

Measuring National Priorities for Post-2015 in Sierra Leone

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All views expressed in this study do not reflect the views of the University of Sierra Leone, PASGR, Ministries, Departments and Agencies of the Government of Sierra Leone and all other institutions mentioned throughout. Any shortcomings rest at the doors of the authors.

Acronyms and Abbreviations

CPD Centre for Policy Dialogue CSO civil society organisation

DHS Demographic and Health Survey

GDP gross domestic product

HIV/AIDS human immunodeficiency virus/acquired immune deficiency syndrome

ILO International Labour Organization
IMF International Monetary Fund

MDAs Ministries, Departments and Agencies

MDGs Millennium Development Goals
MICS Multiple Indicators Cluster Survey
NGO non-governmental organisation

NPSIA Norman Paterson School of International Affairs
NSDS National Strategy for the Development of Statistics

ODA official development assistance

PASGAR Partnership for African Social and Governance Research

PHC Population and Housing Census

PPP purchasing power parity

PRSP Poverty Reduction Strategy Paper

REDD+ Reduced Emissions from Deforestation and Forest Degradation plus

SDGs Sustainable Development Goals

SEEA System of Environmental-Economic Accounting SLIHS Sierra Leone Integrated Household Survey

SSL Statistics Sierra Leone
UK United Kingdom
UN United Nations

UNDP United Nations Development Programme

UNICEF United Nations Children's Fund

UNISDR United Nations International Strategy for Disaster Reduction

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Report Highlights

About the Study

As the world braces itself for the end of 2015, the target end date for the Millennium Development Goals (MDGs), governments, development partners and international organisations have queried the *modus operandi* for monitoring progress on the MDGs amidst statistical inadequacy in many developing countries. In 2012, the Rio+20 United Nations (UN) Conference on Sustainable Development conceived of a set of new commitments to replace the MDGs – the Sustainable Development Goals (SDGs). In this context, the Centre for Policy Dialogue (CPD) and Carleton University's Norman Paterson School of International Affairs (NPSIA), in association with Southern Voice on Post-MDG International Development Goals, launched the Post-2015 Data Test, an initiative to investigate the feasibility and measurability of the SDGs across low-, middle- and high-income countries.

Keen to support research on the SDGs in Africa, the Partnership for African Social and Governance Research (PASGAR) supported the addition of Sierra Leone to the initiative, which already included Senegal and Tanzania, to showcase the statistical capacity of Anglophone West African countries, specifically their capacity to provide adequate, relevant, timely and accurate data to monitor progress on the SDGs.

The Sierra Leone country study examines the relevance of several proposed SDG areas for Sierra Leone and presents the state of statistical data to measure progress on those areas. It evaluates (i) poverty, (ii) education, (iii) employment and inclusive growth, (iv) energy and infrastructure, (v) environmental sustainability and disaster resilience, (vi) governance, and (vii) global partnership for sustainable development. Given that the SDG framework is set to allow for country space in the adoption and implementation of the post-2015 development agenda, the study includes an in-depth analysis of Sierra Leone's national priorities under the seven issue areas. It also evaluates the availability of official data (according to source, type and description of data) required to monitor progress on goals and identifies data gaps.

This report makes a number of valuable contributions. First, the identification of national-level priorities and implications of the SDGs for Sierra Leone will help inform the dialogue on the adoption and adaptation of the SDGs in the country. The report provides insights on potential national-level targets and identifies key challenges and opportunities for implementation of the SDGs. Second, the report identifies data gaps for monitoring progress against national and global SDG priorities. Third, the report catalogues the challenges, inadequacies and efforts in Sierra Leone to collect and disseminate relevant data. It includes a mapping of data sources and an assessment of the accessibility, availability and quality of data. The findings of this report will serve as a guide for policymakers and experts who intend to establish reliable datasets and make evidence-based decisions in Sierra Leone.

Key Findings and Recommendations

Post-2015 Discussions in Sierra Leone

Discussions about the post-2015 agenda have been limited in Sierra Leone, but it would be fair to say that MDG issues have been at the forefront of development discussions in the country since 2009. Civil society organisations (CSOs) are aware of the MDGs and related achievements. They have called for accountability and transparency from the government of Sierra Leone, which has always intimated that national goals and priorities are aligned with the MDGs. In 2008 and 2010, the UN collaborated with the government and civil society to lead a joint mission and produced progress reports on the remaining challenges and MDGs yet to be achieved in Sierra Leone. Regardless, there has not been a framework laid out for the way forward after 2015.

National Priorities

Poverty, maternal and infant mortality, gender inequality, youth employment and environmental degradation are important priorities for Sierra Leone post-2015. Lack of funding to address these priorities remains a significant challenge.

Since 2002, the government of Sierra Leone has made many attempts to reduce the persisting problems of poverty, maternal and infant mortality and gender inequality. An example is Poverty Reduction Strategy Paper (PRSP) III referred to as the Agenda for Prosperity (Government of Sierra Leone 2013a), which focused on mainstreaming gender as one of its core priorities. The Interim PRSP (Government of Sierra Leone 2001), PRSP I (Government of Sierra Leone 2005a), PRSP II referred to as the Agenda for Change (Government of Sierra Leone 2008) and PRSP III all stressed the need to reduce poverty, secure sustainable employment for youth and address issues of environmental degradation. The issues of poverty reduction, youth employment and decent work (which fall within the theme of productive and remunerative work), youth employability (i.e., skills development), and disaster management

and sustainable environmental practices are all part of current thinking and practice encapsulated in PRSP III. These key priorities are also captured under the candidate SDGs.

The Commonwealth Foundation, an intergovernmental organisation based in the United Kingdom, worked with CSOs in Sierra Leone to assess progress towards meeting the MDGs in 2015. Assessments, which took place in 2011 and 2012, covered the issues of poverty, youth unemployment, gender inequality, environment and energy, and infrastructure. Outlined in PRSP III, the assessments' findings are considered to be Sierra Leone's national development blueprint for 2013–18. However, a lack of funding has posed a real challenge for implementation.

Implementation of the SDGs

Sierra Leone has a rich set of sustainable development priorities in place that could be used to inform the implementation of the SDGs at the country level. Looking forward, the government of Sierra Leone will need to focus on diverting funds from ministries, departments and agencies engaged in certain work areas, such as the natural resource sector, towards those that support the social sector. Funding should be allocated to the implementation of strategies on reducing poverty and improving employment, specifically generating awareness about decent work and putting in place mechanisms to reduce youth unemployment. This approach will require the government to focus on education and skills development,

as it will play a key role in solving the long-standing issues of poverty, unemployment and gender inequality.

The National Statistical System

Discussions on the post-2015 agenda have called for reflection on statistical needs within each country. Given the high rate of youth unemployment in Sierra Leone, a priority of the government will be to collect disaggregated data on employment and the country's main economic sectors, including agriculture, mining and infrastructure. Focus should also be on identifying emerging non-traditional labour market activities and environmental issues, such as the area of forest cover removed, reclaiming mined-out areas, and artificial lakes created by rutile mining in Moyamba District. Additionally, the data collection process will need to be refined in order to ensure gender sensitivity, increase the frequency of data collection and shorten the time between data analysis and the dissemination of findings.

Sierra Leone faces significant political, institutional, policy and resource constraints to producing good-quality data. The country's national statistical office, Statistics Sierra Leone (SSL), is not autonomous. Political interference has meant that each government has conducted data collection that serves as a quick win and can be easily funded by the government and development partners. Importantly, CSOs remain dedicated to monitoring Sierra Leone's progress on the MDGs, particularly in the areas of poverty, education and health.

Sierra Leone faces significant political, institutional, policy and resource constraints to producing good-quality data. Going forward, data collection process will need to be refined in order to ensure gender sensitivity, increase the frequency of data collection and shorten the time between data analysis and the dissemination of findings. Commitment and delivery of pooled funding will be needed from international partners and the government to effectively monitor the SDGs.

At the institutional level, the staff turnover rate at SSL was very high between 2004 and 2013. The attrition rate severely affected the trust of some stakeholders and donors, leading to restricted funding of SSL activities. This lack of resources negatively impacted the frequency of data collection. Following its 1989–90 Labour Force Survey, the government recently completed the follow-up 2014 Labour Force Survey that was intended to collect more accurate data on key labour market indicators. The 2014 Population and Housing Census was postponed indefinitely as a result of the Ebola outbreak in West Africa in March of that year.

SSL has been implementing the second National Strategy for Development of Statistics (NSDS) (Government of Sierra Leone 2013c). In a concerted and collaborative approach, the government has been pooling resources from all government entities for data collection under the NSDS. The International Monetary Fund previously carried out the first NSDS in order to assess the country's macroeconomic database. It identified the poor state of institutional capacity and statistical activities within Sierra Leone and subsequently proposed structural reforms, which included restructuring of the national statistical system. The objectives of the reforms were efficient and coordinated data production, client conscientiousness and speedier delivery of quality information to decision- and policy-makers, donors and other users of official statistics (Statistics Sierra Leone 2008, 2–3). The first NSDS suffered from a lack of donor funding for implementation following a sudden change of leadership that disrupted activities at SSL, which led to high attrition of trained staff. The lessons learned were the need to pool resources for statistical activities in the country and the need for collaboration among data users, other stakeholders and SSL.

The second NSDS is seen as a hope for the creation of a national resource pool that enables timely data collection to support all government entities, including line ministries, in a manner that befits the calendar of each year. For example, the resource pool created under the NSDS will include timetables for employers and involve an establishment survey to be undertaken by the Ministry of Labour and Social Security. When the Ministry of Social Welfare, Gender and Children's Affairs is ready to conduct a survey on street children and orphans in and out of school, SSL will coordinate both surveys, ensure quality assurance and provide the needed financial and human resources.

Data Availablity and Quality

The dearth of data had been identified for over a decade, yet the government of Sierra Leone has not implemented reforms or enacted laws that would drastically increase the frequency of data collection and shorten the time between data analysis and the dissemination of findings. Various surveys exist, such as the Demographic and Health Survey, 1 Multiple Indicators Cluster Survey,² Sierra Leone Integrated Household Survey³ and Population and Housing Census.⁴ These surveys, however, are insufficient for measuring progress on the candidate SDGs, particularly for newer goal areas such as those related to the environment, energy, infrastructure, human rights and global partnership for sustainable development. They capture socioeconomic indicators, though on an infrequent basis. Further, the potential to create synergies between survey instruments and improve their alignment to fill data gaps has not been realised. Measuring progress on the SDGs will require concerted efforts to collect and report additional information on relevant socioeconomic indicators. At the moment, the country awaits the release of the 2014 Labour Force Survey findings.

Existing survey instruments are insufficient to measure newer SDGs such as those related to the environment, energy, infrastructure, human rights and global partnership for sustainable development. Investments will also be needed to collect more and better data on the labour market. Disaggregated data will also pose a significant challenge across SDGs for Sierra Leone.

Of the 45 indicators examined across the seven goal areas included in this study, Sierra Leone has data for 48.9 percent. Of the indicators which were selected to reflect national priorities under the SDGs, the situation is worse. Data exists for 13 of the 52 indicators examined – or 25 percent. Data for poverty-related indicators tends to be available, however will likely require further manipulation to meet SDG monitoring needs. Data on education are available for school enrolment (by gender and age, by locality and district), the school completion rate, the pass rate in national examinations (disaggregated by region and gender) and the proportion of children who access pre-primary school/kindergarten. Data on health are available for stunting and malnutrition, infant and maternal mortality rates, the fertility rate and household expenditure on health services. Regarding data on labour and employment, Sierra Leone is working on collecting data that can be used to derive key indicators on the labour market. Hence, Sierra Leone has quality data on education, health and labour. Nevertheless, improvements are needed in the frequency of data collection and the calculation of more indicators. To successfully monitor progress on

¹ Conducted in 2008 and 2013, this survey provides data on the health status of women and children, especially anthropometry (stunting, wasting and nutritional status), HIV/AIDS (human immunodeficiency virus/acquired immune deficiency syndrome) prevalence and exposure to violence.

² Conducted in 2000, 2005 and 2010, the survey provides data on the school completion rate, the pass rate in national examinations

² Conducted in 2000, 2005 and 2010, the survey provides data on the school completion rate, the pass rate in national examinations and birth registration.

³ Conducted in 2003 and 2010, with one pending for 2016, this survey provides information on employment and the labour force, income and expenditure, and migration.

⁴ Conducted in 2004 with the next survey pending in December, 2015, the survey provides information on household composition, the dependency ratio, the labour force participation rate and other key indicators on the labour market.

the SDGs, deliberate efforts are needed to improve Geographical Information System data collection on the environment and disaster management and coordinate data collection on energy and infrastructure, governance and global partnership. Indeed, of the eight potential indicators examined for energy and infrastructure, data exists for one. Data exists for only one of the nine indicators examined for the goal area related to governance. Similarly, though Sierra Leone has established Development Assistance Database, data related to global partnership will need to be improved, particularly for indicators which track progress on financial and trade flows beyond official development assistance.

Notwithstanding efforts on the NSDS, there is ample room for improvement in data collection in Sierra Leone. Mechanisms and policies need to be put into place to increase the frequency of data collection and quality of data collected as well as to determine modes of data collection, the best time periods and what type of data should be collected by specific entities, including CSOs and non-governmental organisations.

Political Economy Dimensions

Due to the numerous challenges facing SSL, Sierra Leone is not in a good position to comprehensively measure progress on the SDGs. In particular, the institution is not autonomous and is reliant on the government of Sierra Leone or donors to fund its activities. The capacity of SSL to produce high-quality data has been questioned and under scrutiny as a result of its heavy reliance on technical assistance from the World Bank, UN or International Monetary Fund.

Sierra Leone is not in a good position to comprehensively measure progress on the SDGs. SSL is not autonomous and the organisation relies heavily on technical assistance from the World Bank, UN or International Monetary Fund to carry out its work.

The government of Sierra Leone should legislate for all data collection to be coordinated and superintended by SSL and for the attachment of statisticians to all ministries, departments and agencies who act as liaison officers between their respective entities and SSL. This approach could lead to standardised data collection methodologies, quality assurance and better data comparability over time.

Unofficial data are collected by various commissions, such as the Anti-Corruption Commission and Decentralisation Secretariat, and core government entities. For example, the Ministry of Health and Sanitation collects programmatic heath data, the Ministry of Education, Science and Technology collects data on education, the Ministry of Tourism and Cultural Affairs collects tourism data, the police and courts collect data on criminals and crimes, and many other government entities collect administrative data that are not for public or academic use. Overall, these unofficial data cannot be used for measuring progress on the SDGs because objectives and methodologies might not be compatible and thus cannot provide a basis for comparison. The government of Sierra Leone should legislate for all data collection to be coordinated and superintended by SSL and for the attachment of statisticians to all ministries, departments and agencies who act as liaison officers between their respective entities and SSL. This approach could lead to standardised data collection methodologies, quality assurance and better data comparability over time.

Even with the small amount of official data available, access to these data by researchers is a problem, with either the frequency of data collection being low or time series datammissing. The Parliament of Sierra Leone recently passed the Freedom of Information Act, but as with most enactments in the country, implementation to the letter has been problematic. Thus, holding government accountable for progress on the MDGs so far, as well as the proposed SDG areas, has been difficult. It should be noted that the capabilities and role of civil society have been reduced in recent years, which has led funds dedicated for CSOs to flow through the Ministry of Finance and Economic Development as well as non-state actors. As such, the government of Sierra Leone has the power to influence CSOs, especially when there are concerns about the lack of transparency in operational and accounting procedures. Still, CSOs recognise the country's capacity to achieve the MDGs and, in turn, they have been requesting that the government increase spending on education and health, reduce its debt burden and focus on promoting environmentally sustainable practices.

Though Sierra Leone has recently passed a Freedom of Information Act, access to data and other government information has remained a challenge owing to problematic implementation. Reduced capacity within civil society has also limited the ability of CSOs to hold the government to account for progress on the MDGs. Without greater resourcing and autonomy, this will also likely be the case for the SDGs.

Recommendations

Efforts to strengthen Sierra Leone's statistical system should include the provision of financial and human resources, improvements in data infrastructure, and the implementation of staff retention and capacity development programmes.

Sierra Leone's national statistical system needs to be strengthened. Strengthening should not be limited to the provision of financial and human resources. It should also include improving infrastructure and implementing a staff retention mechanism and staff exchange programme that will allow staff members to visit other statistical and international institutions. In turn, such initiatives will enhance the provision of timely, relevant and good-quality data for evidencebased policy-making. Additionally, Sierra Leone should design a model for sound statistical information collection and create a National Data Repository-hosting institution.

SSL should prepare an outreach programme for other data producers and data users. It should disseminate information about policies and procedures related to the preparation and presentation

of metadata as well as methods of reporting on the quality of data sources. More needs to be done to improve the compilation of data on new entrants into the labour market through the establishment of a labour market information system, which considers the environment, gender, governance, rule of law, energy and infrastructure. Slight improvements or additions to some indicators on health, education and global partnership would provide national and global indicators that are adequate for monitoring the SDGs.

There is no question that inclusivity is an important part of the post-2015 agenda. As Sierra Leone embarks on implementation of the SDGs, consultations with domestic stakeholders will be a necessity when national priorities are to be identified. The government of Sierra Leone has to ensure that all stakeholders, including local government functionaries, are sufficiently consulted on the SDGs and that an effective enabling environment exists for CSOs to provide input and feedback on the government's monitoring of the MDGs and preparedness for monitoring of the SDGs. Without an appropriate outreach mechanism to include all stakeholders in data collection, use and dissemination, SSL cannot effectively provide the required data for monitoring progress on the SDGs.

As Sierra Leone embarks on the implementation of the SDGs, consultations with domestic stakeholders will be necessary when national priorities are identified to support implementation, data collection and accountability processes.

Introduction

Current Context

In 2015, governments will discuss and negotiate a set of Sustainable Development Goals (SDGs) as part of their commitments from the Rio+20 United Nations (UN) Conference on Sustainable Development in 2012.5 As the Millennium Development Goals (MDGs) are set to reach their end target date in 2015, there will likely be a move to a universal set of goals that will apply to all countries. With the post-2015 development agenda, countries will be provided the space to develop their own national targets and indicators, as well as ensure the inclusion of universal goals and targets with common descriptions and standards. The set of goals that would serve this dual role are currently subsumed in the candidate SDGs, which lay out a broad sustainable development agenda that is underpinned by a framework of goals, targets and indicators for 2030.

A study completed by the UN Inter-Agency and Expert Group on MDG Indicators found that there was very little clarity on how targets were set and that many targets took different forms (IEAG-MDG 2013). It stressed that the MDGs have been incorrectly interpreted at the national and sub-national levels, leading to distorted analysis, priority setting and statistical development efforts. As a result, many observers have called for disaggregated data to better understand how progress on the forthcoming SDGs will be measured and monitored within each country. A "data revolution" was called for to support governments in monitoring the implementation of the SDGs. This data revolution will help track progress and provide key information on the integration of these new goals.

There are numerous challenges facing the national statistical system in Sierra Leone. Civil society organisations (CSOs) have been unable to obtain good-quality socio-economic data. Given that the SDGs will cover priority areas far more extensively than the MDGs, including topics such as sustainable production and consumption, aid flows to productive sectors, reducing vulnerability, building resilience and issues related to peace and security, there is an urgent need to identify existing data gaps in order to enable effective monitoring of the SDGs. It was in this context that the Post-2015 Data Test was launched.

Developed by the Centre for Policy Dialogue (CPD)⁶ and Carleton University's Norman Paterson School of International Affairs (NPSIA), in association with Southern Voice on Post-MDG International Development Goals, the Post-2015 Data Test aims to road-test a number of potential SDGs across low-, middle- and high-income countries. Under the initiative, research teams in Bangladesh, Canada, Peru, Senegal, Sierra Leone, Tanzania and Turkey are examining national-level priorities and measurement challenges for a number of potential SDG areas including poverty, education, employment and inclusive growth, energy and infrastructure, environmental sustainability, governance, and global partnership for sustainable development.

⁵ See http://sustainabledevelopment.un.org/owg.html for more information on the preparatory process for the negotiations in 2015.

⁶ See www.cpd.org.bd for more information.

⁷ Originally undertaken by the North-South Institute, an Ottawa-based international development think tank, the initiative was moved to NPSIA in October 2014 following the announcement that the North-South Institute would be closing.

⁸ Southern Voice on Post-MDG International Development Goals is a network of 48 Southern think tanks from Africa, Latin America and South Asia. See www.southernvoice-postmdg.org for more information.

⁹ See www.post2015datatest.com for full information on the initiative, including countries and research partners involved, a summary of the research objectives, and details on the methodology for the country studies.

The report Delivering on the Data Revolution in Sub-Saharan Africa (Glassman et al. 2014) noted that African countries, especially sub-Saharan African countries such as Sierra Leone, are in urgent need of better quality data because little progress has been made on improving the data situation there. The report determined that the 'building blocks' of national statistical systems in Sub-Saharan Africa remain weak (Glassman et al. 2014), which is certainly the case in Sierra Leone, despite the government having conducted a Population and Housing Census (PHC) (in 2004), Multiple Indicators Cluster Survey (MICS) (2005, 2010), Core Welfare Indicator Questionnaire (2007) and Demographic and Health Survey (DHS) (2008, 2013). Without appropriate building blocks – consistent, good-quality data on births and deaths, economic growth and poverty, taxes and trade, health and sickness, schooling and safety, and land and the environment - Sierra Leone will not be able to calculate key socio-economic welfare indicators. To be valuable to policy-makers, citizens and donors and enable the accountability cycle to work, data must be accurate, timely, disaggregated and widely available. The weaknesses of data building blocks are evident in the instability in headline economic statistics such as economic growth and poverty (Glassman et al. 2014, 6).

At the time of the adoption of the Millennium Declaration in 2000 and subsequent establishment of the MDGs, there was an understanding that data requirements for monitoring of the MDGs were crucial. It was noted that there was a need to strengthen statistical capacity at both national and international levels. In a country such as Sierra Leone, which saw an end to 11 years of civil war in 2002, there were serious challenges to improving data collection and methodologies for monitoring of the MDGs.

The Millennium Development Goals Progress Report 2010 explained that "measuring progress towards achieving the goals is constrained by significant absence of relevant data . . . [and] available data is inadequate and often not up to date" (UN 2010 quoted in Government of Sierra Leone 2010, 12). These findings indicate that Sierra Leone has continued to face constraints in regards to producing sound statistical data. Statistics Sierra Leone (SSL), the national statistical office, has the mandate to superintend all data collection within the country and ensure that data quality is internationally credible. However, the institution has been plagued by ongoing problems, including difficulties with staff retention and the lack of modern logistics to efficiently carry out data collection and analysis.

The civil war of 1991–2002 shattered Sierra Leone's economy by displacing millions of people, destroying basic infrastructure, halting economic activities and engendering massive brain drain. Between 2002 and 2003, Sierra Leone consolidated peace and established the rule of law, resettled displaced people, and rehabilitated and reintegrated "new civilians." Between 2003 and 2014, Sierra Leone enjoyed robust economic growth, expansion in mining activities and diversification of the agricultural sector, which all led to a great influx of commercial inputs and investors. However, this robust growth has not generated enough jobs to absorb the growing youth population and the situation has been worsened by the Ebola outbreak in West Africa in March 2014, which has scared away investors.

The government of Sierra Leone has thus far prepared three Poverty Reduction Strategy Papers (PRSPs), each emphasising the need for macroeconomic stability and the role of employment as a conduit for poverty reduction. These include PRSP I (Government of Sierra Leone 2005a), PRSP II referred to as the Agenda for Change for 2008–12 (Government of Sierra Leone 2008) and PRSP III referred to as the Agenda for Prosperity for 2013–18 (Government of Sierra Leone 2013a). There was also an Interim PRSP (Government of Sierra Leone 2001). However, the problem of poverty persists throughout the country, leading youth to have few to no skills that would make them employable in hightechnology industries or capital-intensive industries such as iron ore and kimberlite mining. Sierra Leone

¹⁰ "New civilians" was the term used for ex-rebel combatants who were reintegrated into society.

remains a largely agrarian economy, with a large proportion of the rural population relying on agriculture for employment and livelihoods.

This report presents the Sierra Leone country study for the Post-2015 Data Test. Following an overview of the research process, it outlines national-level priorities for Sierra Leone across the goal areas selected for the study. The next section provides an analysis of available data for measuring progress on the candidate SDGs. The final section summarises the key challenges and opportunities that Sierra Leone will face when implementing the SDGs before providing concluding remarks and recommendations.

Research Process

The Research Team

The Sierra Leone research team comprises: Samuel Jamiru Braima (team leader), Senior Lecturer, Head of the Department of Economics and Commerce, Fourah Bay College, University of Sierra Leone; Aisha Ibrahim Fofana, Senior Lecturer, Director, Institute of Gender Research and Documentation, University of Sierra Leone; Alfred A. Jarrett, Head, Department of Sociology and Social Work; J.A. Lawrence Kamara, Head, Department of Mathematics and Statistics (formerly Statistician General, SSL); Samuel B. Weekes, Dean, Faculty of Social Sciences and Law, Director, Institute of Population Studies (IPS); and Nat S.B. Wellington, Senior Research Fellow, University of Sierra Leone. The research team members are all personnel of the University of Sierra Leone, a centre of academic excellence and research in Sierra Leone.

Methodology

A Methodology and Implementation Guide was prepared for the Post-2015 Data Test in July 2014. The quide is available online and contains specific details on how the methodological process was undertaken. 11 Therefore, this section only highlights the specific approaches and activities undertaken with respect to Sierra Leone as well as some methodological challenges.

For this study, a mixed-method approach was utilised. Data were collected and interviews were held with key personnel within the following institutions: the Ministry of Finance and Economic Development; Economic Policy Research Unit, Ministry of Finance and Economic Development; and Policy and Research Directorate, Ministry of Social Welfare, Gender and Children's Affairs. 12 Focus group discussions were held to discuss the selection of national-level targets and indicators, potential data gaps for measuring progress, as well as the challenges and opportunities that may exist in Sierra Leone when implementing the SDGs. Additionally, the Sierra Leone research team carried out a literature review of relevant current policies, mapped sources of data from a range of national sources and applied a data quality assessment framework based on international standards (see Annex 2). The inception workshop for the study was held in May 2014¹³ and focus group discussions were held in July 2014.¹⁴

From May to November 2014, the Sierra Leone research team was in constant touch with SSL staff for information pertaining to the National Strategy for Development of Statistics (NSDS), particularly for PRSPs, survey instruments and data availability for indicators on education, employment, income, and health and nutrition. The information received helped the team apply the data quality assessment framework and data strategies as outlined in the Methodology and Implementation Guide. In addition, the team leader contacted the Environmental Protection Agency Sierra Leone, Bank of Sierra Leone, Ministry of Labour, Employment and Social Security, National Revenue Authority and Sierra Leone Chamber of Commerce and Industry requesting additional information on data availability and metadata where appropriate.15

¹¹ See Bhattacharya, Higgins and Kindornay (2014) or the website of the initiative, www.post2015datatest.com.

¹² See Annex 1 for a list of interviewees.

¹³ See www.post2015datatest.com/country-studies/sierra%20leone for a report on the Sierra Leone inception workshop.

¹⁴ See Annex 1 for a list of participants.

¹⁵ See Annex 1 for a full list of organisations.

Limitations of the Study

A major limitation to the study was the timeframe within which the Sierra Leone research team was composed and added to the Post-2015 Data Test initiative. Sierra Leone was only added following a visit of the Executive Director of the Partnership for African Social and Governance Research (PASGAR) to the University of Sierra Leone in May 2014, after the Post-2015 Data Test initiative had already kicked off in November 2013. Another limiting factor was the Ebola outbreak in West Africa in March 2014, which halted almost all activities within Sierra Leone. The Ebola outbreak limited key informant interviews that were scheduled. Additionally, the weather - particularly heavy rains - had a negative impact on attendance at focus group discussions. Another significant factor was limited contact with academics and local government functionaries in various provinces. Their contributions and opinions would have increased the robustness of the study.

Lessons Learned

Through completing this study, a major lesson learned was the realisation that space exists for collaborative research efforts through South-South cooperation, given efforts by CPD and Southern Voice, and North-South cooperation, given NPSIA's association with both CPD and Southern Voice. There is also space for dialogue on global frameworks for human development.

In Sierra Leone, there is consensus on the need for a national data repository given that there is a large amount of administrative and programmatic data available through various ministries, departments and agencies, as well as CSOs and community-based organisations. It is recognised that a mechanism should be put in place to coordinate and harmonise all previously collected data. Examples of administrative and programmatic data in Sierra Leone include: data gained from the Census of Schools conducted by the Ministry of Education, Science and Technology, monthly/quarterly data (on child births, maternal and infant mortality, vaccines administered, age groups of children and mothers, etc.) collected by the Ministry of Health and Sanitation, specifically by Peripheral Health Units and District Monitoring Health Teams, data on reported domestic violence collected by Family Support Units of the Sierra Leone Police Force, and data collected by the Anti-Corruption Commission on people accused of corruption, arraigned and convicted, and/or fined. Additionally, the Decentralisation Secretariat undertakes various surveys on the functions and finances of local councils. With the increasing emphasis placed on decentralisation in the country and the importance of passing information to local levels, this will require further planning and an entirely new data source is potentially required for planning at the local level.

There is awareness and knowledge of the MDGs within Sierra Leone, but little is known about the post-2015 agenda. There is now a need to set international/global standards with the different contexts and status quos of each country in mind. To monitor progress on the SDGs, multi-stakeholder meetings as well as local community understanding and participation are required to have national buy-in for the SDGs and for the monitoring of progress to be holistic and continuous.

Post-2015 Priorities for Sierra Leone

Overview

Under the Post-2015 Data Test initiative, research teams were tasked with identifying national-level targets and indicators for a selection of candidate SDGs. 16 The goal areas tested in Sierra Leone were the following:

- poverty
- education
- energy and infrastructure
- · employment and inclusive growth
- governance
- environmental sustainability and disaster resilience
- global partnership for sustainable development

As outlined in the methodology section, each country examined 5-6 targets and approximately 8-12 indicators for each of the goals listed. CPD, NPSIA and Southern Voice pre-determined some targets and indicators to be examined in all countries for each goal area of the initiative, which will allow for comparison on data availability across country studies. Throughout the study these targets and indicators are referred to as "global." Within the national set of targets and indicators, teams were instructed to ensure that at least one target and corresponding indicator(s) connect to another goal area.

Selecting National Targets and Indicators

The Methodology and Implementation Guide outlines that, since national statistical offices and institutions generate most of the data that will be relevant in the post-2015 context, it will be important for research teams to have in-depth discussions with these entities. These discussions should uncover: how national statistical offices as well as government ministries and agencies are engaging on the post-2015 agenda, if at all, their interaction with other entities and how they communicate data; which data are already being collected; how data are generated and made accessible; the reliability and robustness of data with respect to selected goals, targets and indicators; and the future plans of these entities. This knowledge will allow research teams to offer recommendations on addressing data gaps and the generation of new data at the national level in the context of post-2015.

The guide states the importance of ensuring that indicators are relevant to targets, provide a measure of progress that supports policy-making, establish an existing methodology or one that is logical and meaningful for trend analysis and disaggregation, appropriate and comprehensible. In line with the SDG timeline currently being discussed, all targets listed in this study assume a 2030 deadline.

Using these guidelines as a reference point, national targets and indicators were selected across the goal areas based on the literature review of current policies and feedback received from stakeholders. Key informant interviews were also used to validate the selected targets and indicators. Overall, the national targets and indicators reflect a balance of ongoing national priority areas, such as the priority of labour and employment in the Agenda for Prosperity, and trends in international discussions on the SDGs.

¹⁶ See Bhattacharya, Higgins and Kindornay (2014) for further details on how candidate goals were selected and they key priority areas included under each goal.

Feedback on Global Targets and Indicators

A number of the global targets and indicators apply to Sierra Leone. For example, under the goal "End poverty" and the target "End extreme income poverty," the indicator "Proportion of the population living under \$2 (PPP) per day" is applicable to Sierra Leone's context. Further, the goal area environmental sustainability and disaster resilience is relevant to Sierra Leone since the country is endowed with rich mineral and marine resources. Education is also highly pertinent to the country. Primary education should be free, compulsory and universal. However, persisting issues make it difficult to advance and implement reforms, thus resulting in primary education to be neither free nor universal.

While some global targets are ambitious for Sierra Leone, they serve as pointers should the country attain middle-income status by 2030. Hence, these targets are still relevant to Sierra Leone. For example, the country should focus on ending extreme income poverty, but how "extreme income poverty" is defined in Sierra Leone might vary from the international definition. Ensuring that all Sierra Leoneans have access to good quality primary and secondary education, efficient and job-related vocational training, and technical education is vital and should be a top priority if the government wants to address high youth unemployment.

Within the existing MDG framework, MDG 8 is on global partnership for development. This goal is considered to be particularly significant among the MDGs for two reasons. First, it is not tied to any specific sector such as education or health, but rather is an omnibus category, apparently designed to facilitate international support for the enhancement of progress on the other MDGs. Thus, it addresses issues such as meeting aid targets, provision of debt relief, improving market access, as well as access to information and communication technologies and essential medicines. The targets subsumed under this goal are consequently considered to be broad statements of intentions, somewhat loosely structured and generally not measurable. This is in contrast to the other MDGs, which are more sector-specific and have engendered more effort at data generation and monitoring. Second, this goal is more focused on the actions taken by developed countries, international financial institutions and the private sector and operates more at the global rather than the national level. These characteristics have implications for data requirements at the national level.

Additionally, gender equality and empowerment have gained significant attention at both the international and national levels, including in Sierra Leone. The inclusion of a standalone goal on gender equality in the new SDG framework would be aligned with the country's Agenda for Prosperity.



Current Status

For the past four decades, Sierra Leone has been grappling with maintaining the basic provision of education, health and infrastructure following colonisation. Governance deteriorated, exacerbating socioeconomic issues and, in turn, leading to an increase in poverty.

Generating employment is crucial for pro-poor growth. Unemployment and under-employment are high, especially among youth and women. The majority of the labour force has little education, training or skills. Informal work remains the dominant form of employment and is seeing growth, so the quality and productivity of informal work must be improved. Improvement could be achieved by providing training and education on small-enterprise development as well as increasing access to (micro) credit.

Statistical data on poverty (Table 1) reveal that while Sierra Leone is making progress in a few areas with regards to attaining the MDGs by the end of 2015, much effort is required in several other areas in order to accelerate progress (Table 2). The targets under MDG 1 on reducing extreme poverty and hunger by half refer to halving the proportion of people living on less than US\$1 (PPP) a day.

Table 1. Survey instruments for collection of data on poverty estimates				
Survey instrument	Year	Source		
Sierra Leone Integrated Household Survey	2004, 2011	SSL		
Core Welfare Indicator Questionnaire	2007	SSL		
Population and Housing Census	2004, 2014 (suspended)	SSL		
Labour Force Survey	1989, 1990, 2014	SSL		
Multiple Indicators Cluster Survey	2005, 2010	SSL, UNICEF		

With regards to hunger, progress has been negligible. This is due to the increase in population size, declining agricultural productivity and threats to food security caused by external events such as climate change and rising food and oil prices. This situation has been further exacerbated as Sierra Leone continues to be heavily dependent on rain-fed agriculture.

Table 2 presents the poverty indicators derived from the 2004 Housing and Population Census and the 2003/04 and 2011 Sierra Leone Integrated Household Survey (SLIHS). The Gini coefficient calculated for per capita consumption decreased from 0.3881 in 2003 to 0.32 in 2011, indicating a fall in income inequality.

Table 2. Poverty indicators			
Indicator	2003	2004	2011
Proportion of population living below \$1 (PPP) a day	53.4%		
Proportion of population living below \$2 (PPP) a day	74.5%		
Poverty gap at \$1 a day	20.3%		
Share of income or consumption held by poorest 20%	6.1%		
Gini index/coefficient	42.5%/0.3881		0.3207
Proportion of population below national poverty line		66.4%	52.9%

Table 3. Absolute poverty in the districts by incidence gap and severity, 2003 and 2011								
District Absolute poverty								
	Incid	dence	G	ар	Sev	erity		pulation
Year	2003	2011	2003	2011	2003	2011	2003	2011
National	66.4	52.9	27.0	16.1	14.0	6.7	100.0	100.0
Rural	78.7	66.1	33.8	21.1	18.0	9.1	61.3	62.3
Urban	46.9	31.2	16.3	7.7	7.7	2.8	38.7	37.7
Eastern Province	86.0	61.3	38.9	18.4	21.0	7.5	22.5	22.5
Kailahun	93.0	60.9	45.1	16.9	25.1	6.5	7.4	7.5
Kenema	88.1	61.6	39.3	19.3	20.9	8.2	9.9	10.2
Kono	71.8	61.3	28.9	19.0	14.9	7.7	5.1	4.9
Northern	80.6	61.0	32.8	18.9	17.0	8.1	35.7	34.1
Province								
Bombali	86.1	57.9	43.8	22.7	25.8	11.7	8.4	7.8
Kambia	71.2	53.9	22.9	13.6	9.6	4.6	5.8	5.3
Koinadugu	77.5	54.3	32.8	14.5	17.6	5.0	4.9	5.2
Porto Loko	80.8	59.9	30.0	21.0	13.9	10.0	9.5	8.8
Tonkolili	83.5	76.4	31.4	19.1	16.2	6.5	7.2	6.9
Southern	64.1	55.4	24.2	17.4	12.0	7.4	22.3	22.7
Province								
Во	63.2	50.7	25.0	16.1	13.1	6.7	9.5	10.4
Bonthe	89.3	51.4	39.7	12.9	21.1	4.4	2.7	2.7
Moyamba	68.2	70.8	24.2	22.4	11.3	10.1	5.3	4.3
Pujehun	47.4	54.1	13.9	17.9	5.7	7.9	4.8	5.3
Western Area	20.7	28.0	6.2	7.5	2.8	2.9	19.6	20.7
Western Rural	54.9	57.1	23.8	18.2	12.7	7.2	3.4	4.1
Western Urban	13.6	20.7	2.5	4.9	0.8	1.8	16.2	16.6

As seen in Tables 2 and 3, the national-level severity of poverty declined by more than half from 14 percent in 2003 to 6.7 percent in 2011. The incidence and severity of poverty was highest in rural areas, with a severity index of 9.1 percent compared to 2.8 percent in urban areas. At the district level, poverty was most severe in the Bombali District followed by Port Loko and Moyamba. Poverty was far less severe in the Western Urban District, with a severity index of less than 1 percent.

Previous and Ongoing Efforts

Between 2000 and 2012, Sierra Leone produced two PRSPs geared towards establishing good governance and the rule of law, identifying obstacles to economic growth, reducing youth employment and establishing macroeconomic stability. The 2003/04 SLIHS and 2004 PHC provided head count estimates of poverty above 60 percent of the population. The development priorities on reducing poverty were manifested in the provision of reliable energy supply, human resource development, improving value-addition in fisheries and agricultural productivity, and improving road network transportation across the entire country. Micro-credit financing, provision of cash transfers and modes of social protection were strategies utilised to help the poor and vulnerable.

Ongoing efforts to reduce poverty are based on PRSP III, known as the Agenda for Prosperity for 2013-18. PRSP III focused on gender empowerment, skills, training and education, employment, employment standards and market creation as its core priorities. It also focused on promoting small and medium-sized enterprise development, extending social insurance intervention, providing basic social protection packages for the vulnerable, as well as strengthening support for nutrition, health care, education and housing. Below is a schema of the eight pillars of the Agenda for Prosperity (see Government of Sierra

Leone 2013a) and some of the critical components outlined in PRSP III of the plan for mobility to middleincome status by 2035.

- Diversified Economic Growth: Priorities include promoting economic diversification that leads to sectors with long-term potential for inclusive and sustainable growth, increasing value-addition in production and removing constraints to women's participation in the economy. Strategies involve promoting feeder roads and other infrastructure, microfinance, and wider financial access including seeking foreign investment, marketing and export support, research and extension, training and guidance, establishing economic hubs and special economic zones, and institutional support.
- Managing Natural Resources: Priorities include mineral resources, fisheries and marine resources, water resources, land management, forestry management, and oil and gas development. Strategies include ensuring that natural resource revenues are used to promote Sierra Leone's transformation and sustain inclusive economic development. Strong coordination across sectors and among agencies and actors within sectors will be essential, as will cooperation with neighbouring countries.
- Accelerating Human Development: Priorities include strengthening human capital, empowering people to reduce poverty and accelerating the achievement of the MDGs.
- International Competitiveness: Priorities include removing the wide range of identified constraints and building the necessary supportive environment and infrastructure. Strategies include partnership between public and private sectors and coordination among ministries, departments and agencies and development partners.
- Labour and Employment: Strategies include promoting investment in small and large-scale business and agriculture to create employment at all levels of the private and public sectors. promoting skills development, designing public works programmes to employ youth and ensuring an employment-friendly institutional framework.
- Social Protection: Strategies include developing social protection policies, institutions and programmes, building capacity of relevant agencies and their staff, extending social insurance interventions, providing basic social protection packages for the vulnerable and strengthening support for nutrition, health care, education and housing.
- Governance and Public Sector Reform: Priorities include access to justice, peace and security and effective capacity in the public sector.
- Gender and Women's Empowerment: The priority is empowering women and girls and strategies include empowering them through education, reducing socio-economic barriers and supporting formal and non-formal education, increasing their participation in decision-making in public, private and traditional institutions, increasing their access to justice and economic opportunities, strengthening prevention and response mechanisms to violence against women and girls and improving the business environment for women with access to finance and capacity development.

The schema below (Figure 1) is a summary of some of the major components of Sierra Leone's development priorities and the intricate relationships and intertwined nature of the components. It presents the priorities set for poverty reduction through nutrition, health and sanitation, skills development and education, gender empowerment and ensuring environmental sustainability. To achieve the goal, the conduits are economic diversification, increasing productivity and value-addition, improving international competitiveness, creation of jobs and implementation of the decent work programme, managing natural resources a sustainable manner to increase social spending and create fiscal space for extending social interventions and packages to the vulnerable.

Table 4 presents the global and national targets and indicators for Sierra Leone, data for which can be derived from SSL's household surveys and censuses. The indicator for the goal "End extreme income poverty", US\$1.25/day is the global indicator aligned to our national priority. However, in the 2004 and 2011 SLIHS, proportion of population living below national poverty line, as agreed with the World Bank, was used to estimate poverty. In the 2011 SLIHS the share of employed persons living below the nationally defined poverty line (though it only captured public sector/formal sector employees) and prevalence of child stunting in boys and girls under 5 are common national indicators



Figure 1. Schema of pillars and components for poverty reduction in Sierra Leone

	verty: Targets and indi	
Target	Indicator	Notes
Global	D	Defended by a second second by a second seco
End extreme income poverty	Proportion of population below US\$1.25 (PPP) per day	Refers to the percentage of the population living on less than US\$1.25 at 2005 prices (World Bank 2014c).
Reduce poverty	Proportion of population below US\$2 (PPP) per day	Refers to the percentage of the population living on less than US\$2 at 2005 prices (World Bank 2014d).
	Proportion of population living below national poverty line	In Sierra Leone, the poverty profile was prepared through joint work by the World Bank's Poverty Reduction and Economic Management Unit and SSL The data on which the profile is based are derived from two rounds of the SLIHS conducted by SSL. The first took place between March 2003 and April 2004 and the second between January and December 2011. The profile uses consumption as the measure for household well-being following standards for developing countries. This measure reflects the harmonised set of food and non-food items from the 2003/04 and 2011 surveys.
	Share of employed persons living below the nationally-defined poverty line	The indicator considers the working poor, or the number of employed persons living in households with incomes below the nationally-defined poverty line. This refers only to public sector employees.
		The poverty line is defined as the threshold below which individuals in the population are considered poor and above which they are considered non-poor. The threshold is generally defined as the per-capita monetary requirements an individual needs to afford the purchase of a basic bundle of goods and services (ILO 2014).
Reduce the proportion of people who suffer from hunger	Prevalence of child stunting in boys and girls under 5, %	Stunting: Proportion of under-fives falling below minus 2 standard deviations (moderate and severe) and minus 3 standard deviations (severe) from the median height-forage of the reference population (UNICEF 2014).
National		
End extreme income poverty	Proportion of the population living below Le1,587,746 per day or Le4,350 per day	Le1,587,746 per annum is the minimum consumption expenditure for a household's yearly basket of food and non-food items, thus the term "market basket measure." This defines the national poverty line below which a household is considered poor.
Reduce poverty	Proportion of the population in first and second quintiles, according to the market basket measure	Le1,587,746 per annum is the minimum consumption expenditure for a household's yearly basket of food and non-food items, thus the term "market basket measure." This defines the national poverty line below which a household is considered poor.

Current Status

The education system is administered by the Ministry of Education, Science and Technology. It comprises the provision of: basic education including pre-primary, primary, junior secondary, senior secondary, and technical and vocational education training; tertiary education through universities and polytechnics, including teacher education; and non-formal education including literacy programmes. Local governments, private sector and non-governmental organisations (NGOs) also provide education. The civil war destroyed basic infrastructure and impeded school attendance for a decade. Children missed out on 10 years of schooling – by 2002, children who were under 15 years of age had barely attended school.

In order to increase the school enrolment rate, the government of Sierra Leone implemented free primary education in 2003 and committed to providing universal education by 2015. These initiatives were supported by the Education Act of 2004, Child Rights Act of 2007 and Education Sector Plan for 2007–15. In 2010, the education system was reviewed by the Gbamanja Commission, which added a year to senior secondary school education (making the system 6-3-4-4 instead of 6-3-3-4). The commission's white paper recommended 6-3-4-4 to make up for contact time lost due to two shifts in the method of schooling that prevailed (Williams 2013). The mission statement of Sierra Leone's Education Sector Plan is worth quoting at length: "To provide basic education of quality for all in a phased manner, starting with the realisation of the right of all children to quality primary education, whilst at the same time providing marketable skills training and the relevant and appropriate tertiary education needed for advancement of the society and poverty reduction" (Government of Sierra Leone 2007).

Some administrative data exist for education, including those derived from the Census of Schools, net attendance ratios, gross and net enrolment ratios and pupil-teacher ratios. However, data on entrants and potential entrants into the labour market cannot be easily accessed. Other inaccessible data include enrolment levels, number of trained and qualified teachers, number of students likely to enter technical/vocational institutions, number of teachers required for various categories of learners, with time series data being incomplete.

Although rapid progress has been made – evident by the formulation and implementation of new policies – the education sector is still plagued with challenges, including the quality of education and lack of financial, human and material resources. More specific issues include brain drain at the higher education level, preponderance of untrained and unqualified teachers (especially at the primary and pre-school levels), teacher scarcity for important subject areas (mathematics, French, science, technical and vocational subjects), meeting the needs associated with expanding enrolment rates, meeting the quality needs of the education system, and distance education and skills training.

As outlined in the Education Sector Plan, the target for 2015 is a 30 percent increase in enrolment of primary school—age children, increase in enrolment at all levels and achieving a projected target of 2.9 million children enrolled (Government of Sierra Leone 2007). Sierra Leone's plan for the

^{17 6-3-3-4} implies six years of primary schooling, three years of junior secondary school (which is the basic education completion class), three years of senior secondary school (success in four or five subjects including mathematics and/or the English language qualifies a student for entry into tertiary or higher education) and four years of higher education (after which the student is awarded a degree in a specified discipline).

education system, its targets and indicators are laid out across the MDG framework, PRSPs and proposed SDGs. Box 1 outlines Sierra Leone's National Education Master Plan.

Box 1. Goal and targets of Sierra Leone's National Education Master Plan

- * Promotion of quality basic education (i.e., the 6-3 in the 6-3-3-4 system) that is free and compulsory by 2015.
- * Significantly increasing the current 36 percent literacy rate up to at least 50 percent by 2015 in agreement with goal four of the Dakar Education for All initiative. This is expected to be achieved through the establishment of community education and technical/vocational centres.
- * Elimination of gender disparity in access to, and participation in, education through the implementation of free junior secondary education for girls by 2006.
- * Provision of opportunities for increased access to education for the physically challenged and citizens in difficult circumstances.
- * Creation of an environment that favours the empowerment of youth through education.
- * Use of education as a tool for poverty alleviation.
- * Encouragement of active community participation in ownership of schools through increased decentralisation.
- * Increasing the number of qualified teachers by 30 percent by 2015 using conventional and distance education approaches.

Source: Government of Sierra Leone (2007).

Previous and Ongoing Efforts

Sierra Leone became a member of the Global Partnership for Education, an international organisation based on multilateral partnership, in 2007 after the Education Sector Plan of 2007 was endorsed. The Local Education Group within the organisation is co-chaired by the Minister of Education, Science and Technology and the coordinating agency, the UN Children's Fund (UNICEF). A representative from the broader Education Stakeholder Forum comprised of local and international NGOs and CSOs is also a member of the Local Education Group.

The Local Education Group updated the Education Sector Plan for 2014–18. The plan covers three critical areas: increasing access, quality and relevance, and system strengthening. It advances targets to strengthen education service delivery through improved teacher management and better measurement of learning outcomes. There have been significant improvements in Sierra Leone's education sector. For example, the primary school completion rate for students is currently 76 percent, with 77 percent of that proportion transitioning to the junior secondary level. Additionally, the literacy rate for youth aged 15 to 24 also saw a slight improvement, increasing from 58 percent in 2009 to 59 percent in 2010 (Global Partnership for Education 2015).

Education expenditure slightly increased over the 2004–11 period from 3.3 percent of gross domestic product (GDP) in 2004 to 3.5 percent in 2011. Enrolment increased in all education sub-

sectors over the 2000–11 period, particularly in secondary schools (see Table 5). The increase in the primary school completion rate has boosted demand for junior secondary school and the share of total public recurrent expenditure allocated to education was relatively high, with an average of 25.8 percent over the period, reaching 29 percent in 2011 (Government of Sierra Leone 2013b).

Table 5. Schooling coverage by education level, 2004/05–2010/11		
Indicator	2004/5	2010/11
Pre-primary school gross enrolment rate	n/a	6.5%
Primary school gross enrolment rate	156%	122%
Junior secondary school gross enrolment rate	43%	62%
Senior secondary school gross enrolment rate	14%	32%
Technical and vocational education training (share of secondary)	16%	8%
Tertiary education attainment (individuals per 100,000 inhabitants)	330	451*
Source: Government of Sierra Leone (2013b); World Bank data used for 2004/05, EMIS database also Lamin and Massallay (2012). Note: * denotes the inclusion of teachers.	e used for 2	010/11; see

The main ongoing issues in Sierra Leone's education system are: the need to increase spending on education, decentralising primary education to local government actors, ensuring the efficient use of resources, timely delivery of textbooks and materials, improving teachers' conditions and terms of service including salaries, introducing results measurements, providing better pay for teachers in rural and remote locations, exploring incentives to ensure children attend school, and paying special attention to the education of girls, specifically ensuring and maintaining their enrolment.

The government of Sierra Leone has made several attempts to improve access to primary education and specifically increase enrolment rates for the first grade of primary education. The enrolment rate was estimated to be 122 percent in 2010/11, while 14 percent of children were estimated to not have access to primary school in 2010. The primary completion rate had steadily increased to approximately 76 percent in 2010. These figures indicate that universal primary education had not been achieved. The junior secondary access rate increased by about 14 percentage points to 58.7 percent, while the completion rate increased by close to 18 percentage points to 48.6 percent. The senior secondary access rate was still below 30 percent, though the completion rate increased from about 10 percent to about 26 percent.

The teaching profession in Sierra Leone is disproportionately male, with females only accounting for 25 percent, 14 percent and 8 percent of teachers at primary schools, junior secondary schools and senior secondary schools, respectively, in 2010/11. One major problem in the profession is the recruitment of unqualified teachers, which was at approximately 50 percent (primary school), 41 percent (junior secondary school) and 31 percent (senior secondary school). Public and government-aided school teachers accounted for 91 percent of the teaching force, or about 52,300 in total (Government of Sierra Leone 2013b, 31). The majority of teachers work in primary schools, but only about 60 percent are on the payroll. This situation demonstrates that the teacher training system has been facing difficulties in adequately responding to the growing demand for teachers, a result of the surge in primary and secondary school enrolment and implementation of the fee-free primary education policy.

In terms of the learning environment and safety, the pupil-teacher ratio tends to be higher at district levels. Lower ratios have been primarily found in rural environments since there is a lack of incentives to teach in remote areas, resulting in generally larger class sizes. In districts at the primary level, the ratio varies from 27:1 in the Western Urban District to 46:1 in Pujehun, while at the junior secondary level, the ratio ranges from 16:1 in Bo to 27:1 in Kono. At the senior secondary level,

disparities between districts are even clearer, with pupil-teacher ratios varying between 12:1 and 31:1. At the tertiary level, pupil-teacher ratios range from 2:1 to 284:1 (Government of Sierra Leone 2013b).

The national primary school examinations pass rate, effectively the admission examinations for junior secondary school, improved slightly between 2005 and 2011 from 72 percent to 75 percent. The performance and pass level rate (the share of students passing at least four subjects) at the middle-secondary school level – known as the Basic Education Certificate Examinations or end of junior secondary school exam – has been dismal, with a rate of barely 47 percent in 2011. Subject performance has also been poor, with a failure rate of over 50 percent in all core subjects except for integrated science. Math performance has been particularly poor, with a 77 percent failure rate and just 3 percent of candidates obtaining a credit. The pattern of failure appears to have continued in Senior Secondary Examinations, which are required for entry into universities (Government of Sierra Leone 2013b, 30).

Notably, almost 40 percent of students failed to obtain a single West Africa Senior School Certificate Examination (end of senior secondary school exam) credit and only 10 percent achieved credits in four or more subjects. The success rate in English was low, having dropped from 17 percent to 14 percent over the 2007–10 period. Performance in math was also very poor, with a success rate of just 5.2 percent in 2010 and only 3.2 percent of candidates achieving a math credit (Government of Sierra Leone 2013b, 31).

Figure 2 presents the educational levels attained by heads of households. The majority of household heads, about 87.5 percent, had not completed tertiary education, while approximately 52.1 percent had completed secondary school, of which 26.9 percent had completed senior secondary school and 25.2 percent had completed junior secondary school. Household heads who completed primary school accounted for about 23.7 percent of the total. Notably, 12.5 percent of heads of households had completed tertiary education, with 6.7 percent having completed a certificate/diploma and about 4.1 per cent having completed a first degree. Only about 1.7 percent of heads of households had completed a higher degree. The low level of education among household heads is a factor informing the high illiteracy rate in Sierra Leone (SLIHS 2011).

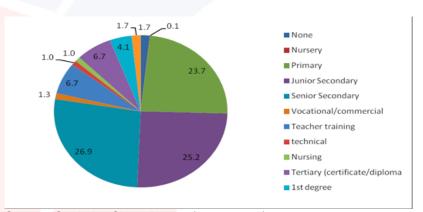


Figure 2. Percentage distribution of educational levels of heads of households

Source: Statistics Sierra Leone (2010; 2011).

The above scenario calls for concerted efforts to invest in and reform the education system, particularly basic education. Ensuring quality learning and adequate human resource development is crucial. Other commitments to reform include: making education more equitable and accessible; improving education completion rates, especially for girls; improving teaching/learning quality at all

levels; making education more relevant for employment; and improving education administration. This situation is an indication of the real need for education and skills development in Sierra Leone.

The government's priority is to achieve universal access to primary education in Sierra Leone by 2018. This will be attempted by instituting fee-free primary education, thus improving access to all levels of education. The government is also focused on implementing targeted programmes to encourage school attendance by the most marginalised, particularly children in the lowest wealth quintile, children with disabilities, girls and young women. The achievement of MDG 2, according to the Agenda for Prosperity, is dependent on the efficient delivery of services such as school feeding programmes, distribution of school uniforms to orphans, the poor and the needy, and provision of school buses for children (Government of Sierra Leone 2013a).

The education system is fraught with many challenges, but these challenges have high potential to align with the SDGs because global partnership will be the driving force for the achievement of goals and targets. Sierra Leone is calling for universal primary education and seeking pathways to encourage technical and vocational education. Achieving 100 percent pre-primary schooling is a daunting task. The registration of births and deaths is improving, but the required infrastructure for data capturing, saving and retrieval has yet to be established. Gender parity in primary school is attainable, but much effort is required to achieve parity at the secondary and tertiary levels because completion rates – even for males – are very low.

Table 6 presents the global and national targets and indicators for Sierra Lone. Imperfect alignment exists between global indicators and available data as discussed below. The use of more indicators would support the monitoring of the SDGs.

Table 6. Global and national targets and indicators for education				
Target	Indicator	Notes		
Global				
Ensure all	% of girls and boys receiving	Refers to the proportion of girls and boys who		
children have	at least one year in pre-	have at least one year of pre-primary		
access to	primary programs	programmes.		
early	% of girls and boys who	Refers to proportion of girls and boys who		
childhood and	complete primary school	complete primary school.		
quality	% of girls and boys who	Refers to proportion of girls and boys who		
primary and	complete secondary school	complete secondary school.		
secondary	% of girls and boys who	The National Primary School Examinations,		
education	achieve a passing grade in	conducted under the aegis of the West African		
	national learning	Examinations Council, qualify pupils		
	assessments at the primary	transitioning from primary school to junior		
	school level	secondary.		
		National (or sub-national) assessment: Large-		
		scale assessment surveys designed to		
		describe the achievement of students in a		
		curriculum area and provide an estimate of the		
		achievement level in the education system as a		
		whole at a particular age or grade level. This		
		normally involves administration of tests either		
		to a sample or population of students (Ho		
		2013).		

Increase the number of adults with skills, including technical and vocational skills	Proportion of individuals enrolled in a technical and vocational education and training institution	Technical and vocational education and training is concerned with the acquisition of knowledge and skills for the world of work. Various terms have been used to describe elements of the field that are now conceived as comprising technical and vocational education and training. In Sierra Leone, it is expected that students who do not perform very well in cognitive aspects can perform in affective and psychomotor aspects and should enter technical/vocational institutions. That was the idea behind the 6-3-3-4 system, involving six years of primary schooling, three years of junior secondary, three years of senior secondary and four years of tertiary education. After the first nine years of schooling, a student would have acquired basic education and can then choose an academic or technical/vocational education.
National		
Ensure all children have access to quality primary and	Completion rates of boys and girls in primary education	The National Primary School Examinations, conducted under the aegis of the West African Examinations Council, qualify pupils transitioning from primary school to junior secondary.
secondary education	Completion rates of boys and girls in secondary education	The West African Senior Secondary Certificate Examinations, conducted under the aegis of the West African Examinations Council, qualify pupils transitioning from senior secondary to tertiary education, where a pass in four out of five subjects, including English and mathematics, qualifies students to enter teacher training colleges/polytechnics/universities.
	Proportion of adults who	Includes graduates from universities and
Ensure a safe, secure and effective learning environment in the	complete tertiary education Pupil-teacher ratio	teacher training colleges/polytechnics. Refers to all teachers in the public school system, who are required to have teaching certification or some level of education as a condition for their employment. This definition generally includes principals and vice-principals.
classroom	Proportion of school-aged children who report being bullied	This is new in Sierra Leone following the tenets of Promoting Rights in Schools, an initiative of ActionAid International. Data on children being bullied in school or on the way home/playgrounds have yet to be systematically collected nationally.
	% of schools with secured compounds, such as a completely enclosed space	Another dimension of Promoting Rights in Schools, an initiative of ActionAid International.



Create Jobs, Sustainable Livelihoods and Inclusive Growth for All

Current Status

Decent job creation in Sierra Leone is dependent on the rules, regulations and liabilities set out by employers. There was an increase in employment during the last decade, but the number of jobs created has not kept pace with the growing population. As mentioned, a major challenge is high youth unemployment.

The post-2015 call to ensure that "no one is left behind" implies the need for inclusive growth and participation of all people in governance, financial intermediation, social cohesion and economic activities. This call is based on the notion that economic growth should positively impact, in a broad sense, all individuals in all productive sectors. A focus on employment goes hand in hand with improvements in human development. Job creation and inclusive growth provide individuals with security, living wages and sustainable livelihoods. Both are essential for the achievement of the MDGs and SDGs.

Sierra Leone's growth over the last five years has been the result of policy reforms coupled with a surge in extraction and exportation of its natural resources, such as iron ore and rutile. In order to sustain and ensure inclusive growth over the long term, the government of Sierra Leone will have to make difficult policy choices. Current practices have implications for the sustainability of natural assets, which are the source of livelihoods for the vast majority of the country's population. For instance, the agricultural sector employs approximately 60 percent of the total population and contributes over 40 percent of GDP. With the challenge of climate change alongside a dramatic increase in the youth population, it is imperative that Sierra Leone experiments with a new growth model, green growth. Green growth focuses on environmental sustainability and inclusiveness (see African Development Bank 2013a). It is believed that green growth will provide a more sustainable future for the country's society and economy. Therefore, the government and development partners are focusing on solar power, value-addition in agriculture, and a small-scale commercialisation programme, which should receive support since they are creating sustainable development opportunities within the private sector at local levels.

Sierra Leone possesses great potential for job creation and growth, but lacks the institutional capacity to harness labour and convert the potential it possesses into decent jobs. Persisting problems of unemployment extend back before the start of the civil war and continue to negatively affect the country.

The 2011 SLIHS determined that approximately 43.9 percent of the population were employed. About 11.8 percent of the labour force was employed in the private sector, while more than one-third worked in the public sector. Approximately 32.5 percent were self-employed, 8.1 percent were employed by NGOs or foreign missions, and 3.8 percent were employed by other employers. Given that the majority of the labour force works in the public sector, the private sector is not well developed and does not have the absorptive capacity to provide enough jobs for the active labour force.

The 2011 SLIHS estimated that there were 1,927,438 people employed in Sierra Leone at the time. The active labour force was estimated to be 2, 240,842, which is about 67.1 per cent of the working-age population. The labour force participation rate was lower for females than males as well as for individuals living in urban areas and individuals within the 40–64 age group. Labour force participation was higher in rural areas than urban areas across all regions of the country. This statistic indicates that the majority of the labour force live in rural areas and are engaged in unpaid family work and/or self-employed activities. The labour force participation rate was higher in rural areas than urban areas for all age groups mainly because farming in rural areas depends on youth for employment. The male labour force participation rate was 68.2 percent, which was higher than the national average of 67.1 percent, whereas the female labour force participation rate was 66.1 percent (see Table 7).

Table 7. Key labour market indicators by sex				
Indicators	Male, %	Female, %	Total, %	
Labour force participation rate				
Labour force participation rate (national)	68.2	66.1	67.1	
Labour force participation rate (urban)	55.5	50.1	52.7	
Labour force participation rate (rural)	77.9	77.1	77.4	
Employment				
Employment rate (national)	66.4	63.5	64.9	
Employment rate (urban)	51.1	46.7	48.9	
Employment rate (rural)	77.5	74.6	75.9	
Proportion of paid workers	7.8	3.6	11.4	
Proportion of self-employed workers	9.8	13.5	23.3	
Proportion of unpaid family workers	30.6	34.7	65.3	
Proportion of people working in:				
Public/government sector	30.2	13.7	43.9	
Private sector	8.9	2.9	11.8	
Self-employed	9.7	12.8	32.5	
NGOs/foreign missions	6.24	1.9	8.14	
Other	3.4	0.4	3.8	
Unemployment				
Unemployed rate (national) (International Labour	2.8	1.7	2.3	
Organization [ILO] definition)				
Unemployed rate (urban) (ILO definition)	7.8	5.1	6.5	
Unemployed rate (rural) (ILO definition)	0.3	0.3	0.3	
Unemployment rate (national) (relaxed definition)	8.6	10.7	9.8	
Unemployed rate (urban) (relaxed definition)	27.1	23.9		
Unemployed rate (rural) (relaxed definition) 3.3 5.1 4.2				
Source: Statistics Sierra Leone (2011).				

Challenges, Current Efforts and Strategies

Some of the major challenges facing Sierra Leone are persisting poverty and high unemployment, which are most prevalent among vulnerable groups such as the elderly, youth, and women. Robust economic performance during the last decade did not translate into a corresponding increase in productive and adequate remunerative employment opportunities. The systemic constraints that underpin these challenges include the lack of up-to-date labour market data, ineffective employment information and communication, obsolete labour laws and the not-yet-implemented National Employment Policy. The low level of adult literacy, which has been estimated at about 41 percent,

means that there is a scarcity of skilled labour in many areas of specialisation needed by the private sector. Women with qualifications in highly skilled disciplines such as engineering, medicine, economics and business management are few. Very few women have vocational training in fields such as masonry, carpentry, plumbing, motor mechanics and electrical engineering.

The goal of the government's labour and employment strategy is to support the provision of productive and adequately remunerative employment opportunities and improve working conditions. The government of Sierra Leone has supported and focused on working with the private sector, which has become an important part of the country's formal economy and a major source of new productive jobs and other income-earning opportunities.

The government has identified areas of improvement, including entrepreneurial training and skills development in both the formal and informal sectors. Still, support and special focus need to be given to future generations of people. The government has developed a comprehensive package of innovative market-oriented entrepreneurship programmes that focus on capacity building and training in priority areas. The package focuses on particular vulnerable groups such as youth, disabled persons, women, and individuals with low literacy levels. Some examples of government-run entrepreneurial programmes include the Fisheries and Marine Training Institute, the Barefoot College and an initiative to expose youth to Songhai farming techniques.

With support from the African Development Bank, the government has been working in collaboration with the UN Industrial Development Organization and the government of China to develop a new "going green programme." The programme would provide employment opportunities for youth as well as training and education on green investment and renewable energy. Some examples of green investment include renewable energy, eco-tourism, and sustainable land and water management (Government of Sierra Leone 2013a).

The government established a Ministry of Youth Affairs that focuses on youth issues at the national and international levels. It also established the National Youth Commission, which coordinates with the Ministry of Youth Affairs and Ministry of Labour, Employment and Social Security to provide youth employment.

With assistance from development partners such as the German International Cooperation (GIZ), the government of Sierra Leone has strengthened the agricultural sector and increased employment. This has been particularly significant for youth, who have become involved in agro-based value chains including the certification of organic coffee and cocoa. A focus on cash crops has led to increased exports and, in turn, increased incomes and secured livelihoods.

In 2011, the government partnered with the United Nations Development Programme (UNDP) to develop the Youth Employment and Empowerment Programme. The programme was designed to strengthen national employment policies and strategies, coordinate youth employment, and provide basic support services for youth across the country, including business development and career advice and guidance.

National Priorities for Ensuring Job Creation and Inclusive Growth

Ensuring job creation and inclusive growth will involve a number of action, which are enshrined in PRSP III (see Government of Sierra Leone 2013a):

- Exposing youth to dynamic agro-based networks and cluster models, improving access to technology in production and agro-processing and improving methods of accessing agribusiness advisory services and training.
- Establishing agricultural cooperatives for youth and encouraging young women and men (including disadvantaged groups such as people living with disabilities) to use improved technology in value chain development.
- Re-designing agricultural training at all levels, from certification to the university level, and making training more relevant to the needs of smallholder and medium-sized farms.
- Establishing a National Volunteer Service Corps as a mechanism for enhancing employment opportunities for inexperienced youth.
- Developing a National Volunteer Service Action Plan that involves CSOs and public-private partnerships.
- Developing a legal and regulatory framework on volunteerism and the use of volunteers in implementing development programmes at the grassroots level.
- Developing an effective national coordination and implementation framework for national volunteerism programmes and projects.

Given the expansion of economic activities in Sierra Leone, there is an urgent need to improve labour conditions, administration and employment. Such improvement will contribute to increased government revenue, which will create fiscal space for social spending, thus addressing poverty. Moreover, new strategies are needed to extend social security to informal workers and improve their working conditions. Formal job creation must be accelerated to exceed labour force growth, which will significantly reduce unemployment in Sierra Leone. The SDGs concerning employment, labour force participation, youth employment, time-related underemployment, decent work and achieving full and productive employment are major development priorities in Sierra Leone, as reflected in the national-level priorities identified in Table 8.

Table 8. Create j	obs, sustainable live	elihoods and inclusive growth for all
Target	Indicator	Notes
Global		
Achieve full and	Labour force	The labour force participation rate is the labour force as a
productive	participation rate	percentage of the working-age population (ILO 2014).
employment for all, including women and young people	Time-related underemployment (thousands)	People in time-related underemployment comprise all people in employment who satisfy the following three criteria during the reference period: (i) are willing to work additional hours; (ii) are available to work additional hours (i.e., are ready, within a specified subsequent period, to work additional hours, given opportunities for additional work); and (iii) worked less than a threshold relating to working time (i.e., people whose hours actually worked in all jobs during the reference period were below 40 hours per week).
Ensure equal pay for equal work	Mean nominal monthly earnings of employees (local currency)	Data on earnings are presented, whenever possible, in nominal terms and on the basis of the mean of monthly earnings of all employees. The earnings of employees relate to the gross remuneration in cash and in kind paid to employees for a month, for time worked or work done together with remuneration for time not worked, such as annual vacation, other types of paid leave or holidays. Earnings exclude employers' contributions in respect of their employees paid to social security and pension schemes and also the benefits received by employees under these schemes. Earnings also exclude severance and termination pay. Statistics of earnings relate to the gross remuneration of employees (i.e., the total before any deductions are made by the employer). Economic activity refers to the main activity of the establishment in which a person worked during the reference period and does not depend on the specific duties or functions of the person's job, but on the characteristics of the economic unit in which this person works.
Support	Gini coefficient	The Gini coefficient is a number between zero and one that
inclusive growth and reduce inequality	Dalma net's	measures the relative degree of inequality in the distribution of income. The coefficient would register zero (minimum inequality) for a population in which each family (or unattached individual) received exactly the same income and it would register a coefficient of one (maximum inequality) if one family (or unattached individual) received all the income and the rest received none.
	Palma ratio	Refers to the ratio of the income share of the top 10% to the bottom 40%.
	Gross fixed capital formation (% of GDP)	Gross fixed capital formation (formerly gross domestic fixed investment) includes: land improvements (fences, ditches, drains and so on); plant, machinery and equipment purchases; and the construction of roads, railways and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings (World Bank 2014b).
National		
Promote decent work	Union coverage rate (by collective agreement)	Includes members of unions and non-members who are covered by a union contract.
	Proportion of	Employee benefits may include: health and dental; life, accidental
	. rependent of	and domain inc, doubterful

	employed workers with access to workplace benefits	death and dismemberment; short-term disability; long-term disability; and retirement benefits (National Social Security and Insurance Trust 2015)
	Average number of hours spent on paid and unpaid work (work burden)	This indicator was suggested by the Sustainable Development Solutions Network (2014). It encompasses an individual's unpaid and paid work burden and helps provide a full description of the range of employment, such as the home production of goods and services. Additionally, it captures the gender aspect of unpaid work as well as time poverty, which is highly relevant when carrying out welfare and leisure analysis (Sustainable Development Solutions Network 2014).
Reduce share of income held by the top 1%	Proportion of total income held by the top 1%	Refers to the proportion of total income held by the top 1% of income holders.
Achieve full and productive	Unemployment rate of women	Refers to the number of unemployed women as a percentage of the female labour force (employed and unemployed).
employment for all, including women, youth	Unemployment rate of youth	Refers to the number of unemployed youth (15–24 and 15–34 years of age) as a percentage of the youth labour force (employed and unemployed).
and people living with disabilities, including HIV/AIDS	Unemployment rate of people with disabilities	Refers to the number of unemployed physically challenged people as a percentage of the labour force (employed and unemployed).



Current Situation: Energy

In 2009, the government of Sierra Leone was tasked with strengthening the energy sector and producing measurable outcomes of increased economic activities and enhanced learning outcomes. To achieve this goal, it allocated its budget specifically to the Emergency Power Project upon learning that the completion of the Bumbuna hydroelectric power plant would be delayed.

Electricity grid generation increased by 3.1 percent from 170.5 gigawatt-hours in 2010 to 175.7 gigawatt-hours in 2011. Industrial consumption of electricity increased approximately 23.1 percent from 24.9 gigawatt-hours to 30.6 gigawatt-hours. Line losses remained high, however – they were estimated at approximately 40 percent of units generated (Ministry of Energy 2014).

Sierra Leone has significantly expanded its power-generation capacity. In 2009, the 50-megawatt Bumbuna plant became operational, which almost doubled Sierra Leone's existing installed capacity and changed the power-generation mix. Prior to the Bumbuna plant, Sierra Leone had only 27 megawatts of conventional thermal generation, which kept costs relatively high. The advent of hydropower generation in the country almost halved the costs of power production. Historically, the average cost of producing power in Sierra Leone was approximately US\$0.27 per kilowatt-hour. Due to escalating oil prices, the average cost had further increased to as much as US\$0.35 per kilowatt-hour in 2007. After the introduction of the Bumbuna plant, the average cost of power production in 2009–10 decreased to US\$0.13–0.17 per kilowatt-hour. Decreases in generation costs translated to a reduction in overall power costs by as much as \$0.14 per kilowatt-hour. Overall savings for Sierra Leone's National Power Authority¹⁸ ranged from US\$2.3 million–4.3 million in 2009 as a result of lower direct costs of power production.

Since 2011, the government of Sierra Leone has taken active steps to improve revenue collection within the country. For example, it implemented pre-paid meters as a mechanism by which to improve the facilitation of payment collection from banks, businesses and customers. These measures have significantly improved the efficiency of revenue collection. In addition, the government has focused heavily on improving the infrastructure of power plants in order to bolster energy production and increase private sector investments, job creation and economic growth. This has included working in collaboration with various organisations such as the International Monetary Fund (IMF), as well as passing legislation that encourages public-private partnerships (Pushak and Foster 2011).

Even with recent investments, Sierra Leone's power-generation capacity continues to fall short of meeting power demand. For example, the Bumbuna plant is the country's largest hydroelectric plant (Mansaray 2012). However, the hydropower from the plant is seasonal, with approximately 50 megawatts of electricity being produced during the rainy season and less than 20 megawatts during the dry season. This inconsistency has resulted in widespread power shortages, which have caused

¹⁸ The National Power Authority is the vertically integrated monopoly supplier of electrical power in the Western Area.

disruptions in productivity and livelihoods. The growing demand for energy has strained power supply. The power transmission and distribution systems do not have the infrastructural capacity to keep up with increasing demand (Pushak and Foster 2011). Although the electricity grid provides most of its power supply to Freetown, it only meets half the demand of the nation's capital. This situation is further exacerbated in rural areas, as rural communities live furthest away and thus are not on the electrical grid. As a result, most people turn to other forms of energy production, such as paraffin or biomass (European Union 2007).

A major focus of PRSP II was the energy sector, as it included the goal "cheap, affordable energy for all" (Government of Sierra Leone 2008). Overall, access to modern energy increased from 3 percent of the country's population in 2000 to 12.1 percent in 2011. Biomass from wood fuel and charcoal still accounts for more than 85 percent of total energy use and is the source of fuel for cooking for 99 percent of households.

Fuel prices at US\$0.94 per litre for both gasoline and diesel in 2010 were higher than the prices in Ghana (US\$0.83) and similar to prices in Guinea and Liberia. Sierra Leone currently has only 90 megawatts of installed capacity, of which 86 percent is for Freetown. The Bumbuna plant generates approximately 62 percent of the country's power, while oil-powered facilities provide the rest (Government of Sierra Leone 2012; African Development Bank 2009.)

The Table 9 outlines the trends of Sierra Leone's energy consumption from 2006 to 2011. Total energy consumption includes consumption by households, industry, services, agriculture and forestry, fishing and transport, which used electricity, fossil fuels and renewable energy such as thermal energy, hydropower and wood fuel.

Table 9.	Table 9. Trends of energy consumption in Sierra Leone, 2006–11					
Year	Biomass consumption '000' Toe ¹⁹	Petroleum products consumption '000' Toe	(Grid-connected) consumption '000' Toe	Total energy consumption '000' Toe		
2006	1,154	195.7	3.4	1,353.1		
2007	1,175	166	3.21	1,344.21		
2008	2008 1,197 192.4 12.79 1,402.19					
2009	2009 1,218 164.5 12.28 1,394.78					
2010	1,241	199.3	16.21	1,456.51		
2011	1,101.0					
Source: G	<mark>overnment of Sierra</mark> L	eone (2012).				

Biomass is a major source of energy used in Sierra Leone for cooking and lighting (Sustainable Energy for All 2012). It accounts for the highest volume of consumption in the whole energy mix, representing over 80 percent of total energy consumed in the country. Wood fuel constituted over 90 percent of total biomass consumed during the 2006–11 period, as shown in Table 10.

¹⁹ To	n of	oil	eq	uiva	lent.
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Table 10. Biom	Table 10. Biomass consumption in Sierra Leone,2006–11					
Biomass	2006	2007	2008	2009	2010	2011
Wood fuel	1,111	1,126	1.136	1,144	1,156	1,161
Charcoal	43	49	61	74	85	101
Total '000'toe	Total '000'toe 1,154 1,175 1,197 1,218 1,241 1,262					
Source: Governmer	Source: Government of Sierra Leone (2012).					

The high use of biomass implies that few individuals/households have access to grid-connected electricity. Table 11, which outlines the total number of individuals who were connected/unconnected to the electrical grid as well as the access rate of grid-connected electricity for the 2006–11 period, corroborates this finding.

Table 11. Access and connectivity to the electrical grid,2006–11						
	2006	2007	2008	2009	2010	2011
Freetown	38,362	47,281	53,126	64,306	67,422	73,551
Bo, Kenema	8,762	9,078	9,455	10,180	11,302	12,593
Makeni customers	305	430	521	596	602	1040
Total customers	47, 429	56,789	63,102	75,082	79,326	87,184
Population 284,574 340,734 378,612 450,492 475.956 523,104 connected to grid						
Population without grid connection	4,937,426	5,009,266	5,106,388	5,173,508	5,294,644	5,478,896
% access	5.5	6.4	7.4	8.7	8.2	8.7
Source: Government of Sie	rra Leone (2012)).				

Ongoing Efforts for the Provision of Sustainable Energy

The government of Sierra Leone has been working in collaboration with UNDP to promote efficient energy production and utilisation of charcoal. This collaboration has been supported by the Innovative Technologies and Private Sector Involvement Project (see UNDP 2015a),²⁰ which seeks to complement Sierra Leone's National Energy Profile (Government of Sierra Leone 2012) and National Energy Strategic Plan (Government of Sierra Leone 2009b). The project also seeks to ensure the provision of and access to modern energy services to improve economic growth, productivity, wealth creation and quality of life for all citizens. In various sub-sectors, it is clear that there is a need for increased access, promotion of the use of more efficient and cleaner energy sources and equipment, and improved availability of renewable energy sources.

With regards to the household sub-sector, the government of Sierra Leone has emphasised the promotion of liquefied petroleum gas as a cooking fuel, wider dissemination of fuel-saving stoves and adoption of renewable energy technologies. Focus is also needed on the agricultural and marine sectors, particularly in terms of the availability of renewable energy sources. These initiatives are required in order to stimulate the use of more advanced technologies. In the commercial sub-sector, most of the focus has been on providing efficient energy devices for communal cooking and heating and for lighting

http://www.sl.undp.org/content/sierraleone/en/home/operations/projects/environment_and_energy/energyefficientproduction.html for more information.

²⁰ See

A review of Sierra Leone's energy sector demonstrates that there are widespread inefficiencies within the sector. For example, over 45 percent of the electricity generated in the Western region remains unaccounted for. Additionally, firewood and charcoal are reported to be 30 percent less efficient than other popular types of fuel (Sustainable Energy for All 2012).

In order to improve the electricity supply in rural areas, the government of China funded the construction of three mini-hydroelectric projects in Makali, Bankasoka in the Port Loko District and Charlotte Village in Western Rural District (Awoko 2014). The Ministry of Energy and Water Resources prepared a new Energy Strategy with sectoral targets for households, industry, agriculture, transport and mining (see Government of Sierra Leone 2012). The strategy outlined a focus on promoting and improving renewable energy sources such as bioenergy, solar power, hydropower and liquid petroleum gas. The overall cost of the programme was estimated at more than US\$7 billion and is expected to be completely implemented by 2030. The strategy proposed utilising and applying new energy sources to different sectors. It also promoted the use and adoption of sustainable practices, such as conservation, in order to minimise environmental degradation.

In order to implement the Energy Strategy, Sierra Leone decided to opt in to the UN-led Sustainable Energy for All initiative.²¹ As a result, a gap analysis report was prepared and the country is expected to develop a comprehensive action plan with the support of development partners (see Sustainable Energy for All 2012). The strategy identified hydropower to be the cheapest renewable energy source for Sierra Leone. The potential is about 1,300 megawatts from a mix of large-scale, small-scale and mini-hydro sources.

There is potential for further development of the Bumbuna plant, as well as development of other renewable energy sources. Hydropower will most likely be complemented by the development of thermal power and generation of solar power. Hydropower is consistent with the country's green growth strategy, as long as environmental and social safeguards are respected. The importance of both future energy sources and irrigation developments, however, highlights the need to develop an integrated, multi-sectoral approach to water resource management that takes into account the potential impacts of climate change.

Sierra Leone also has the potential to harness bioenergy production, specifically for sugarcane. The African Development Bank has been supporting biomass energy generation through the Addax project, which has funding of €25 million from the private investor Addax Bioenergy and additional financing from European development finance institutions and the African Development Bank. The project consists of 10,100 hectares of irrigated sugarcane estates and an ethanol factory capable of producing 90,000 cubic metres of ethanol per year and 32 megawatts of nominal electrical power capacity from the sugarcane bagasse waste by-product, of which 15 megawatts will be available for sale from the national grid. Approximately 80 million cubic metres per year of water being diverted from the Rokel River will be used by this project. In addition, 2,000 hectares will be developed as part of the project's Farmer Development Program, which will focus on rice and cassava and is being implemented with the support of the Food and Agriculture Organization of the UN to ensure food security in the project area. An additional 1,800 hectares will be set aside for ecological corridors and buffer areas to protect existing pockets of biodiversity (African Development Bank 2013b).

www.post2015datatest.com

²¹ See http://www.se4all.org for more information on the Sustainable Energy for All initiative.

The following measures were outlined in the government of Sierra Leone's National Energy Profile:

- Reduce energy losses by upgrading power transmission and distribution systems and reducing human theft.
- Promote the use of energy-efficient equipment and technologies.
- Encourage the use of equipment for power factor correction in industries and homes.
- Promote the development and introduction of improved fuel-saving kerosene, charcoal and wood stoves.
- Launch an awareness campaign to sensitise consumers to the importance of energy efficiency and its relationship to productive use and economy of scale of investment.

Strategy for Providing Sustainable Energy for All

Throughout the country, access to modern energy and electricity is severely limited, as shown in Table 11 above. To achieve the objectives of the Sustainable Energy for All initiative, the government of Sierra Leone has put in place a strategy and established a Multi-Stakeholders' Group on Energy Access. These efforts have been well coordinated and complement the work done by sub-groups and local groups that handle specific activities such as household fuels, bio-fuels and solar electrification. Activities for the medium term cover the 2015–20 period and are outlined in Table 12.

	al Energy Profile:			No.	
Household	Services	Agriculture	Industry	Mining	Transport
Sow, 95% uninterrupted electricity supply To achieve 3% penetration of solar home systems	(grid connection	 70%, 95% uninterrupted electricity supply To achieve 10% penetration of solar photovoltaics for lighting and 10% solar water pumping for 	95% uninterrupted electricity supply	95% uninterrupted electricity supply	Installation of traffic lights in all district headquarter towns
F		irrigation			
To reduce the	 g, heating, cooling a To reduce the 	• To achieve			
share of wood fuel by 20% Increase the penetration of energy-efficient cook stoves to 10% Increase the share of kerosene to 60% Increase the share of liquefied petroleum gas	share of wood fuel to 20% Increase the penetration of energy-efficient cook stoves to 10% Increase liquefied petroleum gas share by 50% To achieve 1% penetration of biogas in hotels and	3% penetration of solar dryers for crop drying • To achieve 100% penetration of refrigeration systems for food and vaccines preservation			

To achieve 3% penetration of solar water heaters Petroleum products Achieving a strategic stock capacity of refined products for 8-10 weeks of national demand demand To achieve 3% penetration of solar water heaters in hotels, guesthouses and restaurants Petroleum products Achieving a strategic stock capacity of refined products for 8-10 weeks of national demand To achieve 3% penetration of solar water heaters in hotels, guesthouses and restaurants Petroleum products Achieving a strategic stock capacity of refined products for 8-10 weeks of national demand Achieving a strategic stock capacity of refined products for 8-10 weeks of national demand Achieving a strategic stock capacity of refined products for 8-10 weeks of national demand Achieving a strategic stock capacity of refined products for 8-10 weeks of national demand Achieving a strategic stock capacity of refined products for 8-10 weeks of national demand To achieve 80% penetration of energy-efficient refrigerators, freezers , air conditioners, cook stocks on saidonal demand To achieve 80% penetration in air conditioning and ventilation, hot water supply and lighting Operating at 95% power Poperating at 95% power Operating at 90% penetration p		1				,
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fluorescent factor 95% power 95% power factor factor factor source: Government of Sierra Leone (2009b).	To achieve 60% penetration of energy- efficient refrigerators, freezers, air conditioners, cook stoves and compact fluorescent lamps Operating at 95% power factor	80% penetration in air conditioning and ventilation, hot water supply and lighting Operating at 95% power factor	95% power factor	80% penetration for motors and drives, refrigeration, and chilled and cooling water Operating at 95% power	80% penetration for motors and drives, refrigeration, and chilled and cooling water Operating at 95% power	40% penetration of mass transportation • Achieving 40% importation of energy- efficient

Current Situation: Infrastructure

Over the last 10 years, infrastructural development has been undertaken extensively in Sierra Leone with the aim to create employment at the local level and prevent environmental and social disruptions. The country has established over 7,000 schools, but the percentage of paved roads has never exceeded 11 percent of the total number of roads, with town and city roads needing to be constructed and existing roads needing to be repaired. Despite frantic efforts by the government of Sierra Leone, the infrastructural gap persists, impeding the country's ability to become internationally competitive.

Notably, the targets on infrastructure outlined in the proposed SDG framework that focus on quality, reliability, resilience and sustainability are not attainable for Sierra Leone since the development of basic infrastructure has still yet to be achieved.

Measuring progress towards safe, accessible and affordable mobility in terms of infrastructure is also not possible in Sierra Leone. Currently, there is a Transport Sector Statistics Bulletin covering motor vehicles usage, licensed and registered vehicles, inland water statistics, domestic and international air transport statistics, and road and water accident statistics. Sierra Leone has not acquired the advanced technology needed to monitor transportation quality and energy efficiency. The country has yet to create a dataset that can be used as a tool to assess energy consumption rates. These are aspects worth considering with regards to monitoring the SDGs. The proposed national indicators below serve as precursors to the SDGs because once data are available on energy use in all sectors, including the transportation sector, then they can be collected or derived from related components for a proposed global indicator such as "Rate of improvement in energy intensity." With improvements in the collection of disaggregated data on energy and infrastructure in Sierra Leone, progress on the SDGs could be monitored.

In order to secure economic growth, focus must be paid to establishing a well-developed transportation network. This is particularly pertinent in key sectors such as agriculture and mining. Currently, the transport system includes: 11,300 kilometres of classified roads of which approximately 895 kilometres are paved, one primary port and several smaller ports serving the private sector, as well as one international airport and a few smaller airports for inland transportation. Notably, there is only one airstrip at Lungi International Airport, which has been undergoing refurbishment and expansion. There are also several inland river waterways.

Sierra Leone currently has three key ports. The Queen Elizabeth II Quay, Sierra Leone's primary port, is located in eastern Freetown and serves as the country's most important gateway for regional and global trade and commerce. It contains one of West Africa's finest natural harbours. More than 257,000 megatons of general cargo pass through the port annually. The port has been undergoing a reform process that will transform it from a service port to a landlord port. Niti Port is currently being used exclusively for the transportation of rutile. It is located in the Bonthe District in an area that was once a critical hub for regional trade. Pepel Port is currently being used for iron ore transportation by African Minerals and London Mining, private sector firms with significant mining interests in Sierra Leone.

The Ministry of Works, Housing and Infrastructure possesses the mandate for the construction and maintenance of roads on behalf of government of Sierra Leone and the implementing agency is the Sierra Leone Road Transport Authority. The Mechanical Services Unit within the Sierra Leone Road Transport Authority works with local businesses and contractors to perform select construction and rehabilitation work.

Sector Strategy, Achievements and Challenges

The government of Sierra Leone has a number of priority goals for infrastructure and the transportation sector. They include:

Road building and maintenance: This includes efforts to rebuild the existing road network, expand the national road system and ensure road maintenance for over 3,700 kilometres of roads. Measures have also been undertaken to construct provincial offices, designated road/rest stops and impound yards, as well as increase acquisition of buses through public-private partnerships. In regards to improving river transportation, strategies and goals have also been developed. These cover areas such as the construction of jetties at vantage points and dredge rivers to increase inland transportation routes and improvement of the regulatory

and safety capacity of the Sierra Leone Maritime Administration. Another aspect is Riverine Transport – the construction of jetties to support transportation on Sierra Leone's extensive inland waterways. There is significant potential to support the shipping of mining (e.g., iron ore) or agricultural (e.g., sugar) products to coastal ports.

- Improving Lungi International Airport: This includes measures to expand and upgrade existing parts of the airport and improve management of the airport, including the establishment efficient passenger and cargo-handling facilities. Additionally, the government has proposed improvements to the airport's ancillary services, including transfer services between Lungi and Freetown. The Lungi-Freetown link will also be improved according to a public-private partnership structure. This should take the form of bus and boat services. A master plan for a bus-boat combination has been developed and should be implemented to improve the transportation system between the airport and ferry terminal.
- Develop the Freetown ports: The government plans to transform the Queen Elizabeth II Quay under the Sierra Leone Ports Authority from a service port to a landlord port, with construction of smaller ports along the coast. Other measures include port participation in the Sierra Leone Ports Authority's reforms and port privatisation, either by being concessionaires of container terminals or licensees of bulk and break-bulk handling. The government also wants to capitalise on the natural advantages of Freetown's natural harbour and strategic global location to transform existing facilities into a trans-shipment hub.

The infrastructural gaps can be best discerned by analysing the challenges in Sierra Leone's infrastructure sectors. Table 13 shows that, while there has been an increase in mobile communication, increasing internet connection remains a challenge. In the power sector, there is dire need for investment – either in solar power, hydropower or thermal energy – since access to reliable and continuous electricity supply in Sierra Leone is very low and intermittent (this is a goal that Sierra Leone cannot easily achieve in the short term). The road network requires repairs and new connections, plus roads have yet to be upgraded to all-weather roads. Sierra Leone is not short of water resources but water management remains a major challenge.

Table 13. Achieven Sector	nents and challenges in Sierra Leo Achievements	ne's infrastructure sectors Challenge
Air transport	Steady growth in all market segments Improving airport accessibility, aircraft age and safety	Relatively high competition
Information and communication	Strong increase in access to mobile communications	Implementing legal and regulatory reform
	External financing	Increasing internet penetration Connecting to regional broadband cable
Power generation	Hydropower generation capacity added	Obtaining needed new investments
	New power strategy in place	Increasing rural access to power
	Power utility national action plan on preparing for privatisation	Implementing legal and regulatory reform
	Improving cost recovery	
	Integrating with West African	
	Power Project	
Ports	Ports system in place	Providing new investments and

		rehabilitation
	Reform is underway	Improving port accessibility from inland
Roads	Road Fund established	Establishing national connectivity
	Reform is underway	Raising fuel levy to establish national
		connectivity cost-recovery levels
	Rehabilitation is underway	Ensure road access to high-value
		agricultural lands
Water and	Well endowed with water	Coping with increase in population and
sanitation	resources	water usage
	National Water and Sanitation	Overhauling urban water infrastructure
	Policy introduced	
		Investing in new water and sanitation
		facilities
		Reducing inefficiencies of utilities
		Rural/urban access to water and
		sanitation
Source: Pushak and Fos	ter (2011, 14).	

Achievements: Road Network

Sierra Leone has an interconnected road network in place, albeit much of it is not in maintainable condition. Of the road network's total 11,999-kilometre length, the classified network accounts for 71 percent or 8,555 kilometres. Of the remainder, 3,000 kilometres are in urban networks and 444 kilometres are unclassified. Most traffic is concentrated near Freetown and a few other major towns. Forty percent of the classified network is in poor condition, while around half of the rural roads are in poor condition. Only 8 percent or 951 kilometres of classified and urban roads are paved. Traffic levels are comparatively low, particularly for unpaved roads. Low traffic levels can be attributed to high fuel costs, poor road conditions and high incidence of poverty. Cars and fuel are unaffordable for the majority of population. Despite low traffic levels, Sierra Leone's road usage has grown slightly, with the country recording a 7.4 percent increase in total number of registered vehicles during 2009 (Pushak and Foster 2011).

Challenges

Setting a fuel levy that is at a high enough level to cover the costs of road maintenance has been difficult for Sierra Leone given its income level (Pushak and Foster 2011). The UNDP reported that the government of Sierra Leone's intention was to increase the fuel levy to US\$0.16 per litre by 2012, but there was only an increase to US\$0.10 per litre recorded in 2010 (UNDP 2010). To lessen the adverse social and economic consequences of the proposed fuel levy increase, Sierra Leone must ensure fair taxation when it comes to taxing fuel used for power generation, construction, mining and agriculture.

The rehabilitation of urban roads, many of which are in poor condition, remains an important task. The improvement of rural access roads to productive agricultural land is also a priority. About 74 percent of the country's area is considered suitable for crop production, of which about 11 percent has been cultivated.²² Around two-thirds of Sierra Leone's population is employed in agriculture, which accounts for more than half of the country's GDP of US\$2 billion. In particular, cocoa exports generate an important stream of hard-currency revenues. Despite much agricultural potential, the

²² See http://www.eoearth.org/article/Water_profile_of_Sierra_Leone for more information.

road network is a major constraint to developing the agricultural sector. For instance, only 21 percent of the rural population live within two kilometres of an all-season road.

Commercial agriculture in Sierra Leone suffers not only from low access to roads, but also from the poor and deteriorating conditions of existing rural roads. The roads need new investment, particularly in the less accessible areas of the southeast. Sierra Leone needs to add about 5,000 kilometres of road in order to provide access to land that accounts for 80 percent of agricultural value.

Measuring Sustainable Energy and Infrastructure for All

Energy statistics are difficult to obtain in Sierra Leone, especially for renewable energy. Although conventional thermal energy production and consumption patterns have been reported, no consolidated set of statistics exists for the overall energy mix in Sierra Leone. However, various units within the energy sector collect administrative data on a regular basis, such as the Bo-Kenema Power Station, the Petroleum Unit of the Ministry of Energy and Water Resources, and the Planning, Evaluation, Monitoring and Statistical Division of the Ministry of Agriculture, Forestry and Food Security.

While there are some data on energy production patterns, the data available only provide a glimpse of the energy sector. Disaggregated data by sector and gender and comparable data for measuring energy consumption trends are limited. For example, data on energy generation from biomass are not disaggregated and do not provide information on the replacement of wood fuel. Readily available data through SSL related to sustainable energy and infrastructure only provide information on the electricity sector, transportation and tourism, with data on the manufacturing sector being noticeably missing. There is no published document that regularly provides information on renewable energy consumption. Data measuring progress towards energy efficiency and data showing the share of renewable energy consumption in total energy consumption can only be sourced through the World Bank's World Development Indicators and other international sources. Fundamental conceptual gaps exist, which further add to the problems for energy data users.

National Priorities for Ensuring Sustainable Energy and Developing Infrastructure for All

The proposed SDG framework includes a goal on sustainable energy with targets on affordability, reliability and access to modern energy services, increasing renewable energy and improving energy efficiency (Table 14). These targets and associated indicators were not included in the Sierra Leone country study because the country is only experimenting with renewable energy, though energy efficiency is a concern. In the near future, SSL is expected to collect more comprehensive data on energy given the potential of solar energy to be an affordable energy source in the country.

Table 14. Ensure	sustainable energy and	develop infrastructure for all: Targets and indicators
Target	Indicator	Notes
Global		
Ensure full	Internet users (per	This indicator measures the number of people who use
access to	1,000 people)	the internet for every 1,000 people.
developed	Average bandwidth	Measurement of the ability of an electronic
infrastructure	speed	communications device or system (such as a computer
and	(megabits/second)	network) to send and receive information, measured in
communication	(megabits/second)	
technology	0/ of the menulation	megabits per second (mbit/s).
technology	% of the population	"With access" means that the distance from a village or
	with access to an all-	household to an all-season road is no more than 2
	season road	kilometres; otherwise, a walk of no more than 20
		minutes or so is required to reach an all-season road.
		An "all-season road" is a road that is motorable by the
		prevailing means of rural transport (often a pick-up or
		truck that does not have four-wheel drive) all year
		round. Predictable interruptions of short duration during
		inclement weather (e.g., heavy rainfall) are permitted,
		particularly on low-volume roads (World Bank 2005).
	% of adults with an	Denotes the percentage of the population with an
	account at a formal	account (by one's self or together with someone else) at
	financial institution	a bank, credit union, another financial institution (e.g.,
	manda mataton	cooperative, microfinance institution) or the post office
		(if applicable) (modified slightly from the World Bank
		Global Findex Glossary [Demirguc-Kunt and Klapper
_		2012]).
Ensure access	# of hours per day	This indicator measures the number of hours for which
to energy and	households have	electricity is available in a household within a given day.
improve	access to electricity on	It is not directly applicable to Sierra Leone's context and
efficiency and	average	a proxy indicator has been included below to capture
sustainability of		the number of person-days households do not have
energy supply,		access to electricity.
including	Rate of improvement	Energy required per unit (currency) of GDP, measured
renewable	in energy intensity	in primary energy terms and GDP. Primary energy
energy	,	refers to energy sources as found in their natural state
0,		(as opposed to derived or secondary energy, which is
		the result of the transformation of primary or secondary
		sources (OECD 2011).
		3041003 (0200 2011).
	Share of the	Access to modern cooking solutions is defined as
	population with access	relying primarily on non-solid fuels for cooking. Non-
	to modern cooking	solid fuels include: (i) liquid fuels (for example,
	solutions (%)	kerosene, ethanol or other biofuels); (ii) gaseous fuels
		(such as natural gas, liquefied petroleum gas and
		biogas); and (iii) electricity. Solid fuels include: (i)
		traditional biomass (for example, wood, charcoal,
		agricultural residues and dung); (ii) processed biomass
		(such as pellets and briquettes); and (iii) other solid
		fuels (such as coal and lignite) (World Bank 2011).
	Share of renewable	Energy that is derived from natural processes (e.g.,
	energy to total energy	solar, hydro) that are replenished at a higher rate than
	consumption	they are consumed. Solar, hydro and biomass are
		common sources of renewable energy (IEA 2014).
		comment couldes of followable energy (IE/(2014).
		(12.1.2011).

National		
Ensure access to safe, efficient	Proportion of vehicles registered	This indicator shows the proportion of people who own a car within each demarcated area.
and affordable mobility	Proportion of fuel consumed by private transportation	This indicator can provide a measure of fuel efficiency for the private transportation sector and includes both household consumption of motor fuels and consumption by various transportation industries.
	Energy used by the transportation sector	This indicator shows the trend in energy usage by the transportation sector. The Petroleum Unit, the Ministry of Energy and Water Resources in collaboration with SSL can provide data.
	Average price of gasoline and fuel oil	This indicator is a measure for the transportation sector.
	% of electricity being generated from renewable energy sources (wind, water, solar and bioenergy)	This is a new measure for which SSL should start collecting data.
	Total electricity available	This indicator can serve as a proxy for measuring "# of hours per day households have access to electricity on average."
	# of person-days that people do not have access to electricity due to all causes, including weather	This indicator also serves as a proxy for measuring "# of hours per day households have access to electricity on average." It should be noted that data for the indicator do not currently exist but may be collected through administrative data from electricity suppliers.



Establish a Sustainable, Healthy and Resilient Environment for All

Current Situation

Sierra Leone is rich in biodiversity and natural resources, but overexploitation of the country's terrestrial and marine ecosystems has intensified over the past three decades. It has a total of 48 forest reserves and conservation areas, representing about 4 percent of its land area (180,250 hectares). Most of them are inadequately protected and managed. Only two of these reserves, Outamba-Kilimi National Park and Tiwai Island Wildlife Sanctuary, have been elevated to the statuses of national park and wildlife sanctuary under the classification system of the International Union for the Conservation of Nature. Some of the major protected areas include the Gola forests, Western Area Forest Reserve, Outamba-Kilimi National Park, Loma Mountains, Tingi Hills, Tiwai Island Wildlife Sanctuary and Kangari Hills.

Major threats to biodiversity include indiscriminate farming practices, wanton exploitation of forest resources, over-fishing, and mining and logging. There have been over 2,000 species of plants, including 74 endemic species, identified in Sierra Leone. Fifteen species of primates, 18 species of antelopes and duikers, nine bat species and over 500 bird species have been recorded. Of the bird species, six are threatened with extinction. The 15 species of primates are all either endangered or vulnerable. Of the 18 species of antelopes and duikers, two have become extinct and 16 are threatened. The Conservation Society of Sierra Leone has been promoting conservation in local communities, schools and colleges as a way to generate awareness about the need to preserve different species, but the impact has been limited.

Prior to 2008, environmental assessment tools were rarely applied, enforced or monitored in Sierra Leone. After the Environmental Protection Act of 2008 (Sierra Leone 2008b) was passed and the Environmental Protection Agency became operational the following year, environmental impact assessments were undertaken more regularly. The Environmental Protection Agency is the main government agency that addresses all issues related to the environment and climate change. The agency's goal is to establish and enforce a strict environmental regulatory framework in Sierra Leone. It has the mandate to coordinate, monitor and evaluate the implementation of national environmental policies, programmes and projects, including issuing environmental impact assessment licenses.

Part of the Environmental Protection Agency's mandate involves the establishment of the National Secretariat for Climate Change, which became operational in 2012, and formulation of a national climate change policy (UNDP 2012). The secretariat was set up to enable the government to access public sector funding from development partners for national climate change adaptation and mitigation programmes, including for the Clean Development Mechanism and Reduced Emissions from Deforestation and Forest Degradation plus (REDD+). The secretariat also has the responsibility to provide guidance and direction for the national climate change policy and strategies and the regulation of climate and carbon trading issues in the country.

Sierra Leone has lost nearly 70 percent of its forest cover, with less than 5 percent of the original forest remaining in isolated forest reserves on tops of mountains and hillsides. There is anecdotal

evidence of the magnitude of the problem of deforestation, which is perceived as a major environmental problem in the country. Uncontrolled exploitation – for purposes such as agricultural expansion, commercial logging, wood fuel extraction (woodcutting and charcoal burning) and mining – has caused severe environmental degradation. As such, there need to be concerted efforts and coordination at national, local and community levels. Similar exploitation has been taking place in the fishery sector. Fish stocks have been reducing due to exploitation by mainly artisanal sub-sectors. The fishery sector has received ongoing technical assistance, including the enhancement of some environmental and quality components. The sector has the potential for growth, however. Continued focus and technical assistance will help secure its export capacity and, subsequently, foreign exchange earnings. Further, the wildlife sector has also suffered from loss of revenues due to poor management practices, lack of capacity and limited participation of communities.

The government recognizes the intersection between environmental sustainability, poverty and development. PRSP III specifically outlined the nexus between the environment and development and a specific definition: the "environment is where we live; and development is what we all do in attempting to improve our lot within that abode. The two are inseparable" (UNEP 2007, 2; Government of Sierra Leone 2013a, 45). Sierra Leone is at a crossroad. The country has been seeking to implement pro-poor and inclusive green growth strategies, while at the same time focusing on infrastructural development, working with multinational companies and engaging in activities that will secure future economic growth.

Previous and Ongoing Efforts

The Environmental Protection Agency has implemented the European Union–funded Environmental Governance and Mainstreaming project. ²³ The project will be completing a review of legal frameworks concerning the environment, natural resource management and climate change. A technical advisory team has been set up to manage this task. The agency works in partnership with the Forestry Division of the Ministry of Agriculture, Forestry and Food Security to ensure that national and multinational companies that acquire concessions in forest areas also carry out the required environmental impact assessments. The agency has been collaborating with the Forestry Division on a number of issues related to environmental regulation in forest concession areas and, most notably, matters related to carbon financing in the forestry sector. Given the proliferation of mining companies and companies interested in agri-business, a major challenge will be putting in place a regulatory mechanism that properly assesses investments for their ability to benefit the country.

In July 2010, the UN Environment Programme worked with the Environmental Protection Agency to implement a natural resource—related programme in Sierra Leone. One focus of this programme was to build the agency's capacity to enforce the effective use of environmental impact assessments and strategic environmental assessments through South-South collaboration. As a result, the government of Sierra Leone developed a framework for environmental governance with the involvement of local-level administration, which includes traditional Paramount Chiefs and modern district councils.

In early 2011, despite the objections of several large mining companies, the Parliament of Sierra Leone passed a fee schedule that set out a points system to quantify the environmental footprint of a project and determine what sort of environmental impact assessments will be required. Additionally, the Extractive Industries Project, funded by the World Bank and the United Kingdom's Department

²³ See http://theredddesk.org/countries/initiatives/environmental-governance-and-mainstreaming-project for more information.

for International Development, developed a series of environmental and social regulations. These clarified the need for project proponents to conduct environmental impact assessments of varying detail, depending on the scope and scale of their projects. The regulations laid out clear expectations for environmental impact assessments, established timetables for submissions and reviews, and have supported the Environmental Protection Agency in conducting strategic environmental assessments of districts where artisanal and industrial mining have been most prevalent. It has been learned that many of the previous impacts can be prevented in the future if environmental planning and management tools, including environmental impact assessments and strategic environmental assessments, are applied consistently at both the policy and project levels (World Bank 2015). There can be no future security or improvement in livelihoods if the natural resources that sustain people's livelihoods are damaged, degraded or destroyed (UNEP 2010). Notably, an inclusive participatory approach could help predict and prevent potential conflicts over the management of natural resources and division of revenues derived from them.

Lesson Learned

These experiences have demonstrated there are key elements that must be taken into consideration for proper environmental planning and management, which include raising awareness of the benefits of environmental assessments, development projects and policies as well as outlining the importance of environmental safeguards. Additionally, key steps need to be carried out including building staff skills and capacities as well as training on best practices and quality control in environmental assessments. Other important steps include streamlining of systems, training and regulation of practitioners to build up a professional cadre of environmental planners and assessors, and adhering to the stakeholder participation model to build a coalition for transparent and effective monitoring and evaluation. In order to oversee companies' potential environmental impacts, regular monitoring should be carried out and monitoring needs to be coupled with law enforcement to ensure compliance.

By diversifying the economy, the government of Sierra Leone has been hoping to implement more environmentally friendly or green practices. Such implementation can be carried out by making agriculture commercially viable, encouraging use of energy-saving devices and equipment and working on "waste to wealth" (UNEP 2010; Living Earth Foundation 2015).²⁴ The country has been attempting to develop and implement solar power and hydropower for electricity generation. Sierra Leone's Agenda for Prosperity addressed the factors that could challenge the country's ability to achieve a more environmentally and economically secure future for its citizens.

Climate Change and Disaster Risk Reduction

Climate change and its impacts on a largely agrarian economy like that of Sierra Leone have been heavily debated internationally, but there has been limited dissemination of conclusions and discussion among the general public in Sierra Leone. Greenhouse gas emissions are not a major concern for many citizens. However, agriculturists, academics and researchers have constantly reminded the government about the possible disastrous effects of greenhouse gas emissions if mitigation and adaptation mechanisms are not put into place. Sierra Leone is not considered to be an industrialised country, thus there has been little concern about air pollution. With a growing mining

^{24 &}quot;Waste to wealth" refers to the conversion of waste materials, such as coconut shells, coconut tree branches and sea shells, into rings, necklaces, cricket bats and ashtrays, among other things. See http://wastetowealth.livingearth.org.uk for more details.

sector, however, there are concerns about the negative impacts that this sector may have on water resources and in terms of noise pollution. Collecting data on such issues would resonate with the SDGs on climate change.

The Meteorological Department of the Ministry of Transport and Aviation, which is the Designated National Authority for the Clean Development Mechanism, is responsible for reporting to the UN Framework Convention on Climate Change Secretariat and on the Kyoto Protocol. The Environmental Protection Agency is responsible for governing the implementation of environmental policies related to climate change. As mentioned, the agency established the National Secretariat for Climate Change, which also formulates guidelines for the approval of climate change projects and oversees a measurement, reporting and verification mechanism for reporting on mitigation actions taken by the government and multinational companies to the UN Framework Convention on Climate Change Secretariat. The secretariat is also responsible for strengthening institutions, providing capacity building for environmental protection and management, as well as documenting the country's efforts on minimising environmental degradation and ability to adapt to climate change.²⁵

According to current climate change projections, Sierra Leone could lose between US\$600 million and US\$1.1 billion annually in crop revenues within the century. Therefore, there is an urgent need to improve the effectiveness and efficiency of disaster management and risk reduction, particularly in relation to natural hazards such as droughts and floods, which will be intensified by climate change. According to the UNDP's study Diagnostic Analysis of Climate Change and Disaster Management in Relation to the PRSP III in Sierra Leone, various social activities have contributed to the emission of greenhouse gases. The majority were linked to the energy, manufacturing, construction and metal industries, with land-use change and forestry helping with carbon dioxide removal. The study recommended that Sierra Leone conduct a technology needs assessment and carry out a consultative process with key stakeholders in order to develop portfolios outlining significant areas where energy waste occurs and potential sources of renewable energy (Tarawalli 2012). The country has policies, legislative instruments, institutional frameworks, guidelines and standards, but requires technical knowledge and financial resources in order to implement the technologies required to mitigate and adapt to climate change. To date, there has not been enough support or resilience building, which has left the country vulnerable. Specifically, climate variability will have negative effects on economic sectors, such as the agricultural and fishery sectors, and exacerbate the existing socio-natural hazards in the country.

The National Environmental Profile, the government of Sierra Leone's main document on the environment, needs to be reviewed and adapted to reflect emerging environmental issues and improve natural resource management as the production of biofuels, offshore oil drilling and chemical mining expands (Blinker 2006). As shown in Box 2, the government has endorsed and signed several international conventions and protocols, though it is unclear which have been ratified. These conventions and protocols are at different stages of implementation. Many have not been ratified or harmonised with the laws, policies and programmes of Sierra Leone. This has resulted in the country falling behind in the implementation of various provisions.

²⁵ Sierra Leone ratified the UN Framework Convention on Climate Change in April 1995 and the Kyoto Protocol in June 2005.

Box 2. International environmental conventions and protocols endorsed and signed

- * Convention on Biological Diversity and Cartagena Protocol on Biosafety
- * United Nations Framework Convention on Climate Change
- * United Nations Convention to Combat Desertification
- * Convention on International Trade in Endangered Species of Wild Fauna and Flora
- * Convention on Wetlands of International Importance especially as Waterfowl Habitat
- * United Nations Convention on the Law of the Sea
- * Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal
- * Vienna Convention for the Protection of the Ozone Layer and Montreal Protocol on Substances that Deplete the Ozone Layer
- * Stockholm Convention on Persistent Organic Pollutants

Source: UNDP (2012b).

The Sierra Leone Disaster Management Policy was drafted in 2008 but has not yet been fully implemented. There have been suggestions for the establishment of a National Climate Change Restoration Fund to meet objectives. The country is also in the process of setting up a National Secretariat for Climate Change and Carbon Trading that will comprise of a National Climate Change Committee (Sowa 2012, 74). The National Registry for Reduced Emissions from Deforestation and Degradation, The Reduced Emission from Deforestation and Forest Degradation and the Non-Reduced Emission from Deforestation and Forest Degradation Carbon Trading are designed to attract investment and to establish an effective regulatory framework for project approval, measurements, reporting and verification. There are hopes that if these steps are implemented, Sierra Leone will be able to monitor emissions levels and accurately report on pollution.

Table 15 below presents the global and national targets and indicators related to the environment. The international community is ready to collaborate with developing countries on environmental problems. Sierra Leone relies heavily on mining for foreign exchange earnings, but the extraction of non-renewable resources and associated potentially negative environmental impacts have caught the attention of the government. This is evidenced by the attention given to natural resource management in the Agenda for Prosperity. All the proposed global targets and indicators are relevant to Sierra Leone and they are the priorities that should be pursued, especially with satellite or geospatial techniques. This will be a new challenge for SSL beyond enumeration area demarcation and mapping.

Table 15. Establish a su indicators	ustainable, healthy and res	silient environment for all: Targets and
Target	Indicator	Notes
Global		
Build resilience and reduce deaths from natural hazards	Disaster deaths per 1,000 inhabitants	A hazard is a dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption or environmental damage. Includes epidemics and pandemics, floods, insect infestations, landslides and Wildfires (UNISDR 2007).
		A disaster is a serious disruption of the functioning of a community or society involving widespread human, material, economic or environmental losses and impacts, which exceed the ability of the affected community or society to cope using its own resources (UNISDR 2007).
Safeguard ecosystems and biodiversity	Net loss in forest area (% of land area)	Forest area does not include land that is predominantly under agricultural or urban land use (FAO 2012).
	Trends in coverage of protected areas	The protected area coverage indicator measures the policy response to biodiversity loss. An increase in protected area coverage indicates increased efforts by governments and civil society to protect land and sea areas with a view to achieve the long-term conservation of biodiversity. A baseline study on socioeconomic activities within marine protected
		areas in Sierra Leone was done in 2012 and a follow-up study is underway.
Publish and use economic, social and environmental accounts in all governments and companies	Share of large tax unit (LTU) taxpayers using integrated reporting	Integrated reporting is a process founded on integrated thinking that results in a periodic integrated report by an organisation about value creation over time and related communications regarding aspects of value creation. An integrated report is a concise communication about how an organisation's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term (IIRC 2013).
		Large taxpayers are very different from other categories of taxpayers and present certain significant risks to effective tax administration. Key characteristics of large businesses include: concentration of revenues, complexity of business and tax dealings, withholding agent or intermediary role, use of professional tax advisors and possession of in-house tax organisation. Businesses may be publicly listed corporations, multinational companies or private groups (OECD 2009).

	Existence of national and sub-national government publishing according to the System of Environmental-Economic Accounting ²⁶	The System of Environmental-Economic Accounting (SEEA) contains the internationally agreed standard concepts, definitions, classifications, accounting rules and tables for producing internationally comparable statistics on the environment and its relationship with the economy. The SEEA framework follows a similar accounting structure as the System of National Accounts and uses concepts, definitions and classifications consistent with the SNA in order to facilitate the integration of environmental and economic statistics (UNStats 2014).
National		
Build resilience and reduce vulnerability to natural hazards	# of people displaced by natural disasters	Natural disasters are those types of disasters that have a natural origin. The indicator also takes reference from UN International Strategy for Disaster Reduction's (UNISDR) socio-natural hazard caused by human activity, relating to overexploitation or degradation of land and resources such as sand mining and quarrying. Disaster refers to a dangerous phenomenon that can cause loss of life or severe injury,
		property damage, loss of livelihoods and services, social and economic disruptions or environmental damage (modified from UNISDR's definition of hazard) (UNISDR 2007).
	# of person-days people are displaced due to natural disasters	There are no data that indicate how long people are displaced due to natural disasters in Sierra Leone. There are only the dates of events. The number of days that people are kept out of their normal residences due to, say, a flood, landslide or wild bushfire would be the ideal measure.
	Direct economic losses from natural disasters, (% of GDP)	Total monetary value of assets lost as a percentage of GDP is a potential measure.
	% of the population displaced by wildfire in the last five years % of the population	This indicator provides data for the proportion of the population who have had to leave their homes due to wildfire within the last five years. This indicator provides data for the proportion of
	exposed to flooding in the last five years	the population who have been affected or threatened by flooding within the last five years. Impacts associated with exposure to flooding can include loss of life or severe injury, property damage, loss of livelihoods and services, social and economic disruptions or environmental damage (modified from UNISDR's definition of hazard) (UNISDR 2007). Pujehun District in the Southern Province of Sierra Leone is an area exposed to frequent flooding.
Safeguard ecosystems and biodiversity	Area of terrestrial eco- zones covered by forest land, disaggregated by forest type	Hectares of forest cover, grasslands and bolilands are potential measures.

²⁶ This is primarily a "yes-no" indicator and has binary variables that can only have two possible values.

Improve air and water quality	Proportion of at-risk wildlife species whose status is upgraded to higher risk (annual) Area of forest disturbed annually by insects, fire and harvesting Degree of physical threats, chemical threats and/or biological	This indicator helps measure conservation effectiveness and tracks changes in the level of risk for at-risk species. The Conservation Society of Sierra Leone works in collaboration with the Department of Biological Sciences at Fourah Bay College and Royal Society for the Protection of Birds. Bush fires are common in Sierra Leone. This indicator measures the quality of freshwater resources.
	impairments to freshwater resources	
Reduce per capita waste through prevention, reduction, recycling and reuse	Estimate of transboundary movement of hazardous waste and recyclable materials	Hazardous waste and hazardous recyclable materials typically exhibit hazardous characteristics, such as being toxic, corrosive or highly flammable. There are problems with the disposal of such waste in Sierra Leone, as experienced in the Moyamba District where rutile is mined and the Bo District's gold mines.
	Estimate of solid municipal waste collected, disposed of and recycled	The responsibility for municipal solid waste management in Sierra Leone is shared among Freetown City Council, Bo City Council, Makeni City Council, Bonthe City Council and the government of Sierra Leone. Municipal solid waste refers to recyclables and compostable materials, as well as garbage from homes, businesses, institutions, and construction and
		demolition sites. Municipal solid waste collection, diversion (recycling and composting) and disposal operations are the responsibility of municipalities and the government.
Address climate change	Rate of greenhouse gas emissions intensity, by industry	Greenhouse gases are those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere and clouds. A greenhouse gas emission intensity measure, which calculates greenhouse gas emissions per unit of GDP, is not yet relevant to Sierra Leone.
Improve the integration of biodiversity, ecosystem services and benefit-sharing into planning, policy formulation	Trends in land-use change and land tenure in the traditional territories of indigenous and local communities	An indicator on the status and trends in the practice of traditional occupations was adopted by the Conference of the Parties to the Convention on Biological Diversity in 2010 (UNEP 2010). Sierra Leone has a National Biodiversity Strategy and Action Plan.



Establish Open, Accountable, Inclusive and Effective Institutions, Rule of Law and a Peaceful and Inclusive Society

Governance and Human Rights Issues in the Post-2015 Agenda

The deficiencies of the existing MDG framework have been discussed at length during negotiations on the SDGs. The narrow economic definition of development has come under severe criticism and, as a result, it has been determined that emphasis must be placed on the inclusion of the broader dimensions of development, particularly those related to governance and human rights. The literature has expanded significantly and identified key governance elements that need to be included in the post-2015 agenda. Conceptual and technical considerations and methods to more accurately measure democracy and human rights deserve special attention going forward.

A representative statement on governance elements for inclusion was given in the UN's Global Thematic Consultation on Governance and the Post-2015 Development Framework (see The World We Want 2013). The report outlined that post-2015 proposals fell into the following categories:

- · General goal on governance
- Governance goal with sub-elements, including commonly one or more of the following:
 - Participation
 - Transparency and access to information
 - Accountability, including corporate accountability
 - Political and civil rights (e.g., freedom of speech, the right to free assembly or elections)
 - Efficiency and capacity of institutions
- Several governance-related goals such as:
 - Justice
 - Peace, conflict, violence and human security
 - Global governance
 - Empowerment and civil and political rights

The report was a result of a consultation process co-led by the UNDP and UN Office of the High Commissioner for Human Rights in collaboration with representatives from CSOs. The process consisted of a series of regional dialogues and expert meetings between September 2012 and March 2013. For the continent of Africa, the report outlined that rule of law, human rights protection, anti-corruption and electoral accountability were the four key issues of concern.

With regards to implementation of the post-2015 agenda, measuring, monitoring and evaluating progress on governance and human rights will be an important area of focus. The issue of proper measurement has received significant attention from policy-makers, academics and political figures. Major concerns were discussed at an expert meeting on governance, human rights and measurement in November 2012. An important conclusion was the assertion that governance and human rights can be accurately measured through proper data collection and analysis.

In a perspective statement to the UNDP in October 2014, Abdoulie Janneh, Executive Director of the Mo Ibrahim Foundation, indicated that the members of the African Union had adopted a Common African

Position on the post-2015 development agenda (Janneh 2014). The common position emphasised promotion of good and inclusive governance, anti-corruption measures, transparency and accountability, and enhancement of the rule of law, among other things, as essential elements for development. Janneh noted that data improvement to inform policy development and aid monitoring is a priority, given that there are serious quantity and quality data gaps, which necessitate investment to ensure meaningful improvement. He stressed that peace, governance and the rule of law are already being measured in Africa (Janneh 2014).

In Sierra Leone's context, efforts have been made to measure governance and human rights. The country's past still haunts the population and the international community has spent significant funds to restore good governance and the rule of law. As such, various institutions, such as the Anti-Corruption Commission and Office of the Ombudsman, have focused on strengthening military and police administration. Additionally, the establishment of the National Revenue Authority, which focuses on improving domestic resource mobilisation in Sierra Leone, has also been supported by the international community. The Sierra Leone Socio-Economic Indices, which were published by the UNDP in November 2009, used a number of international indices to provide a comprehensive overview of Sierra Leone's governance situation (UNDP 2009). The indices included:

- Human Development Report
- Democracy Index
- Ibrahim Index
- Fragility Index
- Corruption Perception Index
- Ease of Doing Business Index and
- Country Policy and Institutional Assessment Index

This study provides a baseline understanding of Sierra Leone's current governance and human right situation. Going forward it provides a basis for developing appropriate targets and indicators to measure progress on governance under the post 2015 agenda.

Current Situation

Democracy, observance of rule of law and individual rights are vital to prosperity and stability. In 2004, the process of decentralisation was reintroduced in Sierra Leone by "an Act to consolidate with amendments, the law on local government, and to provide for the decentralization and devolution of functions, powers and services to local councils and for other matters connected therewith" (Sesay 2012). The reason for reintroducing local governance was two-fold: first, to ensure participatory governance and, second, to promote an effective service delivery system through elected councillors. Following the enactment of the Local Government Act of 2004, the government of Sierra Leone adopted democratic reforms and a more participatory approach to governance.

Rule of Law, Human Rights and Access to Justice

It is common to hear debates about human rights, gender equality, and youth and gender empowerment among academics, policy-makers, development workers, civil society advocates and activists, and ordinary citizens. Sierra Leone has made great strides in improving its human rights record with the concerted efforts of national human rights organisations, international NGOs and the National Forum for Human Rights, a coalition of NGOs.

The efforts by various organisations to advocate for human rights has led to greater awareness of the importance of developing legal and regulatory instruments to support human rights work in Sierra Leone. Some examples of key acts include the Domestic Violence Act (Sierra Leone 2007c), Devolution of Estates Act (Sierra Leone 2007b), and Registration of Customary Marriage and Divorce Act (Sierra Leone 2009a), Child Right Act (Sierra Leone 2007a), Disability Act (Sierra Leone 2011), which seeks to protect the rights of those with disabilities, and Youth Commission Act (Sierra Leone 2009b), which focuses on issues pertaining to the marginalised youth of Sierra Leone. Most of these acts were enacted between 2000 and 2010, but weak national capacity, lack of human and financial resources, alongside weak government support and issues of political accountability have impeded implementation.

In spite of the country's laudable steps and reforms, major challenges persist. Violence against women, gender inequality, marginalisation of people of African descent and cultural discrimination continue to challenge Sierra Leone. For example, women are barred from becoming Paramount Chiefs in the Northern Province. This inequality is also seen in two of the three districts in the Eastern Province. Such unequal access undermines gender equality and must be addressed.

Transparency and Corruption

Since independence in 1961, corruption has been rampant throughout Sierra Leone. The problem has intensified to a point where, despite the influx of development assistance, few to no improvements in economic growth have been realised. Sierra Leone continues to be ranked low in the UN's Human Development Index – in 2011, the country was ranked 180th out of 187 countries, while in 2014 it was ranked 183rd (UNDP 2013; UNDP 2015b). As such, Sierra Leone remains a developing country, with corruption being the canker worm that is eating into the fabric of society (Awolowo 2002).²⁷ Corruption has been a major hindrance to development efforts as it continually undermines or prevents the implementation of reforms.

Specific actions have been undertaken to address the issue of corruption at all levels of government through multi-stakeholder initiatives involving public officials, development partners, academics and civil society activists. The Anti-Corruption Act of 2000 established the Anti-Corruption Commission, which investigates corruption within the government of Sierra Leone and the private sector (Sierra Leone 2000). The act was amended in 2008, giving the commission more power to investigate and persecute those engaging in corrupt activities. Since 2000, many individuals, mostly in the public sector, have been convicted of corruption (Sierra Leone 2008a), including the former Minister of Energy and Power, former Mayor of Freetown, former Ombudsman and former Director-General of the National Revenue Authority.

The difficulty in fighting corruption lies in the lack of coordination among multiple tiers of government and public institutions. There need to be concerted efforts among the police, Judicial and Legal Services Commission (which monitors the performance of the Judiciary), Human Rights Commission of Sierra Leone, Office of the Ombudsman (which investigates complaints of abuses and capricious acts on the part of public officials), Parliamentary Oversight Committees (which monitor the work of specific government ministries), National Public Procurement Authority (which regulates and enforces public procurement procedures) and Audit Service Commission (which audits public agencies).

Sierra Leone is a signatory to the UN Convention against Corruption, which obliges the country to implement a range of anti-corruption laws and practices. Sierra Leone is also a signatory to the African Union's Convention on Preventing and Combating Corruption. Notably, the donor community and CSOs

²⁷ An old adage for corruption in Sierra Leone.

have been engaged in various efforts to stop corruption in the country, including the implementation of regulatory mechanisms, advocacy work and monitoring programmes. A clear example of this can be seen in District Budget Oversight Committees, which have been set up to monitor local council expenditures at the district level and participate in annual national budget hearings.

In addition, the National Public Procurement Act was passed in 2008, which led to the formation of the National Public Procurement Authority (Sierra Leone 2008c). This regulatory body identifies areas that are very prone to corruption. Furthermore, the National Anti-Corruption Strategy for 2008-13 underwent a mid-term review in 2011 to further promote the anti-corruption campaign (Sierra Leone 2008a).

The government of Sierra Leone has evidently established a number of mechanisms and policies to boost transparency and reduce corruption. As a result of these efforts, the country has increased accountability at all levels of government and reduced the more obvious forms of corruption. In 1996, the government introduced the National Governance Reform Programme under which a number of democratic institutions were established to promote principles of democracy. The institutions include the Anti-Corruption Commission, Office of the Ombudsman, National Revenue Authority (which consolidated tax revenue collection), National Commission for Democracy and Human Rights, Human Rights Commission of Sierra Leone and National Public Procurement Authority. These organisations have faced considerable challenges, but their existence has engendered a number of laws and processes that address issues of transparency and accountability in public financial management, public procurement, money laundering, regulation, as well as the supervision of insurance, banking and other financial services.

Since 2007, a number of government ministers and high-level public officials have been fined and relieved of their appointments. Still, the public sector faces issues of corruption. A lack of transparency, particularly in terms of providing access to information, and mismanagement of financial resources, such as awarding contracts to companies and individuals based on personal interests, continue. In addition, the country's weak national revenue base has been the result of embezzlement, misappropriation of funds and limited accountability. Unfortunately, this has further exacerbated socio-economic issues in the country, wasted scare resources and entrenched poor public service delivery. As a result, a large proportion of the population continues to face deprivation, high levels of illiteracy and unemployment, low standards of living, widespread poverty and persistent underdevelopment.

Democracy and Democratic Processes

J.L. Gibson (2006) stated that democracy taking root and surviving depends on the commitments of ordinary citizens to the institutions and processes of democracy. He cautioned, however, that there is no consensus on how best to measure mass support for them. He argued that developing indices for democratic institutions and processes is a multi-dimensional analytical problem and claimed that support for them is a meta-concept comprising attitudes towards various institutions and processes. The degree to which these various aspects of democracy are integrated in the minds of ordinary citizens becomes a substantive issue that is highly dependent on the understanding of a political culture of transition.

Sierra Leone inherited the British parliamentary system of government immediately after independence, but failed to sustain it with the 1967 general elections, which culminated in a military coup. A.B. Zack-Williams commented that "since those events, Sierra Leone's politics lost its innocence and tranquillity, as all semblance of democracy was erased from public life to be replaced by the dictatorship of the oneparty state and the attack upon basic freedoms in the civil society" (Zack-Williams 2008, 14-15). For close to 30 years, Sierra Leone did not enjoy free, fair and peaceful elections. In 1996, the country democratically elected a new President, but democracy was disrupted again in 1997 by another military

coup. However, the democratically elected President was reinstated in 1998 and a peaceful election was held in 2002, which marked the country's full return to democracy.

In 2007, another peaceful general election ushered in a new government and leader. Popular expectations for this new leader were high, as he needed to address the problem of Paramount Chiefs' abuses, the youth question, the problem of corruption and the smooth operation of the British-sponsored independent Anti-Corruption Commission. Other issues that needed attention in order to strengthen democracy included establishing a professional military and police force, making the Judiciary independent, improving education and health, and creating decent jobs. In this respect, democracy is premised on strengthening political and social institutions that are functional in their operations, while reforming or abandoning those that are detrimental to running a fully democratic country.

The successes of the 1996, 2002 and 2007 general elections gave legitimacy to the government of Sierra Leone and convinced donors that the country can consolidate peace. These successes were due to support from donors in building the institutional capacities of electoral management bodies, specifically the National Electoral Commission, Political Parties Registration Commission and Election Offences Courts. For the first time in the country's history, competing parties were given equality of access to the political space and the electoral management bodies were able to function in a credible and transparent manner. The overall objective of donor intervention was to promote and deepen democratic institutions in Sierra Leone.

Access to Justice

Sierra Leone's constitution outlines the right of the access to justice. It explains that the courts of justice are independent and impartial and have a high level of integrity to ensure that the Judiciary dispenses justice on the basis of equal opportunity. There are also provisions for fair hearings and financial assistance to citizens whose fundamental human rights have been violated (Suma 2014). Still, the formal and customary systems of justice have not seemed to help some citizens with access, equity, transparency and consistency of rulings. Women have faced barriers within both systems due to discrimination, lack of information and lower education levels. In particular, they have faced legal barriers in matters related to marriage and inheritance. The situation is exacerbated in rural parts of the country.

The Office of the Ombudsman, National Commission for Democracy and Human Rights, and Human Rights Commission of Sierra Leone are the three statutory bodies mandated with educating the public about individual rights. The Centre for Accountability and Rule of Law is a CSO that produces monthly newsletters about human rights issues in the country. The National Forum for Human Rights and Open Society Justice Initiative initiated the Timap for Justice²⁸ ("Stand for Justice" in local parlance) programme, which trains paralegals and the police in Freetown, as well as some provincial towns, to simplify laws and engage in advocacy and sensitisation programmes. The Lawyers Centre for Legal Assistance, which has offices in Freetown, Makeni and Bo, provides legal aid to indigent citizens. In 2012, the Parliament of Sierra Leone enacted the Legal Aid Act that embraced paralegals as an innovative approach to providing access to justice for all.

NGOs and the Ministry of Social Welfare, Gender and Children's Affairs have undertaken public education programmes regarding the Child Right Act (Sierra Leone 2007a). Additional efforts, however, are required to improve public knowledge about the rights of children and child protection. There are plans for a draft bill that will establish a 30 percent quota for women in elected and other senior

²⁸ For more information, see Koroma and Maru (2006).

management and appointed positions within the government of Sierra Leone. A draft policy being developed by the Law Department of the Ministry of Justice focuses on the removal of discriminatory practices against women in land acquisition.

National Priorities

The Agenda for Prosperity highlighted good governance, access to justice, peace and security, and effective capacity in the public sector as prerequisites for sustainable economic growth, job creation and poverty reduction. It noted that the government will continue to promote initiatives that strengthen governance structures as well as the Judiciary and military and police force involved in implementing good governance. In 2002, the government set up the Office of National Security with a mandate to monitor disasters and coordinate disaster management activities. Currently, there is an impetus to transform the Office of National Security's Disaster Management Department into a statutory agency in order to ensure the effective coordination of disaster management. Further, to consolidate democratic successes, the government has been striving to further decentralise governance roles and functions to the local level, which will improve public participation in political activities and processes at the national and grassroots levels. It has also been registering all citizens and inhabitants within the country's borders.

Notably, the government has been working to improve itinerant courts in order to ensure that access to justice is available across Sierra Leone. It has also been focusing on strengthening local courts in terms of personnel, infrastructure, responsiveness and accountability, as well as implementing the provisions of the Legal Aid Act including the setting up and equipping of the Legal Aid Board and strengthening community engagement and involvement in local needs policing (Sierra Leone 2012). These strategies have provided avenues for reducing the number of days needed to deliver a verdict and helped in maintaining records of allegations, prosecutions, convictions and access to justice.

When SSL starts to collect qualitative data, it can easily align with the global and national targets and indicators in Table 16 below since the institutions set up to implement and monitor democratic principles are all based on Western standards. The establishment of the Office of the Ombudsman, Anti-Corruption Commission and Credit Reference Bureau at the Bank of Sierra Leone, strengthening the military and police force and reforming the Judiciary imply that the government is committed to governance and human rights. The government can align national priorities with global and national targets and indicators and adopt data collection techniques that meet international standards.

Table 16. Establish open, accountable, inclusive and effect institutions and rule of law and peaceful and inclusive society: Targets and indicators		
Target	Indicator	Notes
Provide free and universal legal identity, such as birth registrations	Percentage of children under 5 who are registered with the civil authority	Refers to the number of children under five years of age registered with the civil authority as a percentage of the total population of children under five.
_	Proportion of adults with a basic legal identity document Average time between filing	Refers to the number of adults (18 years of age and over) with a basic legal identity document as a percentage of the total adult population. Collecting data would be hard in Sierra Leone, but
Monitor and end discrimination and inequalities in public service delivery, the rule of law, access to justice and participation in political and economic life on the basis of social status	a case and receiving a verdict	SSL could work with the Judiciary to plan how to collect relevant information.
	Proportion of seats held by women and physically challenged people in national or local government	Includes national and local government, as well as municipal leaders (mayors) for Sierra Leone's six cities.
	% of adults with an account at a formal financial institution, disaggregated by sex	Denotes the percentage of the population with an account (by one's self or together with someone else) at a bank, credit union, another financial institution (e.g., cooperative, microfinance
		institution) or the post office (if applicable), including individuals who have a debit card. This is the same indicator used under the candidate SDG on energy and infrastructure, but in this case it is disaggregated by sex.
Improve personal safety	Prevalence of violence against women, including domestic violence	Violence against women is "any act of gender-based violence that results in, or is likely to result in, physical, sexual or mental harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life" (UN 1993). Information would likely be based on self-reporting (survey data and reporting to the Family Support Unit of the
		Sierra Leone Police, but these data would only cover reported cases, not the total number of cases).
	Violent death per 100,000	Classification of violent death includes killings in war or conflicts, non-conflict deaths and self-inflicted deaths (suicides), while non-conflict deaths include intentional homicide, killings in self-defence, killings in legal interventions and non-intentional homicide (UNODC 2014).
Reduce bribery and corruption in all forms	Survey data regarding bribes or gifts for service from government officials — "In the past year, how often (if ever) have you had to pay a bribe, give a gift, or do a favour to government officials in order to get a document or receive a service."	Refers to the proportion of people who have paid a bribe in the past year at the time of being surveyed. Data are collected through perception surveys and the findings are disseminated to the public with no associated punitive measures.

National		
Monitor and end discrimination and inequalities in public service delivery, the rule of law, access to justice and participation in political and economic life on the basis of social status	Proportion of senior managers who are women	Refers to the number of women in senior management and government-appointed positions as a percentage of the total number of senior management and government-appointed positions
Increase access to justice	Proportion of legal aid applications approved	Refers to the number of legal aid applications approved as a percentage of total legal aid applications received. Notably, the Legal Aid Act of 2012 embraced paralegals, which could change figures.
	Proportion of parties appearing in court without legal counsel because they cannot afford it	Refers to the number of parties who appear in court without legal counsel because they cannot afford it as a percentage of all parties appearing in court.
	Proportion of people who are aware of their fundamental rights, the law and the legal system	An important component of access to justice is the extent of citizens' knowledge about the legal system. The indicators used to measure this parameter are largely qualitative in nature. Through surveys and government statistics, citizens' overall legal awareness can be further measured by assessing their knowledge/familiarity of their fundamental rights and freedoms, criminal matters that can be brought to court, legal institutions that can handle cases, as well as court and legal procedures (UNDP 2003).
Increase public participation in political processes,	Proportion of eligible voters who vote in national elections	Measures the number of registered voters who voted in the last national election.
including elections at all levels of government	Proportion of eligible voters who vote in local government elections	Measures the number of registered voters who voted in the last local government election.
Reduce bribery and corruption	Number of Sierra Leonean firms or individuals prosecuted and convicted	The Anti-Corruption Commission's National Corruption Perception Survey and Transparency International's Corruption Perceptions Index are data source options, but they could not serve as official sources. Additional work would be needed to develop an official measure of corruption in Sierra Leone.



Context

Under the MDGs, the global partnership for development was defined as the commitment made by developed countries to provide assistance to the developing world, measured in terms of aid flows, trade and debt relief. Developing countries, for their part, were expected to reciprocate with a deep commitment to effective aid management, good governance, sustainable development and poverty reduction. This particular goal has been considered to be unique among the MDGs for at least two reasons. First, it is not tied to any specific sector such as education or health, but rather is an omnibus category, apparently designed to facilitate international support for the enhancement of progress on the other MDGs. Thus, it addresses issues such as meeting aid targets, provision of debt relief, improving market access as well as access to information and communication technologies and essential medicines. The targets subsumed under this goal have been consequently considered to be broad statements of intentions, somewhat loosely structured and generally not measurable. This is in contrast to the other MDGs, which are more sector-specific and have engendered more effort at data generation and monitoring. The second unique feature is its focus on the actions required of developed countries, international financial institutions and the private sector, and operation more at the global than the national level. These characteristics have had implications for data requirements at the national level.

Current Situation

From 2004 to 2008, official development assistance (ODA) per capita in Sierra Leone was at an average of US\$75.06. Total ODA fell from US\$376 million in 2004 to US\$340 million in 2005, then peaked at US\$545 million in 2007 due to democratic general elections in the country. While absolute figures have remained steady, ODA has fallen slightly in relative terms as the country's economy has grown. Figure 3 presents total annual aid flows into Sierra Leone for the 2007-10 period. The main donors during this period were the European Union, United Kingdom, UN, World Bank, IMF, African Development Bank, Ireland, United States and Germany. The United Kingdom, United States and recently Germany and Ireland have accounted for almost 70 percent of bilateral ODA, with the United Kingdom's Department for International Development being the most significant bilateral donor (Suzuki, Bangura and Bangura 2011, 245, 248).

Net ODA consists of loans made on concessional terms (net of repayments of principal) and grants by official agencies of the members of the Organisation for Economic Co-operation and Development's Development Assistance Committee, multilateral institutions and non-Development Assistance Committee countries. ODA is used to promote economic development and welfare in recipient countries. It includes loans with a grant element of at least 25 percent (calculated at a rate of discount of 10 percent). Net official aid refers to aid flows (net of repayments) from official donors to countries and territories in Part II of the Development Assistance Committee List of Aid Recipients. As seen in Table 17 below, net ODA received was relatively stable over the last five years.

Such reliance on a small number of donors can create risks of aid volatility, but Sierra Leone has been a favoured nation, with the UK Department for International Development, European Union and US Agency for International Development being development partners who have aligned their support to the government of Sierra Leone's development priorities for greater impact. Multilateral institutions such as the African Development Bank, IMF and World Bank have normally aligned their support to thematic areas in the MDGs and would likely continue as such for the SDGs since global partnership for sustainable development will likely be geared towards developing education and health as well as improving connectivity infrastructure across the world.

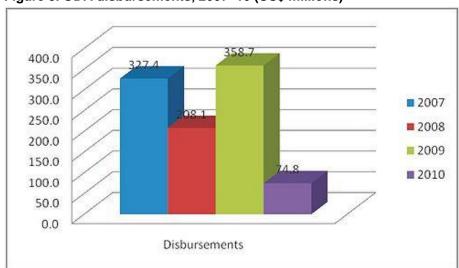


Figure 3. ODA disbursements, 2007-10 (US\$ millions)

Source: World Health Organization (2014).

Table 17. Net ODA and official aid received (current US\$)			
2009	2010	2011	2012
448,260,000	466,850,000	425,300,000	442,820,000
Source: OECD (2015). ²⁹			

ODA inflows into Sierra Leone were estimated at 7.4 percent of GDP, equivalent to US\$29 per person, in 2008. According to the Gleneagles scenario, which refers to ODA commitments made by Group of Eight countries at their Gleneagles Summit in 2005, ODA was to increase to 22 percent of GDP by 2010, which was the amount required to move Sierra Leone out of poverty according to PRSP II. In a recent study on the macroeconomic implications of scaling up ODA under the Gleneagles scenario, the IMF indicated that an increase in ODA inflows would have a significant positive impact on economic growth and poverty reduction without a major and lasting negative effect on macroeconomic stability. However, absorptive and administrative capacity building challenges would need to be addressed. Figure 4 below presents ODA sector allocations for the 2008–10 period.

Sierra Leone's total external debt to various multilateral, bilateral and commercial agencies, including arrears, decreased from US\$1.7 billion in 2004 to US\$1.2 billion in 2005, but returned to US\$1.7 billion the following year. The country experienced a decreasing trend in total volume of debt, moving from US\$1.8 billion in 2005 to US\$0.6 billion in 2008. As of 2009, the country's preferential market access was at approximately 94.4 percent. Its exports to the United States entered duty-free on a most-favourednation basis. Exports have increased by more than 50 percent since 2001.

²⁹ Data are available online at www.oecd.org/dac/stats/idsonline.

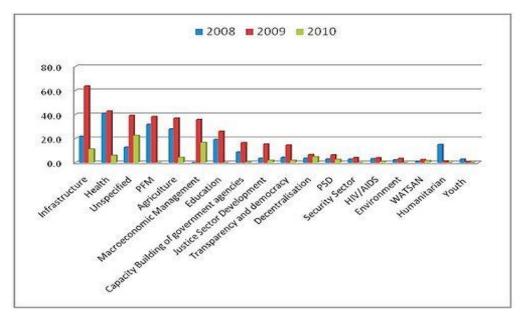


Figure 4. ODA sectoral disbursements(Millions of dollars), 2008-10

Source: World Health Organization (2014). Note: PFM refers to public financial management; PSD refers to private sector development and WATSAN refers to water and sanitation.

Telecommunications facilities could be used as proxy indicators for the target on access to technology and affordable medicine, since cellular phone use has increased significantly. Evidence indicates that the number of mobile network operators increased from two to five between 2001 and 2009. Based on the World Bank's 2007 World Development Indicators, the number of cellular phone subscribers was 13 per 100 people and the number of internet users was 0.2 per 100 people – well below global averages. Computer use by the government, companies and NGOs has also increased. However, computer use in universities as well as junior and high schools has been very limited and needs urgent attention. It has been suggested that increased access to the internet in particular and computers more generally would help enhance Sierra Leone's technological competitiveness.

Previous and Ongoing Efforts

In 2009, the government of Sierra Leone approved a new aid policy, which was endorsed by the country's main development partners (see Government of Sierra Leone 2009a). Development partners also endorsed the government's Agenda for Change, the UN's Transitional Joint Vision (UNIPSIL 2009) and the Joint Assistance Strategy of the African Development Bank, International Development Association and World Bank (African Development Bank 2009). These policies were fully aligned with Sierra Leone's national development agenda. The UNDP provided technical assistance to the government during its formulation of the Agenda for Prosperity, which marked the beginning of Sierra Leone's adoption of major transformative development strategies and policies that will support the country's transition to middleincome status within the next 25 years and becoming a net lender within 50 years.

The UNDP, in partnership with the UK Department for International Development, has been supporting the tracking of progress towards MDG achievement, including through analysis of ODA using the Development Assistance Database, which records all ODA flows to Sierra Leone (Synergy International 2015). This approach has increased transparency and allowed for greater public scrutiny.

In 2011, the UNDP documented the following results:

- The Millennium Development Goals Progress Report 2010 was successfully launched by the Ministry of Finance and Economic Development (see Government of Sierra Leone 2010). The report received critical input from a number of ministries, departments and agencies and support was provided to SSL for improved MDG data collection through the establishment and operationalisation of an MDG Unit within SSL.
- Housed in the Ministry of Finance and Economic Development, the Development Aid Coordination Office enhanced capacity to effectively monitor and report on ODA, which enabled more informed decision-making by the government in the budget allocation process and the coordination of aid at the national, district and sectoral levels, as well as supported the government in dialogues around aid effectiveness, including those associated with the Collaborative Africa Budget Reform Initiative, International Aid Transparency Initiative and International Dialogue on Peacebuilding and Statebuilding.

National Priorities to Support a Global Partnership for Sustainable Development

MDG 8 has been criticised for being riddled with inherent shortcomings, which have contributed to a number of unintended negative effects on recipient countries. Some of the main criticisms have highlighted that MDG 8 has failed to incorporate sustainable development considerations, human rights commitments and stakeholder accountability and has perpetuated traditional donor-recipient relationships that result in insufficient attention being paid to non-aid financing. In this regard, MDG 8 has been deemed inadequate and unable to fulfil its primary function of implementing a sustainable development framework and fostering international partnerships. Thus, the challenges have appeared to lie in the "interdependent mix of financial resources, technology development and transfer, capacity building, inclusive and equitable globalization and trade, regional integration, as well as the creation of the national enabling environment required to implement the new sustainable development goals, particularly in developing countries" (UNDESA 2014).

While still being unachieved at the global level, MDG 8 may successfully be implemented at the national level. Sierra Leone has a strong partnership with the international community and has received a lot of financial assistance. As shown in Table 17, ODA levels remained stable in 2010 following the introduction of the new aid policy, with ODA per capita at around US\$80.

Two of the major challenges for implementation of global partnership will be the predictability of ODA disbursements and ensuring alignment with national development priorities. Therefore, reliable data on ODA flows in Sierra Leone should be collated to enable the government to monitor and manage aid flows.

Thus, the government of Sierra Leone will need to focus its efforts on the following areas in order to ensure that the SDG on global partnership for sustainable development can be monitored:

- Enhancing effective aid coordination practices.
- Increasing the utilisation of opportunities provided by the New Partnership for African Development and other regional organisations.
- Enhancing effective negotiation of national and international contracts.

National-level priorities were highlighted by stakeholders and participants during the inception workshop and focus group discussions for this study (see Figure 5). The priorities were selected for reflecting both the objectives of the SDGs and needs of Sierra Leone.

Figure 5. Priorities for global partnership for sustainable development

Official development assistance

- Proportion of ODA devoted to support of basic social services
- Proportion of untied ODA

Market access

- Proportion of total developed country imports from developing countries admitted duty free
- Average tariffs imposed by developed countries on agricultural products, textiles and clothing from developing countries
- Agricultural support estimate for Organisation for Economic Co-operation and Development countries as % of their GDP
- · Proportion of ODA provided to help build capacity

Debt sustainability

- Debt relief committed under Heavily Indebted Poor Country Initiative and Multilateral Debt Relief Initiative
- Debt service as percentage of exports

Access to technology and affordable medicine

- · Proportion of population with access to affordable essential drugs on a sustainable basis
- Fixed-telephone subscriptions per 100 inhabitants
- Mobile-cellular subscriptions per 100 inhabitants
- Internet users per 100 inhabitants

The proposal for the SDGs by the Open Working Group on SDGs included the candidate goal "Strengthen the means of implementation and revitalize the global partnership for sustainable development" (OWG 2014). A number of the global and national targets and indicators for this study, presented in Table 18, reflect the Open Working Group's target areas. Indicators related to debt relief, market access and aid provision for key priorities identified by the Open Working Group, such as meeting the ODA to gross national income ratio target and supporting statistical capacity and domestic resource mobilisation in developing countries, have been included. Indicators related to the specific needs of developing countries have also been included, such as support for productive capacity, climate adaptation and mitigation for small-island states, and aid for trade for least developed countries and small-island and landlocked developing states.

Specific indicators outlined below are in line with the Open Working Group's candidate goal and would enable accurate monitoring of this goal area.

	a global partnership for susta Indicator	ainable development: Targets and indicators Notes
Target Global	mulcator	Notes
Create an enabling environment for sustainable development	Low-income country debt forgiveness or reduction (% of GDP)	Debt forgiveness or reduction shows the change in debt stock due to debt forgiveness. It is derived by subtracting debt forgiven and debt stock reduction from debt buyback (World Bank 2014a).
dovolopinion	Share of trade in goods and services from low-income countries under duty-free, quota-free market access Existence of laws for ensuring country-by-country reporting by multinational corporations, disclosure of beneficial ownership and preventing money laundering	This indicator tracks the proportion of goods and services from low-income countries that enter developed countries' markets under preferential market access or on a most-favoured-nation basis. This indicator is meant to provide an indication of countries' efforts to address tax evasion and prevent money laundering. Notably, Sierra Leone enacted the Anti-Money Laundering and Combating of Financing of Terrorism Act in 2012.
Increase financing to productive capacity in low- and middle-income countries	Share of aid to the productive sector Proportion of foreign direct investment to the productive sector Share of South-South cooperation to the productive	Aid is defined as ODA. The productive sector is defined as infrastructure, agriculture and manufacturing. The productive sector is defined as infrastructure, agriculture and manufacturing. The productive sector defined as infrastructure, agriculture and manufacturing.
National	sector	
Address the special needs of fragile states, least developed countries, smallisland and landlocked states	Total aid allocated to least developed countries Proportion of aid allocated to least developed countries Total aid for trade financing allocated to least developed	Net ODA recorded by the Development Aid Coordination Office housed in the Ministry of Finance and Economic Development. Net ODA recorded by the Development Aid Coordination Office housed in the Ministry of Finance and Economic Development. Net ODA recorded by the Development Aid Coordination Office housed in the Ministry of
	countries and small-island and landlocked states Proportion of aid for trade financing allocated to least developed, small-island and landlocked states	Finance and Economic Development. Net ODA recorded by the Development Aid Coordination Office housed in the Ministry of Finance and Economic Development.
Promote better statistics for development	Proportion of aid allocated to statistical capacity building in developing countries Total aid allocated to statistical capacity building in developing countries	Aid, defined as ODA, to SSL needs to be recorded (if any).
Support climate change adaptation and mitigation in developing countries	Official climate financing that is incremental to ODA	This indicator was suggested by the Sustainable Development Solutions Network (2014). Through the Conference of the Parties to the UN Framework Convention on Climate Change, developed countries have pledged to provide US\$100 billion per year in climate finance by 2020. This indicator would track official (i.e., public) climate finance provided by each developed country as a

		contribution towards the overall target of at least US\$100 billion per year.
Strengthen domestic resource mobilisation of developing countries, providing international support to improving tax collection as well as tax and natural resource revenue transparency	Proportion of aid to support taxation	The African Development Bank has promoted good practices of public financial management in Sierra Leone, while the UK Department for International Development has supported the strengthening of the National Revenue Authority.
Fully implement ODA commitments to provide 0.7% of gross national income to developing countries	Ratio of ODA to gross national income	The ODA commitment to provide 0.7% of gross national income target was established in 1990. Notably, net ODA to Sierra Leone has been fairly stable for the last five years.
Reduce per capita waste through prevention, reduction, recycling and reuse	Estimate of transboundary movement of hazardous waste and recyclable materials	Hazardous wastes and hazardous recyclable materials typically exhibit hazardous characteristics. In Sierra Leone, these characteristics are defined by taking into account the hazard criteria established under the Economic Community of West African States Common Approach on Migration and Protocol on the free movement of goods, services, persons and capital.

Measuring Progress on Post-2015 in Sierra Leone

Overview of the National Statistical System

Organisation

SSL replaced the Central Statistics Office, which had been in operation since independence. It was established by the Statistics Act of 2002. As such, SSL is mandated to coordinate, collect, compile, analyse and disseminate high-quality and objective official statistics to assist informed decision-making and discussion within the government, private sector and media, as well as the wider national and international communities. Following the 2012 general elections, a structural transformation occurred at SSL which resulted in the first NSDS not being implemented; the head of SSL was unceremoniously removed and a high attrition rate of trained staff ensued. This did not align with the plans of the international community, which was needed to finance the strategy. Massive staff attrition gripped SSL and its capacity to perform its duties became questioned by donors and other stakeholders. However, the initial strategy laid the framework for stationing statisticians in ministries, departments and agencies and established the need for collaboration with SSL in all data collection exercises within the country. It laid the guidelines for pooling resources for national statistical activities rather than having each institution seek funds for its own statistical activities. SSL has been undergoing a restructuring phase during which the second NSDS was developed. The second NSDS is a five-year statistical work programme that provides statistical data on the country's performance and progress in achieving national priorities, the MDGs and overall poverty reduction (Statistics Sierra Leone 2013c).

Over the years, SSL has conducted a series of surveys with support from various partners. Recently, it conducted and published the findings of the 2013 DHS, which monitors infant mortality rates, the prevalence of HIV/AIDS, various health-related issues including anemia, and social issues such as child labour and the effects of female genital mutilation. It also provides information on sexual education, such as the use of contraceptives. The DHS is conducted every five years to populate a database that can be used by the government, researchers, NGOs and CSOs to investigate topics related to population, health and nutrition. The MICS is also conducted every five years, while the Sierra Leone Integrated Household Survey (SLIHS) is conducted every eight years. Recently. SSL has been carrying out data collection for the country's second Labour Force Survey (LFS).

As the head of SSL, the Statistician General makes all executive decisions related to the collection and production of data in Sierra Leone. The Deputy Statistician General and Directors of Divisions work below the Statistician General. The Director of Divisions has 14 district offices that are managed by the Deputy Statistician General. Currently, 161 employees work at SSL, which regularly seeks out financial assistance from the government or donors to support its capacity to carry out surveys, data input and analysis. SSL has three main divisions: Economic Statistics, Demographic Social and Regional Statistics, and the Geographical Information System.

In 2008, SSL recruited and deployed eight statisticians to eight ministries to enhance data collection efforts and create focal points to liaise with SSL on statistical activities so that SSL can provide technical oversight. The ministries included the Ministry of Agriculture, Forestry and Food Security, Ministry of Trade Industry and State Enterprises, Ministry of Labour and Social Security, Ministry of Transport and

Aviation, Ministry of Tourism and Cultural Affairs, Ministry of Health and Sanitation, Ministry of Education, Science and Technology, and Ministry of Social Welfare, Gender and Children's Affairs.

Official Producers of Data

There are three main types of data based on different sources: census data, sample survey data and administrative data. Generally, the first two types of data are largely produced by SSL, while the third type is a by-product of the daily activities of ministries, departments and agencies, which supply SSL with the necessary data to produce statistical outputs. There are several agencies at work in Sierra Leone's national statistical system, all of which require adequate resources for that system to function properly. Other public organisations, such as the Decentralisation Secretariat, Ministry of Trade and Industry, Family Support Unit of the Sierra Leone Police, Planning and Research Directorate of the Ministry of Social Welfare, Gender and Children's Affairs, and Bank of Sierra Leone, also produce data independently. Though SSL remains the primary source of data for the majority of Sierra Leonean data users, non-official data is used as a supplement in some cases.

Almost all of SSL's data are made public, with some of those data being made available online. The Bank of Sierra Leone provides information on economic indicators such as interest rates, exchange rates, money supply and credit to the public. Other data producers may have additional requirements and/or restrictions involved in accessing their data, such as service fees and non-disclosure agreements. The Customs Department of the National Revenue Authority often collects far more information than it reports as official statistics in national publications and contributes to international organisations' databases, such as the IMF's Direction of Trade Statistics and UN Commodity Trade Statistics Database (Comtrade). For example, most goods arriving into the country are classified into two categories, re-exports and goods in transit. Obtaining information from customs and deciphering it poses challenges, as well as requires regular on-site visits and contacts within the government. Additionally, the National Revenue Authority has a Planning, Research and Documentation Directorate that is charged with the responsibility of collecting statistics on revenue from different taxes in the country. The data published by SSL are used by a diverse range of groups including governments, community groups, corporations and individuals.

Unofficial Data Producers

Normally, the vast majority of economic, social and environmental data are collected, processed, compiled and produced by official sources, including national statistical offices, ministries, departments and agencies involved in the production of statistics, and international organisations, such as the African Development Bank, World Bank and IMF.

Non-official data are generally less reliable than official data. A wide array of organisations can be considered non-official sources, including NGOs, businesses and universities. Unlike official sources, non-official sources often have their own agendas and are not legally bound to act in the public interest. NGOs, particularly advocacy groups, are often visibly biased, making it difficult to trust in the reliability of their data. In addition, non-official sources often lack the expertise and resources of official sources. In terms of the former, academics are a clear exception - they usually have relevant expertise and a commitment to objectivity. Still, official data are generally preferable. Nevertheless, non-official data are frequently used to address data gaps. For example, international organisations use non-official data "to fill gaps or to improve data quality and comparability" for data provided by official sources (UNSD 2013). Governments sometimes use non-official data or organise fast-track surveys to inform and justify their decisions.

Key Sources of Data

The data mapping process identified a number of key data sources. In the goal areas related to poverty and employment, the PHC, DHS and SLIHS are sources of frequent information. The Ministry of Education, Science and Technology conducts the Census of Schools to collect data on gross and net enrolment, completion rates and parity indices in collaboration with the SSL Desk Officer assigned to the ministry. The Ministry of Health and Sanitation has the Births and Deaths Division that registers vital statistics, the Planning, Monitoring and Evaluation Directorate that collects data from all Peripheral Health Units and health clinics in the country on pregnant and lactating women, infants and under-five children, and the Meteorological Division that collects data on climate and weather conditions, recording daily and annual rainfall, humidity, pressure and temperature, among other things. The Planning, Evaluation, Monitoring and Statistical Division of the Ministry of Agriculture, Forestry and Food Security collects data on the vulnerability of communities, crop production and productivity, livestock and food security in general. The Environmental Protection Agency collects data on environmental issues and envisages geodata collection as an option to catch up with statistical demands.

Table 19 below summarises key sources of data in Sierra Leone and the SDG goal areas that they seek to address. Notably, the World Bank, International Labour Organization and African Development Bank have collaborated with the government of Sierra Leone to collect specific data, such as the Enterprise Survey. Further, the DHS and MICS are independent surveys with different objectives, the former being demographic and latter investigating the issues of pre-primary schooling, school completion rates, HIV/AIDS prevalence and domestic violence, among others. SSL could harmonise methodologies and sampling techniques to derive estimates for under-five stunting and wasting, teenage pregnancy, preprimary schooling, national identification (national identity card issued by the National registration Secretariat in Freetown), and birth and death registrations, to mention a few indicators. It is not feasible for all donors and NGOs to investigate the same issues.

Sources	sources across goal areas Description	Major changes	Implication of changes	Goal area
Population and Housing Census (PHC)	The PHC is designed to provide information about people in Sierra Leone, patterns of migration, and demographic and social characteristics. It is a mandatory survey that is conducted every 10 years. Data are available from SSL for 1963, 1974, 1985 and 2004.	December 2014 had been slated date for the PHC, which was postponed due to the Ebola outbreak.	The enumeration areas drastically changed after the civil war given resettlement and reintegration. New methodologies have been rapidly introduced with limited testing.	PovertyEducationEmployment and inclusive growth
Multiple Cluster Indicator Survey (MICS)	The 2010 MICS is a nationally representative survey of households, women and children. The main objectives of the survey are: (i) to provide current information for assessing the present situation of women and children in Sierra Leone – including the identification of vulnerable groups and disparities among groups – in order to inform policies and interventions; (ii) to produce data to monitor progress towards the achievement of goals and targets that include the MDGs and those of World Fit For Children.	The MICS contributes to the improvement of national statistical, data and monitoring systems and strengthening national capacity and technical expertise in the design and implementation of these systems.	The 2010, 2005 and 2000 surveys have a few areas of overlap for trend analysis and comparison, though new issues crop up in each successive MICS. The MICS and DHS are not easily comparable.	Poverty Education
Demographic and Health Survey (DHS)	The 2013 DHS sample was designed to produce reliable estimates of the most important variables for the country as a whole, urban and rural areas, and the four regions and the 14 districts. The sampling frame used for the 2013 DHS is the latest PHC, which was conducted in 2004. The frame excluded the population living in collective housing units, such as hotels, hospitals, work camps, prisons and boarding schools. Provides reliable estimates of health and demographic indicators in the areas of fertility, mortality, family planning, maternal and child health, nutrition, malaria and HIV/AIDS.	The 2013 DHS was the second survey of this kind to be conducted by the government.	DHS data will be useful to academic and researchers interested in analysing the current situation and trends in Sierra Leone as well as conducting comparative, regional or crossnational studies.	Health Gender equality
Labour Force Survey (LFS)	This survey provides estimates of employment and unemployment. The main objective of the LFS is to divide the workingage population into three mutually exclusive classifications – employed, unemployed, and not in the labour force/inactive – and provide descriptive and explanatory data for each of	The LFS questionnaire was modified and non-traditional modes of data collection have been tested (the use of smartphones and personal digital assistants).	The questionnaire has been reviewed several times to check for logical flow and relevant issues related to employment, the labour market and qualifications/the highest educational level attained.	EducationEmployment and inclusive growthGovernance

	these categories. Data are available for 1989/90 and 2014.			
Sierra Leone Integrated Household Survey (SLIHS)	Sierra Leone is thinking about conducting a third SLIHS, which provides data on labour and employment, income and expenditure, and informal sector employment. Data are available on request for 2003/04 and 2011. The 2011 report is available online.	This is a national survey that provides the most reliable data on employment and labour, employment and time use, and the poverty profile.	The 2003/04 and 2011 SLIHSs are reasonably comparable.	PovertyEducationEmployment and time useHousingHealth
GDP by income and by expenditure accounts	The main data published are: GDP and gross national product at current and constant 2001 prices (by 16 economic activities if necessary). Other aggregates include disposable income, net national lending and borrowing, an account for general government expenditure including capital and recurrent expenditures, GDP at factor cost and market prices by sector, gross domestic capital formation by kind of asset at current prices and constant 2001 prices, indirect taxes net of subsidies by sector at current prices and constant 2001 prices, and compensation of employees at current prices and at constant prices. The main items in the government's institutional sector account are: general public services, defence, education, health, social security and welfare, housing, other community and economic services and other purposes.	Statistical revisions are carried out regularly to ensure that public accounts have the latest information. This is also done to implement improved estimation methods. SSL carries out these annual revisions in collaboration with at least one of the following international organisations: the World Bank, IMF, African Development Bank and UN Economic Commission for Africa.	SSL provides full details on the revisions it undertakes in consonance with the UN Economic Commission for Africa, World Bank and IMF, which aim to ensure that data quality is consistent and comparable over time. Another improvement is the estimation of the informal transportation sector and the diverse classifications in the questionnaires sent out. For example, instead of just transport, the questionnaires now include road, air, water and local airline. Specific questionnaires have also been designed to cover fishing and other businesses, such as driving schools, law firms, etc. Consolidated data on banks are now received from the Banking Supervision Department at the Bank of Sierra Leone; this is an improvement in data collection. Similar modalities are being put in place for insurance companies. Accounts have been rebased to a more recent year – 2001. Better methodologies have been introduced to suit the source data and improve the quality of output data.	Employment and inclusive growth Global partnership

Vital Statistics - Death	This is a mandatory administrative survey that collects demographic and medical information annually from all vital statistics registries on births and deaths at the Births and Deaths Department of the Ministry of Health and Sanitation. It collects administrative data regularly. Data are available upon request.	The last decade has seen the issue of births and deaths take centre stage.	Coverage has increased considerably but there are some doubts about data quality.	Governance
Geographical Information System data*	The Environmental Protection Agency conducts a review of the different data-producing institutions in Sierra Leone on protected areas, species, climate, vegetation, fire and various socio-economic data. It provides all appropriate expert contacts.	Geo-data collection will be very useful going forward. There is a need for the agency to link with universities so that the Department of Geo-informatics and engineering faculties can work together.	A database repository can be established at the university for use by researchers, development economists, practitioners and the like.	Environment and disaster resilience, including mitigation and adaptation in climate change
Enterprise Survey**	The survey examines the factors that shape the business environment. It covers small, medium and large firms. The surveys are administered to a representative sample of firms in the non-agricultural formal private sector. The sample is consistently defined in all countries and includes the entire manufacturing sector, the services sector, and the transportation and construction sectors. Public utilities, government services, health care, and financial services are not sectors included in the sample. The topics covered in the survey include infrastructure, trade, finance, regulations, taxes and business licensing, corruption, crime and informality, finance, innovation, labour and perceptions about obstacles to doing business.	The Enterprise Survey collects a wide array of qualitative and quantitative information through face-to-face interviews with firm managers and owners regarding the business environment in their countries and the productivity of their firms.	The qualitative and quantitative data collected through the survey connect a country's business environment characteristics with firm productivity and performance. Note that the SDGs seek improvement in productivity.	Infrastructure Trade Finance, regulations, taxes and business licensing Governance (corruption and crime) Informality, finance, innovation, and labour

Sources: Statistics Sierra Leone (2003/2004, 2004, 2008, 2010/2011) unless otherwise stated. * conducted by EPA with support from Protected Areas Resilient to Climate Change (PARCC); ** conducted by the World Bank - previously the ILO - in collaboration with the Ministry of Labour and Social Services for enterprises with six or more employees.

Data Availability for Post-2015

SSL collects data through the use of censuses, sample surveys and administrative records. Four censuses have been held in Sierra Leone (in the years 1963, 1974, 1985 and 2004), with a fifth being postponed due to the Ebola outbreak. Four MICSs have also been conducted, while the DHS is conducted every five years. The collection of administrative data, on the other hand, involves data compiled from records rather than questionnaires. Administrative records are maintained, for example, to regulate the inflow and outflow of goods across borders, assist in the legal processes involved in registering events such as births and deaths, the number of convictions per month, the number of reported cases of domestic/sexual violence, and the number of vehicles registered and licenced. The amount of information that SSL collects from its sources – across areas such as labour, education, demography, rural-urban migration and health - generally means that researchers and other frequent data users are limited by huge gaps in data availability. For any data available nationally, especially data on socio-economic variables, the data are disaggregated by locality, region, district, sex and age.

Data Availability for Post-2015 Targets and Indicators

The national statistical system is decentralised to some degree, with different data producers having different responsibilities and capacities for data production and management. The main data producers include SSL, ministries for health, labour, education, industry and agriculture, public sector institutions such as the central bank, private sector institutions such as chambers of commerce and industry, courts and policing systems, research and academic institutions as well as NGOs. Institutions should be properly coordinated by SSL to enable SSL to be part of all data collection activities to ensure quality and ascertain whether the methodological framework used meets both national and international standards. Institutions could also verify the nature of data collected by themselves and agree on how to monitor progress on socio-economic characteristics under the post-2015 agenda.

Despite high costs, Sierra Leone remains committed to conducting the PHC at least every 10 years. The last PHC was conducted in 2004 and plans are underway to conduct the next census in 2015. The population data gained from the PHC are an essential addition to the economic and social data generated by the national statistical system. Sample surveys, which are frequently large-scale (MICS, SLIHS, Core Welfare Indicator Questionnaire, DHS), have become the major sources of data for monitoring national development plans, PRSPs and MDG progress in Sierra Leone. With help from UNICEF, the MICS has been successfully conducted on schedule every five years since 2000, while the other surveys have been carried out irregularly. The DHS was first conducted successfully in 2008 and then again 2013 and the findings from both surveys were recently published. The first SLIHS was conducted in 2003 and its data were analysed in 2006/07 and 2010/11. The last Core Welfare Indicator Questionnaire was conducted in 2007.

According to international recommendations, agricultural and economic censuses are supposed to be conducted at least every 10 years. To date, this has not been the case in Sierra Leone. Collected data have provided in-depth information on the status of employment, youth unemployment, informal sector workers and the working poor. These are just a few examples of labour market indicators that are aligned with the SDGs. However, as seen with the agricultural and economic censuses, there are still serious data gaps within the national statistical system. Thus, steps should be taken to maintain field organisations on a continuing basis in order to retain the local technical expertise built up in the administration of these large-scale sample surveys.

The main data gaps identified in Sierra Leone are as follows: the supply of labour, labour market information system and number of people affected by natural disasters such as flooding. Moreover, there have been serious concerns that Sierra Leone has no comprehensive data on the number of disabled individuals, homeless/unsheltered children, orphans and Ebola victims. The lack of data availability in these key areas is an indicator of inadequacies within the national statistical system and persisting data gaps. Additionally, it is crucial that data from the above data sources be collected using a gendersensitive approach. Gender should be mainstreamed in national statistical legislation and SSL's structures and work programmes.

With the exceptions of the goal areas on poverty, education, and employment and inclusive growth, the data mapping process showed that data availability for global targets and indicators is weak, thus highlighting the need for data collection and analysis. It is important to note that there is a dearth of data for global indicators. This has raised serious concerns. The data mapping process showed that in most instances data were either unavailable for a specific global indicator or part of a short and disjointed series. For the global indicators on governance, for example, data would need to be collected through new survey instruments. With regards to national indicators, more than 20 indicators did not have available data. At the national level, data for the goal areas on governance, energy and infrastructure, and environment and disaster resilience require the most attention. For areas where non-traditional data collection methods appear easier, it may be advantageous to use participatory assessments, qualitative data collection and advanced technology such as geo-data collection or satellite imaging. Table 20 provides an overview of the general availability of data for the targets and indicators, with national targets and indicators represented by the shaded row. Data availability will be a major challenge as SSL will likely have difficulty meeting monitoring requirements for priorities under the post-2015 agenda given the standard datasets that it currently produces.

Table 20. Data Goal area	availability Targets	for measurin Indicators	g progress Indicator available	against global t Calculation from existing data needed ³⁰	Custom tabulation by	licators Data to be collected
End poverty						
Global	3	5	2	3		
National	2	2		2		
Ensure quality	education fo	r all				
Global	3	5		4		1
National	2	6	4	1		1
Create jobs, su	istainable liv	elihoods and ir	nclusive grow	th for all		
Global	4	7	4	1	1	1
National	3	7	4			3
Ensure energy	and develop	infrastructure	for all			
Global	2	8			1	7
National	1	7				7
Establish a sustainable, healthy and resilient environment for all						
Global	3	5	1	2		2
National	6	13	1			12
Establish open	, accountabl	e, inclusive an	d effect instit	utions and rule c	of law and peac	eful and
inclusive societ	ty					
Global	5	9	1			8
National	4	7				7
Establish a global partnership for sustainable development						
Global	2	6	1	1		4
National	6	10	1			9
Total						
Global	22	45	9	11	2	23
National	24	52	10	3	0	39

Quality of Data for Measuring Progress on Post-2015 in Sierra Leone

Statistics Leone's Quality Assurance Measures

There have been concerns about the quality assurance of data collected by SSL. There has been a perception that since SSL operates with technical assistance from the World Bank, UN Economic Commission for Africa and Economic Community of West African States, the data collected and produced are of good quality. In other words, just working with these organisations validates the quality of the data. Collection and analysis of data on poverty, employment and labour, infant and maternal mortality, gross and net education enrolment, school completion rate and parity indices have been carried out, but interpretability, accuracy, coherence and timeliness have been questioned.

Notably, the Statistics Act of 2002 has a specific mandate to improve data quality (see Sierra Leone 2002; see also Box 3). It gives SSL the statutory mandate to effectively plan and coordinate statistical activities in Sierra Leone with the aim of collecting, processing, analysing and disseminating accurate, clear, relevant, timely and high-quality statistical information on social, demographic, economic and financial activities to serve the needs of users, including the government and general public. The act

³⁰ Refers to instances when another data source is publicly available but additional efforts are needed to calculate the indicator.

³¹ Refers to instances when data exist but a custom tabulation request to SSL is required.

specifies the issue of maintaining and striving for high-quality data (Sierra Leone 2002). The international community in Sierra Leone, including the European Union, UK Department for International Development, UN, UNICEF, UN Educational, Scientific and Cultural Organization, Food and Agricultural Organization of the UN, and World Health Organization, has always played leading roles in the data collection process by either providing technical advice or experts. The World Bank has also been instrumental in the calculation of poverty and income inequality estimates. Additionally, the ILO has played its traditional role in data collection on child labour, the informal sector, unemployment, youth unemployment, time use, employment-to-population ratio, issues of the working poor and labour safety. These institutions have assisted SSL in surveys of their interest and sometimes helped in funding statistical activities.

Box 3. The framework for statistics in Sierra Leone

The focus of the framework for statistics is on improving the planning, prioritising, financing, managing and coordinating of statistical development activities to meet demands for high-quality statistics. SSL will be able to refer to this framework for guidance on statistical capacity building and standardisation of statistical estimates from various data producers using international standards, definitions and classifications to agree on credible official statistics. Development partners will be able to use it as an input in selecting programmes and projects to support. All stakeholders will be able to use it to promote effective partnerships and coordinate capacity building efforts. Once adopted by all stakeholders, the new framework is expected to help create much-needed synergies, reduce duplication efforts and promote sustained, credible statistical capacity in Sierra Leone. Its overall objective should be to improve development outcomes and good governance by strengthening the national statistical system in Sierra Leone. Specific objectives should include raising societal awareness of the role of statistical information, increasing user satisfaction by enhancing the quality and usability of statistical information, promoting greater use of statistical information and achieving synergies, cost-effectiveness and sustainability in the national statistical system.

Applying the Data Quality Assessment Framework

The data quality assessment framework used in this study was drawn from the IMF's Data Quality Assessment Framework (IMF 2003) and other international data quality assessment frameworks (see Annex 2). The framework uses the following five main criteria for examining data quality:

- Relevance
- Accuracy and reliability
- Timeliness and punctuality
- Accessibility and clarity
- Coherence and comparability

Under the Post-2015 Data Test initiative, research teams examined the quality of available data for global targets and indicators under each goal area against the five main criteria. The basket of data sources was examined and an overall score for each goal area was provided. Only key survey instruments that could potentially be used to monitor progress on a goal area were included in the overall assessment. Each criterion was scored on a scale of 1 to 5. A score of 5 indicates that data for the goal area meet all criteria sub-components, 3 indicates that more than half of the criteria sub-components have been met, while 1 means none of the criteria has been met. The scores 2 and 4 are used to describe intermediate levels for which sub-component criteria have been met. Each team was required to complete the data quality assessment for the global targets and indicators and assign scores for the national level, represented by the shaded row. The Sierra Leone research team could not apply the framework systematically to each

survey instrument identified through the data mapping process because of differences in methodologies that precluded comparisons. Surveys were therefore assessed on a score of 1 to 5 for each subcomponent.

Table 21 provides an overview of considerations in the assessment based on discussions with some data users and producers. The team leader consulted documentation on individual survey instruments as well as the data and discussed at length with SSL officials for clarifications. For survey instruments carried out by other government ministries, departments and agencies, such as the Environmental Protection Agency, the team leader discussed with the responsible personnel about geo-data collection, dissemination of results and coordination with SSL. The team leader also analysed the metadata and discussed them with responsible personnel in MDAs.

Table 21. Overarch	ning considerations in the da	ata quality assessment
Criteria, component	Sub-component(s)	Notes
Relevance, user needs	Procedures to track user needs and uses of statistics	While SSL normally consults with users, it needs further outreach to track user needs and uses of statistics for research purposes and evidenced-based decision-making.
	 Legislative requirement to consult with users on data collection 	The Statistics Act does not explicitly have provisions on consultations but statistical councils comprise representatives of the government and the public.
Relevance, user satisfaction	 Regular follow-up with users to ensure user satisfaction Periodic consultations with users for feedback Post-collection evaluations to compare data outcomes with user needs 	There had been no indication that SSL has collected information regarding user satisfaction though it presents, for instance, the pilot census report on radio and television. The NSDS promotes objective stakeholder meetings that intend to stimulate discussion and consensus among users and producers of statistics. Greater efforts are needed to obtain feedback beyond the government and national and international NGOs.
Accuracy and clarity, sampling and non-sampling errors	Compilation of user feedback to assess the relevance of statistical studies for user purposes	While feedback is noted by SSL, it is not compiled. SSL should compile user feedback to improve data quality assurance.
Accessibility and clarity, clarity	Staff training and development programmes for writing about statistics	Staff are trained by the ILO and some get bursaries for post-graduate studies, but no special report about staff development is published. This could be a productive new direction, especially in terms of retaining staff.

Limitations to the Quality Assessment

One major limitation of this data quality assessment is that it does not weight sub-components. Scoring on a scale from 1 to 5 was carried out without the use of any special weighting for frequency, clarity, comparability, relevance or number of indicators. The scores were based on researchers' experience with data availability, relevance, comparability and clarity. Another key gap identified through the assessment was consultations with data users. The NSDS should be required to explain the consultative scheme that SSL uses as well as the users and other producers of data with whom SSL must consult. Notably,

consulting with users is not explicitly documented in the Statistics Act. Thus, while it can serve as a check on the quality of data collected by SSL, the act lacks the framework for consultation procedures.

Results of the Data Quality Assessment

Generally, the results of the data quality assessment are not surprising. As outlined in the discussion above and evidenced in Table 22 below, the quality of official data in Sierra Leone is weak. The results revealed that there is room for improvement across the goal areas in terms of relevance, particularly with respect to ensuring that data correspond with and satisfy users' needs. However, the results also determined that the quality of data for the goal areas on poverty, education, and employment and inclusive growth is marginally better than that for other goal areas within the proposed SDG framework. Moreover, it is worth noting that higher scores also correspond with goal areas for which the bulk of sources come from SSL and for which significant support is provided by the international community. Table 22 gives an overview of the results across goal areas. National-level targets and indicators are the shaded rows.

Table 22. Results	Table 22. Results of the data quality assessment					
Goal area	Relevance	Accuracy and reliability	Timeliness and punctuality	Accessibility and clarity	Coherence and comparability	
End poverty						
Global	4	4	3	3	3	
National	4	3	2	3	2	
Ensure quality educ	cation for all					
Global	4	3	3	2	2	
National	4	3	3	2	2	
Create jobs, sustair	nable livelihoods	and inclusive gro	wth for all			
Global	3	3	3	3	3	
National	3	3	2	3	2	
Ensure energy and develop infrastructure for all						
Global	3	3	3	3	2	
National	3	2	2	1	2	
Establish a sustainable, healthy and resilient environment for all						
Global	4	3	3	3	3	
National	3	3	2	2	2	
Establish open, acc	Establish open, accountable, inclusive and effect institutions and rule of law and peaceful and inclusive					
society						
Global	3	3	3	3	3	
National	4	2	2	2	2	
Establish a global p	artnership for su	ustainable develor	oment			
Global	3	3	4	4	3	
National	3	2	2	2	3	

As identified in the table above, the data quality for global targets and indicators related to poverty, education, and employment and inclusive growth stands out. While timeliness and punctuality receive low scores, this is largely because the World Bank sometimes takes time to approve the cleanliness of data. Poverty received scores of 4 for relevance and for accuracy and reliability, while employment and inclusive growth received scores of 3 for accuracy and reliability as well as coherence and comparability. Poverty, education, and employment and inclusive growth received median scores for relevance as well as accuracy and reliability. While there are a few exceptions, the remaining goal areas tended to score lower across the board. The lower scores are largely due to a lack of evidence demonstrating user

consultations across the criteria for relevance, accuracy and reliability, and accessibility and clarity. In the areas of energy and infrastructure, environment and disaster resilience, and governance, coherence and comparability tended to score a 2 because of the lack of comparability between statistics derived from different sources or different periods of time in the cases of a number of survey instruments. In particular, the median scores for relevance as well as accuracy and reliability for the area of global partnership are explained by the predominance of foreign aid data as the key source for national targets and indicators, with very low scores for the indicator at national level, since they have little or no technical support.

Overall, the above table demonstrates that the quality of data for national targets and indicators in Sierra Leone is poor. National scores are significantly different from global scores because survey instruments used at the national level did not meet some of the sub-components for particular criteria. Although the government has made efforts to make data more easily accessible, increase consultations and follow up with users on policies and guidelines, the lack of transparency with regard to data revisions and the quality of data produced weigh down the overall score. Resources, sometimes required to carry out surveys are not adequate and the reliance on international support becomes problematic for the implementation of the laid out plans and as such, ad hoc procedures take precedence for want of data.

The Economic Policy Research Unit of the Ministry of Finance and Economic Development, the National Revenue Authority, the Research Department of the Bank of Sierra Leone, and SSL have been working on rebasing Sierra Leone's GDP figure. It is believed that this type of coordination among key data producers and ministries, departments and agencies will strengthen the quality of data in the country.

As mentioned, different institutions collect data using different methodologies. SSL collects data from nation-wide censuses and surveys, using international standards and statistical methods, and it uses secondary data from other data producers such as ministries. Ministries and other public sector institutions compile data mainly from administrative records, although some conduct censuses and surveys. For example, the Ministry of Education, Science and Technology undertakes an annual Census of Schools and the Ministry of Agriculture, Forestry and Food Security undertakes a census of agriculture. NGOs collect data mainly from participatory assessments, while research and training institutions usually conduct small-scale surveys. Thus, not all types of surveys conducted in the country follow due procedures laid out by SSL. It is this lacuna in harmonising survey procedures and standards that make comparability problematic.

Notably, international recommendations on concepts, definitions, classifications and frameworks for statistics frequently do not reflect the conditions in Sierra Leone, which inhibit their implementation. Improved internet access for data producers would improve data accessibility and adherence to international standards.

Political Economy of the Data Revolution

This section outlines the current state of data availability, collection and analysis in Sierra Leone as well as recent developments. Additionally, the government of Sierra Leone's commitment to improving data collection, accessibility and availability as well as support for the statistical capacities of SSL are discussed.

Understanding the Drivers of Data Gaps and Improvements

Factors responsible for the existence of data gaps may include financial, technical, institutional, capacity and political barriers. As Table 23 outlines, the government's focus has been primarily on data collection and input. A cursory look at the activities still be to be undertaken by SSL indicates the magnitude of the existing data gaps listed in the NSDS and PRSP III. Current challenges facing data collection include:

- A lack of capacity building at SSL and among other staff within the national statistical system
- The training component of the NSDS has not been implemented
- · No staff have been trained on labour statistics, child labour, and industrial and labour economics as there has been a lack of funding
- SSL has been unable to expand the number of statisticians due to a lack of funds
- Donor funds earmarked for the implementation of the NSDS were largely not disbursed to support the capacity building and data collection aspects of the NSDS

The following activities were planned but have not yet been carried out:

- LFS data have not been analysed
- · An agricultural database has not been created
- A census of business establishments and other economic surveys have yet to be conducted
- · Labour market policy and institutional reforms have yet to be implemented
- Some data collection still goes on without recourse to SSL

The following are pending activities of SSL as stated in the NSDS:

- Conduct the PHC in 2014
- Conduct or gather:
 - Gender-based violence survey
 - Crime and justice statistics
 - MICS-5 survey in 2015
 - Education census/surveys in 2015
 - District Health Facility Survey by 2014
 - Monitoring of the Free Health Care Survey
 - Quarterly crime and justice data collection exercise
 - Colligation of the Annual Statistical Digest

Table 23 below presents the key areas in which SSL seeks to improve. For all of the priorities listed. contributions from government and donor partners represent the main financing options.

Table 23. Priority flagsh system, 2013–17	nip policies, projects and strate	egies for improving the national statistical
Priorities	Key targets	Potential project strategies
Build a robust, coherent and transparent institutional, infrastructural and legal framework for the coordination of statistical activities in the country	Review the legal framework and incorporate the UN's Fundamental Principles of Official Statistics and best practices for effective data collection, table processing and dissemination Build new SSL offices	 Review the Statistics Act of 2002 to incorporate the UN's Fundamental Principles of Official Statistics Review the NSDS Construct new headquarters for SSL and its 14 district offices
Build an effective, unified and coordinated statistical system for delivering statistical products and services	Coordinate a decentralised national statistical system	 Employ, deploy and capacitate statisticians at ministries, departments and agencies as well as at district levels Provide material and financial capacity-building programmes, including enhanced remuneration and training on data collection and management for SSL
Provide credible macroeconomic data for monitoring of the economy	Produce key macroeconomic indicators such as GDP, consumer price index, producer price index, international trade, poverty, labour, employment, agriculture, tourism, transport, etc.	 Conduct detailed surveys such as the SLIHS in 2016 Conduct the Core Welfare Indicator Questionnaire in 2015 Conduct Quarterly Time Use Surveys Conduct monthly market-based and specialised surveys for the consumer price index Conduct quarterly and annual establishment-based surveys for national accounts, producer price index and business confidence index compilation Conduct the LFS Conduct annual agriculture surveys Conduct business establishment censuses Conduct tourism, international trade and transport statistics surveys, the annual Public Expenditure Tracking Survey, and surveys to collect energy and environmental statistics
Provide credible socio- demographic indicators for monitoring social indicators such as infant, child and maternal mortality rates, population growth and migration rates, school enrolment rates, etc.	Produce key socio-demographic indicators such as total population, mortality rates, enrolment rates, literacy rates, etc., disaggregated by sex	Conduct the PHC Conduct detailed surveys on gender-based violence, crime and justice, and education; the MICS-5 survey; and the District Health Facility Survey Compile the Annual Statistical Digest

Political and Legal Barriers

SSL is a quasi-autonomous institution under the development arm of the Ministry of Finance and Economic Development. Given that SSL is entirely dependent on financial support from the government of Sierra Leone, the possibility exists for its mandate and functions to be influenced by the government's political agenda and strategic interests. Because the budget allocation to SSL is low, there are bound to be reductions in activities that would normally be undertaken by the institution.

It was noted in the NSDS that, in absolute terms, SSL has received an increase in total funding from the government. However, SSL's proportion of funding received from the government's annual budget has been declining over time, thus posing a major challenge to continued funding of some activities. Additionally, SSL's ratio to GDP declined from 0.23 in 2009 to 0.2 in 2010 and then to 0.13 in 2011.32 In the 2014 budget, the government provided Le7.9 billion to SSL to cover the regular activities of data collection and analysis. In addition, Le18.6 billion was provided for the implementation of the PHC, DHS and LFS (Government of Sierra Leone 2015).

All levels of government in Sierra Leone have generally provided financial and technical support to SSL. It is hoped that SSL will be able to remain independent of political influence. If it is able, SSL will have greater incentive to carry out data collection, collation and analysis according to its mandate and international standards. Increased autonomy would enable SSL to work without oversight from various ministries, departments and agencies.

Availability and Accessibility of Nationally Produced Data

Internet access, smartphones and tablets remain limited in Sierra Leone. Regardless, SSL has been at the forefront of trying to utilise these new technologies for data collection. It has been experimenting with data collection using smartphones and personal digital assistants in particular. Additionally, SSL has been working with the Environmental Protection Agency to experiment with geo-data collection, which includes, for instance, data collection on land surveys using the Geographical Information System. If fibre optics are implemented in Sierra Leone, internet connectivity within the country would greatly improve. As a result, data that were previously only available in hard copy and at selected locations would become available online and be accessible by the general public.

With respect to data accessibility, it is important to differentiate between raw data and processed data. Raw data are defined as primary data that have been collected from a source. These sources include administrative records, sample survey questionnaires and census questionnaires. Raw data are compiled and manipulated to create processed data. Processed data are what SSL publishes and disseminates to the public. It should be noted, however, that SSL does not make raw data publicly available. This is normally due to ethics protocols specifically related to maintaining confidentiality and anonymity and protecting the identities of survey respondents. However, the Statistician General may request the raw data, but they can only be used for academic purposes. The Statistician General can also authorise the release of those raw data that are relevant and appropriate for the academic research.

Though the Freedom of Information Act has been enacted, many challenges remain. For example, awareness and understanding of certain legislation, such as the Freedom of Information Act, require a minimum standard of literacy. Given the low literacy levels in Sierra Leone, literacy remains one of the most pressing challenges.

Implications for Measuring Progress on Post-2015

As mentioned, the state of data availability, accessibility and quality in Sierra Leone remains poor. There is a dire need for the government to accelerate capacity building at SSL and make statistics a priority for

³² See Government of Sierra Leone (2013c) for more information.

development planning and policy formulation. The availability of data is heavily reliant on continued financial assistance from the government. As such, much of the funding has often been subjected to the political agenda and strategic interests of the government. This dependency on the government is evident, for example, when coordinating and guiding sample surveys. Despite the potentially biased funding, the biggest challenge facing data availability in Sierra Leone is the lack of predictable financial assistance received from the government. Ultimately, failing to address these issues will result in persisting data gaps and inability to accurately monitor the SDGs.

It is important to note that targets set for goals areas on poverty, education and health can be thoroughly monitored given that some of the indicators have direct bearing on the priorities of the Agenda for Prosperity. However, other targets and indicators, such as those for water and sanitation as well as infrastructure for roads, transport and communications, have been used as political campaign tools. The government has recently been heavily associated with success in these areas.

Conclusion

The Sierra Leone country study highlights the government of Sierra Leone's attention to collecting and disseminating high-quality data over the past decade. It also demonstrates its strong commitment to issues such as transparency, governance and gender equality. This commitment is clearest in the enactment of the three gender-based acts, Child Right Act, Legal Aid Act and Freedom of Information Act. Robust data are necessary for evidence-based decision-making and implementation of various initiatives. However, due to financial, institutional and capacity constraints in the country, the collection and dissemination of high-quality data and implementation of initiatives have only been partial.

Key Findings and Recommendations

Post-2015 issues have not been widely discussed among the general public in Sierra Leone. Discussions have largely been limited to academics, researchers, development workers, and civil society advocates and activists. However, PRSP III has been successful in generating awareness of the MDGs, which provides baseline knowledge that can be applied to the upcoming SDGs.

PRSP III identified Sierra Leone's priorities under eight pillars, each being critical to development and the aspirations of the government and citizens. All facets of the proposed SDGs can be found in PRSP III. The government's initiatives to reduce youth unemployment, improve renewable energy sources, enhance environmental sustainability and natural resource management, diversify the economy and strengthen the education sector are all critical to reducing poverty and improving livelihoods. However, inadequate financial and human resources have constrained the government in implementation.

Achieving the MDGs has always been considered an uphill task for Sierra Leone. There has been hope that the MDGs on universal primary education and global partnership for development would be met with sustained efforts. With the transition to the SDGs, the government of Sierra Leone will be required to monitor progress on many of the same goal areas including developing infrastructure, securing financial resources and strengthening human capital. This country study highlights the importance of addressing the issues of data availability, access and quality and the need to improve transparency and accountability within the government. It also provides relevant information on diverse aspects of the wellbeing of Sierra Leoneans.

Regarding recommendations, SSL requires an outreach programme that focuses on user feedback as a basis for change management. Staff development within SSL should be as well planned and focused as laid out in the NSDS. Since SSL's activities are financially dependent on the government, they are likely to be influenced by the government's political agenda and strategic interests. The persisting data gaps at SSL indicate that the country is not in a good position to accurately measure progress on the SDGs. Although some targets and indicators, such as those on poverty, education, employment and inclusive growth, have relatively better data available that are comparable in some aspects, more comprehensive data are generally required. Data are particularly needed for goal areas such as energy, the environment and governance.

Measuring progress on the SDGs will be a challenge for Sierra Leone. Going forward, SSL requires independence from the government of Sierra Leone in order to reduce political influence. As well, SSL should develop a framework for how it will coordinate with other ministries, departments and agencies to improve the frequency and quality of data collected. It also needs to map out a strategy to ensure that the data collected are aligned with the country's national priorities. On the other hand, the government of Sierra Leone should collaborate with development partners and multilateral institutions to ensure that the country has the financial and human resources necessary to carry out the required data collection for the SDGs. Additionally, efforts are needed to hold the government and stakeholders accountable for their actions. If not, Sierra Leone will likely be unable to fully implement and monitor its progress on the SDGs.

Business registers maintained by different institutions should be integrated into one central register or system that could be maintained and regularly updated by SSL. Making use of the central business register and conducting sample surveys of large enterprises should be done on a regular basis in order to provide time series data on output, sales, wages and business development in the private sector. Sample surveys covering small enterprises in the informal sector and household-based labour force surveys with questions on informal employment should be undertaken at frequent intervals, since the informal sector is a major source of employment in Sierra Leone.

Additionally, collecting information through grassroots/local participatory approaches would be a strong complement to official data collection practices. This approach would involve collecting qualitative information in a participatory manner as a way to supplement the quantitative information already being collected in sample surveys. Qualitative information would enhance the clarity and explanatory power of the quantitative data as well as broaden the analysis of various phenomena such as poverty. Moreover, a participatory approach would also provide citizens with a sense of belonging, which may enhance patriotism and lead to greater commitment to achieving development priorities.

Postscript: Ebola Outbreak Effects on Post-2015 Data Issues

External shocks can have effects on the data monitoring and evaluation capacities of individual countries. The Ebola outbreak that struck countries in West Africa – specifically the Mano River Basin (save Ivory Coast) - in March 2014 is an example of such a shock. The outbreak, which affected Sierra Lone until May 2015, disrupted all facets of life including agriculture, mining, manufacturing, construction, transportation, domestic and international trade, and tourism. Educational activities stalled for nearly 10 months, with attendant consequences of increased teenage pregnancy and more children dropping out of school. Water-related operations were either suspended or scaled down and resources for expanding water, sanitation and hygiene infrastructure were diverted to the Ebola response. Available statistics for Sierra Lone indicate that 170 children had died from Ebola as of November 11, 2014. More women than men contracted the disease given women's role as caregivers, women's engagement in informal trade in markets and border towns and the fact that the majority of health-care workers are female nurses. The financial sector was not spared as daily banking hours were reduced by about 2 hours, while some commercial and rural/community banks closed or scaled down operations in outbreak epicentres, with consequences for internal trade. The outbreak's impacts on economic activities caused domestic revenue collection to drop by an estimated Le390 billion, equivalent to US\$90 million, in 2014. The disruption reduced the country's economic growth prospects to 4 percent in 2014 from the original projection of 11.3 percent (Government of Sierra Leone 2015).

While recent assessments indicated that Sierra Leone's public debt is sustainable in the medium- to longterm, the decrease in domestic revenue and increase in expenditure induced by the Ebola outbreak has posed serious challenges to debt management, a major concern for global partnership for sustainable development. Thus far, the government has contributed Le80 billion to manage the crisis, of which Le9.9 billion was disbursed directly to the Ministry of Health and Sanitation, Le40 billion to the Ebola response and Le30 billion for hazard pay incentives to the dedicated Ebola account at the Sierra Leone Commercial Bank. Given the risks faced by medical personnel, the government has provided an additional Le30 billion while the African Development Bank and World Bank have provided US\$5.2 million and US\$17 million, respectively, to health-care workers engaged in the fight against Ebola. The Minister of Finance and Economic Development stated that the Ebola outbreak "has created a devastating social and humanitarian crisis with severe negative economic impact, thus, reversing the impressive economic growth we have achieved in recent years" (Government of Sierra Leone 2015).

Despite an initially slow response to the outbreak, the international community recently increased financial and technical assistance. Estimated indicative and firm commitments by development partners are as follows: African Development Bank, US\$61.2 million; World Bank, US\$132 million; United Kingdom, US\$535 million; European Commission, US\$16.9 million; United States, US\$10.2 million; Australia, US\$9.6 million; Italy, US\$6.5 million; Japan, US\$5.5 million; China, US\$4.8 million; Ireland, US\$2.5 million; Germany, US\$2.2 million; Finland, US\$2.2 million; and Sweden, US\$1.9 million. Other contributing countries and organisations include Austria, Cuba, Denmark, the Netherlands, Nigeria, the Gambia, Canada, Spain, the Islamic Development Bank and the Organisation of Petroleum Exporting Countries Fund for International Development. Contributions from humanitarian organisations include the Children's Investment Fund Foundation, US\$14.9 million; and Central Emergency Response Fund, US\$7 million (Government of Sierra Leone 2015).

In addition, several organisations and countries have committed funds to support regional efforts to fight Ebola in Guinea, Sierra Leone and Liberia. These include the Bill & Melinda Gates Foundation, US\$51 million; Canada, US\$30 million; Clinton Foundation, US\$5.9 million; Comic Relief, US\$1.6 million. Additional budget support to mitigate the impact of higher spending and revenue loss due to Ebola has been provided by the African Development Bank, US\$24 million; World Bank, US\$20 million; and the European Union, €12.6 million. Budget support of US\$40 million provided by the IMF was timely in mitigating the fiscal impact of the Ebola outbreak and supported an increase in the amount offered in the weekly foreign exchange auction by the Bank of Sierra Leone (Government of Sierra Leone 2015).

The Ebola outbreak in the Mano River Basin is not yet over, with a resurgent outbreak in Liberia reported in July 2015, but it has already demonstrated the importance of data for planning. In Sierra Leone, the outbreak established a new standard for transparency and accountability in the use of public funds as well as the need for collaboration between the Parliament of Sierra Leone, Audit Service Commission and Anti-Corruption Commission in monitoring and evaluating public fund management for better service delivery. The Ebola outbreak has created awareness in Sierra Leone of the need to have statistics at hand - information that can be verified and analysed - for the sake of public safety. It has also confirmed the effectiveness of methods for channelling funds, as exemplified by the operations of the UN Family of Organizations in Sierra Leone during the crisis. The deficiencies in data collection and administration in Sierra Leone as well as need for health statistics and recruitment of more medical personnel have been laid bare.

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Team member, Post-2015 Data Test Team member, Post-2015 Data Test

Sky Handling, Lungi

Annex 2. Data Quality Assessment Framework

Criteria	Components (scale)	Sub-components (scale)	
Relevance	Completeness	Policy requirements for data collection	
Relevance	Main Question: How complete are		
	the data?	Guidelines for data collection	
	the data.	Procedures to coordinate statistical information	
		Procedures to perform regular programme reviews	
		Advisory council to advise on statistical priorities Availability of meta-data	
	User needs	Agreements with user about the data content and priorities	
	Main Question: Do the data	Procedures to track user needs and uses of the statistics	
	correspond with user needs?	Information about the survey objectives	
		Legislative requirement to consult with the user on data collection	
	User satisfaction	Regular follow-ups with users to ensure user satisfaction	
	Main Question: Do the data satisfy	Periodic consultations with users to obtain feedback	
	user needs?		
		Post-collection evaluations to compare data outcomes with user needs	
Accuracy and eliability	Sampling and non-sampling errors Main Question: What procedures	Measurement, evaluation and systematic documentation of sampling and non-sampling errors	
	are in place to reduce sampling and non-sampling errors?	Mechanisms to ensure survey samples closely represent the population under study	
		Quality assurance plan to prevent, monitor and evaluate non-sampling errors	
		Compilation of user feedback to assess the relevance of the statistical study for user purposes	
	Systematic and random errors	Systems to assess source data, intermediate results and statistical	
	Main Question: What procedures	outputs	
	are in place to reduce systematic	Procedures to measure and reduce errors	
	and random errors?	Regular assessment of data sources	
		Systematic comparison of data and results with data and results from	
		other existing sources to ensure validity	
		Assessment report of statistical discrepancies in intermediate data	
		Revisions analysed to improve statistical process	
	Revision measures	Policies for documenting principles and procedures for data revision	
	Main Question: What measures are in place to revise the data?	Transparent and standard procedures for revising data	
		Periodic quality reporting on the accuracy of data collected	
		Public access to revision policies	
		Information that clearly identifies preliminary and revised data	
		Information that shows timely correction of errors found in published statistics	
imeliness and	Timeliness	Release policy distinguishing between statistical outputs and the	
unctuality	Main Question: How quickly are	corresponding release procedures and timeliness targets	
	the data released for dissemination	Compliance with timeliness targets like the International Monetary Fun	
	or further processing?	data dissemination standards	
		Official calendar to announce advance release dates of major statistics	
		Attainable schedule for the production process Maximum time allowed to elapse between the end of the reference	
		period and the availability of the data	
		Procedures to ensure timely and effective flow of data from providers	
		Procedures to ensure timely and enective now or data from providers Procedures to consult with users about the periodicity of the statistics	
	Punctuality	Action or contingency plans to address delays in data release date	
	Main Question: Whether the data	Procedures to regularly monitor the punctuality of every release as per	
	are delivered according to the	the release calendar	
	official due date?	Notifications provided for any divergences from the advanced release	
		time and publication of new release dates	
		Formal explanations provided in the event of a delay	
ccessibility and	Accessibility	Data dissemination strategy and policy, including clear pricing policy for	
clarity	Main Question: How easily are the	governing the dissemination	
	data accessible?	Policy or guideline to ensure that the data are made available to all	
		users (including any restrictions that may apply)	
		Strategies to release data, metadata and microdata	
		Availability of publication catalogues for users	

Criteria	Components (scale)	Sub-components (scale)
Ontena	Components (scale)	Application of information and communication technology to disseminate data (in addition to hard copy publications)
		Navigable website that allows users to access data and metadata and facilitates self-tabulation in a variety of formats
		Periodic consultation with users to ensure dissemination formats satisfy user needs
		Procedures to request data that are not readily available to the public
	Main Question: How clearly are the data presented to all users?	Guidelines describing the appropriate content and preferred formats an style of the agency's outputs
		Presentation of statistics that facilitate proper interpretation and meaningful comparisons
		Regular production of up-to-date methodological documents and quality reports
		Staff training and development programmes for writing about statistics
		User support or information services for handling questions related to the data
		Procedure to annotate differences between international standards, guidelines or good practices
		Statistics presented in a clear and understandable manner
		Explanatory texts accompany the data
	Matadata and accounts	Meaningful comparisons included in the publication
	Metadata and microdata Main Question: How accessible	Policies to provide documentation on concepts, scope, classifications, data sources, basis of recording, compilation methods, etc. with the
	and readable are the metadata and microdata?	release of statistical results
		Procedures to ensure metadata are documented according to standardised metadata systems
		Procedures to ensure metadata are updated regularly Availability of microdata
		Rules and protocols for accessing microdata
Coherence and comparability	Consistency Main Question: How consistent are the data internally or cross- sectorally?	Policy promoting cooperation and exchange of knowledge between individual statistical programmes/domains
		Specific guidelines for individual statistical programmes/domains to ensure outputs obtained from complementary sources are properly combined
		Process-specific procedures to ensure outputs are internally coherent
		Information provided to users on the effects of changes in methodologies on final estimates
	Comparability Main Question: How comparable	Extent to which statistics derived from different sources or different periodicities are comparable
	are the data over time?	Clear explanation and reconciliation provided for any methodological changes or differences
		Analysis of the major related statistics before designing a new individua statistical programme/domain
	/	Comparison provided with other statistical sources that contain the
		same or similar information (including identification of divergences with explanations)
	Standardisation Main Question: Are the data produced using common standards with respect to scope, definitions, classifications and units?	Common standards for concepts, definitions, units and classifications to promote coherence, consistency and comparability of the statistics
		Periodic assessment of compliance with international and national standards for statistical production
		Explanation provided for any deviations from international and national standards to users
		Reference made to common repository of concepts, definitions and classifications when designing a new individual statistical programme/domain
		Quality reporting includes assessment of internal consistency and
		a warm, reporting included addeddinon of internal dendertoly and

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