environment
- 4.2.1 Air, Water Pollution and Sanitation
- 4.2.2 Land Use and Land degradation
- 4.2.3 Natural resources (Forestry, Fisheries and Wildlife)

5. Information Technology

The Directorate will carry out the following functions:

- Setting up IT policies and standards.
- setting up and maintaining standard methodologies for the input, validation, storage and output of census, survey and other data,
- setting up and maintaining standard methodologies for the proper documentation of census, survey and other data processing systems,
- providing the overall Information Technology (IT) application to support statistical systems development and general data processing services.
- setting up and maintain a common Information Technology infrastructure, including a Local Area Network (LAN) and Wide Area Network (WAN),
- ensuring adequate supply of appropriate hardware and software for the analysis of statistical data, preparation of statistical reports, and for administration and accounting within the Bureau,
- ensuring operational condition of hardware and software, and availability of back-up facilities and arrangements for continuity of operations in case of breakdown of in-house systems,
- instituting and maintaining adequate control systems so as to prevent computer fraud and abuse
-

- designing a training programme for Bureau staff in the use of computers and provide day-to-day support,
- setting up and maintaining standards for good statistical dissemination, including standards for publications and electronic products,
- designing, building and maintaining databases for statistical observations and for aggregates,
- designing, building and maintaining a Central Statistical Database,
- setting up and managing information on the Internet,
- establishing and maintaining an IT Resource Center complete with its own library. Its primary role will be to ensure that IT is taught to statistical office staff members. It will also provide an opportunity for revenue for the organization in terms of provision of services to those outside the institution

The Directorate will have the following Branches and Sections:

5.1 Technical Operations
- 5.1.1 Hardware and Software Support
- 5.1.2 Communications Infrastructure
- 5.1.3 Networking and Security
- 5.1.4 IT Training

5.2 Business Development
- 5.2.1 Database development
- 5.2.2 Web development
- 5.2.3 Statistical Applications Support
- 5.2.4 Systems Development

6. Cross-Cutting Branches

Under the Statistician- General

6.1 Communication, Public Relations and International Relations

This Branch will handle communication, public and international relations functions of the Bureau. In order that these functions are handled in a professional manner, this Unit will be manned by professional communications personnel.

6.2 Internal Audit

6.3 Provincial Statistical Offices

The PSOs will be enhanced to do more than data collection. They will get involved in analysis and writing of provincial reports from census and survey data. They will also be involved in creating statistical awareness in respective provinces.

Under Deputy Statistician-General

6.4 Surveys, Censuses and Operations

This new Branch will be responsible for various aspects of all surveys and censuses conducted by the Bureau and line Ministries. It will work closely with subject-matter branches in the design and implementation of censuses and surveys. It will be manned by specialists in census and survey design and implementation as well as personnel with experience in field operations.

6.5 Research, Methods, Analysis, Standards and Coordination

This new Branch will:

- coordinate, audit and backstop the NSS,
- provide statistical information to individuals, local institutions, regional and international organizations as demanded.
- research into and develop appropriate methodologies and cost effective data collection strategies,
- develop business plans and strategies for enhancing quality in all statistical collections,
- diffuse "best practices" among data providers in the country,
- ensure inter-institutional coordination of the NSS,
- ensure technical coordination by standardizing and humanizing main concepts, definition and classifications used in the NSS,
- in collaboration with research and training institutions and other subject-matter specialists, carry out more detailed data analyses of policy nature,
- provide statistical consultancy and advice.

The Branch will have the following Units:

6.5.1 Research, Methods and Standards (sampling, questionnaires design)
6.5.2 Coordination
6.5.3 Statistical Analysis

6.6 Publications and Marketing
6.6.1 Printing
6.6.2 Dissemination
6.6.3 Library Services

(d) Creating strategy awareness

One important activity in strategy implementation will be to create strategy awareness first among all employees of the Bureau and then with other stakeholders. The employees of the Bureau will need to internalize the Plan in order to own it, commit themselves to it and be able to effectively implement it. This will be done in a systematic manner using periodic meetings, seminars and workshops,

brochures, newsletters, Intranet, etc. Needless to say, these media will also help in changing the work ethics, mindsets and in the creation of a strong corporate culture.

Communication plays a vital role in strategy implementation. Effective communication networks will be created throughout the Bureau in order to motivate staff, break the "silo mentality", and improve statistical governance. In particular, open dialogue will be encouraged, top-down and bottom-up communication will be enhanced and employees will be fully involved in decision making to make change possible. Strategic management process will "become easier if subordinates are encouraged to discuss their concern, reveal their problems, provide recommendations and give suggestions"[8], etc.

(e) Challenge of change of management

No organization or individual can escape change. Change is caused by the ever-present social, economic and technological trends in society. Change is always underway with all organizational systems and processes intrinsically subject to constant review. For organizations, change is a way of life and is the way to stay competitive and to grow. Change should be viewed as an opportunity rather than a threat to an organization. It is, therefore, important that strategy creates "learning organizations" in which change-oriented thinking becomes a habit for every body and individual. For individuals, change can enrich careers and personal lives.

The above notwithstanding, there is always resistance to change. Indeed "*resistance to change can be considered the single greatest threat to successful strategy implementation*"[9]. This resistance is always attributed to the fact that often, people do not understand what is happening or why changes are taking place. Change will be managed, among other things, by anticipating the focus of resistance, eliminating unnecessary resistance caused by misconceptions through communication and mastering the power base to support change.

(d) Creating a strategy –supportive culture

For the strategy to succeed, it should be supported by a conducive organizational culture. So implementation of the Plan will involve creating a new set of values, value systems and a performance-based culture that links everyone and every unit at the Bureau to unique features of the strategy. In particular, the **core corporate values** which have been identified above will be promoted

(e) Enhancing statistical governance

It is now well known that statistical governance impacts on the effectiveness of the system in delivering demanded statistical data. Apart from the aspects of legal framework and the organizational structure, the following statistical governance issues will be addressed to improve the effectiveness of the Bureau.

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[8] ***Fred R. David, Concepts of Strategic Management, 6th Edition, Prentice Hall International, Inc., 1997***

[9] ***Ibid.***

Increasing the relevance of data

Increased relevance of data will be ensured by keeping abreast of changing user needs and by ensuring that the data production systems adequately respond to these needs. This entails mainstreaming users in data production processes, and getting them to play proactive upstream roles in the development of national statistics. The data production systems will thus be made intensively user-driven.

Improving coordination, partnerships, networking and information sharing

The Bureau will promote effective co-ordination, partnerships, networking and information arrangements with all main stakeholders. In particular, existing arrangements will be enhanced and new arrangements will be made among data producers, between data providers and users, between data providers and research/training institutions, and among donors. This will be one way to strengthen the National Statistical System.

Arrangements among data producers

These will be improved by:

- maintaining a list of all major data producers and establishing a standing ***Data Producer-Producer Committee***,
- preparing a "***Compendium of Main Concepts, Definitions and Terms Used in the National Statistical System***" in consultation with users and other data producers to be used as a technical co-coordinating tool in statistical production,

Arrangements between data producers and users

Arrangements for co-coordinating data producers and users are essential for increasing data relevance by advancing 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. Data users need to routinely specify their data needs, the form in which data are required (e.g. summary data in form of indexes, trends, rates, etc.), the detail the data should take (level of disaggregation) and the time frame for data presentation (e.g. monthly, quarterly, annually). On the other hand, data producers need to indicate what data are available and their quality, how the data can be accessed, what data are expected to be collected, what problems are experienced in data production, etc. Above all, they need to promote use of their products. Data users will be mainstreamed and encouraged to play up-stream proactive roles in national statistical development.

The Bureau will enhance standing ***Data User-Producer Committees*** for different sectors of the economy or establish them where they do not exist.

Arrangements between data producers, research and training institutions

There have been ad hoc collaboration arrangements with different departments at the University of Zambia and especially the Economics Department, Institute of Economic and Social Research and the Demographic Unit, and with other researchers. These arrangements have improved analysis of CSO data. In particular, policy-related analysis has been enhanced by adding subject-matter knowledge to analysis of the data. In addition, through feedback mechanisms, these arrangements have led to improvements in the design of questionnaires and data collection.

Coordination of donor assistance

Very often, donors fund statistical activities to collect specific data without regard for what other statistical activities are taking place in the country. This has often led to distortion of national priorities for statistical development. In addition, such assistance has not had lasting impact it would otherwise have had were it to be coordinated. The Bureau will create partnerships with donors to ensure that their support achieves intended purpose, namely the exchange and development of know-how and technical expertise in order to build capacities to produce and use statistics[10].

Improving knowledge management

Knowledge management will be improved through proper documentation of procedures, policies and methodologies and in a manner that is conducive to preservation of institutional memory. In particular the Bureau will put a lot of emphasis on the development and documentation of step-by-step manuals on all main activities undertaken by the office.

Knowledge management will also be improved by careful development of databases (see below).

Improving data analysis

Poor analysis of data has been given as one reason for non-use or non-optimal use of statistical data. Improvements in data analysis will go beyond production of standard statistical reports that are good for general use. They will aim to extract policy and action--related information from masses of data collected in surveys and censuses.

This will be done by building appropriate in-house analytical capacity and by collaborating with research and training institutions and subject-matter specialists in the country. Researchers and other data users will be encouraged to access and carry out definitive data analysis. The Bureau will make full use of advances in technology (e.g. **Geographic Information System - GIS)** to analyse and simplify the presentation of often complex sets of data and information and relationships related to

[10] ***Some Guiding Principals for Good Practices in Technical Cooperation for Statistics, UN Statistical Commission, E/CN.3/1999/19***

poverty and vulnerability, and to generate improved analytical statistical products like **vulnerability and poverty maps.**

Improving information dissemination and access

It must be emphasized that statistical information is of no value unless it reaches those who need it, can be easily understood and is actually used. It is, therefore, of crucial importance that statistical information are widely disseminated and used. Dissemination is the last activity in the data production process and it has to be planned and budgeted for well in advance.

The Bureau will adopt a well-defined **dissemination policy and programme** which will provide for, *inter alia*, advance publication of a release calendar and simultaneous release of data to all stakeholders so that there is equal access to statistical information. The programme will aim to provide information in a user-friendly manner, making it easy for users to understand what story is being told. It will also provide for use of various media for different market segments, such as statistical reports, press releases, circulation of statistical tables, dissemination seminars and electronic media, including internet.

Dissemination and communication with users can be improved by data producers hiring the services of professional communicators. Realizing that statisticians are poor communicators, more at ease talking to each other than the public, the Bureau will have to recruit professional communications personnel to handle the communication and public relations functions of the Bureau.

Data access will be made easier by establishment of a comprehensive **National Statistical Database** that will, (i) allow the consolidation of all data in one location and hence act as a **one-stop-centre** for national statistics, (ii) provide powerful, yet easy to use, analytical tools, (iii) help "tell a story" and thus improve decision-making, and (iv) facilitate dynamic publishing and web dissemination to various constituencies[11]. Such a Database should have connectivity with sector databases and should be accessible online.

The Bureau may adopt the **Childinfo** computer software that was developed to store and present data from multiple databases, and display it in simple and user-friendly formats using its strong display features. This software has been used to great effect to develop the Tanzania Social Economic Database (TSED) and Tanzania Online (www.tzonline.org). TSED is a comprehensive socio-economic database that was developed for Tanzania mainland with assistance from the UN system while Tanzania Online is an up-to-date gateway to a comprehensive set of full text documents on development issues in Tanzania. TSED is the first database of its kind in East Africa. It is proposed that the Bureau holds discussions with UNICEF Lusaka with a view to hosting and expanding the database that UNICEF has been developing. The Bureau, however, should continue to participate in the SADC regional initiative on development of a live database.

The envisaged National Statistical Database is shown in Figure 3.4 below.

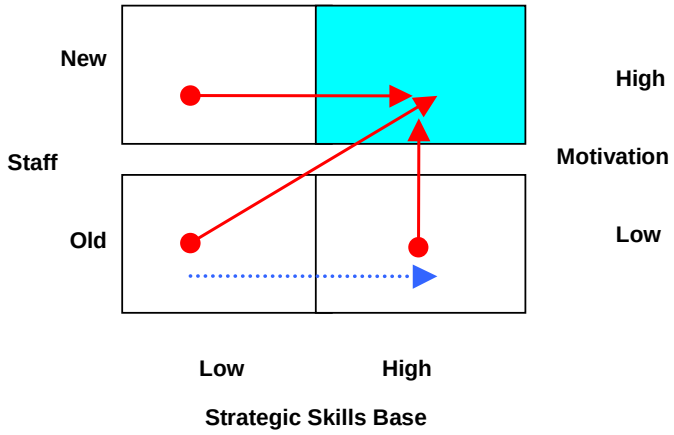
[11] ***The World Bank: Strengthening Capacity to Improve the Monitoring and Analysis of Poverty and Development, the 2nd Generation LIVE DATABASE,***

(f) IT Policy and Strategy

An **IT policy and strategy** will be designed to support the mission and business of the Bureau. It was pointed out earlier that IT will play a big role in statistical processes and data management. The IT policy and strategy will guide all IT and data management issues including:

- standardization of work processes at the Bureau so that data and information are collected, processed, stored, shared, and disseminated in a uniform manner at the Bureau,
- connect Provincial Statistical Offices in order too have the same infrastructure and facilities as well as providing access to shared facilities (e.g. administrative tools),
- take into consideration the IT levels in line Ministries for the purpose of data sharing and connectivity.

Figure 3.3 : Human resources development strategy



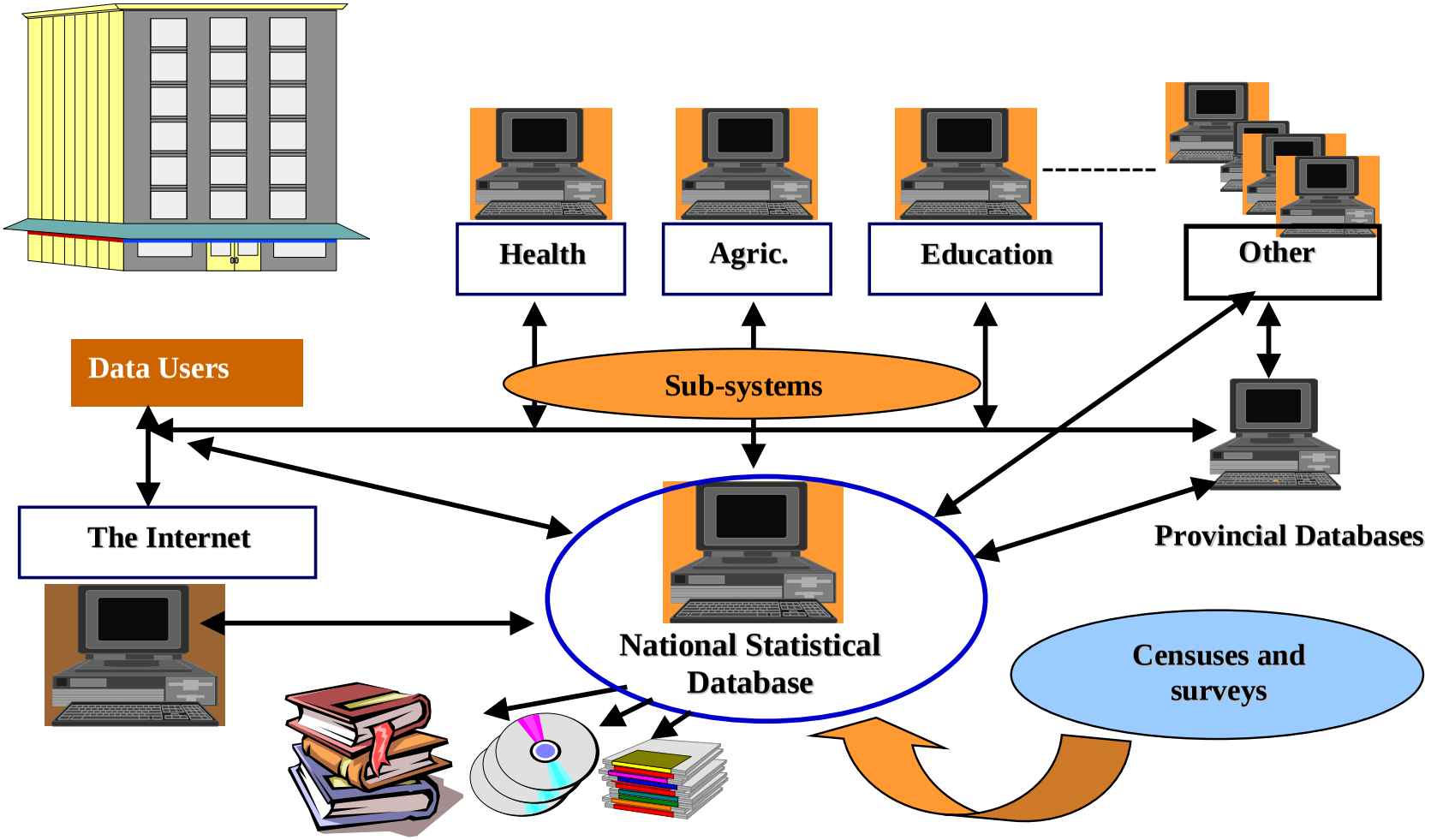
(g) Human Resources Development Strategy

A Human Resources Development (HRD) strategy will be developed. The centerpiece of the strategy 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 3.3. 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. Motivation will be enhanced by having in place competitive Terms and Conditions of Service. The development of these Terms and Conditions of Service should be high on the list of priorities.

(h) Management Systems

Crucial management systems that need to be established were given in Chapter 6. These will be established as a matter of priority as many other activities that will be undertaken depend on them.

Figure 3.4: Proposed National Statistical Database



(i) Motivation

Motivation of personnel is a crucial factor in organizational effectiveness. It is widely accepted that objectives, strategies and policies have little chance of succeeding if employees and managers are not motivated. While attractive Terms and Conditions of Service will be a motivating factor, they will by no means be the only factor. Other motivating factors include, *inter alia*, clear career pathing, leadership, facilitation, rewarding of quality and promoting professionalism and Encouraging innovation and creativity .

Career path

Lack of a clear career path can be a demotivating factor. It is proposed that the Bureau adopts the following career paths for statistical, IT, Accounts and Administrative personnel:

Leadership

Leadership is about" *lifting of person/s vision to higher sights, the raising of a person's performance to a higher standard, the building of a person's personality beyond its normal limitations*"[12]. Good leaders establish rapport with subordinates, empathize with their needs and concerns, set a good example and democratize management of organizations.

Table 3.2: Career paths for Bureau staff

Statistical post	Equivalent IT Post(s)	Accounts	Administration*
Director	Director	Director	Director
Principal Statistician	Manager Technical Operations/ Manager Business Development	Principal Accountant	Principal Administrative Officer
Senior Statistician	Senior Systems Analyst/Web Master/ Database Administrator/ Network Administrator	Senior Accountant	Senior Administrative Officer
Statistician	Systems Analyst/ Programmer/	Accountant	Administrative Officer
Principal Statistical Officer	Software Technicians/Hardware Technician/ Network Technician	Principal Accounts Officer	Principal Administrative Assistant
Senior Statistical Officer	Screen editor/Data Control clerk/ Computer operators	Accounts Assistant	Administrative Assistant
Statistical Officer	Data Entry	Accounts Officer	Clerk

- **An appropriate career path will be worked out for Human Resources Management and Development Group**

Facilitation

Employees will lose motivation if they are not facilitated to do their work properly. Among other things, they need appropriate equipment, full access to Internet, access to new literature and books, participation in international meetings, etc.

[12] ***Fred R. David, opt. cit.***

Rewarding of quality and promoting professionalism

Staff will undergo a job review/evaluation on an annual basis. Career and personal development opportunities as well as promotion will be linked to performance.

Encouraging innovation and creativity

All staff will be given ample opportunity to release their creative energies by encouraging the practice of delegating responsibility, management encouraging staff to be creative in approaching tasks and to offer an alternative view/methods to accomplish tasks.

7.2 MONITORING AND EVALUATION

(a) Need for monitoring and evaluation

It is important that implementation of the Plan is periodically monitored, reviewed and eventually evaluated. Monitoring is essential for tracking inputs, activities, and outputs, and for determining whether implementation of the Plan is on course or not. It is also essential to assess how much is being achieved vis-à-vis the Plan objectives. This will make it possible for corrective measures to be taken or for implementation strategies to be revised if it should appear that implementation is off track. A monitoring schedule should be established that uses Plan-related performance indicators to track progress.

At the end of the Plan period, there should be an evaluation of the extent to which the Plan achieved its objectives.

To the extent possible, implementation of the Plan should be according to the identified priorities. The high-priority activities should be implemented first. However, the Plan should be flexible enough to allow for periodic review of the priorities since what may not have been priorities at the time the Plan was designed may become so in future. However, there will be a need for careful examination of new demands for data against planned activities with possibilities for buy-ins and piggybacking special modules on current data collection activities, leading to marginal incremental costs in meeting new demands for data without distorting agreed priorities.

As much as possible, implementation should stick to the established implementation schedule. Any lapses in the implementation of activities will not only upset the coordination arrangements with related activities but will also upset the budget.

(b) Performance monitoring and measurement

The Strategic Plan will be periodically monitored to determine progress towards achievement of its objectives. A Plan-relevant set of performance indicators was designed to measure progress towards outputs of the Plan.

The following performance reviews will be made:

Progress Report

The Board will make a Quarterly Progress Report (QPR) and an Annual Progress Report (APR) to the Minister as a statutory requirement.

Annual External Review

During the Plan period, an Annual External Review (AER) will be carried out by the Ministry of Finance and National Planning together with development partners. The external reviews will use the identified performance indicators.

Terminal Review

At the end of the Plan. A Terminal Review (TR) will be carried out again by the Ministry of Finance and National Planning together with development partners. The TR will use the identified performance indicators.

Benchmarking

Benchmarking is a method of making systematic comparison in specific areas with other relevant organizations and especially with those organizations with best performance. The aim is to determine areas where improvements can be made.

Two types of benchmarking will be used, namely internal and external benchmarking. Internal benchmarking will be done by comparing results from different directorates, branches and sections with reference to such things as timeliness, user satisfaction. This will make it possible to monitor directorates and branches which have high and which have low performance. The benchmarking will form a basis for improvements in internal performance. International benchmarking will be done to compare its performance with that of high performing CSOs and Bureaus in SADC and COMESA sub-regions.