### REPUBLIC OF LIBERIA



# NATIONAL STRATEGY FOR THE DEVELOPMENT OF STATISTICS (NSDS)

#### **FOREWORD**

One of the main tasks of a National Statistics Office (NSO) is to develop a framework which facilitates the coordination of the National Statistical System (NSS). In the execution of this task, the Liberia Institute of Statistics and Geo-Information Services (LISGIS) and the sector ministries/agencies that comprise the Liberia National Statistical System (LNSS), with funding from the African Development Bank (AfDB), have designed the National Strategy for the Development of Statistics (NSDS) in Liberia.

The entire society of Liberia has been affected by the consequences of the 14-year civil war that destroyed the country's infrastructure, devastated the economy, left an impoverished and conflict-stricken population, and ruined major baseline statistics. Data users are willing to use any statistical information, even if the methodology is questionable. It is an unfortunate situation and it has galvanized the LNSS into looking for ways to meet the increasing demand for good statistics to demonstrate that the statistician is relevant to national development.

As Liberia emerges from the years of destruction and embarks on its journey of recovery, reconstruction and development, the need for setting up a national framework for the production, compilation, analysis and dissemination of national statistical and spatial data cannot be over-emphasized. There are several areas where much effort is required to build the statistical capacity necessary to inform and guide the process of development.

Strengthening the quality and timeliness of basic statistics and improving the coordination of statistical activities are two major challenges that confront many developing national statistical systems. Statistical weakness constrains the ability of both the Government and development partners to asses the impact of development programs. The problem with coordination of statistical activities stems from the fact that sectors have their own mandates for data collection and use that are not always in line with national needs.

The National Strategy for the Development of Statistics (NSDS) provides a framework to overcome these two challenges. Through the integration of statistical activities within the national system, it promotes collaboration and effective coordination of statistical activities. By creating up-to-date databases and the statistics needed to monitor development indicators, the NSDS intends to demonstrate the relevance of statistics to support national and international development processes, such as the PRS and MDGs, and attracts increased government support and better coordinated donor assistance for resources.

The NSDS aims to ensure the production and dissemination of high quality statistical data that meet international best practices. It is designed to mainstream sector statistics into the NSS to reflect the national focus. The essence is not to replace or transfer statistical functions and activities of sector agencies to the national statistics office (NSO), but rather to improve them for the larger national and key user needs.

The design has therefore been prepared by LISGIS, working together with stakeholders, through the profiling of statistical institutions to determine their strengths and weaknesses and their manpower capacities to sustain statistical development. This was done through the establishment of Sector Statistics Development Strategy (SSDS) Committees in all participating agencies to design the process for improvement of statistics at the sector level. It is my wish and hope that the NSDS will be embraced by our policy makers, planners, development partners as well as other users of statistics.

Finally, I wish to extend my sincere thanks and appreciation to the NSDS designers, particularly the AfDB and the two national consultants, the LISGIS Coordinator, focal point and the fifteen (15) sector coordinators, the staff of the statistics offices of the participating sector ministries and agencies and all those who assisted LISGIS in editing and finalizing this document.

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#### **ACRONYMS AND APPREVIATIONS**

AfDB African Development Bank

CPI Consumer Price Index

CWIQ Core Welfare Indicators Questionnaire (Survey)
DFID Department for International Development

DHS Demographic and Health Survey
DQAF Data Quality Assessment Framework

ECOWAS Economic Community of West African States

FAO Food and Agriculture Organization

GEMAP Governance and Economic Management Programme

GOL Government of Liberia

HCPI Harmonized Consumer Price Index

HS Harmonized Commodity Description and Coding System

ILO International Labour Organization
IMF International Monetary Fund

iPRS Interim Poverty Reduction Strategy

LAN Local Area Network

LDHS Liberia Demographic and Health Survey

LFS Labor Force Survey

LISGIS Liberia Institute of Statistics and Geo-Information Services

LNSS Liberia National Statistical System

M&E Monitoring and Evaluation

MDGs Millennium Development Goals

MTEF Medium Term Expenditure Framework

NGO Non-Governmental Organization

NIMAC National Information Management Centre

NPHS National Population and Housing Census (NPHS)
NSDS National Strategy for the Development of Statistics

NSO National Statistical Office NSS National Statistical System PRS Poverty Reduction Strategy

RFTF Results Focused Transitional Framework SETS Socio-Economic Transformation Strategy

SNA System of National Accounts

SSDS Sector Statistics Development Strategy

SWAp Sector Wide Approach

SWOT Strengths, Weaknesses, Opportunities, and Threats

UNDP United Nations Development Programme

UNESCO United Nations Educational, Scientific and Cultural Organization

UNIDO United Nations Industrial Development Organization

UNMIL United Nations Mission in Liberia

WAN Wide Area Network

WHO World Health Organization

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#### **EXECUTIVE SUMMARY**

Liberia's National Strategy for the Development of Statistics (NSDS) is a framework aimed at rebuilding statistical capacity and strengthening coordination across the agencies responsible for collecting data. It seeks to enhance the capacity of the central statistics organisation, the Liberia Institute of Statistics and Geo-Information Services (LISGIS), and other agencies with responsibility for collecting, analyzing, and disseminating statistics in Liberia. A strengthened National Statistics System can better coordinate programs, develop necessary capacities, and create the structures needed for effective collaboration in the generation, analysis, and dissemination of timely, reliable, and relevant statistics.

Some important initial steps have been taken to rebuild Liberia's statistics capacity, including the establishment of LISGIS in 2004 and the completion of the Demographic and Health Survey (DHS), the Core Welfare Indicators Questionnaire (CWIQ) Survey, and the National Population and Housing Census (NPHS), among others. Nevertheless, substantial weaknesses remain, and significant efforts are required to rebuild Liberia's National Statistics System. Most major statistical series, databases, and survey instruments need to be rebuilt. The Act that established LISGIS should be strengthened by reducing the long list of statistical series it requires, providing LISGIS with a stronger coordination role, reducing the size of the Board, and clarifying the tenure of Board members and the Director General of LISGIS. Institutional and Professional Capacity remains weak, so significant training and recruiting of new personnel is required in several agencies with statistics responsibilities. The quality and timeliness of data needs to be improved, and coordination across organizations that are part of the National Statistics System should be enhanced.

The over-arching objective of the NSDS is that by 2015 the national statistics system will be well-coordinated, harmonized and efficient with performance that is consistent with national, regional and international standards and responsive to the country's development agenda. The NSDS aims to establish a coordinated national statistics system that efficiently produces and disseminates accurate and timely data that are relevant to and supportive of the national development agenda.

The NSDS incorporates five long-term strategic objectives:

- 1. Making statistics relevant to national and local development;
- 2. Developing an efficient capacity building plan for the Liberia National Statistical System;
- 3. Developing a coordinated, harmonized and effective National Statistical System;
- 4. Ensuring adoption and consistent use of relevant statistical methods and standards; and
- 5. Developing and managing an efficient information sharing system.

The combination of the collapse of the statistical system during the conflict and the significant demand for a range of data from senior policymakers, government officials, partners, NGOs, the business community, and the general public mean that LISGIS and other agencies must set priorities to ensure that the most important needs are met while they build their capacity to provide additional data over time. The highest priority during the next three

years is to provide the data required for implementing and monitoring the Government's Poverty Reduction Strategy. The PRS includes 56 key indicators of progress, with many different agencies responsible for generating these indicators, using a variety of survey and data collection mechanisms. With respect to specific statistics, surveys, and databases, the highest priorities include the following:

- *LISGIS*. LISGIS will strengthen the national income accounts, consumer price index, and external trade statistics; conduct the Core Welfare Indicators Questionnaire (CWIQ) Survey at least once every 18 months; generate (with the Central Bank) a new Household and Income Expenditure Survey in 2009; conduct the next Demographic and Health Survey in 2010; strengthen its business statistics; and generate annual population and demographic indicators, among other activities.
- *Agriculture*. The Ministry of Agriculture (working with LISGIS) will conduct its first crop production survey by the end of 2008; develop an Agricultural Market Information Systems Survey in 2009; and develop a Crop Monitoring and Early Warning System by the end of 2008, among other activities.
- Macroeconomics. LISGIS will generate new national income accounts in 2009; the
  Ministry of Finance will continue to strengthen the dissemination of timely and
  accurate budget data and build a debt management system by mid-2009; the LRDC
  Secretariat will build a database on partner activities and financing; the CBL will
  continue to strengthen its credit reference database, commercial bank reporting, and
  balance of payments statistics; and LISGIS, the Ministries of Commerce and Industry
  and Finance (Department of Revenue), and the CBL will strengthen the timeliness
  and accuracy of trade data.
- Other sectors. The Ministry of Health will regularize its reporting on health services, disease patterns, facilities, and human resources, and will begin to conduct periodic disease-specific surveys; the Ministry of Education recently completed its first school census and will do so on an annual basis; the Ministry of Gender will conduct sample surveys on gender violence and other key issues; and the Ministry of Labor will conduct a small-scale employment survey of businesses to be followed by a larger survey in 2012, among other sector-specific activities.

Generating these and other data with widespread, accurate, and timely dissemination will require strong communication and coordination among key actors. LISGIS will organize a Technical Committee composed of representatives of all producer ministries and agencies and key users in both the public and private sectors, chaired by the Director General of the LISGIS. Sector committees will be established, with LISGIS representation on each committee to provide technical support and provide links across sectors. The LISGIS Board will oversee the implementation of the NSDS.

Participation of key producer ministries and agencies will proceed in phases, spread over a three-year period, with the first phase covers ten key ministries and five public institutions. Each of the initial agencies will develop its own strategy over the next four months. Considerable efforts will be made to strengthen monitoring and evaluation (M&E) activities, with each agency responsible for its own M&E under the guidance of LISGIS.

There is a strong need to build institutional and professional capacity to implement the NSS. LISGIS, working with the Ministry of Internal Affairs, will establish and equip County Statistical Units with a LISGIS County Statistics Officer in place in seven counties immediately and in the rest of the counties by the end of 2009. LISGIS and the University of Liberia will develop an in-service training program to train at least 100 staff over three years, conduct annual trainings for county officers, and develop a statistics degree program at UL. Each ministry will develop its own plans for strengthening its in-house capacity. LISGIS will also explore acquiring a suitable building where it can appropriately house its staff, databases, and records.

Resources required for implementing the NSDS include equipment, vehicles and other logistical support, infrastructure development, furniture, and personnel services. The cost of the entire implementation process for the NSDS over five years is estimated at around USD\$47 million (see Annex C). During the initial three years (corresponding to the PRS period) implementing the NSDS will require about US\$32 million. The GOL is likely to be able to finance between one-third and on-half of the costs of implementing the NSDS. Therefore, support from Liberia's development partners will be an important ingredient to making the NSDS successful.

The key next steps for rebuilding and strengthening the statistical system include:

- Amend the Statistics Act to strengthen LISGIS as the lead agency for compiling, coordinating, and disseminating statistical information.
- Reconstitute the LSIGIS Board with nine members, with fixed three-year terms, renewable for one additional term.
- Appoint the LISGIS Director General and Deputy Directors-General for fixed sixyear terms (renewable once) with signed performance contracts.
- Provide LISGIS with statutory authority to validate official statistics, authorize national-level data collection, mobilize resources to support the NSS, and coordinate training in statistical techniques and analytical methods.
- Establish a Technical Committee comprised of key producers and users of statistics to better coordinate statistics operations across sectors.
- Develop sector-specific strategies for ten ministries and agencies over the next year, and extend participation to other agencies over a three-year period.
- LISGIS will generate a CWIQ survey every 18 months, produce a new Household Income and Expenditure survey by 2009, and a DHS once every three years.
- Several Ministries and Agencies will initiate or strengthen critical surveys and databases.
- LISGIS will open statistics units by the end of 2009 in all 15 counties.
- LISGIS and UL will develop an in-service training program, conduct annual trainings for county officers, and develop a statistics degree program at UL.

# CHAPTER ONE INTRODUCTION AND BACKGROUND

#### 1.1 National Context

Liberia is recovering from a protracted and costly civil war. A large part of the country's infrastructure was destroyed; much of the rest is dilapidated and needs repair. Economic activity declined precipitously. Key institutions and organizations became dysfunctional and need to be reconstituted. The difficulties in rebuilding and reconstruction have been compounded by the loss of baseline data and the deterioration of the capacity to collect and analyze relevant statistics and other information critical for decision makers. Significant progress has been made over the last five years, and especially since January 2006 when the democratically-elected government was inaugurated, but there is a long way to go.

The National Strategy for the Development of Statistics (NSDS) is a framework aimed at rebuilding statistical capacity and strengthening coordination across the agencies responsible for collecting data. It specifically seeks to strengthen the capacity of the central statistics organisation, LISGIS, and integrate all statistical activities within a national system. This strengthened system will coordinate programs to develop the necessary capacities and create the structures needed for effective collaboration in the generation, compilation, analysis, and dissemination of timely, reliable, and relevant statistics.

For a statistics system to contribute to national development, relevant activities need to be organized so that the data collected, compiled, analysed and disseminated are timely, reliable, comprehensive, and widely available. LISGIS and each of the other ministries and agencies that contribute to the national system need to coordinate their operations transparently and accountably to reduce redundancy, focus attention on core responsibilities, and provide the indicators that enable their development activities to be monitored effectively. A strong statistics system collects the most important information needed for decision makers and analysts while avoiding the risk of assuming a role greater than can be sustained by existing human, organizational, institutional, and financial capacities. Although this risk applies to any national statistics system, it is critical in Liberia, where much of the relevant human and institutional capacity needs to be rebuilt and re-created.

In addition, coordinating statistical activities within Liberia is a challenge. Sector ministries and agencies have their own mandates for data collection and reporting. Furthermore, most of these ministries and agencies lack the technical expertise, infrastructure, and finance to produce key statistics on a regular basis. As a result, their methodologies and techniques are not harmonized and statistics activities, including reporting, are (at best) weakly integrated.

#### 1.2 Initial Progress and Challenges

The Liberia statistical system is characterized by outdated statistical procedures, low salaries, a culture of poor record keeping, and low but growing demand for products, a lack of

computers and the know-how to use them. There is inadequate archiving of what little data exists, electronic records are systematically deleted due to lack of computer capacity, there are insufficient secure offices to house equipment, and sometimes resistance to the need to keep accurate records. These problems must be addressed in order for good relationships between data users, producers and providers to be restored, and for statistical activities to relate to real data needs.

The needs and demands for timely and accurate data are enormous, and there is a danger that the Liberia Institute of Statistics and Geo-Information Services (LISGIS) will be expected to collect, compile, and disseminate statistics beyond its limited capacity. The wider statistical systems are being re-established in an ad hoc fashion. The growing demand and the re-establishment of some collection of data create an important opportunity to create a harmonized and coordinated statistical system.

Some important initial, though largely ad-hoc, steps to rebuild Liberia's statistics capacity have been taken. LISGIS, supported by the GOL and its development partners, has been compiling information required for policy formation and effective implementation. LISGIS has also been cooperating with various ministries, agencies and bureaus of Government, to improve their databases. LISGIS was created by the Statistics Act of 2004 as an initial action towards re-establishing the capabilities for compiling and disseminating statistics at a national level. There are some weaknesses in the underlying LISGIS legislation (as discussed in the next section) but the creation of LISGIS represented an important step forward.

The Government's First 150-Day Action Plan (January-June 2006) and interim Poverty Reduction Strategy (iPRS), launched in July 2006, were formulated using a narrow, weak data base. Until recently no official data were available on Liberia's major imports and exports, with trade information relating to petroleum products, timber, and rubber either missing or incomplete. Until the recent revision of the index for Monrovia, the Consumer Price Index (CPI) was based on a 1964 basket of goods and a reference year of 1998. No household budget survey that would enable revision of the index had been conducted for several decades. National Accounts data are seriously out of date.

During the 150-Day Action Plan, sectors were given the mandate to undertake rudimentary data collection to support their activities. The iPRSP recognized the need for a substantial investment in human capital and information technology to boost the national statistics system and improve information management. The iPRSP highlighted the need for undertaking the Demographic and Health Survey (DHS) and CWIQ surveys to provide up-to-date socio-economic and demographic household data that could improve economic management and support the formulation of the PRS, including data on youth, gender, employment, trade, health, education, and the environment. The iPRSP advocated the development of a national strategy for the development of the statistics system to identify priority statistical activities that would be funded during the PRS. It called for improving the capacity for monitoring and evaluation of programme results and for information that could track progress towards the MDGs, update and broaden the statistical base, and strengthen the

coordination and monitoring of donor funding and NGO activities. It also recognized the need for population and housing census data to provide spatial and gender disaggregated demographic and socio-economic data and to update the sampling frame for survey activities.

Subsequently, LISGIS and its partners produced several population and economic surveys. These include the Liberia Demographic & Health Survey (LDHS), the Core Welfare Indicators Questionnaire survey (CWIQ) and the Participatory Poverty Assessment Survey. These have yielded important data on activities, incomes, and other social indicators. The DHS and CWIQ were important inputs for formulating the Poverty Reduction Strategy (PRS). The most important development has been the completion of the first National Population and Housing Census (NPHS) for 24 years in March 2008. Provisional results of this were published on 20th June 2008, unfortunately too late for inclusion in the final PRS.

Notwithstanding these important achievements, the infrastructure and logistical support that allow reliable data to be collected on a regular basis remains inadequate. The Government's ability to effectively implement the PRS, make critical policy decisions, and lay the foundation for sustained growth and development requires significant continued improvements in statistical quality and coordination. Data on delivery of basic services in the health and utilities sectors are required quarterly, while agriculture and education data are needed at least annually. Accurate, comprehensive and timely annual national accounts data are essential for monitoring of the PRS and general economic progress.

LISGIS and the statistical units in ministries and agencies do not have the trained manpower, appropriate equipment, and statistical techniques to accomplish their required tasks. LISGIS has few of the technical skills needed to operate the various stages of the data management process. Accordingly, during the PRS period, considerable investments will be needed to build capacity within LISGIS and other data-producing sectors.

The demand for data to support the implementation and periodic updating of the PRS provides the opportunity for developing a harmonized and coordinated national statistics system. In this respect the NSDS, which offers a framework for improving the coordination of statistical activities and associated funding issues, is timely and appropriate.

Five long-term strategic objectives or goals have been identified to address the institutional issues and challenges to ensure the growth and development of the national statistical system:

- 1. Make statistics relevant to national and local development
- 2. Develop an efficient capacity building plan for the Liberia National Statistical System
- 3. Develop a coordinated, harmonized and effective National Statistical System
- 4. Ensure adoption and consistent use of relevant statistical methods and standards
- 5. Develop and manage an efficient information sharing system

The NSDS is not a panacea for Liberia's statistical deficiencies. Nonetheless, it will help move the development process forward by seeking to create an up-to-date database that supports national and international development processes, such as the PRS and MDGs.

# CHAPTER TWO OVERVIEW OF THE NATIONAL STATISTICAL SYSTEM

#### 2.1 The National Statistics and Geo-Information Act, 2004

The National Statistics and Geo-Information Act (Chapter 50A of Title 12 of the New Executive Law), approved on 22<sup>nd</sup> July 2004, established an autonomous and accountable Liberia Institute of Statistics and Geo-Information Services (LISGIS). It notes the lack of coordination within the national system, the need for strategic partnerships between producers and users of statistics, and the importance of a collaborative effort among all stakeholders to "ensure the production and dissemination of accurate and timely human-development and environment friendly data for implementation of national development programmes." Appropriately, the Act has 'National' in the title with the Statistics Board being given the responsibility to monitor and develop such a system. Yet, the Act does not provide the framework for promoting the development of statistical capacities within the relevant sectors. Indeed, the Act deals more directly with the activities of LISGIS than those of a national statistics system.

Only some of the changes required by the law have been made. Key outstanding actions include Deputy Director General appointments to the new agency and the implementation of the governance structure. However, here are several weaknesses in the Act that should be rectified:

- It requires a long list of statistical series, not all of which are still relevant, and which in any case are beyond LISGIS's capacities, and there is little focus on staff conditions, performance management or accountability.
- The LISGIS name is awkward, and in particular "Geo-Information" has little relationship to LISGIS' core statistical functions.
- The key coordination role of LISGIS of the wider national statistical system is not adequately covered, and should be strengthened, including the creation of a formal statistics coordination committee chaired by the DG.
- The LISGIS Board, with 21 members, is far too large to be effective. It should be reduced to at most nine members. Its composition should include well-respected technical users and consumers of statistics, but not representatives from the donor community. It should include the Director General (DG) of LISGIS as a member. A suitable person other than the DG should be selected as Secretary to the Board.
- An independent chairperson is needed for the Board, rather than the Minister of Planning as at present.
- The current Act does not stipulate the tenure of either Board member or the DG. It should be revised to stipulate a three-year term for Board members (renewable once) and a six-year term for the DG (renewable once). In addition, the Board should not be permitted to choose its own successors and future DGs without presidential approval.
- The stipulations that mandate the number and functions of the Deputy Directors-General should be taken out and left to the discretion of the Board.

Mechanisms for input by users are inadequate. A senior statistics User/Media
advisory committee consisting of government and outside users of statistics should be
established. These outside user representatives might include business, civil society,
the media, and the University. This committee would comment on the statistics work
programme and on gaps identified by users

#### 2.2 Statistics and Supporting Infrastructure

The infrastructure (statistical, physical and technical) to enable the regular collection of reliable data is rudimentary. Statistical techniques are outdated and there are few computers and little capacity to use them efficiently. There is inadequate archiving of the few data available, electronic records are often deleted due to lack of computer capacity, and the availability of secure offices to house equipment is limited.

Many sectors lack informative databases and the physical, human, and ICT capacities to acquire relevant data. An obvious gap (recently rectified) was the delay in completing a national census, that had left the country poorly equipped to undertake national planning and lacking up-to-date sampling frames that would guide national surveys. As the 2008 census data are processed they will provide population, regional and community-level data. A key element of the statistical infrastructure is a cadre of experienced staff who can organize and undertake field data collection activities. The current practice in LISGIS and other sectors is to contract field data collection to private individuals after a specified period of training.

While some (and even a significant amount) of this work can be contracted out, the internal capacity for the management and supervision of field data activities needs to be developed. LISGIS does not have county or district offices. Under the PRS, LISGIS is expected to establish statistics units for local data collection activities.

To support an integrated national system, it will be necessary to establish a central pool of qualified field staff and supervisors to work with the new County Statistics Units. These experienced interviewers will work for LISGIS on annual contractual basis, but subject to be renewed each year, and would supervise and train the temporary staff needed for the fieldwork of all large-scale household surveys. All non-professional staff in the NSS, including these field supervisors, would benefit from a specially designed certificate course in statistics covering key subject matter areas. Such qualified staff would boost the capacities of LISGIS and the sector statistical units.

The physical infrastructure available for the statistical system is in poor shape. Most participating ministries and agencies have inadequate office space and no library or storage space to keep safe the few documents that are available. Many ministries and agencies are housed in make-shift or temporary structures that require renovation. With the breakdown of the national telecommunication system, there are no land-line telephones. Most communication relies on the use of individual personal mobile phones, much of the cost of which is often borne by staff members.

Few sectors are linked to the Internet. Where such connections are available they are usually limited to the offices of senior staff members. Many sector statistics units have only a few desk-top personal computers that are shared by several people. Furthermore, a significant number of government personnel are not computer literate and their data analysis and dissemination skills are weak. Senior members of staff have limited international exposure and/or training (both short- and long-term). There is no structured system of training junior and middle level staff.

Most of these shortcomings are evident at LISGIS. Part of its longer term plans (beyond the period of the current PRS) should include new or upgraded facilities. These facilities would include library, conference facility, appropriate IT connectivity and information storage, training rooms, and adequate physical storage.

#### 2.3 Statistical Production and Dissemination

Within any national statistical system, no matter how decentralized, there is a need for the central office to produce a core set of key statistics. In the case of Liberia, LISGIS needs to produce regular and timely national accounts and associated economic statistics such as prices and external trade. For this purpose and for general business statistics it also needs to conduct regular business surveys based on a comprehensive frame (business register). Similarly it needs to conduct household surveys based on a comprehensive population listing, usually based on the last census. Some of these business and household surveys may be done for or jointly with other ministries, but LISGIS needs the trained staff capacity to carry them out.

At present, Liberia does not have a harmonized set of statistical methods or standard classification procedures for producing statistics. Capacities in survey and questionnaire design, sampling techniques analysis, and report writing are inadequate. Data are not produced in a timely manner and there is a lack of coordination across sectors. Sector statistics units are expected to submit instruments for data collection to LISGIS for advice before actual fieldwork takes place. To date, these have not been harmonized and standardized. Sectors with links with United Nations agencies (ILO, WHO, FAO, UNESCO, UNIDO) or multi-lateral agencies (IMF, World Bank, ECOWAS) receive technical assistance for their data collection activities, including the use of manuals. LISGIS does not (and in fact, at present, cannot) provide a central facility where these international reference materials can be readily consulted.

The difficulties are widely noted among ministries and other government agencies. Experiences and outcomes vary. The Ministry of Health and Social Welfare reported that due to the lack of health statistics, relevant NGOs collect their own data for monitoring purposes, creating a fragmented data base. The Ministry of Gender and Development highlighted the lack of gender disaggregated national data and the general lack of understanding among producers of statistics of the need for gender-related statistics.<sup>1</sup> The

<sup>&</sup>lt;sup>1</sup> The 2007 Demographic Health Survey (DHS) began to address this problem by including data disaggregated by gender, and the PRS includes several critical gender-related monitoring and evaluation indictors.

Ministry of Education is responsible for collecting education statistics covering primary to tertiary education. There has been close collaboration with LISGIS in the design of the questionnaire, interviewing, data capture, and analysis. A census of schools for the 2005/2006 academic year was conducted in early 2006.

There are special problems with respect to economic statistics. The Ministry of Commerce and Industry is responsible for industry and trade policy, but the statistics generated (by them or by LISGIS), particularly on industry, are weak. The Ministry of Finance collects revenue, expenditure and debt data, each of which has their particular limitations. The last agricultural census was in 1970/1971 and the most recent agricultural survey was in 2001.

The Central Bank publishes the Economic Bulletin and Statistical Bulletin, and collaborates with LISGIS to produce the Monrovia consumer price index (CPI). Until 2006, that index had been derived using 1964 expenditure weights. In 2006, the Monrovia CPI was replaced by the Harmonized Consumer Price Index (HCPI), which uses October-December 2005 as a reference period and covers 234 items. Though it is the official price index for Liberia, the data base refers to Monrovia. That will remain the case until a national household expenditure and income survey can be conducted. LISGIS collects the prices and should be responsible for the index, but has inadequate skilled staff to take it over at present.

The Central Bank has been producing financial, monetary, and trade statistics based on information from commercial banks, Customs, the MOF, and the Ministry of Commerce and Industry. Due to capacity weaknesses in these data producing agencies, Central Bank staff has taken the lead in helping ensure the data are appropriately formatted and validated.

National accounts statistics used to be produced through annual national accounts surveys and published as a statistical bulletin by the old central statistics office under the Ministry of Planning and Economic Affairs. The 1968 system of national accounts (SNA 1968) was being used although the system was moving towards partial implementation of SNA 1993. The war ended that effort. Compilation of the National Accounts will resume at LIGIS after a series of economic surveys have been conducted. A similar situation holds for the external trade statistics. Those data used to be derived manually, but during the war years member states of ECOWAS adopted the harmonized commodity description and coding system (HS) and the EUROTRACE software for data processing. LISGIS is making efforts to ensure the official launch of the software to reactivate the production of these data.

Dissemination of available statistics, both nationally and within sectors, is limited and difficult. There is no mechanism for sharing information. Even if there were, the support infrastructure is lacking. A partial remedy is emerging through the recent creation of LiberiaInfo, a software system which has the potential to become a national platform for official statistics. In addition, local area networks (LAN) among certain stations could enhance coordination of statistical activities and sharing of information.

#### 2.4 Human Resource Capacity

Most data producing agencies report that many officers in their statistics units have no statistics background. The situation in the Counties is worse – their officers have no statistics training and are not computer literate. On-the-job training will be needed to begin to remedy this deficiency. Among the challenges facing the Ministry of Planning and Economic Affairs, for instance, are lack of qualified staff to generate data, inadequate expertise in economic modeling, and gaps in key data. The Ministry of Finance also lacks personnel trained in statistical techniques. Particular requirements are middle-level personnel with masters degrees in management and finance who also have competence in statistical analysis.

LISGIS itself has inadequate skilled personnel to compile, analyze, and publish the regular statistics it is supposed to be responsible for, especially on the economic statistics side. Even with the household surveys it does undertake itself, it has inadequate capacity to analyze and produce the reports without external consultancy assistance.

The Institute for Population Studies was established in 1973 to offer training in statistics in addition to population studies. It started a demographic and survey statistics training programme for middle level manpower in 1975. It ceased during the war but was reactivated in 1995. The Institute has started an advanced programme to produce post-graduate students in population studies. The Institute could benefit from support to upgrade its library and lecture rooms, software and data analysis programmes, and ICT infrastructure (computers and internet facilities).

#### 2.5 Strengths, Weaknesses, Opportunities and Threats (SWOT)

A SWOT analysis of the current situation provides an assessment of the functional capacity of the statistical system. Relevant factors internal to the system (its strengths and weaknesses) relate to the legal and institutional framework, consultative and participatory arrangements, the degree of harmonization and integrated use of statistics, adherence to professional ethics and international standards in the production of statistics, the available human and other capacities, management skills and leadership style, human resource development policies, recruitment and training policies, promotion and retraining of staff, materials and facilities required, work environment and office space, and compensation packages. The external factors relate to the bureaucratic status of the national statistics system, its political and budgetary support, government strategy for statistics development, the level of national statistics awareness, and extent to which statistics are used in policy and planning.

#### Strengths of Liberia's National Statistics System

One the strength of the present system is the explicit effort being made by the GOL, civil society, and general public to break with past structures that undermined economic growth and development. Liberia can foster (almost from scratch) a process that will promote the development of an integrated national statistics system. The establishment of LISGIS as an

autonomous organization with responsibility to help develop an accountable, efficient, and coordinated national statistics system is an important start. Other strengths include:

- The personnel handling the planning/statistics development/research units are skilled, knowledgeable, and dedicated (though, as described below, they could benefit from additional training).
- The general desire for Liberia to regain its earlier competence and capacity in the production and use of relevant social and economic statistics.

#### Weaknesses of the Liberia National Statistics System

Offsetting these strengths are numerous weaknesses, many of which have already been noted. Among the more prominent difficulties are:

- Separate sector mandates for data collection activities and statistical production undermine the incentives to coordinate to achieve an integrated system.
- There is a lack of harmonization of statistical methods, standards and classifications within the system due, in part, to the absence of the appropriate legal and institutional framework that promotes collaboration and coordination across sectors.
- The inadequate infrastructure and resources in key line ministries compromise the quality and scope of statistical production, analysis, and dissemination.
- Poor working conditions make it difficult to attract and retain qualified, experienced professional and technical staff.
- Office and storage space are inadequate, logistic arrangements are weak, and technological infrastructure (internet connectivity, computers, statistical software and packages, data archiving, storage and retrieval facility) is poor.
- The absence of County statistics offices undercuts the ability to assemble data that can be used to promote local development. This reinforces the pattern of exclusion.

#### Opportunities that Support the Liberia National Statistics System

Opportunities for improvement abound. They include:

- There is significant demand from government, local authorities, and development partners for relevant data covering a broad range of economic and social variables.
- Stakeholders concerned with improving the national statistics system have demonstrated their willingness to collaborate and coordinate their activities. Donor partners have also been willing to provide significant amounts of financial and technical assistance.
- With the formulation of the iPRSP and the PRS, the relevance of reliable and timely data for development planning and performance monitoring is well understood.
- The increased availability of local training institutions offers the opportunity for retraining personnel through short-term courses, especially in basic and middle-level technical skills.

<u>Threats to the Development of the Liberia National Statistics System</u> Threats to the development of the national statistics system include:

- The Statistics Act does not make adequate provision to support a coordinated (national) approach to data collection and dissemination. Overlapping responsibilities within public agencies creates confusion in determining the division of data responsibilities.
- International NGOs collect national data with few links to corresponding sector agencies.
- The perception persists among (some) government officials that development partners are too intrusive in their continued oversight of government activities. Sharing statistics reinforces this oversight.
- The limited coordination among development partners and other stakeholders undermines the effective integration of the system.
- Delays in collecting, collating and analyzing the data can reduce the value of statistics in policy making, monitoring and evaluation.
- Support through the GoL budget for statistics activities has been low. Long-term funding from development partners for a sustainable system has not been identified.
- The tendency to want to address all problems at once (and risk not doing any of them well) rather than introduce an incremental approach and address the most important problems first.
- Weak County infrastructure, especially with respect to roads, electricity and water will hold back the establishment of County statistics systems.
- Skilled staff members continue to seek alternative opportunities. As consequence, turnover of professional staff remains high.
- Weak compensation and incentives impede the development of staff needed to develop the national statistics system.

# CHAPTER THREE STRATEGIC AND OPERATIONAL OBJECTIVES

The NSDS seeks to improve the scope, quality, and relevance of all official statistics. The implementation process will involve all key data producers, users, and suppliers and Liberia's development partners, and aims at strengthening and mainstreaming sector statistics within the national statistics system. By providing a framework for generating benchmark and time series data on development indicators, the NSDS aims to enhance Liberia's capacities for monitoring and evaluation. Transparency and accountability will improve as a result.

The over-arching objective is that by 2015, the national statistics system in Liberia will be well-coordinated, harmonized and efficient with performance that is consistent with national, regional and international standards and responsive to the country's development agenda. Further, during the next decade, Liberia aims to establish a coordinated national statistics system that efficiently produces and disseminates accurate, timely, disaggregated data that are relevant to and supportive of the national development agenda. These features will be assured through the adoption and use of appropriate standards and techniques and through an effective and sustained commitment to capacity development. Public trust in the quality and value of official statistics is fundamental. Developing that trust (and acceptance) requires a national statistics system with activities that are consistent with the United Nations Fundamental Principles of Official Statistics that were developed by the United Nations Statistical Commission and adopted by Liberia in 1994 (see Appendix A).

The NSDS incorporates five long-term strategic objectives, each of which relates to a specific challenge and highlights the relevant operational/priority interventions.

#### 3.1 Objective #1: Making Statistics Relevant to National and Local Development

Recent improvements in the quality and scope of statistics in Liberia are highly encouraging. Nevertheless, much of the data that Government agencies produce are not effectively used. Even where sufficient and relevant data have been generated, the level of utilization of statistical data in policy formulation and implementation by some participating ministries and agencies is low. Part of this stems from the lack of awareness or appreciation by some opinion leaders for the crucial role of statistical data in policy formulation, implementation and evaluation. This attitude undervalues the role of statistics in helping direct the efficient allocation of resources and measuring outcomes. It can also be attributed to the general lack of data over the last two decades. The census, normally undertaken every decade, was disrupted. Other key surveys (as noted earlier) did not occur. It will be important for statisticians and others connected to the national statistical system to demonstrate that even with limited resources they have the skills to make statistics relevant to the development agenda.

#### Operational priorities include:

- As a top priority, facilitating the compilation of relevant data and statistics in support of the implementation, monitoring and evaluation of the PRS, as detailed in Chapter 13 of the PRS and Chapter 4 of this strategy document.
- Providing decision-makers at a national and local level and other users of statistics
  with regular updates on available information and how it can be used constructively to
  support their activities.

The program of statistical development and outputs designed to achieve these goals is set out in the next chapter.

### 3.2 Objective #2: Devising an Efficient Capacity Building Plan for Liberia's National Statistics System

There is a strong need to strengthen organizational systems, structures and capacities for the NSS. The shortage of personnel with the appropriate training in statistics and related fields is a critical constraint. LISGIS operates in a rented office space which is too small and inadequate for their long term needs. The extent to which the various capacities (professional, technical, administrative) can be developed will determine the ultimate success of the national statistics system. Important progress has been made in some areas. For example, the UNDP/NIMAC project has provided important support to LISGIS, and as it winds down it will transition functions, staff, resources and assets into LISGIS. But much more will need to be done to build the capacity needed for a strong NSS in Liberia.

#### Priority interventions include:

- Raising the competence of statisticians by expanding opportunities for training;
- Ensuring the availability of essential facilities and equipment to all sectors of the system;
- Construction of a "Liberia Statistics House" building to serve as a home for LISGIS and be the national hub for all national statistical activities and programmes; and
- Formulating and implementing a comprehensive capacity development plan that assures the production of relevant data throughout the national statistics system.

### 3.3 Objective #3: Developing a Coordinated, Harmonized and Effective National Statistics System

Collaboration and coordination are critical for reaching the goals of the NSS. This will require legislative and organizational changes, including a modification of the operational incentives within LISGIS and the ministries and agencies that produce and use statistics. Relevant interventions include:

 Amending the Statistics Act to strengthen LISGIS as the lead agency for compiling, coordinating, and disseminating statistical information. The amended legislation should provide the LISGIS Board of Directors with the mandate to promote coordination and collaboration at the national, ministry, agency, and County levels, and clarify the roles and responsibilities of LISGIS relative to other ministries and agencies. The Board will be responsible for considering statistics policies, liaising with the Office of the President on matters relating to statistics in national development, providing effective guidance and supervision to the NSS through LISGIS, reviewing the implementation of the NSDS, approving work programs and budgets, addressing critical issues that could hinder the implementation of the NSDS and approving progress and annual reports.

- Institutionalizing regular coordination meetings among sectors, chaired by LISGIS, to discuss issues and take decisions to reinforce collaboration and information sharing.
- Developing and adopting approaches to monitoring and evaluation that promote the effective implementation of the national development agenda.

### 3.4 Objective #4: Ensuring the Adoption and Consistent Use of Relevant Statistical Methods and Standards

The recent surge in data-related activities by government, development partners, and non-government agencies has yielded a diverse range of data derived using numerous different approaches. A major issue is that many of the relevant (public and private) organizations are autonomous with their own mandates and reporting systems. This problem is sometimes compounded by the direct support being provided by development partners to selected organizations and activities rather than to the system as a whole, and that this funding does not always support the highest priorities of the system. To make the most efficient use of resources devoted to statistics activities, these various approaches need to be systematized. One advantage of the broad-based participation by stakeholders being encouraged by the Government is that it offers a mechanism for resolving some of these problems. One advantage of participatory approaches is that by engaging stakeholders they produce institutional arrangements that tend to be sustainable. The NSDS process can be used to develop an integrated statistical system with a set of specific statistics objectives that are relevant to Liberia's economic growth and social development.

#### Priority interventions include:

- Collating and compiling relevant methods and standards for all sectors in the statistics system and ensuring that personnel in the sectors are familiar with them;
- Developing and adopting a coordinated approach to data collection so that uniform operational standards can be promoted and achieved throughout the NSS;
- Ensuring uniformity and compliance by developing and establishing national guidelines for the consistent use of statistical techniques by sectors. This would include organizing workshops on statistical methods and standards to bring all sectors up-to-date on accepted standards, changes in procedures and techniques.

### 3.5 Objective #5: Developing and Managing an Efficient Approach to Information Sharing

For information to be used more effectively in planning and programming, it has to be shared and available to all equally, subject to confidentiality constraints. This involves generating and disseminating information. Timely publication and dissemination of data can help improve the operations of the relevant organization and those with which it interacts. Weak dissemination efforts often reflect the lack of well-organized record-keeping systems that can routinely generate data as part of an organization's normal operations, and sometimes resistance by some organizations to share their data. LISGIS has taken two initiatives to improve data reporting: introducing the LiberiaInfo database (referred to earlier) and the General Data Dissemination Standard (GDDS), that aims to enhance cooperation among data producing ministries and agencies in the NSS. The goal is to ensure coherence in the production and compilation of statistics and promote the timely, harmonized dissemination of data relevant to policy formulation and planning.

To further enhance dissemination of data, LISGIS will take steps to publish an annual Statistical Bulletin and upgrade its website. This effort will raise the quality of data production and stimulate the broader sharing of information.

A Statistics Information Network system will be created that will serve local and development partner agencies, researchers, and others. The system should consist of a local area network for storing and retrieving data and a wide area network for linking LISGIS to sector and county offices for sharing publishable and confidential statistical data.

LISGIS will operate a reference library service as an integral part of its operating system. In addition to the library, free copies of all publications from sectors in the statistical system should be made available to the public, University, and county libraries throughout the country and via its new website.

#### Relevant interventions include:

- Publishing an Annual Statistical Bulletin;
- Develop and maintain an enhanced NSS dedicated website for publication of data and statistics from all government ministries and agencies;
- Formulating data access and dissemination policies that promote information flows within the national statistics system and its stakeholders; and
- Developing and promoting a national database platform at LISGIS, linked to sectors and ministries and agencies in the statistics system, which enhances information exchange and the regular updating of the database.

### **CHAPTER FOUR** PRIORITY ACTIVITIES AND STATISTICS

The demand for timely, accurate, and reliable statistics has grown rapidly during the last two years. Senior policymakers, government officials, partners, NGOs, the business community, and the general public want and need a wide range of data for planning their key activities, understanding constraints, establishing appropriate goals, and measuring progress. However, institutional and capacity constraints in LISGIS and line ministries and agencies make it impossible to generate and disseminate all of the desired data. Thus, while LISGIS and other ministries and agencies must be ambitious, they must set priorities to ensure that the most important needs are met while they build their capacity to provide additional data over time. Strong technical assistance will be required in many areas to rebuild databases and survey instruments.

#### 4.1 PRS and MDG Indicators

The highest priority during the next three years is to provide the data required for implementing and monitoring the PRS. The monitoring and evaluation (M&E) section of the PRS describes 56 key indicators required for tracking progress across the four Pillars.<sup>2</sup> Many different ministries and agencies are responsible for generating these indicators, using a variety of survey and data collection mechanisms. Appendix Table B summarizes the PRS indictors, grouped by the responsible ministry or agency, alongside the key data collections activities of each ministry or agency.

The LRDC Secretariat has the lead responsibility for reporting on M&E for the PRS. Working in close collaboration with LISGIS, the LRDC Secretariat will consolidate outputs and outcomes at the national level and will produce annual reports on progress towards each of the indicators. There will be a mid-term evaluation of the PRS as well as a full evaluation in 2011 at the conclusion of the implementation period.

The main sources of quantitative data for the indicators are LISGIS and the line ministries and agencies. Baseline data have been generated for most PRS indicators, drawing on existing databases and the 2007 CWIQ and LDHS. In some cases, baseline data are not yet available, but line ministries and agencies are working to establish baselines as quickly as possible. Once data are generated by the line ministries and agencies, LISGIS will be responsible for ensuring the quality of the data and will forward vetted data to the LRDC Secretariat, which will use the data for its overall PRS M&E activities and for generating an annual PRS Progress Report.

In conjunction with progress on the PRS, Liberia is also moving forward on achieving the Millennium Development Goals (MDGs). Achieving the MDGs will be a challenge for many developing countries, but it will be even more difficult for Liberia because of the legacy of the war. Nevertheless, Liberia is striving to move forward on these goals, and many of the

<sup>&</sup>lt;sup>2</sup> PRS Table 13.1, pages 155-59.

key indicators of the PRS are consistent with the MDGs, including reducing the incidence of poverty, reducing mortality rates, eliminating gender disparities, and increasing the number of people with access to safe water, among others. As with the PRS, LISGIS and the line ministries are the main sources of the key data on the MDGs.

#### 4.2 Key Priorities for LISGIS

LISGIS has central responsibility for compiling and collecting much of the key data and coordinating the data collection from other ministries and agencies. To fulfill its mandate, LISGIS will aim to strengthen its core activities of the national income accounts, consumer price index, and external trade statistics (see section 4.4 below). In addition, it has identified key priority areas on which to focus over the medium term. These include, but are not limited to, the following:

- Core Welfare Indicators Questionnaire (CWIQ) Survey. The CWIQ survey includes several thousand households, and contains information on consumption, household characteristics, education levels, occupation, and perceptions of poverty. LISGIS plans to conduct the CWIQ survey at least once every 18 months.
- Household Income and Expenditure Survey (HIES). The HIES is the basis of the Consumer Price Index (CPI) and other household data, and is a key input to the national income accounts. The HIES was last conducted in 1964 and is in desperate need of an update. LISGIS and the Central Bank plans to conduct a nation-wide HIES every five years beginning in 2009.
- *Business Statistics*. LISGIS will develop an improved and enhanced businesses registry from 2009 to provide a sound basis for improved sample surveys of business. It will also develop an informal sector business survey to begin in 2011, both as an input to improving the national income accounts, but also as an important element that is typically missing from standard business surveys.
- The Liberia Demographic and Health Survey (LDHS). The LDHS provides information on fertility, fertility preferences, use and knowledge of family planning methods, maternal and childhood health, maternal and childhood mortality, breast feeding practices, nutrition, knowledge of HIV/AIDS and other health issues. The LDHS was conducted in 1986, 1999/2000, and 2007. LISGIS plans to conduct the LDHS once every three years, with the next LDHS in 2010 at the end of the PRS period.
- *Environmental Statistics*. LISGIS is taking the lead to set up a unit responsible for environmental statistics, and is aiming to begin to collect data beginning in late 2008.
- *LiberiaInfo*. LISGIS will maintain LiberiaInfo, a software program developed to store data for all surveys, censuses, and related statistical products in the country. It will be updated as frequently as possible beginning 2008. This tool will ultimately be made web-enabled to facilitate enhanced access.
- *NSS dedicated website*. LISGIS will develop a dedicated website that will serve as a major dissemination of official statistics on Liberia as well as information hub for the NSS and its membership.

- Census. The field enumeration for the 2008 NPHC has been completed, and provisional results will be published in mid-2008. The main outstanding task is to carry out the data entry within the next six months and then analyze the data as well as link the census data to the 2007 and subsequent CWIQ data in order to produce poverty profile maps for the country in 2008 and 2009. Based on the census, LISGIS will aim to begin to produce annual demographic indicators and population estimates.
- *Decentralization*. LISGIS plans to open statistics units by the end of 2009 in the 15 counties to coordinate the collection and dissemination of official statistics. Additionally, in support to the broader objective of the emerging decentralization strategy of government, it is envisaged that these units will provide critical capacity support to local governance structures for not only informed decision making but also developing and using simple M&E tools for tracking on-going development processes.

#### 4.3 Agricultural Statistics

Data and information on agricultural production, prices, and market conditions are central to Liberia's development since the majority of Liberians gain their livelihoods from agriculture. These issues have taken on even greater importance with the rapid increase in global food prices since 2007. For these reasons, it is critical for Liberia to strengthen its capacity to generate and analyze timely and reliable agricultural statistics. There are five key activities planned during 2008-2012 to rehabilitate agricultural surveys and statistics activities:

- *Crop Production Survey*. Generating reliable data on agricultural output, land area, yields, and other issues is critical for increasing food availability, improving nutrition, and enhancing food security. The Ministry of Agriculture (MOA) will conduct its first crop production survey by the end of 2008 and then conduct it annually thereafter.
- Agricultural Market Information System (AMIS) Survey. This survey includes price data for agricultural products at various levels, from farm gate to final consumer. The MOA plans to conduct its first AMIS survey by June 2009. Initially it will conduct the survey quarterly, but it will aim to move to a monthly survey over the medium term as it builds the requisite capacity.
- *Crop Monitoring and Early Warning System (CMEWS)*. The objectives of the CMEWS are to (a) provide early periodic indications of expected size of crops to determine desirable import levels to meet production shortfalls, (b) provide periodic forecasts of supply and demand of Liberia's staple foods (rice and cassava), and (c) to provide statistical information on the nutritional status of the population. The MOA is aiming to conduct its first CMEWS by the end of 2008 and quarterly thereafter.
- *Development of Fishery and Agriculture Database*. Over the medium term, the MOA will work with LISGIS and other partners to build the capacity necessary to create this long-overdue database.
- *Fishery and Livestock Surveys*. There is an increasing demand for fishery and livestock statistics, including for providing critical data for the national accounts, and over the medium term the MOA will begin to build the capacity to generate this data.

 Household-based census of agriculture. LISGIS will conduct household survey fieldwork for a census of agriculture in 2010.

#### 4.4 Fiscal, Financial, and Macroeconomic Statistics

Significant progress has been in improving fiscal, financial, and macroeconomic statistics during the past two years, but there is far to go.

- National income accounts. Generating and publishing accurate and timely national income accounts is one of LISGIS's core activities, and is critical for providing a basis for monitoring economic progress in the country and assessing the affordability of government development plans. A new national benchmark survey of value added will be conducted in 2009, followed by smaller sample surveys in subsequent. LISGIS will also aim to generate a new quarterly index of production beginning in 2011.
- *Budget*. The Ministry of Finance will continue to produce and disseminate data on actual expenditures by ministry/agency and economic classification, both in the context of quarterly fiscal reports and on a monthly basis. Once the planned IFMIS is operational in (mid-2009) the task of compiling such data will be made significantly easier. Ultimately, the evolution over time to program budgeting and a medium-term expenditure framework will facilitate the availability of activity-based budgetary data. The effort to disaggregate expenditures at the county level is just beginning and will be pursued during the PRS period.
- *Debt*. The GoL's Debt Management Strategy calls for the Ministry of Finance to complete the process of compiling and reconciling debt data by the end of 2008 and to install and begin to utilize debt management software in 2009.
- *Partner financing*. The LRDC Secretariat, working with the MOF and other ministries and partner organizations, will develop a database on partner activities, commitments and disbursements to inform coordination, planning, and budget preparation.
- Money and banking. The Central Bank of Liberia (CBL) is responsible for collecting and reporting regular data on monetary developments, the banking sector, the balance of payments, and related issues. It publishes the Quarterly Financial and Economic Bulletin and The Liberia Financial Statistical Bulletin, which provide some of the most up-to-date coverage on economic statistics. It is continuing to strengthen its capacity to compile key data from other organizations and to report reliable data in a timely manner. In addressing the issue of defaults on the payments of loans, the CBL has established a credit reference database to help provide information on the credit worthiness of potential borrowers. To ensure efficient and effective supervisory and regulatory oversight, the CBL carries out both on-site and off-site inspections of banks to monitor compliance and detect early warning signs. It requires banks to submit financial statements on a monthly basis.
- *Trade and Industry*. Some progress has been made in improving trade statistics, but they are still incomplete and released with a long lag. LISGIS, the CBL, and the Ministries of Commerce and Industry and Finance will focus on strengthening data on

- export and import volumes, and establish systems to ensure that trade statistics incorporate data from companies that are not captured by BIVAC data. They will also focus on strengthening surveys and statistics on industrial activity, and will work with the National Investment Commission to strengthen data on actual realized investment.
- Balance of payments. The CBL is currently collecting, processing, compiling and
  disseminating Liberia's balance of payments (BOP) statistics, based on data provided
  by a number of institutions and agencies. It will supplement this data through periodic
  surveys of entities that have transactions with nonresidents. The CBL is making
  efforts to collect the BOP questionnaires from data providers and plans to compile
  and produce BOP statement for the country for publication in the IFS. There are also
  plans for establishing running surveys for realized foreign direct investment (FDI).
- *Consumer prices*. As discussed earlier, LISGIS and the CBL are planning to update the Household Income and Expenditure Survey and create an updated, nationwide baseline to monitor price developments. They plan to conduct the next HIES in 2009 and produce a new CPI by 2010. They will also aim to generate a new producer price index (PPI) beginning in 2011.

#### 4.5 Other Key Statistics and Surveys

As shown in Appendix Table B, almost every ministry and agency has specific data and statistical needs. As described in the next section, each sector will be developing plans and strategies to strengthen their data collection during the PRS period. While not an exhaustive list by any means, some of the key data include the following:

- *Health*. Many key health statistics are collected through the DHS, CWIQ survey, and census. In addition, the MOH currently collects data on health services and disease patterns on a daily basis and publishes these quarterly in the *Epidemiological Bulletin*. It has established the National Integrated Disease Surveillance & Response System, which tracks information about key diseases such as cholera and yellow fever. It will aim to begin publishing vital statistics (births and deaths) on a quarterly basis by the end of 2008. Drawing from its new computerized Health Management Information System, it will report annually beginning by the end of 2008 on health facilities, human resources, and key financial information. To strengthen its long-term financing structure, the MOH has already begun to compile the first National Health Accounts to help inform the development of its Health Financing Policy Plan, and plans to publish updated National Health Accounts every two years. .The MOH also plans to conduct periodic surveys on malaria, HIV/AIDS, and tuberculosis, starting with a malaria survey in 2008.
- *Education*. The MOE requires regular data on school enrolments, gender, teacher-student ratios, literacy rates, and a range of other information. Some of this information can be compiled through the CWIQ Survey. To complement this data, the MOE recently completed its first school census providing core educational data, and plans to conduct a school census on an annual basis.
- *Gender*. Some information on key gender issues can be generated through the CWIQ, DHS, census, and other survey instruments. The Ministry of Gender plans to

- supplement this by conducting sample surveys on gender violence and undertaking a mapping of women's organizations.
- *Labor*. Although Liberia's unemployment rate is steadily falling as the economy recovers, it remains high, and continuing to reduce it is one of the highest priorities of the PRS. To provide critical information on these issues, the Ministry of Labor, with the support of LISGIS, the ILO and other partners, will undertake a small scale employment survey of businesses in 2009 to be followed by a larger survey in 2012. The Ministry will also undertake an Occupational Injuries Survey and a Child Labor Survey, aiming to conduct both of these in 2009. They will compile annual statistics on formal sector employment via the proposed LISGIS annual establishment survey, and with LISGIS will jointly organize an informal sector survey.

# CHAPTER FIVE IMPLEMENTATION

#### 5.1 Oversight and Coordination

There are currently many (perhaps more than fifty) key stakeholders in the Liberian statistical system and it will be an organizational challenge to coordinate all of their activities. Several key steps will be taken to strengthen oversight and improve coordination:

- The LISGIS Board will oversee the implementation of the NSDS, which will be carried out by LISGIS and the relevant ministries and agencies.
- LISGIS will organize a Technical Committee composed of representatives of all
  producer ministries and agencies and key users in both the public and private sectors,
  chaired by the Director General of the LISGIS. The Technical Committee will be
  responsible for coordinating the implementation and monitoring and evaluation of
  activities.
- Sector committees will be established, with LISGIS representation on each committee
  to provide technical support and provide links across sectors. Sectors committees will
  be responsible for developing sector-level strategies and forming both Implementation
  Teams and Monitoring and Evaluation Teams.

As noted earlier, the need for *national* statistics requires the mainstreaming of sector statistics into the national statistics system. The NSDS does not seek to replace the statistical functions of public sector producer ministries and agencies or transfer them to the national office; rather it seeks to work with them to strengthen their output within the framework of national and user needs. In this regard, the NSDS helps achieve a shift in mindset from an uncoordinated statistical system to an integrated system that emphasizes coordination among stakeholders.

#### 5.2 Implementation Phases

Participation of key producer agencies will proceed in phases, spread over a three-year period. The first phase covers ten key ministries and five public institutions. The initial ten participating ministries are Planning and Economic Affairs, Health and Social Welfare, Labour, Education, Finance, Commerce and Industry, Agriculture, Gender and Development, Internal Affairs, and Transport while the five institutions are LISGIS, Central Bank of Liberia, University of Liberia Institute for Population Studies, Bureau of Immigration and Naturalization, and the Civil Service Agency.

Each of these sectors will develop its own strategy over the next four months, including priorities, plans and needs, and then implement those strategies in cooperation with LISGIS. Sector Statistics Development Strategy (SSDS) Design Committees already have been established in all 15 initial ministries and institutions. The Committees comprise heads of all functional technical sections (both data production outfits and key data users), with a key user

as Chair. A Technical Workshop on the functions of the SSDS Design Committees was organized for members on Tuesday, 16 October 2007 to kick-start the process.

In the second year, four ministries (Public Works, Defense, Information/Cultural Affairs/Tourism, and Lands/Mines/Energy) and six critical public institutions (Liberia National Police, Liberia National Fire Service, General Service Agency, National Housing Authority, National Port Authority, and Monrovia City Corporation), will begin NSDS implementation. Institutions that generate their own funds will have to bear the cost of implementing their sector plans. Other state-owned agencies and private institutions interested in designing sector strategies would be assisted to do so in the third year.

Workshops should be held to organize the main participating sectors and key users of statistics (decision makers and planners, private business, and development partners) to familiarize them with the NSDS and to elicit their input. The workshops will deal with such issues as Change Management, Strategy Implementation and Realization, Monitoring and Evaluation Techniques, and to help finalize Preparation of Action Plans and Budgets.

#### 5.3 Monitoring and Evaluation Arrangements

Progress needs to be tracked through an effective management and accountability framework that covers performance indicators and reporting schedules. The goal of the monitoring and evaluation (M&E) framework is to monitor agreed performance targets on a regular basis, measure the degree to which targets are being achieved, measure the use of inputs, the progress of activities and the value of outputs, identify problem areas, and define corrective actions. The intent is to help programs to remain on track and to help determine the modifications needed if circumstances change. The establishment of guidelines for M&E can help to strengthen a culture of data management in which data, precision, analytical rigor, and information sharing are valued.

M&E should be undertaken in three areas: activities, personnel and financial. Activities should be implemented according to their schedules in the action plan, and monitoring should relate to timeliness of delivery. The performance of institutions and personnel should be monitored and assessed on the basis of approved performance indicators. All revenue and expenditure management processes should comply with accepted public sector financial procedures and remain within approved budgets. Design of M&E activities should include the following:

- define the key indicators of performance and the specific period for the M&E exercise;
- define the persons, agencies, and stakeholders responsible;
- define the specific method of reporting, channel of communication, and feedback system appropriate to each situation

Each agency will be responsible for undertaking their own M&E, including LISGIS. Additionally, LISGIS will be in charge of developing M&E standards and guidelines,

aggregating and reporting results, and compiling information from each agency. LISGIS will have the authority to periodically check on the M&E process within each agency, and to advise on sector M&E reports. Depending on capacity availability, there should be monitoring and evaluation requirements such as quarterly, half yearly or yearly progress reports and mid-term/mid-project and end-of-project evaluations.

#### 5.4 Capacity Building

As discussed earlier, there is a strong need to build institutional and professional capacity for the NSS. The UNDP/NIMAC project has played an important initial role in supporting initial progress, but as this project winds down additional efforts will be required. Over the short-and medium-term, significant amounts of technical assistance will be required to rebuild key databases and survey instruments. To help build capacity for statistics and M&E during the PRS period, several specific steps are planned:

- LISGIS, working with the Ministry of Internal Affairs, will establish and equip County Statistical Units with a LISGIS County Statistics Officer in place in seven counties immediately and in the rest of the counties by the end of 2009. It will develop plans to provide the associated office infrastructure and agree working relations (including and transition mechanisms) with other partners currently engaged in supporting local data compilation strategies by the end of 2008.
- LISGIS, working with the University of Liberia (UL), will develop an in-service statistical training program for junior and mid-level statistical staff within LISGIS and the key line ministries/agencies and train at least 100 staff over three years.
- LISGIS, UL and its development partners will conduct regular trainings for county officials and county-based staff on data collection and analysis. The aim will be to train at least 10 people per county, and to conduct refresher training on an annual basis.
- Each Ministry will also develop its own strategies for strengthening in-house capacity.
- UL and LISGIS will develop a statistics degree program at UL in order to begin training a new generation of professional statisticians.
- The LRDC Secretariat and LISGIS will conduct regular workshops and training related to generating data and monitoring progress on the PRS.
- LISGIS currently rents space in a building that is too small to allow it to effectively carry out its mission. LISGIS will explore acquiring a suitable building where it can appropriately house its staff, databases, and records.

#### 5.5 Resource Requirements, Costing and Funding

Resources required for implementing the NSDS include equipment, vehicles and other logistical support, infrastructure development, furniture, and personnel services. Participating sectors were asked to indicate their requirements. Estimated costs were derived for the projects that sectors expect to undertake over the period to actualize the strategic objectives for the national statistics system. The cost of the entire implementation process for the NSDS over five years is estimated at around USD\$47 million (see Annex C). During the initial three

years (corresponding to the PRS period) implementing the NSDS will require about US\$32 million.

The GOL will finance part of these expenses through the national budget, both for LISGIS and the line ministries and other agencies involved. The GOL will also make direct budget allocations to support statistical work at the county level where appropriate. It is hard to project government resources in advance, since these will depend on total government revenues, needs in other sectors, and legislative approval. But based on current budget resources for statistics activities (\$3.36 million), the GOL is likely to be able to finance between one-third and on-half of the costs of implementing the NSDS.

Therefore, support from Liberia's development partners will be an important ingredient to making the NSDS successful. The estimated level of support required to implement the NSDS is approximately \$6 million per year, on average. Development partners recognize the role and importance of statistics in improving development outcomes, and the need for the NSDS to strengthen the national statistical system. To make the most of partner funding, it will be very important to ensure that it supports the highest priorities of, and is fully aligned with, the NSDS rather than other activities. One approach to the coordinated financing of the NSDS would be a sector-wide approach (SWAP). Such an arrangement is an effective mechanism for the long-term planning of the development of national statistics that can include coordinated inputs from multi-lateral, bilateral and non-governmental sources. The funds could be used for training and capacity building of identified personnel from all the implementing partners. As a means of enhancing their confidence in this approach, a clear set of data priorities, well specified deliverables, and pre-determined monitoring and evaluation performance indicators need to be specified.

# CHAPTER SIX KEY STEPS FORWARD

Improving Liberia's national statistics will involve the cooperation and contribution of government data users and producers, NGOs, the business community, and development partners. For the NSDS to support economic growth and social development in Liberia, the statistical system needs to be structured and managed so that it can produce and disseminate reliable data that users value in a coordinated, timely, and professional manner that is consistent with local and international methods and standards. There is both a need and an opportunity for the GOL, development partners, and other agencies to rebuild the national statistical system. The key steps towards rebuilding and strengthening the statistical system are as follows:

#### **Priority Actions**

- 1. The Statistics Act should be amended to strengthen LISGIS as the lead agency for compiling, coordinating, and disseminating statistical information. Key changes should include:
  - a. Giving LISGIS a stronger coordination mandate;
  - b. Clarifying issues related to functions of LISGIS and other ministries and agencies, links between then, and the promotion of activities consistent with a national statistics system;
  - c. Reducing the size of the Board (see below); and
  - d. Renaming LISGIS with a simpler, clearer name.
- 2. The LISGIS Board should be reconstituted and limited to no more than nine members. Each member should have a fixed three year term of office, renewable for one additional term. The composition of the Board should be more technical than political. The Chair should be appointed by the President and be a knowledgeable, independent professional. The position of Chair should be commensurate with the level of a Minister. Board members, even those from a particular institution, are expected to reflect a broad perspective to ensure that LISGIS has the benefit of informed opinion. Board members will be appointed by the President, based on recommendations from the Director General (DG) and Chair. The DG should be a member of the Board. Provision should be made for the appointment of a suitable person as substantive Secretary to the Board.
- 3. The DG and Deputy Directors-General of LISGIS should be appointed for fixed terms of six years (renewable once) after signing a performance contract with the Government. Based on satisfactory performance, they may be extended for no more than one additional term. The DG should perform the executive role while the Deputy should perform the daily technical role.
- 4. LISGIS should be provided with statutory authority to (a) validate official statistics; (b) authorize data collection that is national in scope; (c) mobilize resources to support the

- development of the national statistics system; and (d) coordinate training in statistical techniques and analytical methods.
- 5. To better coordinate statistics operations across sectors, the GOL will institute a Technical Committee comprised of key producers and users of statistics whose functions would be to advise on methodology for data collection from various sources and help establish ways to harmonize such methods and standards, and to assist in the coordination of activities of the national statistics system. The Director-General of LISGIS will chair the Technical Committee. Sector committees will be established, with LISGIS representation on each committee to provide technical support and provide links across sectors. Sectors committees will be responsible for developing sector-level strategies and forming both Implementation Teams and Monitoring and Evaluation Teams
- 6. Participation of key producer agencies will proceed in phases, spread over a three-year period. The first phase will cover ten key ministries and five public institutions. Each of these sectors will develop its own strategy over the next four months, including priorities, plans and needs, and then implement those strategies in cooperation with LISGIS. In the second year, participation will expand to four addition ministries and six agencies.
- 7. LISGIS will focus on generating a CWIQ survey every 18 months, producing a new Household Income and Expenditure survey (as the basis for an updated CPI) by 2009, and a DHS once every three years. It will begin publishing an Annual Statistics Bulletin in 2009 and enhance its website. Developing and promoting a national database platform at LISGIS, linked to sectors and agencies in the statistics system, which enhances information exchange and the regular updating of the database
- 8. Several Ministries and Agencies will initiate or strengthen critical surveys and databases. For example, the Ministry of Agriculture (MOA) will begin to produce an *Annual Crop Production Survey*, the *Agricultural Market Information System Survey*, *amongst others*. The Ministry of Finance will continue to strengthen budget reporting, and will build a debt database and debt management system by 2009. The Ministry of Labor will undertake a small scale employment survey of businesses in 2009 to be followed by a larger survey in 2012. It will also undertake an Occupational Injuries Survey and a Child Labor Survey, aiming to conduct both of these in 2009. Other Ministries and Agencies also will produce key statistics.
- 9. LISGIS will open statistics units by the end of 2009 in all 15 counties. Working with the Ministry of Internal Affairs, LISGIS will establish and equip County Statistical Units with a LISGIS County Statistics Officer in place in seven counties immediately and in the rest of the counties by the end of 2009.
- 10.To further develop institutional and professional capacity, LISGIS, working with the University of Liberia (UL), will develop an in-service statistical training program for junior and mid-level statistical staff within LISGIS and the key line ministries and train at

least 100 staff over three years. LISGIS and UL will conduct annual trainings for at least ten officials and county-based staff in each county on data collection and analysis. LISGIS and UL will develop a statistics degree program at UL in order to begin training a new generation of professional statisticians. LISGIS and the LRDC will conduct regular workshops and training related to generating data and monitoring progress on the PRS. LISGIS will also explore the possibility of acquiring a new building to adequately house its operations. Over the short- and medium-term, significant amounts of technical assistance will be required to rebuild key databases and survey instruments.

11. The estimated cost of implementing the NSDS over the next five years is approximately \$47 million, of which about \$32 million is needed during the three years of the PRS. The GOL will finance part of these expenses through the national budget, including for LISGIS, the line ministries and other agencies involved, and to support statistical work at the county level where appropriate. However, because of Liberia's limited budget resources, support from Liberia's development partners with financing and by supplying appropriate technical assistance will be an important ingredient to making the NSDS successful, including possibly through a SWAP mechanism. It is particularly important that all partner funding for statistical activities be directed at the highest priorities of the NSDS. Over time, the GOL will establish mechanisms for ensuring the financial sustainability of the key organizations that comprise the national statistics system.

#### **Appendix A: United Nations Fundamental Principles of Official Statistics**

*Principle 1: Relevance, Impartiality and Equal Access.* Official statistics are an indispensable element in the information system of any society, serving the government, the economy and the public with data about the economic, demographic, social and environmental situations.

*Principle 2: Professional Standards and Ethics.* To retain trust in official statistics, the national statistics system has to operate according to strictly professional considerations, scientific principles and professional ethics.

*Principle 3: Accountability and Transparency.* To enable the data to be correctly interpreted, information will be presented according to scientific standards on the sources, methods, and procedures of the statistics.

*Principle 4: Prevention of Misuse of Data.* Professional staffs in the national statistics system are entitled to comment on erroneous interpretation and misuse of statistics.

*Principle 5: Cost-Effectiveness.* Data for statistical purposes may be drawn from all types of sources, including statistical surveys, or administrative records. The source should be chosen in ways that assures quality, timeliness, and reduces the costs and the burden on respondents.

*Principle 6: Confidentiality.* Data on individuals collected for compilation within the national statistical system, whether they relate to natural or legal persons, will be strictly confidential and used exclusively for statistical purposes.

*Principle 7: Legislation*. The laws, regulations and measures under which the national statistics system operates will be made public.

*Principle 8: National Coordination.* Coordination among statistical agencies is essential to achieve consistency and efficiency in the national statistics system. All agencies will cooperate to ensure this occurs.

Principle 9: International Standards. The national statistical system will use international concepts, classifications and methods to promote the consistency and efficiency of the system with others at all official levels.

*Principle 10: International Cooperation.* Bilateral and multilateral cooperation among national statistics systems contributes to the improvement of official statistics in all countries.

### **Annex B: PRS Indicators and Key Activities by Agency**

| Lead<br>Ministry/Agency       | Indicator/Activity   |  |  |  |  |  |
|-------------------------------|--|--|--|--|--|--|
|                               | PRS Indicators:  |  |  |  |  |  |
| Anti-Corruption<br>Commission | Score on Transparency International Corruption Perception Index  |  |  |  |  |  |
| Bureau of Immigration         | PRS Indicators:  |  |  |  |  |  |
| and Naturalization            | Number of fully staffed BIN key border posts   |  |  |  |  |  |
|                               | PRS Indicators:  |  |  |  |  |  |
| Bureau of the Budget          | Net total transfers to SOEs/parastatals as % of Government revenue   |  |  |  |  |  |
|                               | PRS Indicators:  |  |  |  |  |  |
|                               | Export of goods, f.o.b.  |  |  |  |  |  |
|                               | Foreign Direct Investment  |  |  |  |  |  |
| Central Bank of Liberia       | Consumer Price Index (with LISGIS)   |  |  |  |  |  |
|                               | Banking system deposits/GDP (%)  |  |  |  |  |  |
|                               | Non-performing loans as a percent of total assets of the banking system (%)  |  |  |  |  |  |
|                               | PRS Indicators:  |  |  |  |  |  |
|                               | Share of the population that perceives the Government of Liberia to be performing better than in the previous year |  |  |  |  |  |
| Civil Service Agency          | Number of ministries, agencies, and SOEs/parastatals restructured based on revised, published and adopted mandates |  |  |  |  |  |
|                               | Key Activities:  |  |  |  |  |  |
|                               | Job inspection   |  |  |  |  |  |
|                               | Operational research   |  |  |  |  |  |
| Forestry Development          | PRS Indicators:  |  |  |  |  |  |
| Authority                     | Volume of timber products produced   |  |  |  |  |  |
|                               | PRS Indicators:  |  |  |  |  |  |
| Governance<br>Commission      | Number of ministries, agencies, and SOEs/parastatals restructured based on revised, published and adopted mandates |  |  |  |  |  |
|                               | Score on Transparency International Corruption Perception Index  |  |  |  |  |  |

| Lead<br>Ministry/Agency  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
| Willistry/Agency   | Indicator/Activity   |  |  |  |  |  |  |
|  | Juvenile Offenders with access to rehabilitation services (%)  |  |  |  |  |  |  |
|  | Cases successfully prosecuted (%)  |  |  |  |  |  |  |
| Judiciary  | Number of Circuit Courts and Magisterial Courts rehabilitated/ constructed and functioning (judged by whether a legal proceeding has been completed in that court) |  |  |  |  |  |  |
|  | Number of Judicial Officers trained and deployed at Circuit/Magisterial Courts (disaggregated by gender)   |  |  |  |  |  |  |
|  | PRS Indicators:  |  |  |  |  |  |  |
| Land Commission (when established)  Review and reform by Land Commission of all aspects of land policy, law, and admir |  |  |  |  |  |  |  |
|  | PRS Indicators:  |  |  |  |  |  |  |
|  | Percentage of households with access to electricity  |  |  |  |  |  |  |
|  | Total installed capacity (MW)  |  |  |  |  |  |  |
| Liberia Electricity<br>Corporation   | Percentage of rural households with access to electricity  |  |  |  |  |  |  |
|  | Regional or cross border interconnectivity (miles of cross border transmission lines)  |  |  |  |  |  |  |
|  | PRS Indicators:  |  |  |  |  |  |  |
|  | Percent of the population below national poverty line  |  |  |  |  |  |  |
|  | Incidence of extreme poverty   |  |  |  |  |  |  |
|  | National income accounts  Consumer Price Index (with CBL)  |  |  |  |  |  |  |
|  | Net enrollment ration in primary education (disaggregated by gender)   |  |  |  |  |  |  |
| LISGIS   | Gender Parity Index in primary enrollment  |  |  |  |  |  |  |
|  | Youth literacy rate  |  |  |  |  |  |  |
|  | Key Activities:  |  |  |  |  |  |  |
|  | Core welfare indicators survey   |  |  |  |  |  |  |
|  | Liberia demographic & health survey  |  |  |  |  |  |  |
|  | National account statistics  |  |  |  |  |  |  |
|  | Social statistics  |  |  |  |  |  |  |

| Lead<br>Ministry/Agency          | Indicator/Activity   |  |  |  |  |  |  |  |
|----------------------------------|--|--|--|--|--|--|--|--|
| www.stryw.tgeney                 | Household income & expenditure survey  |  |  |  |  |  |  |  |
|                                  | Liberia information updates  |  |  |  |  |  |  |  |
| LISGIS cont.                     | Consumer price index   |  |  |  |  |  |  |  |
|                                  | National establishment census  |  |  |  |  |  |  |  |
|                                  | Analysis of census data  |  |  |  |  |  |  |  |
|                                  | Environmental survey   |  |  |  |  |  |  |  |
|                                  | Agriculture census   |  |  |  |  |  |  |  |
|                                  | PRS Indicators:  |  |  |  |  |  |  |  |
| Liberia National Police          | Police: population ratio   |  |  |  |  |  |  |  |
| Liberia National Folioc          | Ratio of arrests to reported major/violent crime   |  |  |  |  |  |  |  |
| Liberia                          | PRS Indicators:  |  |  |  |  |  |  |  |
| Telecommunication Authority      | Universal Access telecommunications coverage throughout Liberia  |  |  |  |  |  |  |  |
| Liberia                          | PRS Indicators:  |  |  |  |  |  |  |  |
| Telecommunication<br>Corporation | Iniversal Access telecommunications coverage throughout Liberia  |  |  |  |  |  |  |  |
| •                                | PRS Indicators:  |  |  |  |  |  |  |  |
| Ministry of Internal             | Public expenditure transferred to local authorities (%)  |  |  |  |  |  |  |  |
| Affairs                          | Administration buildings and palava huts constructed and rehabilitated   |  |  |  |  |  |  |  |
|                                  | PRS Indicators:  |  |  |  |  |  |  |  |
|                                  | Volume of agricultural production (% growth), disaggregated by food and non-food crops, number of acres of land cultivation (commercial/private farms) |  |  |  |  |  |  |  |
|                                  | Key Activities:  |  |  |  |  |  |  |  |
| Ministry of Agriculture          | Crop production survey   |  |  |  |  |  |  |  |
| Millistry of Agriculture         | Agriculture market information systems   |  |  |  |  |  |  |  |
|                                  | Crop monitoring and early warning system   |  |  |  |  |  |  |  |
|                                  | Develop agriculture and fishery database   |  |  |  |  |  |  |  |
|                                  | Fishery statistics   |  |  |  |  |  |  |  |
| Ministry of Commerce             | PRS Indicators:  |  |  |  |  |  |  |  |
| and Industry                     | Number of new businesses registered  |  |  |  |  |  |  |  |
|                                  | PRS Indicators:  |  |  |  |  |  |  |  |
| Ministry of Defense              | Annual NSSLR-IM benchmarks achieved  |  |  |  |  |  |  |  |

| Lead<br>Ministry/Agency                  | Indicator/Activity  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|
| Ministry of Defense cont.                | Percent of the population that perceives the security situation to be better than in the previous year            |  |  |  |  |  |  |
|  | PRS Indicators:   |  |  |  |  |  |  |
|  | Net enrollment ratio in primary education (disaggregated by gender)   |  |  |  |  |  |  |
|  | Gender Parity Index in primary enrollment   |  |  |  |  |  |  |
|  | Teacher to student ratio  |  |  |  |  |  |  |
| Ministry of Education                    | Youth literacy rate   |  |  |  |  |  |  |
|  | Key Activities:   |  |  |  |  |  |  |
|  | School Census   |  |  |  |  |  |  |
|  | Data processing and analysis  |  |  |  |  |  |  |
|  | Publication and Dissemination   |  |  |  |  |  |  |
| Ministry of Finance                      | PRS Indicators:   |  |  |  |  |  |  |
| Ministry of Finance                      | Net total transfers to SOEs/parastatals as % of Government revenue  |  |  |  |  |  |  |
|  | Key Activities:   |  |  |  |  |  |  |
|  | Sample survey on gender violence  |  |  |  |  |  |  |
| Ministry of Gender and<br>Development    | Study on women in governance  |  |  |  |  |  |  |
|  | Focus on rural women  |  |  |  |  |  |  |
|  | Mapping of women organizations  |  |  |  |  |  |  |
|  | PRS Indicators:   |  |  |  |  |  |  |
|  | Child mortality rate  |  |  |  |  |  |  |
|  | Maternal mortality rate   |  |  |  |  |  |  |
|  | Child malnutrition (% of children under 5) (Stunting, wasting, height for age, weight for height, weight for age) |  |  |  |  |  |  |
|  | Contraceptive prevalence rate (disaggregated by method)   |  |  |  |  |  |  |
| Ministry of Health and<br>Social Welfare | HIV prevalence rate (disaggregated by sex and age)  |  |  |  |  |  |  |
|  | Doctors per 1000 person   |  |  |  |  |  |  |
|  | Nurses per 1000 persons   |  |  |  |  |  |  |
|  | Midwives per 1000 persons   |  |  |  |  |  |  |
|  | Key Activities:   |  |  |  |  |  |  |
|  | Nation-wide health survey   |  |  |  |  |  |  |

| Lead<br>Ministry/Agency                 | Indicator/Activity   |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|
| Willistry/Agency                        | Quarterly publication on health statistics   |  |  |  |  |  |  |
| Ministry of Health and                  | Monitoring and supervision of health information systems   |  |  |  |  |  |  |
| Social Welfare cont.                    | Integrated disease surveillance & response activity  |  |  |  |  |  |  |
|   | PRS Indicators:  |  |  |  |  |  |  |
|   | Percent of the population that perceives the security situation to be better than in the previous year   |  |  |  |  |  |  |
|   | Number of beneficiaries of legal aid (civil/criminal)  |  |  |  |  |  |  |
| Ministry of Justice                     | Number of Circuit Courts and Magisterial Courts rehabilitated/ constructed and functioning (judged by whether a legal proceeding has been completed in that court) |  |  |  |  |  |  |
|   | Number of Judicial Officers trained and deployed at Circuit/Magisterial Courts (disaggregated by gender)   |  |  |  |  |  |  |
|   | Juvenile Offenders with access to rehabilitation services (%)  |  |  |  |  |  |  |
|   | Cases successfully prosecuted (%)  |  |  |  |  |  |  |
|   | PRS Indicators:  |  |  |  |  |  |  |
|   | Employment rate (%as determined by MoL 2008/2009 labor market survey)  |  |  |  |  |  |  |
| Ministry of Labor                       | Wage employment in the non-agricultural sector (% of total employment)   |  |  |  |  |  |  |
|   | Key Activities:  |  |  |  |  |  |  |
|   | Labour Force Survey  |  |  |  |  |  |  |
|   | Occupational Injuries Survey   |  |  |  |  |  |  |
|   | Child Labor Survey   |  |  |  |  |  |  |
|   | PRS Indicators:  |  |  |  |  |  |  |
|   | Volume of iron ore produced  |  |  |  |  |  |  |
| Ministry of Lands,<br>Mines, and Energy | Percentage of households with access to electricity  |  |  |  |  |  |  |
|   | Total installed capacity (MW)  |  |  |  |  |  |  |

| Lead<br>Ministry/Agency                 | Indicator/Activity  |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|
| Ministry of Lands,<br>Mines, and Energy | Percentage of rural households with access to electricity                             |  |  |  |  |  |  |
| cont.                                   | Regional or cross border interconnectivity (miles of cross border transmission lines) |  |  |  |  |  |  |
|   | Key Activities:   |  |  |  |  |  |  |
|   | Socio-economic survey   |  |  |  |  |  |  |
| Ministry of Planning                    | Monitoring and evaluation of NGOs' activities   |  |  |  |  |  |  |
| and Economic Affairs                    | Establishment of Regional offices   |  |  |  |  |  |  |
|   | Monitoring and evaluation of sectors by CDA   |  |  |  |  |  |  |
|   | PRS Indicators:   |  |  |  |  |  |  |
| Ministry of<br>Transportation           | Number of vessels entering and clearing Freeport of Monrovia per month                |  |  |  |  |  |  |
| Ministry of Post and                    | PRS Indicators:   |  |  |  |  |  |  |
| Telecommunications                      | Population with local access to postal services (%)                                   |  |  |  |  |  |  |
|   | PRS Indicators:   |  |  |  |  |  |  |
|   | Number of new miles of roads rehabilitated/ reconstructed                             |  |  |  |  |  |  |
| Ministry of Public Works                | Person-months of roadwork employment created per year                                 |  |  |  |  |  |  |
| Works                                   | Access to safe drinking water   |  |  |  |  |  |  |
|   | Access to improved sanitation   |  |  |  |  |  |  |
| MTA                                     | PRS Indicators:   |  |  |  |  |  |  |
| WITA                                    | Number of buses regularly operating in Monrovia                                       |  |  |  |  |  |  |
|   | PRS Indicators:   |  |  |  |  |  |  |
| National Housing<br>Authority           | Additional units of low-income housing constructed                                    |  |  |  |  |  |  |
|   | PRS Indicators:   |  |  |  |  |  |  |
| National Investment<br>Council          | Number of new businesses registered   |  |  |  |  |  |  |
| National Ports                          | PRS Indicators:   |  |  |  |  |  |  |
| Authority                               | Number of vessels entering and clearing Freeport of Monrovia per month                |  |  |  |  |  |  |
|   | PRS Indicators:   |  |  |  |  |  |  |
| UPU                                     | Population with local access to postal services (%)                                   |  |  |  |  |  |  |

US\$

### **Annex C: Costs of Implementing the NSDS**

Million Table 1: Summary Budget for Implementing the NSDS in Liberia, by Activity and Year :

| rear:                          |           |          |          |          |          |          |          |
|--------------------------------|-----------|----------|----------|----------|----------|----------|----------|
| COST ITEMS                     | 2008/'09  | 2009/'10 | 2010/'11 | 2011/'12 | 2012/'13 | TOTAL    | TOTAL    |
|                                |           |          |          |          |          | (08/'09- | (08/'09- |
| CODE ADMINISTRATIVE CO         | CTC       |          |          |          |          | 10/'11)  | 12/13)   |
| CORE ADMINISTRATIVE CO         | 515       |          |          |          |          |          |          |
| . EQUIPMENT                    |           |          |          |          |          |          |          |
|                                | 0.34      | 0.29     | 0.17     | 0.13     | 0.09     | 0.80     | 1.02     |
| . LOGISTICS                    | 0.0.      | 0.20     | V        | 0.20     | 0.00     | 0.00     |          |
|                                | 0.86      | 0.93     | 0.51     | 0.38     | 0.25     | 2.30     | 2.93     |
| . FURNITURE                    |           |          |          |          |          |          |          |
|                                | 0.06      | 0.05     | 0.03     | 0.02     | 0.01     | 0.14     | 0.17     |
| . INFRASTRUCTURE               |           |          |          |          |          |          |          |
|                                | 0.20      | 0.20     | 0.20     | 0.20     | 0.20     | 0.60     | 1.00     |
| a. Salary                      |           |          |          |          |          | 4.00     | 0.10     |
| h Training                     | 0.22      | 0.40     | 0.60     | 0.90     | 1.00     | 1.22     | 3.12     |
| b. Training                    | 0.20      | 0.25     | 0.24     | 0.27     | 0.44     | 0.69     | 1.40     |
| c. Professional Services       | 0.20      | 0.23     | 0.24     | 0.27     | 0.44     | 0.09     | 1.40     |
| c. 1 Tolessional Services      | 0.20      | 0.20     | 0.20     | 0.20     | 0.20     | 0.60     | 1.00     |
| SUBTOTAL                       | 0.20      | 0.20     | 0.20     | 0.20     | 0.20     | 0.00     | 10.64    |
|                                | 2.08      | 2.32     | 1.95     | 2.10     | 2.19     | 6.35     |          |
|                                |           | _        |          |          |          |          |          |
| 6 STATISTICAL ACTIVITIES (     | PROJECT ( | COSTS)   |          |          |          | -        |          |
| Census of Population           |           |          |          |          |          |          |          |
|                                | 0.80      | -        | -        | -        | -        | 0.80     | 0.80     |
| County Statistics Units        | 0.00      | 0.00     | 0.00     | 0.00     | 0.01     | 1.00     | 1.00     |
| new statistical training       | 0.69      | 0.20     | 0.20     | 0.30     | 0.21     | 1.09     | 1.60     |
| initiative                     | 0.40      | 1.40     | 1.40     | 0.90     | 0.40     | 3.20     | 4.50     |
| Core Welfare Indicators        | 0.40      | 1.40     | 1.40     | 0.30     | 0.40     | 3.20     | 4.50     |
| Questionnaire Survey           | 0.50      | 0.50     | 0.50     | 0.50     | 0.50     | 1.50     | 2.50     |
| Liberia Demographic &          |           |          |          |          |          |          |          |
| Health Survey                  | -         | -        | 1.50     | -        | -        | 1.50     | 1.50     |
| National Account               |           |          |          |          |          |          |          |
| Statistics/Business Statistics | 0.20      | 0.46     | 0.46     | 0.40     | 0.40     | 1.12     | 1.92     |
| Household Income &             |           |          |          |          |          |          |          |
| Expenditure Survey             | -         | 2.00     | -        | -        | -        | 2.00     | 2.00     |
| External Trade Statistics      | 0.10      | 0.05     | 0.05     | 0.00     | 0.00     | 0.00     | 1.00     |
| Liberia Info. Updates, Nat'l   | 0.13      | 0.35     | 0.35     | 0.30     | 0.20     | 0.83     | 1.33     |
| Stat. Quarterly Bulletin &     |           |          |          |          |          |          |          |
| Monthly Stat Newspaper         | 0.13      | 0.15     | 0.15     | 0.15     | 0.15     | 0.43     | 0.73     |
| Consumer Price Index           |           |          |          |          |          |          |          |
|                                | 0.20      | 0.20     | 0.40     | 0.30     | 0.30     | 0.80     | 1.40     |
| Environmental Statistics       |           |          |          |          |          |          |          |
|                                | 0.10      | 0.10     | 0.10     | 0.10     | 0.10     | 0.30     | 0.50     |
| Labour Force Survey            |           |          |          |          |          |          |          |
|                                | -         | 0.64     | -        | -        | 1.50     | 0.64     | 2.14     |

| Sample Survey on Gender                                   |      |           |           |      |      |           |       |
|---|------|-----------|-----------|------|------|-----------|-------|
| Violence  | 0.04 | 0.03      | 0.03      | 0.03 | 0.03 | 0.10      | 0.16  |
| Crop Production Survey                                    | 0.09 | 0.07      | 0.07      | 0.06 | 0.06 | 0.23      | 0.35  |
| Crop Monitoring and Early<br>Warning System               | 0.04 | 0.03      | 0.03      | 0.03 | 0.03 | 0.10      | 0.16  |
| Fishery Statistics  | 0.07 | 0.06      | 0.06      | 0.05 | 0.05 | 0.19      | 0.29  |
| Agriculture Market survey                                 | 0.05 | 0.04      | 0.04      | 0.03 | 0.03 | 0.13      | 0.19  |
| School Census, including analysis and publication         | 0.40 | 0.34      | 0.34      | 0.29 | 0.29 | 1.08      | 1.66  |
| Nationwide Health Survey                                  | 0.08 | 0.07      | 0.07      | 0.06 | 0.06 | 0.22      | 0.34  |
| Quarterly Publication on<br>Health Statistics             | 0.01 | -         | 1         | 1    | -    | 0.01      | 0.01  |
| Integrated Disease<br>Surveillance & Response<br>Activity | 0.02 | 0.01      | 0.01      | 0.01 | 0.01 | 0.04      | 0.06  |
| New LISGIS HQ building                                    | -    | 3.00      | 1.00      | -    | -    | 4.00      | 4.00  |
| Index of production and producer price index              | -    | -         | -         | 0.25 | 0.20 | -         | 0.45  |
| Social Statistics   | 0.20 | 0.40      | 0.40      | 0.40 | 0.40 | 1.00      | 1.80  |
| Agriculture Census  | -    | -         | 3.00      | -    | -    | 3.00      | 3.00  |
| National Establishment<br>Census                          | -    | -         | -         | 0.89 | -    | -         | 0.89  |
| Occupational Inquiries Survey                             | 0.06 | 0.05      | 0.05      | 0.04 | 0.04 | 0.16      | 0.24  |
| Child Labor Survey  | 0.05 | 0.04      | 0.04      | 0.03 | 0.03 | 0.13      | 0.19  |
| Socio-Economic Survey (Planning)                          | 0.20 | 0.17      | 0.17      | 0.14 | 0.14 | 0.54      | 0.82  |
| Agric. Market Information<br>System                       | 0.05 | 0.04      | 0.04      | 0.03 | 0.03 | 0.13      | 0.19  |
| Develop Agriculture and<br>Fishery Database               | 0.03 | 0.03      | 0.03      | 0.02 | 0.02 | 0.09      | 0.13  |
| Job inspection survey (CSA)                               | 0.08 | 0.07      | 0.07      | 0.06 | 0.06 | 0.22      | 0.34  |
| Establishment of Integrated<br>Statistical Institute      | 0.08 | 0.05      | 0.03      | -    | -    | 0.16      | 0.16  |
| Publication of UL Quarterly<br>Statistics Journal         | 0.04 | 0.03      | 0.03      | 0.03 | 0.03 | 0.10      | 0.16  |
| SUBTOTAL  | 4.74 | 10.5<br>3 | 10.5<br>7 | 5.40 | 5.27 | 25.8<br>4 | 36.51 |
| GRAND TOTAL   | 6.82 | 12.8<br>5 | 12.5<br>2 | 7.50 | 7.46 | 32.1<br>9 | 47.15 |

#### **CONSTANT 2008 PRICES**

| of which core government funding based on existing |      |      |      |      |      |       |       |
|--|------|------|------|------|------|-------|-------|
| budget   | 3.36 | 3.36 | 3.36 | 3.36 | 3.36 | 10.08 | 16.80 |
| Extra funding from<br>Government for NSDS          |      |      |      |      |      |       |       |
| (proposed)   | 0.69 | 1.00 | 1.50 | 2.00 | 2.50 | 3.19  | 7.69  |
|  |      |      |      |      |      | 13.2  |       |
| Government Total Funding                           | 4.05 | 4.36 | 4.86 | 5.36 | 5.86 | 7     | 24.49 |
|  |      |      |      | ·    |      | 18.9  |       |
| Gap to be financed by donors                       | 2.77 | 8.49 | 7.66 | 2.14 | 1.60 | 2     | 22.66 |