National Strategy for the Development of Statistics

Ghana

2018-2022

FOREWORD

Since Ghana's last National Strategy for the Development of Statistics (2009-2013), the world has witnessed an unprecedented data revolution. There has been an exponential increase in the type, amount, and number of producers as well as new innovations in how to collect, analyse and communicate data. While supply has been increasing at a relatively faster pace, it is still far outstripped by demand from the public, private, and not for profit sectors, all of which require good data to inform their work. This brings to the fore the need to ensure that products and services of the National Statistical System (NSS) meet this elevated user demand.

The National Strategy for the Development of Statistics (2018-2022) therefore is very timely, and sets out an ambitious 5-year strategy for the NSS. It recognises the need for Ghana's official statistics to be the standard bearer for accuracy, consistency, and credibility of statistics in the country. In particular, this strategic plan seeks to address the underdevelopment of the administrative data system, such that more and better quality data may be collected at a lower cost, while simultaneously ensuring survey credibility. This will be particularly important to fulfil the reporting requirements of both national and international development programmes such as the Ghana Shared Growth and Development Agenda, the African Union's Agenda 2063, and the Sustainable Development Goals. The NSS must also venture into new territories and explore the potential role that Big and Open data could play in the development and dissemination of official statistics.

The NSDS contains six (6) goals that are expected to strengthen the NSS to perform its function efficiently by improving the legal and regulatory environment, and enhancing data production and dissemination. It also seeks to make funding streams more reliable and enhance collaboration between national and international partners to ensure that Ghana's NSS benefits from external expertise and innovations from a wide network of statistical actors.

I commend all who, in diverse ways, contributed to the development of this strategy. While this plan builds on the achievements of the first NSDS, the task of meeting the demand for data has become bigger and more nuanced than ever before. I recommend this strategy based on its comprehensiveness and detailed programming of activities, and entreat all stakeholders to play their

part in supporting its implementation to achieve the vision and mission for which the strategy has been prepared.

Ken Ofori-Atta
Minister for Finance

PREFACE

The National Strategy for the Development of Statistics 2018-2022 is a comprehensive strategic document which seeks to guide the evolution of the National Statistical System (NSS) to enable it to produce the statistical knowledge the country needs in order to fulfil its development potential. This NSDS is primarily concerned with setting a vision for the next 5 years (2018-2022) and providing milestones that the NSS must reach in order to make that vision a reality. This strategy seeks to create a system which is capable of being responsive to users' needs by providing a basis for results-oriented strategic management of the NSS and acting as a framework to mobilise and manage resources.

ACKNOWLEDGEMENTS

Much hard work goes into producing a strategy document of this scope and detail. The Ghana Statistical Service would like to acknowledge the input and support of the managers at both GSS and other MDAs which prepared sections of this plan. In particular, GSS acknowledges the Ministry of Employment and Labour Relations and Ministry of Gender, Children and Social Protection for allowing members of their staff to join the drafting team which put together this important document. Other members of the drafting team were drawn from GSS head office staff and their dedication is much appreciated (a list of drafting team members can be found in the annexes to this document). The Co-ordination and Programme Management Directorate at GSS headed by Mr. Sylvester Gyamfi are also to be commended for their work in championing a collaborative approach to building this strategy for the entire National Statistical System.

This strategy is also the result of efforts by PARIS21 and their consultant Mr. Charles Machinjili, who provided expert advice on the drafting process; and ODI Fellow Ms. Eleanor Carey who co-ordinated the drafting of this Plan. Finally, this process would not have been possible without the support of the Ghana Statistics Development Project, which is being administered by the World Bank through its Country Office in Ghana.

CONTENTS

LIST OF TABLES

FIGURES

ACRONYMS

AGRIS	Agricultural Integrated Survey
B&D	Births and Deaths Registry
CAPI	Computer Assisted Personal Interviewing
CDD	Communication and Dissemination Directorate, Ghana Statistical Service
CEPA	Centre for Policy Analysis
COP21	21st Conference of the Parties (Paris Agreement on Climate Change)
CPMD	Coordination and Programme Management Directorate
CRESS	Country Report on Support to Statistics
CSO	Civil Society Organization
CSD	Census and Survey Directorate, Ghana Statistical Service
DISDAP	District Level Data Analysis and Dissemination Project
DP	Development Partner
EA	Enumeration Area
EPA	Environmental Protection Agency
ESD	Economic Survey Directorate, Ghana Statistical Service
FD	Finance Directorate, Ghana Statistical Service
GHS	Ghana Health Service
GIS	Ghana Immigration Service
GoG	Government of Ghana
GPS	Ghana Police Service
GSD	Ghana Statistics Development
GSDGA	Ghana Shared Growth and Development Agenda
GSS	Ghana Statistical Service
HR	Human Resources, Ghana Statistical Service
IT	Information Technology, Ghana Statistical Service
IBES	Integrated Business Establishment Survey
IDA	International Development Association
IEA	Institute of Economic Affairs
ISSER	Institute of Statistical, Social and Economic Research
MDAs	Ministries, Departments, and Agencies
MDTF	Multi-donor Trust Fund
MELR	Ministry of Employment and Labour Relations

MIS	Management Information System
MMDAs	Municipal Metropolitan District Assemblies
MoE	Ministry of Education
MoFA	Ministry of Food and Agriculture
MoGCSP	Ministry of Gender, Children and Social Protection
MoH	Ministry of Health
MoTCCA	Ministry of Tourism, Culture and Creative Arts
MLNR	Ministry of Lands and Natural Resources
MWRWH	Ministry of Water Resources, Works and Housing
NACPUS	National Advisory Committee of Producers and Users of Statistics
NGO	Non-Governmental Organization
NRSC	National Road Safety Commission
NSDS	National Statistics Development Strategy
NSS	National Statistical System
PARIS21	Partnership in Statistics for Development in the 21st Century
RGD	Registrar-General's Department
ROD	Regional Office Directorate, Ghana Statistical Service
RIPS	Regional Institute for Population Studies
RSIM	Research, Statistics, and Information Management Unit
SDGs	Sustainable Development Goals
SHaSA	Strategy for the Harmonisation of Statistics in Africa
SOCD	Survey Organization and Census Directorate, Ghana Statistical Service
SDD	Social & Demographic Directorate, Ghana Statistical Service
SRF-CF	Statistics for Results Facility-Catalytic Fund

EXECUTIVE SUMMARY

This second National Strategy for the Development of Statistics for Ghana provides strategic direction for the National Statistical System of the country for the years 2018-2022. Following from the first NSDS which focused on building the enabling environment for the functioning of the statistical system, this strategy places emphasis on statistical production to meet user needs, which are many and varied. First and foremost, government agencies require official statistics to enable evidence-based policy making and to track the impact of policies on the population. The private sector, not-for-profit organizations, and development partners also require data to inform investment decisions or development interventions. Finally, the research community also adds value to the data produced by conducting further studies.

In Ghana, as in most countries, the responsibility for meeting this need for data falls on the National Statistical System (NSS). This system comprises data users, producers and suppliers whom the Ghana Statistical Service (GSS) must coordinate to produce a suite of official statistics. The production and dissemination of official statistics involves the organization and implementation of the population and housing census, along with the production of a range of economic and social statistics, including compilation, processing and dissemination of national accounts, consumer price indices, and demographic statistics. The coordinating role of GSS includes providing advisory and technical services to all users on statistical matters and ensuring the production of quality official statistics through promoting the use of internationally accepted standards across all national data producers. The GSS is also responsible for overseeing the consistency and continuity of official data series.

The specific content of statistical production in Ghana is informed by a wide range of sectoral, national, regional, and global strategies either pertaining directly to the production of statistics or which place data demands on the statistical system. Chief among these are the UN Fundamental Principles on Official Statistics, the African Union Agenda 2063, the Sustainable Development Goals (SDGs), and the Ghana Shared Growth and Development

Agenda (GSGDA II), 2014-2017. There are also myriad sectoral strategies to which the statistical production of sector-specific MDAs is aligned.

Both internal and external factors also impact statistical production in any NSS. In Ghana, the external factors affecting statistical production include the demand of the political system for more and better data; while the general public continues to seek evidence that social interventions are effective. At the global level also, the SDGs have placed renewed emphasis on the need for disaggregated data. Ghana's recent economic situation, however, has meant that financial support for statistics production from central government has declined and resources provided by development partners cannot adequately fill the void. In addition, a new Statistics Bill which would strengthen support for the NSS is currently pending approval.

Through NDSD I some progress has been made on making internal factors impacting statistical production more favourable. Visibility of the NSS has been somewhat improved, while statistical infrastructure has also been focussed upon. Physical infrastructure for both GSS and MDA statistical units remains a challenge however as do the issues of collaboration, funding, capacity building, and adequate data production and dissemination.

A SWOT analysis in chapter 5 of this document reveals additional details about the strengths, weaknesses, opportunities and threats of the NSS today. This, together with the preceding situation analysis, informs the content of chapter 6 which details the vision, mission and goals of the NSS for 2018-2022. These are:

Vision: An efficiently coordinated system delivering quality statistical products and services by 2022

Mission: To produce accurate, relevant, reliable and timely statistics to meet user needs.

The strategy has 6 goals:

1. Improve the policy, regulatory and institutional framework
2. Improve human resource development and management
3. Modernise physical infrastructure
4. Update statistical infrastructure
5. Enhance data production, quality, dissemination, and use

6. Develop sustainable funding arrangements and establish collaborations with national and international institutions

Each goal has a number of strategies associated with it.

The final sections of this strategy contain an annualised work plan and budget, as well as a monitoring and evaluation framework. The budget for the entire plan including all major censuses and surveys is $169,446,383. Almost half of the amount ($84.6m) will be spent on implementing the 2020 Population and Housing Census

Funds are expected to come from the Government of Ghana (GoG), participating MDA budgets and Development Partners.

Dr. Philomena Nyarko,
Government Statistician

1. INTRODUCTION

Ghana completed drafting its first National Strategy for the Development of Statistics (NSDS), the Ghana Statistics Development Plan, in 2008. Intended to cover the years 2009-2013, two major projects were derived from this plan, the first was an institutional reform project for the Ghana Statistical Service (GSS) funded by a multi-donor trust fund. The second was the Ghana Statistics Development Project, which, due to funding delays, began operation in 2014. While the implementation of this project is on-going however, the underlying strategic plan has lapsed. This document is the second NSDS for Ghana and seeks to provide a comprehensive plan to guide the evolution of the National Statistical System (NSS) over the next five (5) years to enable it to produce the official statistics that Ghana needs in order to fulfil its development potential.

This first chapter provides an overview of this document and outlines the reasons why Ghana will benefit from an updated NSDS. It also details the main areas of focus for the Strategy and gives insight into the process that was followed to produce this plan.

1.1 What is a NSDS?

This National Strategy for the Development of Statistics (NSDS) is concerned with providing a strategy for the National Statistical System (NSS) for the next five (5) years (2018-2022). In particular, it seeks to outline a vision for where the NSS should be in 2022 and to set out a road map and milestones that must be reached along the way in order to make that vision a reality. An NSDS provides:

- The mechanisms through which users' needs are assessed;
- A plan to build capacity within the NSS to meet user needs;
- A framework to mobilise national and international resources;
- A basis for results-oriented strategic management of the NSS.

The NSDS is championed by the Partnership for Statistics for Development in the 21st Century, PARIS21. This NSDS was formulated according to the 10 Fundamental Principles for structuring the preparation and implementation of the NSDS as set out in PARIS21's new guidelines for NSDS 2.0. These are:

1. Have the support of policy makers at a high level.
2. Rely on a rigorous methodology: analysis of the situation, vision, strategic objectives, action plans taking account of financial constraints.
3. Align with development objectives; provide data for results-based management approach to development; meet the needs of users.
4. Build on existing, and ensure compliance with, international commitments.
5. Rely on international standards for statistics.
6. Cover the entire NSS.
7. Integrate the various dimensions of capacity building.
8. Ensure priority funding from the state budget.
9. Serve as a framework for external assistance.
10. Integrate monitoring and evaluation.

1.2   Why does Ghana need a NSDS?

Ghana's first NSDS, the Ghana Statistics Development Plan, covered the years 2009-2013. This strategic plan was intended as a framework to ensure the comprehensive, effective, and sustainable development of statistics in the country. The plan had 4 strategic goals:

1. Improve policy, regulations and institutional framework
2. Improve statistical infrastructure
3. Enhance data development and management
4. Invest in physical infrastructure and equipment

Each goal had a number of strategic objectives associated with it. There were 15 in total.

Two main projects were derived from this strategy. The first was an institutional reform project pertaining to the Ghana Statistical Service (GSS) and was funded by a multi-donor trust fund that is now concluded. The second is the Ghana Statistics Development Project which, with support from the Statistics for Results Catalytic Fund (SRF-CF) and the International Development Association, is under the management of the World Bank. Due to funding barriers, the project began operating outside the lifetime of the first plan, in 2014; and will continue into 2018. The project drew on the GSD plan to frame its components as follows:

- Component 1: Institutional Reform and Organizational Change

- Component 2: Enhancing Capacity
- Component 3: Data Production and Dissemination
- Component 4: Project Management, Monitoring and Evaluation

The GSD project is currently being implemented by the GSS and nine (9) other Ministries, Departments and Agencies (MDAs), namely:

1. Ministry of Education
2. Ministry of Health
3. Ministry of Lands and Natural Resources
4. Ministry of Employment and Labour Relations
5. Ministry of Communications
6. Ministry of Gender, Children and Social Protection
7. Ministry of Trade and Industry
8. Ministry of Food and Agriculture
9. Births and Deaths Registry

Notwithstanding the fact that the GSD Project is on-going, Ghana is now in need of a successor to its first NSDS to ensure both that statistics production is in line with user needs and to take account of changing circumstances, such as the advances in technology that have changed the landscape of data collection, analysis and dissemination since 2009.

The NSDS works in conjunction with strategies at the sub-national, national, regional and global levels. Given the proliferation of strategies that will impact statistical production, for example the Sustainable Development Goals (SDGs), which have been agreed since 2009, this new strategy will serve as a guide to the NSS on how to integrate these increased demands into its statistical activities.

1.3 Main focus of this NSDS

Progress has been made against each of the 4 strategic objectives contained in the GSD Plan 2009-2013. In particular, the role of GSS as the main coordinating body of the NSS has been strengthened, capacity has begun to be built within the MDAs through training and collaboration, and both GSS and MDAs have obtained much of the physical resources necessary to carry out their work.

While the first NSDS aimed at bringing the NSS together, this second strategy focuses on improving the quantity and quality of statistics produced to meet user needs. The vision and mission for the NSS set out in this strategy bears this out:

> **Vision:** An efficiently coordinated system delivering quality statistical products and services by 2022.

> **Mission:** To produce accurate, relevant, reliable and timely statistics to meet user needs.

The strategy has 6 strategic goals:

1. Improve the policy, regulatory and institutional framework
2. Improve human resource development and management
3. Modernise physical infrastructure
4. Update statistical infrastructure
5. Enhance data production, quality, dissemination, and use
6. Develop sustainable funding arrangements and establish collaborations with national and international institutions

There are 22 strategies underpinning these goals. In particular, these strategies aim to reduce duplication or conflicting estimates by promoting common concepts and methodologies across the NSS and providing mechanisms to coordinate statistical production, as well as financial and technical support to the NSS. In addition, they seek to properly resource the NSS in order to help it cope with the unprecedented level of demand placed upon it by the data requirements of both national and international agendas.

This NSDS guides the statistical production of the entire NSS. The predecessor plan included the activities of 10 MDAs. This strategy encompasses the priority statistical activities of 16 core MDAs whose data production activities are considered vital to meet the needs of the country. Their activities are included in the work plan and budget for this strategy. Due to limited resources a further five (5) MDAs are recognised as having "associated" status (see Table 1-1), and will be incorporated into subsequent NSDSs. However, these MDAs are encouraged to continue collaborating with the core group through the NSS governance mechanisms to carry out statistical work.

Table 1-1: Core and associated MDAs for NDSD II

	Core	Associated
1	Ghana Statistical Service	Ministry of Trade and Industry
2	Ministry of Lands and Natural Resources	Ministry of Communications
3	Ministry of Employment and Labour Relations	Office of the Head of Civil Service
4	Ministry of Health/ Ghana Health Service	Judicial Service
5	Ministry of Education	Energy Commission
6	Births and Deaths Registry	
7	Registrar-General's Department	
8	National Communication Authority	
9	Ministry of Water Resources, Works and Housing	
10	Ghana Police Service	
11	National Road Safety Commission	
12	Environmental Protection Agency	
13	Ghana Immigration Service	
14	Ministry of Tourism, Culture, and Creative Arts	
15	Ministry of Food and Agriculture	
16	Ministry of Gender, Children and Social Protection	

1.4   Writing this strategy

The process of writing this strategy has been guided by PARIS21's seven (7) design phase steps (see Figure 1-1 for an overview of process):

1. Acknowledging, recognizing (by government, by highest authority in statistics)
2. Understanding the NSDS process and the context for developing it
3. Preparing

4. Assessing
5. Envisioning (the future)
6. Identifying strategic goals
7. Developing action plans

<u>Steps 1 and 2:</u> Acknowledging the need for this strategy and understanding the process to develop it began in December 2015/ January 2016 with the appointment of an in-house coordinator who conducted a desktop review of the previous NSDS, including reviewing a report which had been completed upon the plan's completion in 2013; and of the PARIS21 guidelines for writing a second NSDS.

Figure 1-1: Process of agreeing Ghana's NSDS, 2018-2022

<u>Step 3:</u> Preparations to undertake this process were made by the coordinator, who constructed a project plan and rationale and presented this to GSS management; and also allocated funds in the GSD Project budget. The GSS also reached out to PARIS21, who agreed to provide technical support to help draft this plan. A drafting team was assembled (full details in annex 2) comprising members of GSS head office staff and MDA representatives.

At the beginning of March 2016, four online questionnaires were launched to gather the input of four groups of stakeholders. These were: GSS; MDAs of the National Statistical System; Development Partners who have supported statistical activities in Ghana since 2009; and other institutional stakeholders including users of the products and service of Ghana's National Statistical System. The questionnaires went live from 1st March to 18th March.

The online questionnaire served three purposes:

1. It was a way to quickly engage with a large group of stakeholders at no cost;
2. It allowed stakeholders to provide feedback on the activities of the NSS under the GSDP 2009-2013;

6

3. It allowed stakeholders to make inputs on the content and strategic direction of the next NSDS, 2018-2022.

The overall response rate for all four questionnaires was 49.3%. While this response rate is relatively low, this is likely due to the fact that this is the first time GSS has used online questionnaires; and feedback indicated that many stakeholders did not feel comfortable answering the questions because of their lack of knowledge about the GSDP 2009-2013. This indicated that more needed to be done throughout the drafting and implementation of this NSDS to engage stakeholders in a meaningful way.

The main issues for attention that emerged from responses were:

- Sustainable funding (including coordination of Development Partner support);
- Enhancing data collection (including the use of new technology);
- Timeliness of data capture and release;
- Enhancing data interpretation and analysis capacity;
- Improving access to data for data users;
- The use of statistics in decision-making;
- Coordination and communication inside and outside NSS;
- Improving ICT and physical infrastructure;
- Robust M&E framework and processes;
- Ensuring that the institutional structure governs the entire NSDS;
- Strengthening Human Resources processes, policies and procedures;
- The development of a new legal framework covering the NSS.

Steps 4, 5 and 6: Assessing the current situation, envisioning the future desired situation and identifying strategic goals, have all largely been conducted with technical support from PARIS21. PARIS21 made three one-week missions and provided offsite support during this process. The first mission was in March 2016 during which the drafting team was constituted and convened, a large stakeholder meeting was held, and the first draft of this NSDS was produced. Between March and May 2016, there were numerous presentations and communication activities about the NSDS, which helped to clarify the current situation and build consensus around the vision for the future and the goals that would be required to achieve it.

Step 7: The first elements of an action plan to implement the NSDS were produced during the consultant's second visit in May 2016. This included strategic statistics plans submitted by the nine MDAs covered under the GSD Project, as well as the GSS Corporate Plan. A set of new MDAs were also identified as important data producers and the drafting team was tasked with engaging with them to produce strategic statistics plans. A workshop was held in late May to begin this process.

From May to July, the drafting team continued to work with MDAs to produce finalised strategic statistics plans.

PARIS21's final visit was in late July 2016 during which the annualised action plan and budgets were finalised, the log frame built and funding and governance mechanisms discussed.

A 6-day residential workshop was then held for the drafting team, GSS management, and MDA coordinators to finalise the NSDS document.

Following the completion of this document, a large stakeholder consultation will be held to advocate for the next stages of the NSDS process, namely securing funding and building governance mechanisms.

1.5   Overview of this strategy document

This document consists of 9 chapters. The first is this introductory chapter. The chapter that follows gives an overview of the current governance structures for the National Statistical System, while chapter 3 links this NSDS to the national and international development agenda. Chapter 4 analyses the current situation of the NSS and reviews the achievements of the first NSDS. An analysis of the NSS's strengths, weaknesses, opportunities and threats is presented in chapter 5, from which the vision, mission and strategic goals contained in chapter 6 are derived. Finally, chapters 7, 8, and 9 are the basis for implementing this plan by providing a multi-year action plan, budget, and monitoring and evaluation framework respectively.

2. THE NATIONAL STATISTICAL SYSTEM

2.1 Introduction

The manner in which statistics are collected, processed and utilized has drastically changed in recent years. There are now more players such as producers, providers and users of statistical information than ever before. The need to coordinate all of these players in the statistical ecosystem has become critical to guide policy formulation and management.

The National Statistics System (NSS) is the means of organizing these players in the statistical sphere and taking a holistic approach to the production and effective utilization of official statistics. It comprises a legal framework, institutional and organizational arrangements; and guiding principles for collection, management and dissemination of official statistics. In other words, the NSS assures uniformity of direction, methods and processes of official statistics.

A national statistical system has three components, namely data users, data producers, and data suppliers. It is therefore very important to pay attention to the interplay of these components in developing an effective NSS to ensure production of quality and timely statistics for guiding and measuring the overall development process and monitoring the implementation of development programmes. The principle of evidence-based decision making is critical in guiding the central government, subnational governments, the private sector, not-for-profit organizations (e.g. NGOs) or civil society organizations (CSOs), researchers, the media, development partners and the general public.

The NSDS provides a framework for the entire NSS and provides a logical structure for all national and international statistical programmes; and for donor support to those programmes to provide an action plan for statistical capacity building, and act as an impetus for change.

2.2 The National Statistical System in Ghana

The NSS in Ghana comprises the Ghana Statistical Service (GSS), individuals, institutions and all others who have a role to play in the production and use of statistics. The GSS and the statistical units of Ministries, Departments and

Agencies (MDAs), are governed by PNDC Law 327, enacted in 1993. The GSS in Ghana evolved from the Office of the Government Statistician (set up in 1948), to the Central Bureau of Statistics in 1963. It then finally became the Statistical Service in 1985, by PNDC Law 135.

In Ghana the NSS is not a legal entity, as it is not explicitly mentioned as an institution in any legislative document. However, there are several references in various legislative instruments governing successive central statistical agencies. These references not only give a mandate to the Central Statistical Agency, in this case the Ghana Statistical Service (GSS), to produce and disseminate official statistics in Ghana, but also task GSS to coordinate and collaborate with MDAs and other organizations which, through the course of their work, produce official statistics.

The production and dissemination of official statistics involves the organization and implementation of censuses, along with the production of a range of economic and social statistics, including compilation, processing and dissemination of national accounts statistics, consumer price indices, and demographic statistics. The coordination role of GSS includes providing advisory and technical services to all users on statistical matters and ensuring the production of quality official statistics through promoting the use of internationally accepted standards across all national data producers. The GSS is also responsible for overseeing the consistency and continuity of official data series.

2.3   The importance and use of statistics

The UN Fundamental Principles of Official Statistics state that "Official Statistics provide an indispensable element in the information system of a democratic society, serving the government, the economy and the public with data about the economic, demographic, social and environmental situation".

Thus, the users and uses of official statistics are myriad.

- Statistics produced by National Statistical Systems are chiefly used by **government departments** to enable evidence-based policy making and to track the impact of policies on the population. In Ghana, they are

particularly pertinent to respond to the statistical needs of the Ghana shared growth and Development Agenda.

- The **private sector** requires statistics in order to determine where to invest, how much to invest and who to target. Statistics provide the business community with information necessary for market segmentation among other things.

- **Researchers** use data for further analysis beyond what may have been presented in statistical reports. Researchers bring out important observations in the data, which also promotes public debate.

- A number of projects are carried out by **not-for-profit organizations** at national or subnational level. Together with trade unions and civil society organizations, not-for-profit organizations require comprehensive statistical information to implement projects or to make various institutions accountable to their employees or to their electorates.

- **Development partners** use statistics to implement a number of projects, and also to evaluate the impact of their interventions. They thus need timely statistical information to guide their interventions, promote regional integration, and generally to report on development progress. The SDGs recently adopted by the United Nations will also require statistics to enable national governments to manage and report on their progress towards meeting the set goals and targets.

- **The general public** needs statistics to hold the government and other authorities accountable. The general public also needs data for general knowledge that empowers them to make informed decisions.

It is in this context that governments at all levels should embark on statistical capacity building in order to have a strong and vibrant statistical system that supports evidence-based policy formulation, management, monitoring and evaluation and general knowledge.

2.4 Sources of statistics

Data sources can be categorized into two groups: primary and secondary. Primary sources of data are the results of those original censuses and surveys that are carried out for the purpose of creating official statistics. Secondary

sources of data are those that have been primarily collected for other purposes including administrative data and private sector data. Across all of the goals, particular emphasis will be placed on strengthening the administrative data system over the coming 5 years.

3. THE NSDS AND THE DEVELOPMENT AGENDA

3.1 Introduction

The NSDS sits alongside a number of international, national, and sectoral agendas which guide the statistical production of Ghana's NSS. This chapter details the most significant agendas which will impact on statistical activities at GSS and MDAs in the years 2018-2022.

3.2 The NSDS and the international development agenda

At the global level, this NSDS will align with key international guidelines and principles including the following:

- 1994: The UN Fundamental Principles of Official Statistics
- 2006: Reference Regional Strategic Framework for Statistical Capacity Building
- 2009: African Charter on Official Statistics
- 2009: The Strategy for the Harmonisation of Statistics in Africa (SHaSA)
- 2013: The African Union's Agenda 2063
- 2015: Paris Agreement on Climate Change (COP21)
- 2015: The Sustainable Development Goals

3.3 The NSDS and the national development agenda

The Ghana Shared Growth and Development Agenda (GSGDA) II, 2014-2017, is a medium-term national development policy framework. The GSGDA II provides a set of policy objectives and strategies to guide the preparation and implementation of medium-term and annual development plans and budgets at sector and district levels. The transformation required to attain the aims of the GSGDA necessitates quality statistics to measure and monitor indicators to inform national policy and planning processes. It will also be necessary to position the NSS to provide all the statistics necessary for the successor plan.

Ghana is also currently undergoing a process to write a 40-year development plan. The NSS intends to use the NSDS as the main vehicle to integrate their activities into this 40-year strategy.

Integrating the NSDS into national development policy processes and contexts will involve a fundamental change in the relationships between stakeholders engendered through consultation, collaboration, participation and effective leadership.

This alignment will provide an opportunity for advocacy among stakeholders (especially among the political leadership, decision makers and development partners). Also, it would provide an opportunity to mobilise the country and the development partner community to support national statistical development.

3.4 The NSDS and sectoral development agendas

At the sectoral level, this NSDS recognises the importance of the following strategies listed in Table 3-1:

Table 3-1: Sectoral statistics strategies to which NSDS is aligned

Sector	Strategy	Principal MDA impacted
Employment	- National Employment Policy - Occupational Safety and Health Policy - Labour-Intensive Public Works Policy - Forced Labour Convention, 1930 (No.29) - Underground Work (Women) Convention, 1935 (No.45) - Freedom of Association and Protection of the Right to Organize Convention, 1948 (No.87) - Employment Service Convention, 1948 (No.88) - Fee Charging Employment Agencies Convention (Revised), 1949 (No.96) - Abolition of Forced Labour Convention, 1957 (No.105) - Seafarers; Identity Documents Convention, 1958 (No.108) - Radiation Protection Convention, 1960 (No.115) - Guarding of Machinery Convention, 1963 (NO.119)	Ministry of Employment and Labour Relations

Sector	Strategy	Principal MDA impacted
	• Hygiene (Commerce and Offices) Convention, 1964 (No.120) • Minimum Age Convention, 1973 (No.138) • Tripartite Consultation Convention, 1976 (No.144) • Working Environment (Air Pollution, Noise and Vibration) Convention, 1977 (No.148) • Labour Administration Convention, 1978 (No.150) • Labour Relations (Public Service) Convention, 1978 (No.151) • Worst Forms of Child Labour Convention, 1999 (No.182) • Maternity Protection Convention 2000, (No. 183) • Safety and Health in Agriculture Convention, 2001 (No.184)	
Civil Registration and Vital Statistics	• UN Convention on Civil Registration and Vital Statistics • Africa programme on Civil Registration and Vital Statistics • CRVS strategy of Ghana	• Births & Deaths Registry • GSS • Registrar-General's Dept. • Ghana Health Service
Gender Statistics	• UNSD Global Gender Statistics Programme • African Programme on Gender Statistics • Beijing Platform for Action • Protocol to the African Charter on Human and People's Rights on Women's Rights • Convention on the Elimination of Discrimination against Women • National Gender Policy	• MoGCSP • Ghana Health Service • Ministry of Lands and Natural Resources • Ministry of Employment and Labour Relations
Demographics	• National Population Policy	GSS
Energy	• Energy Policy of Ghana • Strategic National Energy Plan	Energy Commission

Sector	Strategy	Principal MDA impacted
Water & Sanitation	• National Water Policy (2007) • Water Sector Strategic Development Plan (2014-2025) • Africa Ministerial Conference on Water • Sanitation and Water for All (SWA)	Ministry of Water Resources, Works and Housing
Housing	• Ghana National Housing Policy (2015) • Housing Sector Profile (2011) • Shelter Afrique • UN-Habitat	Ministry of Water Resources, Works and Housing
Environment	• Minimata Convention • Biodiversity Convention • UN Convention on desertification and drought • Stockholm Convention • Basel Convention • Abidjan Convention • Bamako Convention • National Environmental Policy • National Climate Change Policy • EPA Strategic Plan	Environmental Protection Agency
Health	• Global Health Observatory • Health-for-All Policy for the 21st Century • Ghana National Health Policy • Maternal and Child Health Care Policy • Roll-Back Malaria Road Map • National TB* Control Strategy • 2016-2020 National Strategic Plan for HIV/AIDS Control • 2016-2020 Health Sector Plan for HIV/AIDS Control • Ghana National EPI* Policy	Ministry of Health (Ghana Health Service)
Economic Statistics	• 2014 African Project on the Implementation of 2008 SNA • ECOWAS Protocol on Free Movement of Persons • African Common Position on Migration and	• GSS • Ghana Health Service • Ghana Immigration

Sector	Strategy	Principal MDA impacted
	Development • National Tourism Development Plan	Service • Ministry of Tourism, Culture and Creative Arts
Lands and Natural Resources	• Ghana Forest and Wildlife Policy • Ghana 25-year Plantation Strategy • National REDD+ Strategy • Minerals and Mining Policy of Ghana • ECOWAS Mineral Development Policy	Ministry of Lands and Natural Resources
Education	• Education Sector Plan 2010-2020	Ministry of Education
Food and Agriculture	• Comprehensive Africa Agricultural Development Program • New Partnership for Africa's Development • ECOWAS Agricultural Policy • FASDEP II • Africa action plan for improving statistics for food security, sustainable agriculture and rural development • Strategic Plan for Agriculture and Rural Statistics (SPARS)	• Ministry of Food and Agriculture • GSS
Crime	• UN Decade of Action for Road safety (2011-2020) • Africa Road Safety Action Plan (2011-2020) • West African Road Safety Action Plan (2011-2020) • National Road Safety Policy • National Road Safety Strategy (2011-2020)	National Road Safety Commission

4. SITUATION ANALYSIS OF NSS AND NSDS 1

4.1 Introduction

The NSS has seen improvements under the 2009-2013 Ghana Statistics Development Plan (NDSD I). Despite this progress, much remains to be done in several areas in order to develop and maintain institutional capacity and infrastructure. This chapter considers the current situation after the implementation of NDSD I.

Ten key MDAs were included under NDSD I. These are:

1. Ghana Statistical Service (GSS);
2. Ministry of Food and Agriculture (MoFA);
3. Ministry of Gender, Children and Social Protection (MoGCSP);
4. Ministry of Communications (MoC);
5. Ministry of Health (MoH);
6. Ministry of Trade and Industry (MoTI);
7. Ministry of Employment and Labour Relations (MELR);
8. Ministry of Education (MoE);
9. Ministry of Lands and Natural Resources (MLNR); and
10. The Births and Deaths Registry (BDR).

4.2 External factors affecting statistical development

4.2.1 Political

Ghana operates under a multi-party democratic political system, which is increasingly calling for more statistics to support evidence-based policy making. This focus on the importance of statistics is welcome and may help to shore up government resource allocations to the NSS.

4.2.2 Economic

In recent years, Ghana has achieved lower middle-income status and therefore, donor support and access to concessionary loans is dwindling and

government revenue has been falling. These challenges have resulted in a decline in budgetary support for the production of statistics, which is a threat to the entire NSS.

In spite of these challenges, there has been an increased demand for statistics for economic planning and evidence-based decision-making. This presents an opportunity for the NSS to improve its visibility by providing quality and timely data.

4.2.3 Social

The general public is increasingly demanding evidence for social interventions that NGOs and governmental agencies are implementing in the country. This creates an opportunity for the NSS to provide timely data to measure the impact of these interventions.

The establishment of more tertiary institutions offering courses in statistics will increase the pool of graduates to staff the NSS. Additional researchers and academics will also increase demand for statistics. This is an opportunity for the NSS over the next 5 years.

4.2.4 Technological

There have been significant technological advancements since the GSD Plan prepared in 2008. The data revolution can be defined as an explosion in the volume of data, the speed with which data are produced, the number of producers of data, the methods of dissemination of data, and the range of topics on which data is now being produced. This explosion in the quantity of data has gone hand in hand with innovation in the sources of data, for example new technologies such as mobile phones and the internet and from others such as qualitative data, citizen-generated data and perceptions data.

These advancements in new technologies are leading to an exponential increase in the volumes and types of data available, creating an unprecedented possibility for informing and transforming societies. Since many different actors from the public sector, the private sector, academia, the media, civil

society organizations and others have entered the field of data production, there is an urgent need to:

a) Develop a national consensus on principles and standards;
b) Share technology and innovation for the common good of users;
c) Identify new and improved resources for capacity development.

This will enable data to play its full role in the realisation of sustainable development by closing key gaps in access to and use of data. The NSS should, through the NSDS II, position itself to build partnerships to harness the benefits of this Big and Open data through:

a) Exploring the integration of non-traditional data providers and users;
b) Ensuring that the Statistical Law is updated in line with the Fundamental Principles of Official Statistics;
c) Collaborating with external partners on big or open data projects;
d) Promoting the effective coordination of data-related activities;
e) Promoting access to and the use of data using open data principles; and
f) Ensuring data-related activities are adequately resourced.

Ghana has also recently launched an Open Government Data Initiative which aims to create a platform to draw together datasets from across government agencies.

In addition, the NSS is in the process of switching from traditional Pencil and Paper Interviewing to Computer Assisted Personal Interviewing and is exploring new sources of data.

There have also been improvements in the technology available to support Management Information Systems (MIS) such as the evolution of cloud and web-based solutions which no longer require the physical infrastructure of Local or Wide Area Networks (LAN/WAN).

4.2.5 Legal

A legal framework for statistics exists for GSS and also for the MDAs as recorded in the NSDS I. However, a new Statistics Bill is currently before Cabinet for consideration. This new Statistics Bill will give recognition to, and also strengthen the NSS to uphold the basic principles of professional

independence, confidentiality, impartiality, relevance and reliability of statistics: and give a mandate for data collection.

Moreover, the 2012 Data Protection Act (Act 843) enhances the protection of the providers and producers of data. The Data Protection Act is implemented by the Data Protection Commission (DPC), which is a statutory regulatory body established under the Data Protection Act, 2012 (Act 843) to register Data Controllers and Processors. This requirement stems from the fact that Government institutions process personal and institutional information in the course of rendering their services. In view of this, it is mandatory under the law that every government institution registers with the Data Protection Commission. This is a positive step forward and will reassure data providers that their data is being kept safe.

4.2.6 Location

The inadequate address system for buildings in most communities creates fieldwork challenges.

4.2.7 Global

Globally, the processes surrounding the Sustainable Development Goals have engendered a new focus on the importance of official statistics to satisfy nuanced reporting requirements. This presents an immense opportunity to the NSS both in relation to the possibility of increased funding; and new and strengthened partnerships on a bi- and multi-lateral basis.

4.3 Internal factors affecting statistical development
4.3.1 Visibility of the NSS

The GSS, through the NSDS I, has provided a stronger identity and greater visibility for the NSS and created awareness of the importance of statistics. The GSS continues to use the celebration of the annual African Statistics Day as a major springboard to raise awareness among the public about the important role played by statistics in all aspects of social and economic development. The major players in the NSS also take advantage of the Day and other statistical literacy programs to advocate for systematic and increased use of statistics for

evidence-based decision-making, as well as provide opportunities to increase the scope and relevance of statistics. These activities have helped to sensitize the public on the role and importance of the NSS.

However, improvements to communication and dissemination would help to raise the visibility of the NSS on an ongoing basis.

4.3.2 Statistical infrastructure

There is inadequate economic and social data available for policy making, monitoring, evaluation and research. Data gaps exist particularly with regard to administrative data, the lack of an integrated census and survey programme, and the lack of a comprehensive calendar for data releases and dissemination.

The NSS has seen some improvement in its statistical infrastructure through NSDS I. To date:

- the National Sampling Frame has been updated;
- the digitization of Enumeration Area (EA) maps is almost completed;
- a comprehensive business register has been compiled through phase one of the Integrated Business Establishment Survey (IBES I);
- a long term census and survey programme has been drafted; and
- NSS is gradually shifting from Pen and Pencil Interviewing, to Computer Assisted Personal Interviewing (CAPI), which has the capacity to reduce cost and reduce the time lag between data collection and publishing and dissemination.

These efforts are expected to enhance the quality of statistical products and services in the NSS.

4.3.3 Physical infrastructure

The NSDS I has strengthened the physical infrastructure to support statistical production. Vehicles have been procured and distributed to the MDA statistical units to be used for data collection. IT equipment (printers, computers, scanners, photocopiers, tablets, software, etc.) has also been provided for

speedy processing, interpretation and dissemination of the statistical products of the MDAs.

However, the additional MDAs that are included in the core group for this NSDS require support to upgrade their physical infrastructure. In addition, GSS continues to struggle with constrained office space.

4.3.4 Collaboration and coordination in the NSS

Co-ordination of the NSS in the current arrangement has presented practical difficulties where data that is independently produced by the GSS or Ministries, Departments and Agencies (MDAs) are packaged and released independently, resulting in duplications and inconsistencies.

The system also lacks a robust monitoring and evaluation framework, nor does it currently have the capacity to implement one.

Stakeholder participation in statistical production through effective collaboration and networking needs to be improved within the NSS. Coordination and information sharing amongst stakeholders in the NSS is currently not as effective as expected because of weak governance structures. Statistical advocacy within the MDAs has been generally unsatisfactory. User/Producer as well as producer/producer coordination should be strengthened to enable effective dialogue.

4.3.5 Funding the NSS

Securing sustainable funding remains one of the key challenges for the NSS. The major sources of funds for the NSS are the Government of Ghana (GoG) and Development Partners (DPs). Two major Projects have been supported during NSDS I: the Multi-Donor Trust Fund (MDTF) which supported GSS's institutional reform; and the Statistics for Results Facility Catalytic Fund (SRF-CF) and the International Development Association (IDA) funded Ghana Statistics Development Project, which is under the management of the World Bank. The NSS must ensure that any future sources of funding are well-coordinated and predictable in order to guarantee sustainability.

The new Statistics Bill has made provision for a statistics fund to be established to support censuses and large surveys (data collection activities) in the NSS. In addition, the GSS Governing Board has endorsed the creation of an in-house professional service, which would be available for providing consultancy services, the proceeds from which would go to fund NSS activities. MDAs are also being encouraged to budget for their statistical activities and include them in their budget submissions.

4.3.6 Relevance of the NSS

Due to the low appreciation for the importance of the use of statistics for development among the leadership of Ministries, Departments and Agencies, and among national policy-making bodies, the commitment to support statistical activities is lacking.

Timeliness in the release of data of any kind is what makes that data relevant to users. Overall, the 2012 GSS User Satisfaction Survey found that the majority of respondents were satisfied with the details, relevance, frequency and style of presentation of official statistics but timeliness of release and accessibility of reports were identified as issues to be addressed.

Under the NSDS I considerable effort was made to improve timeliness in the release of statistics. For most of the recent surveys carried out by GSS, the time lag between field data collection and release of results has been reduced from between 12 and 18 months to 10 months. Other MDAs involved in the Ghana Statistics Development Project have seen similar improvement. This positive impact is the result of training in data processing, analysis and report preparation provided to statisticians and data processing staff in the NSS.

In the wider operating environment, statistical production in Ghana also faces a challenge from organizations generating statistical products without being guided by any official standards in their methodology. This poses a threat to the overall integrity of statistical production in the country and to the relevance of the NSS.

4.3.7 Capacity building, data production and dissemination

There has been improvement in data production, dissemination of statistics, and information sharing under the NSDS I through:

- Conduct of the 2010 Population and Housing Census;
- Conduct of the GLSS6, GDHS 2014 and MICS 2011 surveys;
- Putting in place the Micro-data Access Policy (Micro-data for census and surveys are now free);
- Availability of Ghana Info and National Data Archive platforms for indicator and micro-data dissemination respectively;
- Holding of numerous dissemination workshops and issuing of press releases;
- Dissemination of survey reports, monthly Consumer and Producer Price Indices as well as publishing quarterly GDP estimates on the GSS Website.

Statistical capacity however remains an issue at all levels of the NSS and much targeted training will be required in order to tackle this problem.

4.3.8 Institutional reform

There have been institutional reforms to strengthen the production of statistics in the country, at the local and national levels. GSS underwent substantial institutional reform supported by a Multi-Donor Trust Fund. This phase encompassed the following components:

1. Legal and institutional reform
2. GSS capacity building
3. Improving the quality and dissemination of statistical products
4. Supporting the 2010 Census Post Enumeration Activities
5. Project Management

This reform also saw the creation of the Coordination and Programme Management Directorate (CPMD), which is responsible for coordinating activities both within GSS and the wider NSS (see GSS organogram in Annex 1).

Through this reform process, GSS devolved some of its statistical activities to the regional and district levels. The GSS is now working with the Local Government Service (LGS) to establish Statistics Departments in the MMDAs. GSS will provide support for recruitment and training, to ensure that the right calibre of staff is recruited to run the Statistics Departments in the MMDAs. An operational manual, scheme of service, and staffing norms for the Statistics Department in the MMDAs has been developed. A relationship will be maintained between the MMDAs' Statistical Units and the Regional Statistician through the District Coordinating Director. This will ensure the presence of a statistical unit within the MMDAs to generate and use district and community level data, and utilise local administrative data, to inform district planning, budgeting, etc.

4.4   Summary of challenges

Challenges of resource constraints, data gaps, lack of a robust monitoring and evaluation framework, and capacity constraints still persist in the NSS. The assessment report on NSDS I indicate that, the NSDS I and other sector Strategic Plans for Statistics of the MDAs were relatively unknown to many of the entities and personnel for whom the plans were designed. This implies that the vision and the mission were not efficiently shared and owned by the MDAs, which in turn affected implementation of the various plans.

5. SWOT ANALYSIS OF THE CURRENT SITUATION

OF THE NSS

5.1 Introduction

This section provides an examination of the strengths, weaknesses, opportunities and threats (SWOT) of the NSS, and makes recommendations for the NSDS as a result of this analysis.

5.2 Strengths

The following strengths were identified:

a) Statistics Bill already presented to Cabinet;
b) Experience in implementing a NSDS;
c) Well trained staff in GSS to provide technical backstopping to MDAs and MMDAs in the NSS;
d) Improved capacity to collect and analyse data;
e) Improved collaboration within the NSS currently in the production of statistics due to GSDP 1;
f) The Civil Service Law of 1993 and the PARDIC recommendation that obliged the formation of Research, Statistics, and Information Management (RSIM) as one of the four directorates established in all sector Ministries;
g) The establishment of the Ghana Open Data Initiative.

5.3 Weaknesses

a) Weak collaboration and coordination in the wider NSS;
b) Existing data gaps;
c) Limited number of Statistical Units in Metropolitan, Municipal and District Assemblies;
d) Poor dissemination of Compendium of Statistical Concepts and Definitions, leading to little or no use;
e) Limited data release calendars by MDAs and GSS;

f) Inadequate Management Information Systems in MDAs;

g) Low statistical literacy among users;

h) Inadequate user-friendly statistics;

i) Inadequate dissemination of data;

j) Inadequately trained staff;

k) Inadequate Central Government funding to NSS;

l) High staff turnover, lack of succession planning and ageing workforce;

m) Poor culture of maintenance for equipment and infrastructure;

n) Limited ICT infrastructure;

o) Over-reliance on surveys/ censuses rather than administrative data.

5.4   Opportunities

a) Increased demand for statistics to satisfy national and international data needs such as the SDGs, AU Agenda 2063;

b) Increased international technical and financial support for statistics;

c) Technological advances allowing for more timely, accurate, and cost effective data collection, analysis and dissemination;

d) Availability of sub-regional, regional and international frameworks to enhance collaboration;

e) Collaboration among countries in the region (peer reviews);

f) Re-establishment of NACPUS, allowing for producer-user feedback loops;

g) Funding from Ghana Statistics Development Project (GSDP) until 2018;

h) Support from development partners;

i) Availability of specialised institutions which could be consulted to support advanced data analysis and interpretation (ISSER, RIPS, CEPA, IEA and others);

j) Availability of universities and other local institutions to train statisticians;

k) Existence of a large pool of statistics graduates/ professionals in the labour market from which the GSS, MDAs and MMDAs can draw.

5.5 Threats

a) Low appreciation of the importance of statistics in the process of policy- and decision-making;
b) Negative perceptions of completeness and reliability of data;
c) Different reporting formats required by international organizations hampering productivity;
d) Requests for ad hoc surveys by stakeholders which are not part of NSDS;
e) Poor and inadequate remuneration package for statisticians;
f) Lack of a general class for statisticians within the Civil Service;
g) Inadequacy of and delays in government funding for statistical activities;
h) Competition from third party statistics producers;
i) Selective approach adopted by DPs to support NSS;
j) Inconsistent and conflicting statistical data from different producers both within and outside the NSS still exist;
k) New Statistics Bill not yet passed into law by Parliament.

5.6 Recommendations

A number of steps to address weaknesses of the NSS have been identified. These include passage of the Statistics Bill that is currently with Cabinet and the re-establishment of the National Advisory Committee of Producers and Users of Statistics (NACPUS). It is also recommended that a number of activities be centralised at GSS in order to reduce duplication and identify opportunities for cost saving.

5.6.1 The New Statistics Bill

The Statistics Bill seeks to establish the GSS as the central statistics production and coordinating agency for the NSS. Thus, the Statistical Service will be tasked to provide the coordinating mechanism within the modern NSS to ensure that data and resources can be shared between development sectors effectively and efficiently.

The key components of the Bill that will affect the NSS are:
- The granting of coordination powers to GSS

- Establishment of a statistics fund
- Establishment of statistical departments in the districts
- Provision of legal backing to the NACPUS

5.6.2 Re-establishing the National Advisory Committee of Producers and Users of Statistics (NACPUS)

The NSS will re-establish the NACPUS, which is intended to provide valuable feedback to data producers on users' needs and the relevance of official statistics. The Committee is also tasked with protecting the information provided by respondents and those being surveyed, and recommending strategies to ensure the use of uniform standards.

5.6.3 Centralise specific activities at GSS

Under the last NSDS, certain activities such as procurement were centralised at GSS in order to reduce duplication and speed up progress across the NSS. Similarly, there are a number of other areas that would benefit from centralisation including advocacy, human resources and training, and establishing an integrated Management Information System for the NSS.

5.6.3.1 Advocacy strategy to raise profile of statistics

There is low appreciation of, limited access to, and inadequate knowledge of the importance of the use of statistics for development among stakeholders in the NSS. Due to this, there is a need to intensify advocacy to raise the profile of statistics within the MDAs and the NSS. The NSS will commit to develop an advocacy strategy within the first year of the functioning of this NSDS.

5.6.3.2 Human resource requirement, development and management

Professional competence within the NSS is essential for efficient and comprehensive collection, management, dissemination and archiving of statistical information to meet the increasing demand. To this end, there is a need to conduct a human resource capacity analysis of the NSS, especially the

statistical units of the various MDAs that are key providers of administrative data. This analysis would determine:

- the number of staff required for each statistics unit;
- the profile of skills, qualification and competence required for each unit;
- training needs.

A provisional centralised training schedule has been assembled and can be found in annex 5. This schedule will be managed and implemented by the HR Directorate at GSS and will utilise, where possible, the statistical training centre located at GSS, as well as GSS staff to deliver training programmes. External venues and consultants will be contracted as required.

The NSS should also have a code of conduct to enforce professionalism. As part of the efforts to ensure proper management of human resources within the NSS, there is the need to assess and adopt best practices pertaining to codes of conduct in other countries.

5.6.3.3 Project to establish cloud storage to enable a NSS Management Information Systems

The approach to building IT infrastructure under the last NSDS was to address the needs of each MDA individually. Technological advances in the areas of cloud storage since then mean that the time is now right to build a more integrated solution to Management Information Systems (MIS). This will support harmonised statistical production as well as data archiving and storage solutions.

5.6.4 The Current Approach

Up to now, individual MDAs have requested Local Area Networks and Wide Area Networks (LAN/ WAN) in order to facilitate MIS. The objective of LAN/WAN is to facilitate electronic communication and shared resources such as printers, storage, internet and others within a working environment. WAN enables inter-connection between/among the LANs in a wider geographical area.

Note that LAN/WAN is not just cabling and connecting devices; it goes beyond that which makes it expensive and costly to maintain. Some of the costs

include switches, routers, firewalls and the WAN service provisioning cost. Each of the MDAs' LAN/WAN would span from Head Office to Regions to Districts. Apart from the one-time cost of the implementation, there is also recurrent cost such as WAN service fees, maintenance and replacement parts which later become more costly than the implementation cost. The initial cost of implementation alone for 15 MDAs is estimated at $18.4m to connect head offices, to regional and district levels.

If the NSDS were to include MDAs' LAN/WAN implementation, it would imply that the entire MDAs connectivity issues are to be managed by GSS rather than the statistical units of the MDAs. This would significantly shift focus of the NSDS and widen the scope beyond what is manageable.

In addition, the current practice introduces additional burdens in terms of duplication which then affects the sustainability of systems, and further introduces disintegrated management of statistical data or datasets from the MDAs.

5.6.5 The Desired Approach

The desired approach of this NSDS is to implement centralised cloud or web application and database management systems that integrate the data structures of the MDAs into one platform to enable consistency, quality, security and sustainability. The objective of the NSDS Statistical Information System (NSDS SIS) is to build an effective Private Cloud/Web information system on a solid IT infrastructure (such as using NITA Data Centre) for service provisioning to participating MDAs (users) without MDAs investing in infrastructure, software, datacentres and operations individually for the same purpose.

See Figure 5-1 below for a graphical demonstration for the proposed MIS solution. This diagram shows how the data lifecycle of the NSDS Statistical Information System (SIS) flows, from collection to dissemination. The data collection requirements of each of the 16 MDAs will feed into the NSDS SIS development, to enable sector specific reporting. This will enable the NSS to have a centralised repository database (named "statistics database" in the diagram).

NSS STATISTICAL INFORMATION SYSTEM SCENARIO
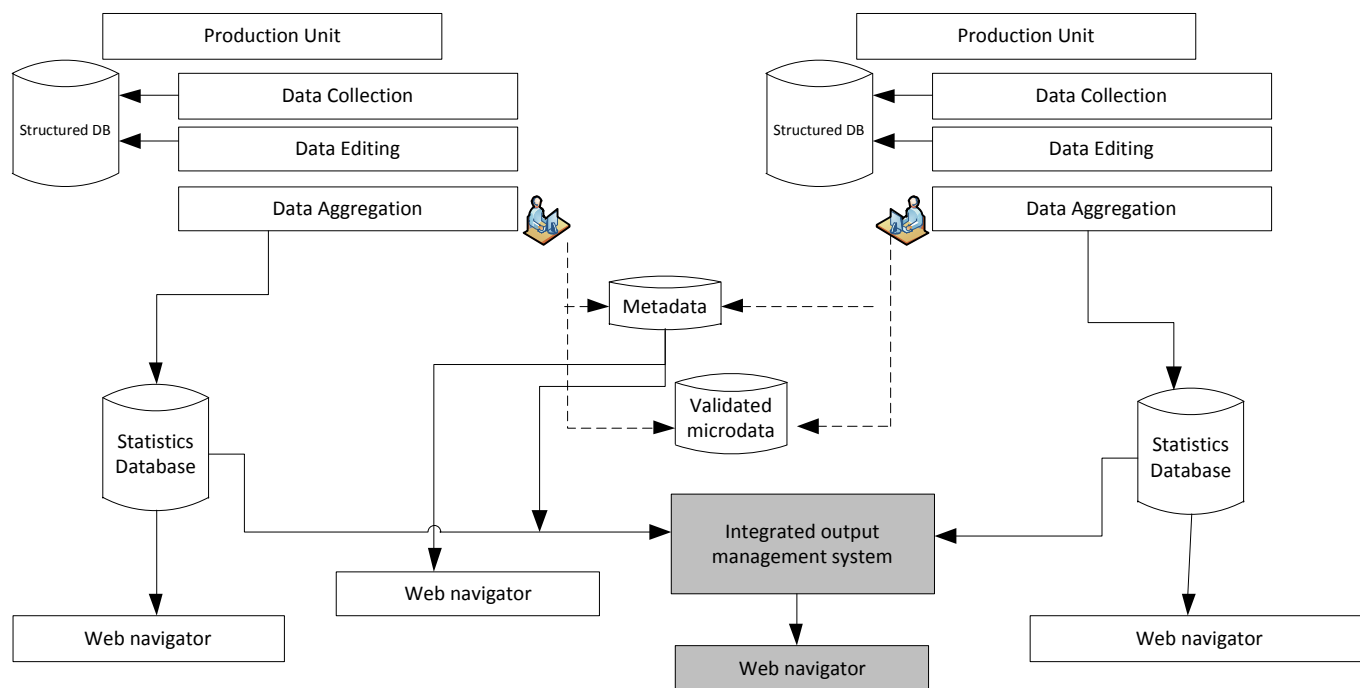
Figure 0-1: Proposed NSS statistical information system

The benefits of such a system include the following:

1. It enables a large amount of data to be collected in a wide range of domains, which is essential for national planning and performance.
2. It provides the same platform for a wide range of data aggregation and aids complex statistics analysis.
3. It also defines complete computational models; and encourages elastic and on-demand capabilities.
4. Fault tolerance – this system recognises that technology occasionally fails and has an in-built fault detection system which allows for quick automatic recovery when failure happens.
5. It helps to model complex business processes and utilizes semantic technologies to provide key insight into how outcomes and causes are related.
6. It allows for well-defined workflows/business processes of different services, applications and human participants.
7. The system is flexible, agile and has scope for scalability, should the NSS expand in the future to include more MDAs.

6. VISION, MISSION AND STRATEGIC GOALS

6.1 Introduction

This chapter outlines the vision, mission, core values and strategic goals of this NSDS.

6.2 Vision and mission

Vision: Efficiently coordinated system delivering quality statistical products and services by 2022

Mission: To produce accurate, relevant, reliable and timely statistics to meet user needs.

6.3 Core values

The core-values and guiding principles which will drive the NSS to achieve the desired output of statistics and indicators are:

Confidentiality: The NSS will guarantee the protection of the "individual records" of data suppliers. The statistical institutions should treat statistical information as strictly confidential and used exclusively for statistical purposes.

Integrity: The NSS will ensure that statistical activities of statistics producers are based on adherence to the principles of objectivity and independence in the collection, compilation and dissemination of statistics. This would encompass institutional arrangements that ensure professionalism in statistical policies and practices, transparency, and ethical standards.

Reliability: The NSS will ensure that data sources are reliable, statistical techniques are sound; and statistical outputs sufficiently reflect reality through robust quality assurance mechanisms and benchmarking.

Relevance: The NSS will work to ensure that statistics produced meet the information needs of users with respect to content coverage and timeliness.

Professionalism: The NSS will operate strictly according to professional considerations, including scientific principles and professional ethics, on the

methods and procedures for the collection, processing, storage and presentation of statistical data.

6.4 Goals and strategies

This NSDS has 6 goals with 22 accompanying strategies. Together, these are intended to strengthen the NSS to perform its functions efficiently and effectively.

6.4.1 Specific goals and their strategies

Table 6-1 outlines the specific goals of this NSDS and their respective strategies.

Table 6-1: Specific goals and their strategies

Goal 1: Improve the policy, regulatory and institutional framework

Strategy 1	Operationalize the new statistics law
Strategy 2	Re-establish NACPUS and its technical sub-committees
Strategy 3	Strengthen the NSS to oversee all statistical activities in the country

Goal 2: Improve human resource development and management

Strategy 1	Strengthen Human Resources of GSS and MDAs
Strategy 2	Establish a coordinated programme for statistical capacity building for the entire NSS

Goal 3: Modernise physical infrastructure

Strategy 1	Refurbish office structures of GSS and MDA statistical units
Strategy 2	Procure vehicles and accessories and maintain existing ones for data collection
Strategy 3	Improve ICT infrastructure across the NSS (computers, servers, etc.)

Goal 4: Update statistical infrastructure

Strategy 1	Revise as appropriate the standardised and harmonised statistical classifications and frameworks (e.g. System of National Accounts, ISIC, etc.)
Strategy 2	Develop a reporting framework for NSS statistical activities, e.g. standard reports from the PHC, GLSS, Annual Schools Census, etc. and from administrative data collection.
Strategy 3	Strengthen and maintain the GSS Resource and Data Centre
Strategy 4	Design a formal workflow for data production/ management cycle for the NSS
Strategy 5	Strengthen the Management Information Systems (MIS) of the NSS by building one (1) cloud/ web based solution for the NSS

Goal 5: Enhance data production, quality, dissemination, and use

Strategy 1	Adopt an integrated census and survey programme that can produce disaggregated data (e.g. gender, income group, migratory status etc.)
Strategy 2	Expand compilation and use of data from administrative records that can produce disaggregated data (e.g. gender, income group, migratory status etc.)
Strategy 3	Advance the awareness of the importance of statistics through targeted advocacy and communication for decision-makers, media, the business community and the general public
Strategy 4	Implement an NSS dissemination policy (e.g. data release calendars and creation of Open Data ecosystem) and more effectively utilise dissemination channels, including web-based channels
Strategy 5	Capitalise on technological advances to collect, process and make data available in a more efficient and timely manner (e.g. use of CAPI)
Strategy 6	Develop a country-specific Quality Assessment Framework for all statistics produced
Strategy 7	Sensitise non-institutional data suppliers to the importance of their role in producing quality statistics
Strategy 8	Enhance Monitoring and Evaluation of NSS statistical activities

Goal 6: Develop sustainable funding arrangements and establish collaborations with national and international institutions

Strategy 1	Identify and establish links with national (e.g. GSS and NDPC), global/regional statistical operations and programmes

7. MULTI-YEAR ACTION PLAN

7.1   Introduction

This chapter contains the multi-year action plan for the NSDS with associated costs. Each goal has a number of strategies associated with it and each strategy contains a number of activities to be carried out by an implementing MDA. These activities are detailed in the grid in the following section. The years in which they take place and the projected cost to be incurred for each activity are also included.

Activities were projected as precisely as possible. However, consideration may be given by the NSS governance system to the addition, replacement, or dropping of activities over the next 5 years due to changing circumstances or opportunities arising as long as the attainment of the parent strategy/ goal would not be undermined.

7.2 Multi-year action plan

The multi-year action plan is outlined in Table 7-1 below.

Table 7-1: Multi-year action plan with associated costs in USD $

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Total
Goal 1: Improve the policy, regulatory and institutional framework								
1.1 Operationalise the new statistics law								
1.1.1	Hold a stakeholder workshop to review the Legislative Instrument by the end of 2018	GSS (CPMD)	$29,040					$29,040
1.1.2	Finalise and print Legislative Instrument	GSS (CPMD)	$1,838					$1,838
1.1.3	Sensitization on new Statistics law for 70 participants	GSS (CPMD)	$10,500					$10,500
			$41,378	$0	$0	$0	$0	$41,378
1.2 Re-establish NACPUS and its technical sub-committees								
1.2.1	Hold quarterly meetings of 9 NACPUS Working Groups	GSS (CPMD)	$42,780	$42,780	$42,780	$42,780	$42,780	$213,900
1.2.2	Meeting of heads of working groups with GSS management twice per year	GSS (CPMD)	$1,830	$1,830	$1,830	$1,830	$1,830	$9,150
			$44,610	$44,610	$44,610	$44,610	$44,610	$223,050
1.3 Strengthening the NSS to oversee all statistical activities in the country								
1.3.1	Develop annual work plans and budgets of GSS and MDAs implementing NSDS	GSS (CPMD)	$36,720	$36,720	$36,720	$36,720	$36,720	$183,600
1.3.2	Act as the secretariat to NSS committees (CPMD running; meeting servicing etc.)	GSS (CPMD)	$60,000	$60,000	$60,000	$60,000	$60,000	$300,000
1.3.3	Project Management Training for all CPMD staff plus selected project coordinators throughout GSS	GSS (CPMD)	$20,000					$20,000

Goal/Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Total
1.3.4	CPI Training for 140 staff every 2 years			$180,000		$180,000		$360,000
			$116,720	$276,720	$96,720	$276,720	$96,720	$863,600
	Sub-Total Goal 1		$202,708	$321,330	$141,330	$321,330	$141,330	$1,128,028
Goal 2: Improve Human Resource development and management								
2.1Strengthen Human Resource of GSS and MDAs.(Career Development and Succession Planning, On line Performance Management.)								
2.1.1	Organise 5 days in-house orientation for 382 GSS staff on performance management system in 2017 and a follow-up programme in 2018	GSS (HR)	$68,460	$68,460				$136,920
2.1.2	Organise 3 days orientation programme for 120 (National Service Personnel, Interns and staff due for retirement	GSS (HR)	$7,275	$7,275	$7,275	$7,275	$7,275	$36,375
2.1.3	Organise quarterly sensitization staff durbars for 382 GSS staff annually to improve Management-Staff communication and work place relations	GSS (HR)	$94,580	$94,580	$94,580	$94,580	$94,580	$472,900
			$170,315	$170,315	$101,855	$101,855	$101,855	$646,195
2.2 Implement a coordinated programme of statistical capacity building for the entire NSS								
2.2.1	Implement training of cross-cutting statistical programmes for all implementing MDAs	GSS (HR)	$460,160	$221,040	$362,760	$211,040	$362,760	$1,617,760
2.2.2	Organise 10 days training programme for 59 staff of Administration, Accounting, Internal Audit and procurement on their fields of operation annually	GSS (HR)	$16,705	$16,705	$16,705	$16,705	$16,705	$83,525
2.2.3	Collaboration with US Census Bureau for training in estimation methods for socio-demographic indicators	GSS (HR, SDSD)	$33,840	$33,840	$33,840			$101,520
2.2.4	Collaboration with Statistics South Korea for training on preparing easy to understand statistical bulletin (socio-demographic) for primary, Junior and senior high students	GSS (HR, SDSD)	$44,200					$44,200
2.2.5	Undertake short courses in environmental statistics (Statistics for ecologists)	EPA		$8,000	$8,000	$8,000	$8,000	$32,000

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Total
2.2.6	Training of 2 officers yearly in data collection, processing and analysis for Road Traffic Statistics at Delft Technology University in the Netherlands	NRSC	$14,400	$14,400	$14,400	$14,400	$14,400	$72,000
2.2.7	Undertake short courses in crime statistics	GPS	$20,000	$20,000	$20,000	$20,000	$20,000	$100,000
2.2.8	Study tour of statistics units of well-developed national police service	GPS	$10,000					$10,000
2.2.9	50 ToTs from the 10 Regional Offices trained on effective data collection and monitoring of Health Related SDGs as well as building the capacity of key staff on data analysis and information usage at the various facilities at all the levels.	MoH				$86,530		$86,530
2.2.10	Training in Monitoring and Evaluation for data managers to effectively undertake data quality checks	MoH		$7,330		$7,330		$14,660
2.2.11	Training of 2 Data capturers for each of the 1078 sub-districts nationwide to increase electronic data capture at the sub-District level by 2021	GHS	$23,180	$23,180	$23,180	$23,180	$23,180	$115,900
2.2.12	Train Staff of RSIM in Labour Statistics and Research Methods	MELR				$60,000		$60,000
2.2.13	Build capacity of staff of the Estate team on Facilities Management and report writing by April, 2017 and June 2018	GSS (Admin)	$50,000	$50,000				$100,000
2.2.14	Train staff on Occupational health and safety measures by January every 2 years	GSS (HR)		$4,950		$4,950		$9,900
2.2.15	Orientation of Staff on security and safety by November 2017 and 2019	GSS (Admin)	$21,750		$21,750			$43,500
			$694,235	$399,445	$500,635	$452,135	$445,045	$2,491,495
	Sub-Total Goal 2		$864,550	$569,760	$602,490	$553,990	$546,900	$3,137,690
Goal 3. Modernize Physical Infrastructure								
3.1 Refurbish office structures of GSS and MDA statistical units								
3.1.1	Upgrade GSS Data Centre to ISO 90001 & 27001 tier 1 standard.	GSS (IT/ Admin)		$500,000				$500,000

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Total
3.1.2	Outsourcing cleaning activities for GSS head office and regional office by September 2017	GSS (Admin)	$50,000	$50,000	$50,000	$50,000	$50,000	$250,000
3.1.3	Refurbishment of nine regional residences and build/acquire a residence for the Greater Accra	GSS (Admin)		$270,000	$90,000		$90,000	$450,000
3.1.4	Liaise with service providers for maintenance of GSS Assets and continuously provide telephone, water, electricity and air-condition services from January 2017 to December 2021	GSS (Admin)	$40,000	$40,000	$40,000	$40,000	$40,000	$200,000
3.1.5	Outsourcing security of the GSS's property at Head office, census secretariat, census annex, 10 regional offices by April, 2017	GSS (Admin)	$200,000	$200,000	$200,000	$200,000	$200,000	$1,000,000
3.1.6	Procure furniture for Head Office	GSS (Admin)		$3,900				$3,900
3.1.7	Procure office equipment	EPA	$19,125					$19,125
3.1.8	Furnish statistical unit at NRSC Head office and 10 regional offices	NRSC		$50,600				$50,600
3.1.9	Establish and furnish office space for Statistical Units in 8 regional offices for Registrar General for data collection	RGD		$49,775	$49,775			$99,550
3.1.10	Procure electrical fixtures for the office	MoFA	$27,500					$27,500
3.1.11	Refurbish statistics office	MoH	$5,000					$5,000
3.1.12	Refurbish office space at Centre for Health Information Management (both regional and District Offices)	GHS	$31,750					$31,750
3.1.13	Furnish office for RSIM directorate at MoE head office	MoE	$6,600					$6,600
3.1.14	Enhance the storage and retrieval of immigration records using mobile shelving	GIS		$100,000				$100,000
3.1.15	Refurbish RSIM office of MoTCCA	MoTCCA		$7,850				$7,850
			$379,975	$1,272,125	$429,775	$290,000	$380,000	$2,751,875
3.2 Procure vehicles and accessories and maintain existing vehicles for data collection								
3.2.1	Six Saloon/Sedan cars	GSS	$66,000		$66,000		$66,000	$198,000
3.2.2	Procurement of 41 station wagons (4x4 vehicles) over 5 year period to replace overaged vehicles in implementing MDAs to support data collection exercises	All MDAs		$1,115,200	$557,600	$557,600	$557,600	$2,788,000

Goal/Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Total
3.2.3	Procure 16 pick-up vehicles to support data collection exercies in implementing MDAs	All MDAs		$752,000				$752,000
3.2.4	Procure 5 mobile registration vans for births and deaths registration in very low coverage areas	BDR		$235,000				$235,000
3.2.5	Maintenance & repairs of vehicles	GSS (Admin)	$100,000	$100,000	$100,000	$100,000	$100,000	$500,000
3.2.6	Procure 800 assorted tyres	GSS (Admin)		$140,000		$140,000		$280,000
3.2.7	Procure 300 batteries	GSS (Admin)			$52,500			$52,500
3.2.8	Procure insurance for existing and newly acquired vehicles	GSS (Admin)	$6,600	$210,220	$272,580	$272,580	$272,580	$1,034,560
			$172,600	$2,552,420	$1,048,680	$1,070,180	$996,180	$5,840,060

3.3 Improve ICT infrastructure (computers, storage, archiving, central repository)

Goal/Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Total
3.3.1	Connectivity maintenance including Regional offices (monthly)	GSS (IT/Admin)		$60,000	$60,000		$30,000	$150,000
3.3.2	Maintenance and upgrade of GSS web-portal for easy access of data/information.	GSS (IT)		$100,000	$50,000		$50,000	$200,000
3.3.3	Maintain GSS digitised document and record management system	GSS (IT)		$60,000	$60,000		$30,000	$150,000
3.3.4	Procure 400 laptops for all implementing MDAs	All MDAs	$126,720	$126,720	$126,720	$126,720	$126,720	$633,600
3.3.5	Procure 560 desktops for all implementing MDAs	All MDAs		$436,800	$218,400			$655,200
3.3.6	Procurement of 5 photocopiers (1 per 2 directorates) over the next 5 years to support statistics production	GSS (Admin)	$6,750	$6,750	$6,750	$6,750	$6,750	$33,750
3.3.7	Procurement of 5 projectors (1 per 2 directorates) over the next 5 years to support statistics production	GSS (Admin)	$500	$500	$500	$500	$500	$2,500
3.3.8	Procurement of 30 printers (1 per 2 directorates) over the next 5 years to support statistics production	GSS (Admin)	$5,500		$5,500		$5,500	$16,500
3.3.9	Installation of stores management software eg. Save or Paskel and training of 5 officers on the use the software by December 2017 to facilitate management of procured items to support statistics production	GSS (IT)	$13,838					$13,838

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Total
3.3.10	Procure and maintain mobile devices to enable GSS communication/ dissemination on social media	GSS (IT/ CDD)	$14,000	$8,000	$8,000	$8,000	$8,000	$46,000
3.3.11	Purchase of 175 GPS for use in crime data collection	GPS	$245,000					$245,000
3.3.12	Purchase 50 users software for the GPS	GPS	$31,100					$31,100
3.3.13	Training in the use of GPS for 1,350 officers	GPS		$200,000				$200,000
3.3.14	1000 tablets for registration of Births and deaths	B&D	$150,000	$150,000				$300,000
3.3.15	Procure document digitizing equipment to digitize GIS data	GIS		$501,925				$501,925
			$593,408	$1,650,695	$535,870	$141,970	$257,470	$3,179,413
	Sub-Total Goal 3		$1,145,983	$5,475,240	$2,014,325	$1,502,150	$1,633,650	$11,771,348
Goal 4: Update Statistical Infrastructure								
4.1 Revise as appropriate the standardised and harmonised statistical classifications and frameworks, e.g. System of National Accounts, ISIC etc.								
4.1.1	Promote the use of common concepts, definitions, standards and classifications within international requirements over the next five years for users of statistics	GSS (CPMD)	$10,000	$10,000	$10,000	$10,000	$10,000	$50,000
4.1.2	Harmonisation of concepts, definitions and standards of classification of data/statistics on water, housing and works	MWRWH		$34,660				$34,660
			$10,000	$44,660	$10,000	$10,000	$10,000	$84,660
4.2 Develop a reporting framework for NSS statistical activities, e.g. standard reports from the PHC, GLSS, Annual Schools Census, etc. and from administrative data collection.								
4.2.1	Collaboration with STATISTICS NORWAY to improve national accounts reporting	GSS (ESD)	$70,333		$70,333			$140,667
4.2.2	Annual update of the Business Register using validated government registers	GSS (ESD)	$10,000	$10,000	$10,000	$10,000	$10,000	$50,000
4.2.3	Collaboration with ISSER and IFPRI for production of Ghana Social Accounting Matrix (SAM)	GSS (ESD)	$7,000	$7,000	$7,000	$7,000	$7,000	$35,000

Goal/Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Total
4.2.4	Collaboration with Ministry of Tourism, Ghana Tourist Board and other stakeholders to produce Tourism Satellite Accounts (TSA)	GSS (ESD)		$1,125,000				$1,125,000
4.2.5	Produce an annual national and regional reports on crime, accidents, arms etc. in consultation with GSS	GPS	$50,000	$50,000	$50,000		$50,000	$200,000
4.2.6	Produce and monitor labour and employment indicators to fulfil reporting requirements for national policies, SMTDP, SDGs and international Conventions annually	MELR	$4,500	$4,500	$4,500	$4,500	$4,500	$22,500
4.2.7	Produce 1 research report per year on a thematic area such as teacher absenteeism	MoE	$11,350	$11,350	$11,350	$11,350	$11,350	$56,750
4.2.8	Produce and make available quarterly reports on migration information 2 weeks after every quarter	GIS	$3,000	$3,000	$3,000	$3,000	$3,000	$15,000
4.2.9	Develop and disseminate annual statistical reports/bulletins (water, housing etc.) on the activities of the Ministry and its Departments/Agencies to the general public.	MWRWH	$2,863	$2,863	$2,863	$2,863	$2,863	$14,315
4.2.10	Coordinate the production of indicators for the SDGs (Goal 6 and 9) annually, working with statutory bodies and NGOs.	MWRWH	$6,420	$6,420	$6,420	$6,420	$6,420	$32,100
			$165,466	$1,220,133	$165,466	$45,133	$95,133	$1,691,332
4.3 Strengthen and maintain the GSS Resource and Data Centre								
4.3.1	Train staff to design and implement a standard data warehouse architecture	GSS (CDD)	$25,760	$30,000				$55,760
4.3.2	Build the capacity of staff in client service management	GSS (CDD)	$20,000					$20,000
4.3.3	Build capacity of 4 staff of GSS Resource and Data Centre in data warehousing and mining techniques through external training	GSS (HR)		$10,000	$10,000	$10,000		$30,000
			$45,760	$40,000	$10,000	$10,000	$0	$105,760
4.4 Design a formal data production/ management cycle for the NSS								
4.4.1	Hire a consultant to design and implement data management cycle for NSS	GSS (IT)	$20,000	$20,000				$40,000

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Total
4.5 Strengthen the Management Information Systems (MIS) of the NSS by building 1 cloud/ web based solution for the NSS								
4.5.1	Develop Business Process Mapping, Modelling and Improvement for all NSS members	GSS (IT)	$1,600,000					$1,600,000
4.5.2	Develop Enterprise Architecture design and Integrated Architecture Framework	GSS (IT)		$480,000				$480,000
4.5.3	Automate Enterprise Architecture	GSS (IT)		$1,000,000				$1,000,000
4.5.4	Undertake maintenance of IT systems	GSS (IT)				$300,000	$300,000	$600,000
4.5.5	Build capacity of IT team to support the National Statistical System	GSS (IT)	$60,000	$60,000	$60,000	$60,000	$60,000	$300,000
4.5.6	Harmonize and secure information system environment	GSS (IT)	$125,000					$125,000
			$1,785,000	$1,540,000	$60,000	$360,000	$360,000	$4,105,000
	Sub-Total Goal 4		$2,047,193	$2,864,793	$245,466	$425,133	$465,133	$6,047,718
Goal 5: Enhance data production, quality, dissemination, and use								
5.1 Adopt an integrated census and survey programme that can produce disaggregated data (e.g. gender, income group, migratory status etc.)								
5.1.1	Conduct 2020 Population and Housing Census	GSS (SOCD)	$2,890,016	$24,502,027	$55,834,450	$1,143,080	$231,800	$84,601,373
5.1.2	Conduct Census of Agriculture Phases 2 & 3	GSS (ESD)	$10,500,000		$10,500,000			$21,000,000
5.1.3	AGRIS core and rotating modules	GSS (ESD)		$200,000	$200,000	$200,000	$200,000	$800,000
5.1.4	Conduct GDHS ROUND 7	GSS (SOCD)			$1,000,000			$1,000,000
5.1.5	Conduct MICS ROUND 4	GSS (SOCD)					$1,500,000	$1,500,000
5.1.6	Conduct GLSS ROUND 8	GSS (SOCD)					$5,994,600	$5,994,600
5.1.7	Malaria Indicators Survey	GSS (SOCD)	$953,409					$953,409
5.1.8	Conduct Labour Force Survey	GSS (SDD)		$1,500,000		$1,500,000		$3,000,000
5.1.9	User Satisfaction Survey	GSS (CDD)				$350,000		$350,000

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Total
5.1.10	Undertake CPI rebasing in 2020	GSS (ESD)				$300,000		$300,000
5.1.11	Undertake GDP rebasing in 2021	GSS (ESD)					$300,000	$300,000
5.1.12	Undertake Producer Price Index (PPI) & Index of Industrial Production (IIP) rebasing and publication of these indices in 2017 and 2018	GSS (ESD)		$300,000			$300,000	$600,000
5.1.13	Conduct annual Economic survey to estimate output, inputs and stock indicators for medium, small, and micro establishments	GSS (ESD)		$508,000		$508,000	$508,000	$1,524,000
5.1.14	Conduct GAPS survey in all districts	MoFA	$805,739	$805,739	$805,739	$805,739	$805,739	$4,028,695
5.1.15	Conduct a 14 day yield studies with 17 SRID staff in all ecological zones of the country in the 3rd quarter of the year.	MoFA	$23,240	$23,240	$23,240	$23,240	$23,240	$116,200
5.1.16	Conduct a vegetable survey with 15 ASCU staff in ten Districts annually.	MoFA	$85,346	$85,346	$85,346	$85,346	$85,346	$426,728
5.1.17	Annual food market price data collection	MoFA		$168,296	$168,296		$168,296	$504,888
5.1.18	Maternal Death Survey	MOH			$220,491		$220,491	$440,983
5.1.19	Systematic geological mapping	MLNR	$124,482	$248,964	$124,482		$124,482	$622,410
5.1.20	Regional Geochemical Soil Sample of twenty-five field sheets (five field sheets annually) by 2021	MLNR		$405,162	$135,054		$135,054	$675,270
5.1.21	Process and Interpret Airborne Geophysical Data by 2021	MLNR	$56,800	$56,800	$56,800	$56,800	$56,800	$284,000
5.1.22	Data collection on forest resources	MLNR		$390,300	$390,300		$390,300	$1,170,900
5.1.23	Data collection on minerals resources	MLNR		$390,300	$390,300		$390,300	$1,170,900
5.1.24	Capture gender disaggregated data in relation to age, urban and rural land transactions in 2017-2018 to satisfy data requirements of policy-makers	MLNR	$59,200	$59,200		$59,200		$177,600
5.1.25	Data collection on stool lands, family lands	MLNR	$89,400	$89,400	$89,400	$89,400	$89,400	$447,000
5.1.26	Conduct child labor survey to update the 2002 child labor survey	MoGCSP		$193,215				$193,215

46

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Total
5.1.27	Conduct Labour Market Survey (LMS) every 2 years	MELR		$293,575		$293,575		$587,150
5.1.28	ICT Survey to collect disaggregated data for measuring SDGs	NCA	$183,640	$183,640	$183,640	$183,640	$183,640	$918,200
5.1.29	Undertake Annual Schools Census	MoE	$640,280	$640,280	$640,280	$640,280	$640,280	$3,201,400
5.1.30	Collaborate with GSS to carry out a survey to establish the number of households that use underground water without recourse to Water Resources Commission	MWRWH	$100,000					$100,000
5.1.31	Use GIS mapping to determine the areas that are vulnerable to erosion along the coastline by end of 2020.	MWRWH				$50,775		$50,775
			$16,511,551	$31,043,484	$70,847,818	$6,289,075	$12,347,768	$137,039,695

5.2 Expand compilation and use of data from administrative records that can produce disaggregated data (e.g. gender, income group, migratory status etc.)

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Total
5.2.1	Build a database of Environmental Impact Assessment allowing for the issuing of permits on a sector by sector basis	EPA	$33,125	$33,125				$66,250
5.2.2	Collect data to monitor compliance of permitted projects and chemicals nationwide	EPA	$49,715	$49,715	$49,715	$49,715	$49,715	$248,575
5.2.3	Collect data on environmental quality indicators by the regions	EPA	$38,880	$38,880	$38,880	$38,880	$38,880	$194,400
5.2.4	Continuously collect data on the level of greenhouse gas emissions by Head Office	EPA	$68,460		$68,460			$136,920
5.2.5	Development of templates in consultation with GSS Social Statistics Directorate for capturing and reporting data from police stations throughout the nation	GPS	$56,400					$56,400
5.2.6	To increase coverage of Administrative data collected from MMDAs, two (2) officers per Region will coordinate the collection of official statistics from MMDA's monthly to produce a Regional/District report of administrative data. The first report will be due by September, 2017	GSS (RoD)	$27,900	$27,900	$27,900	$27,900	$27,900	$139,500
5.2.7	Produce data for annual report on civil registration and vital statistics	GSS (SDD)	$6,140	$6,140	$6,140	$6,140	$6,140	$30,700

47

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Total
5.2.8	Train 20 officers on Statistical Management System at the head office and regional levels to enhance administrative data collection	GPS		$18,000				$18,000
5.2.9	Establish an IT infrastructure for data transmission from regions and districts to the headquarters	GPS	$30,000					$30,000
5.2.10	Train and monitor national, zonal and district representatives on crime data collection using updated templates	GPS	$400,000	$400,000	$400,000	$400,000	$400,000	$2,000,000
5.2.11	Train stakeholders at the district level on completion of marriage registration forms and submission of returns	RGD		$153,090				$153,090
5.2.12	Train 40 staff to compile data on all types of businesses registered (current)/ liquidated/ industrial property (collaborate with GSS)	RGD		$87,840				$87,840
5.2.13	Scale-up community register programme	B&D		$364,150	$364,150	$364,150	$364,150	$1,456,600
5.2.14	Annual statistical report writing of detailed analysis and validation of disaggregated health data from key Agencies (15) within the sector	MOH	$19,460	$19,460	$19,460	$19,460	$19,460	$97,300
5.2.15	Sensitize out-stations of the forest sub-sector on the importance and their role in producing quality statistical data	MLNR	$12,400					$12,400
5.2.16	Develop statistical templates to collect administrative data from Departments/Agencies for annual statistical report on labour and employment	MELR	$12,250	$12,250	$12,250	$12,250	$12,250	$61,250
5.2.17	Collect administrative data for and publish quarterly statistical bulletin on ICT in Ghana on the NCA website,	NCA		$45,700	$22,850	$22,850	$22,850	$114,250
5.2.18	Establish data cells in each of the 20 agencies under MoE to collect administrative data	MoE-RSIM Coordinator		$33,000				$33,000
			$754,730	$1,289,250	$1,009,805	$941,345	$941,345	$4,936,475

5.3 Advance the awareness of the importance of statistics through targeted advocacy and communication for decision-makers, media, the business community and the general public

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Total
5.3.1	Conduct an annual statistics fair for stakeholders	GSS (CDD)		$119,350	$119,350	$119,350	$119,350	$477,400

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Total
5.3.2	Hold awareness creation and sensitization programme on appropriate use of statistical data for evidence-based decision/policy making	GSS (CDD)	$24,120		$24,120		$24,120	$72,360
5.3.3	Utilize social media to increase awareness and education and address critical issues on statistics production and dissemination.	GSS (IT)		$10,225				$10,225
5.3.4	Organise Media training and sensitization workshops for 50 journalist to increase public awareness and appropriate use of statistical data every other year, 2017,2019 and 2021	GSS (CDD)		$14,800	$14,800		$14,800	$44,400
5.3.5	Run a biannual advertisement in the three newspapers and 3 TV stations three times aimed at informing and educating the public on existing statistical products to enhance statistical literacy	GSS (CDD)		$24,120	$24,120		$24,120	$72,360
5.3.6	Hold annual statistical literacy & advocacy programmes on gender statistics	MoGCSP	$9,175	$9,175	$9,175	$9,175	$9,175	$45,875
			$33,295	$177,670	$191,565	$128,525	$191,565	$722,620

5.4 Implement an NSS dissemination policy (e.g. data release calendars and creation of Open Data ecosystem) and more effectively utilise dissemination channels including web-based channels

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Total
5.4.1	Implementing NSS dissemination policy	GSS (CDD)	$30,000	$30,000			$30,000	$90,000
5.4.2	Publish annual Economic survey report	GSS (ESD)	$750	$750	$750	$750	$750	$3,750
5.4.3	Publish Annual Socio-demographic profile of Ghana	GSS (SDD)	$1,600	$1,600	$1,600		$1,600	$6,400
5.4.4	Publish annual analytical report from road traffic statistics	GSS (SDD)	$1,600	$1,600	$1,600		$1,600	$6,400
5.4.5	Prepare, publish and disseminate easy to understand statistical bulletin for primary, Junior and senior high school students	GSS (SDD)		$4,800	$1,600		$1,600	$8,000
5.4.6	Print and dissemination of assorted publications from implementing MDAs	All MDAs		$300,000	$300,000	$400,000	$350,000	$1,350,000
			$33,950	$338,750	$305,550	$400,750	$385,550	$1,464,550

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Total
5.5 Capitalize on technological advances to collect, process and make data available in a more efficient and timely manner, e.g. use of CAPI								
5.5.1	To acquire, develop and utilize modern technology in capturing RTC data	NRSC		$500,000				$500,000
5.5.2	Digitization of Backlog of marriage data (1m per year for 5 years)	RGD		$250,000	$250,000	$250,000	$250,000	$1,000,000
5.5.3	Develop Web portal for data capturing and intelligence system to generate real-time ICT indicator reports (Dashboard)	NCA	$65,000					$65,000
5.5.4	Pilot use of CAPI for data collection and processing through the Enhanced EMIS application in 3 regions	MoE	$31,600					$31,600
5.5.5	Replicate use of CAPI for data collection and processing through the Enhanced EMIS application in all 10 regions					$540,000		$540,000
5.5.6	Maintenance of the enhanced education management information system (EMIS)	MoE		$30,000	$30,000	$30,000	$30,000	$120,000
			$96,600	$780,000	$280,000	$820,000	$280,000	$2,256,600
5.6 Develop a country-specific Quality Assessment Framework for all statistics produced								
5.6.1	Develop data quality assessment framework	GSS (CDD)	$40,500	$40,500				$81,000
5.6.2	Implement quality assessment framework	(GSS (CDD)	$45,000	$45,000	$45,000	$45,000	$45,000	$225,000
5.6.3	Conduct national data quality audit every two years	GHS		$82,500		$82,500		$165,000
			$85,500	$168,000	$45,000	$127,500	$45,000	$471,000
5.7 Sensitize non-institutional data suppliers to the importance of their role in producing quality statistics								
5.7.1	Devise and implement a publicity strategy on the need for registration of marriages, filing marriage returns and businesses	RGD	$2,400	$2,400	$2,400	$2,400	$2,400	$12,000
5.7.2	Devise and implement a publicity strategy on early registration of births and deaths	B&D		$16,000	$16,000	$16,000	$16,000	$64,000
			$2,400	$18,400	$18,400	$18,400	$18,400	$76,000

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Total
5.8 Enhance Monitoring and Evaluation of NSS statistical activities								
5.8.1	Training of all 15 staff of CPMD in M&E	CPMD	$20,000	$20,000	$20,000	$20,000	$20,000	$100,000
5.8.2	Conduct M&E activities including data collection to complete results framework	CPMD		$19,690	$19,690	$19,690	$19,690	$78,760
			$20,000	$39,690	$39,690	$39,690	$39,690	$178,760
	Sub-Total Goal 5		$17,538,026	$33,855,244	$72,737,828	$8,765,285	$14,249,318	$147,145,700
Goal 6: Develop sustainable funding and collaborative arrangements with national and international institutions								
6.1 Identify and establish links with national (e.g. GSS and NDPC), global/regional statistical operations and programmes								
6.1.1	Annual CRESS report	GSS (CPMD/ FD)	$5,000	$5,000	$5,000	$5,000	$5,000	$25,000
6.1.2	Scoping exercise to be carried out into potential partnerships with external organizations	GSS	$10,000					$10,000
6.1.3	Sponsor two Senior officers of ASC Unit to attend AFCAS (African Commission on Agriculture Statistics) biannual meeting.	MoFA	$5,300		$5,300		$5,300	$15,900
6.1.4	Participate in international statistical conferences especially on SDGs	GSS	$33,000	$33,000	$33,000	$33,000	$33,000	$165,000
	Sub-Total Goal 6		$53,300	$38,000	$43,300	$38,000	$43,300	$215,900
	Total		**$21,851,759**	**$43,124,367**	**$75,784,739**	**$11,605,888**	**$17,079,631**	**$169,446,383**

8. MULTI-YEAR BUDGET PLAN

8.1 Introduction

This chapter provides an overview of the cost of this NSDS. Costs are broken down by goal and strategy. For a breakdown of cost by activity, implementer and year, see Table 7-1 above.

The total cost of implementing this plan is $169.4m.

8.2 Multi-year budget

The majority of the overall budget is allocated to goal 5 which contains the entire census and survey activities as well as those designed to strengthen the administrative data system of the country (Table 8-1).

Table 8-1: Summary of costs by goal

Goals	Cost in USD$
1. *Improve the policy, regulatory and institutional framework*	$1,128,028
2. *Improve Human Resource development and management*	$3,137,690
3. *Modernise Physical infrastructure*	$11,771,348
4. *Update Statistical Infrastructure*	$6,047,717
5. *Enhance data production, quality, dissemination, and use*	$147,145,700
6. *Develop sustainable fudding and collaborative arrangements with national and international institutions*	$215,900
Total	**$169,446,383**

Figure 8-1: Distribution of funds required for NSDS by goal

The majority of Census & Survey funds are allocated to the 2020 Population and Housing Census ($84.6m). For a list of all major censuses and surveys (2010-2021) see annex 3.

Table 8-2 below summarises the cost of delivering on each strategy.

Table 8-2: Summary costs by strategy

Strategy	Cost
Goal 1: Improve the policy, regulatory and institutional framework	
1.1 Operationalise the new statistics law	41,378
1.2 Re-establish NACPUS and its technical sub-committees	223,050
1.3 Strengthening the NSS to oversee all statistical activities in the country	863,600
Goal 2: Improve Human Resource development and management	
2.1 Strengthen human Resources of GSS and MDAs	646,195
2.2 EImplement a coordinated programme for statistical capacity building	2,491,495
Goal 3: Modernise Physical infrastructure	
3.1 Refurbish office structures of GSs and MDAs statistics units	2,751,875
3.2 Procure vehicles and accessories and maintain existing ones for data collection	5,840,060
3.3 Improve ICT infrastructure (computers, storage, archiving, central repository)	3,179,413
Goal 4: Update Statistical Infrastructure	
4.1 Revise as appropriate the standardised and harmonised statistical classifications and frameworks, e.g. System of National Accounts. ISIC etc.	84,660
4.2 Develop a reporting framework for NSS statistical activities, e.g. standard reports from the PHC, GLSS, Annual Schools Census. etc. and from administrative data collection.	1,691,331
4.3 Strengthen and maintain the GSS Resource and Data Centre	105,760
4.4 Design a formal data production/ management cycle for the NSS	60,966
4.5 Strengthen the Management Information Systems (MIS) of the NSS by building 1 cloud/ web based solution for the NSS	4,105,000
Goal 5: Enhance data production, quality, dissemination, and use	
5.1 Adopt an integrated census and survey programme that can produce disaggregated data (e.g. gender, income group, migratory status etc.)	137,039,695
5.2 Expand compilation and use of data from administrative records that can produce disaggregated data (e.g. gender, income group, migratory status etc.)	4,936,475
5.3 Advance the awareness of the importance of statistics through targeted advocacy and communication for decision-makers, media. the business community and the general public	722,620
5.4 Implement an NSS dissemination policy (e.g. data release calendars and creating an Open Data ecosystem) and more effectively utilise dissemination channels including web-based channels	1,464,550
5.5 Capitalise on technological advances to collect, process and make data available in a more efficient and timely manner, e.g. use of CAPI	2,256,600
5.6 Develop a country-specific Quality Assessment Framework for all statistics produced	471,000
5.7 Sensitise non-institutional data suppliers to the importance of their role in producing quality statistics	76,000
5.8 Enhance Monitoring and Evaluation of NSS statistical activities	178,760
Goal 6: Develop sustainable funding and collaborative arrangements with national and international institutions	
6.1 Identify and establish links with national (e.g. GSS and NDPC), global/regional statistical operations and programmes	215,900
Total	**169,446,383**

8.3   Funding arrangements

This NSDS will be implemented at a total cost of US $169,446,383 over a period of five years. Since the strategy is owned by the Government of Ghana, the Government is expected to provide the funds for its implementation. However, in the spirit of cooperation, collaboration and partnership, Development Partners would be encouraged to support Government by contributing both technical and financial resources to complement government's efforts in implementing the strategy.

MONITORING AND EVALUATION

8.4   Introduction

This chapter outlines the governance mechanisms for this NSDS and the monitoring and evaluation framework and timeline it will adhere to.

8.5   Current governance mechanism

The current governance mechanism for the National Statistical System was established under the Ghana Statistics Development Project which began operation in 2014. This consists of a National Steering Committee whose remit includes oversight of the activities of the GSD Project, the GSS management, and the Co-ordination and Programme Management Directorate of the Ghana Statistical Service with responsibility for management of the implementation of the project (Figure 9-1). A Technical Committee was also constituted to carry out implementation in the Ministries, Departments and Agencies involved in the project.

Figure 8-2: Current NSS governance mechanism

8.6 Governance mechanism for implementation

Figure 9-2 depicts the governance mechanism for implementing the strategy.
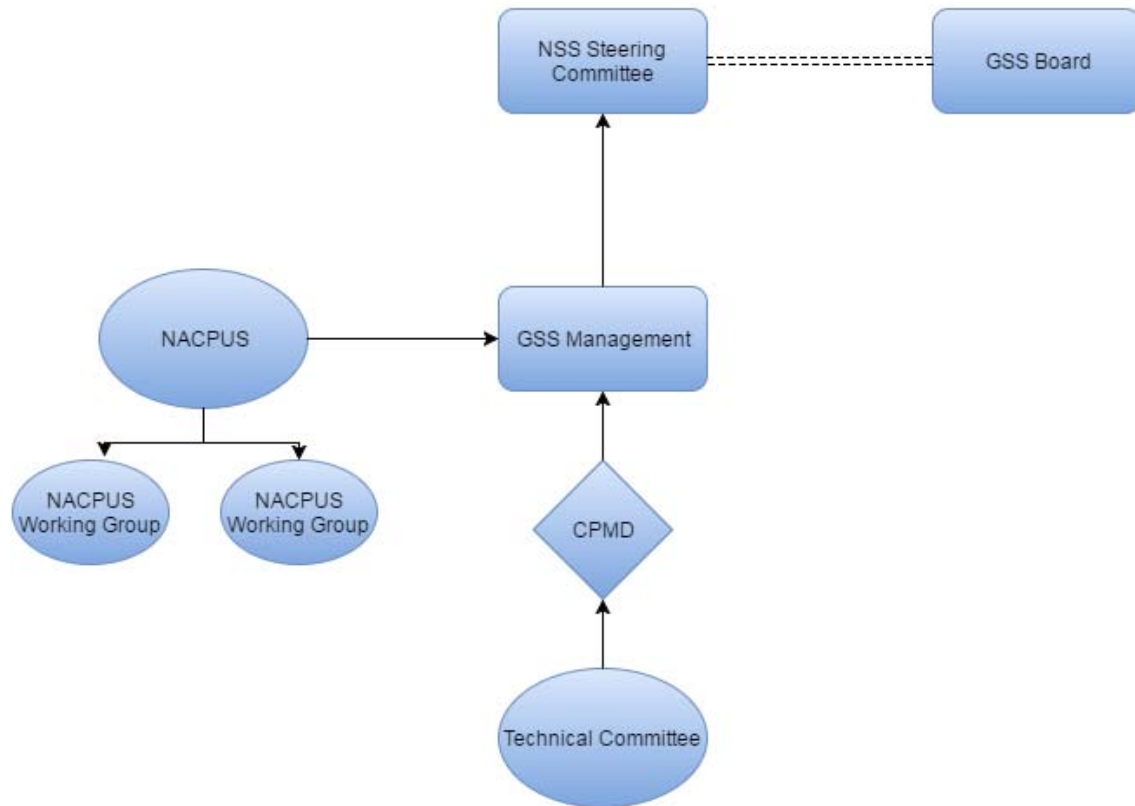
Figure 8-3: NSS Governance Mechanism

8.6.1 National Statistical System Steering Committee

The role of the NSS Steering Committee is to have oversight of the implementation of the NSDS programme. Members will meet quarterly and review progress of implementation from GSS Management.

The Steering Committee includes membership from the GSS and the MDAs represented on the NSDS activity plan, plus two members of the GSD Project. It will also include representation from a number of Government institutions and organizations that deal with statistics in their day-to-day activities, as well as representation of Development Partners. The NSS membership shall be as follows:

- The Chairman of the Board of the Ghana Statistical Service;
- The Government Statistician;
- The Chief Directors of the MDAs represented on the NSDS activity plan;
- A representative from the Ministry of Finance;
- The Director-General of the National Development Planning Commission;
- A representative from the Bank of Ghana; and
- A representative of Development Partners (1 representative and 1 alternate).

8.6.2 GSS Management

The role of GSS Management is to supervise the operational implementation of the NSDS programme and ensure adequate funds are made available by liaising with the government of Ghana Ministry of Finance and the development partners.

8.6.3 CPMD

CPMD is the Co-ordination and Programme Management Directorate within GSS which will manage the operational implementation of the NSDS activity plan and oversee monitoring and evaluation.

8.6.4 Technical Committee

The Technical Committee is responsible for the day-to-day implementation of the activity plan and reporting on progress to the CPMD at monthly meetings.

The membership of the Technical Committee will be representatives from each of the MDAs included in the NSDS activity plan.

8.6.5 NACPUS

The National Advisory Committee of the Producers and Users of Statistics (NACPUS) is intended to provide valuable feedback to data producers on users' needs and the relevance of official statistics. The Committee is also tasked with

protecting the information provided by respondents and those being surveyed, and recommending strategies to ensure the use of uniform standards.

The membership of NACPUS will comprise all members of the technical committee and members drawn from the user community such as universities, government departments, etc.

NACPUS will also have a number of sub-committees focussing on specific aspects of statistics; and will meet quarterly prior to the Steering Committee Meeting.

Table 8-3: Yearly cycle of committee meetings

Committee	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
NSS Steering Committee			■			■			■			■
NSS Technical Committee												
NACPUS		■			■			■			■	
Meeting between heads of NACPUS working Groups and GSS Management					■						■	
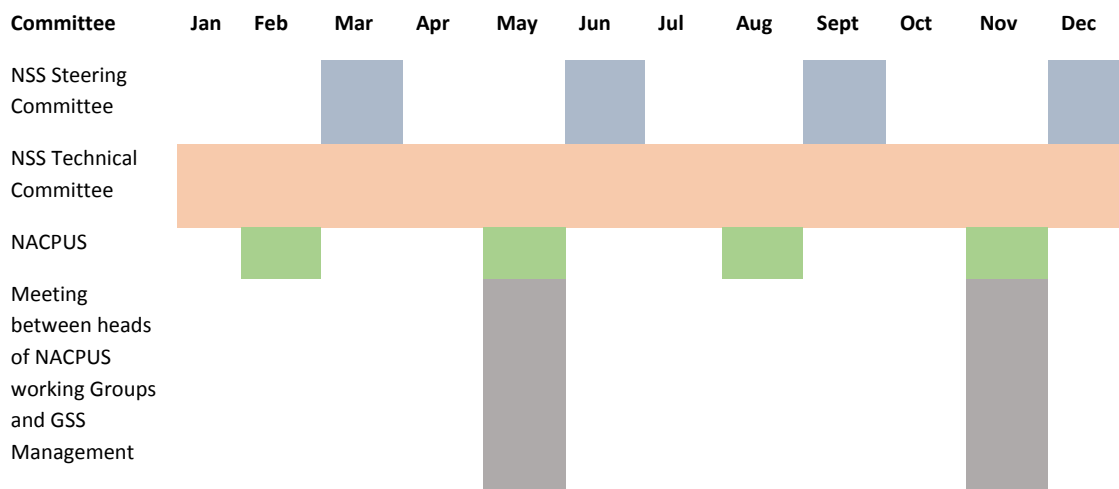
8.7   Monitoring and evaluation

The log frame in Table 9-2 below will be the main tool for monitoring and evaluating progress towards each goal. Each activity has a specific implementer, verifiable indicator and means of verification.

Table 8-4: Monitoring and evaluation log frame

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
Goal 1: Improve the policy, regulatory and institutional framework									
1.1 Operationalize the new statistics law									
1.1.1	Hold a stakeholder workshop to review the Legislative Instrument	GSS (CPMD)	▓					Finalized LI submitted to GSS	Workshop report and LI submitted to GSS management
1.1.2	Finalize and print Legislative Instrument	GSS (CPMD)	▓					Legislative instrument is in place by the end of 2018	Legislative instrument available on the GSS website and printed copies available at the GSS library
1.1.3	Sensitization on new Statistics law for 70 participants	GSS (CPMD)	▓					Number of NACPUS members sensitized on LI	Report on LI sensitization workshop
1.2 Re-establish NACPUS and its technical sub-committees									
1.2.1	Hold quarterly meetings of 9 NACPUS Working Groups	GSS (CPMD)	▓	▓	▓	▓	▓	Quarterly meetings being held at GSS head office on a quarterly basis	meeting minutes
1.2.2	Meeting of heads of working groups with GSS management twice per year	GSS (CPMD)	▓	▓	▓	▓	▓	Meetings of heads of working groups with GSS management being held twice per year to discuss issues/ recommendations	meeting minutes
1.3 Strengthening the NSS to oversee all statistical activities in the country									
1.3.1	Develop annual work plans and budgets of GSS and MDAs implementing NSDS	GSS (CPMD)	▓	▓	▓	▓	▓	Annual work plans submitted to CPMD by GSS directorates, and implementing MDAs by end of October of previous year	CPMD report to NSS steering committee
1.3.2	Act as the secretariat to NSS committees (CPMD running; meeting servicing etc.)	GSS (CPMD)	▓	▓	▓	▓	▓	All meetings run to schedule, meeting minutes circulated within 2 weeks, at least 1 member of CPMD team to attend each committee meeting	Reports of NACPUS committees to NSS Secretariat
1.3.3	Project Management Training for all CPMD staff plus selected project coordinators throughout GSS	GSS (CPMD)	▓					All CPMD staff members and 7 selected project coordinators from other directorates to receive project management training at GIMPA and a project management handbook	Training report submitted to NSS Steering Committee and project documentation submitted to GSS management on an ongoing basis.

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
			■					containing procedures for GSS to be produced by end of 2018. All projects to be run according to handbook by end of 2019.	
1.3.4	CPI Training for 140 staff every 2 years		■		■		■	10 day CPI training conducted with all 140 staff every 2 years ensuring that price data is being collected in the correct manner.	Training report and monitoring of ongoing price data collection

Goal 2: Improving Human Resource development and management

2.1 Strengthen Human Resource of GSS and MDAs.(Career Development and Succession Planning, On line Performance Management.)

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
2.1.1	Organize 5 days in-house orientation for 382 GSS staff on performance management system	GSS (HR)	■	■				Staff performance management system being fully implemented including staff appraisals and accessible performance management protocols	Annual staff appraisals carried out and summary report submitted to the GSS Board
2.1.2	Organize 3 days orientation programmes for 120 (National Service Personnel, Interns and staff due for retirement	GSS (HR)	■	■	■	■	■	3 days of orientation to take place on an annual basis	orientation report submitted to GSS Board
2.1.3	Organize quarterly sensitization staff durbars for 382 GSS staff annually to improve Management-staff communication and work place relations	GSS (HR)	■	■	■	■	■	Staff Durbar held once a quarter for 5 years.	Durbar discussion points and plan submitted to GSS management at least 1 month prior to each Durbar and report submitted to NSS Steering committee afterwards.

2.2 Implement a coordinated programme of statistical capacity building for the entire NSS

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
2.2.1	Implement training of cross-cutting statistical programmes for all implementing MDAs	GSS (HR)						Training calendar is communicated to participants at least 1 month ahead of new year beginning and implemented as published. Must receive 80% or higher satisfaction rating in trainee feedback.	Training calendar published on GSS website and trainee feedback submitted to GSS HR, collated and submitted to NSS Steering Committee.
2.2.2	Organize 10 days training programme for 59 staff of Administration, Accounting, Internal Audit and procurement on their fields of operation annually, 2018-2022 for best practices in these	GSS (HR)	■	■	■	■	■	Training programme run on an annual basis with 90% or higher passing a knowledge test at the end of each programme.	Test scores submitted to GSS HR and collated report submitted to GSS management,

Goal/Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
	fields.		▓	▓	▓	▓	▓		
2.2.3	Collaboration with US Census Bureau for training in estimation methods for socio-demographic indicators	GSS (HR, SDSD)	▓	▓	▓			Socio-demographic indicators produced by GSS will be by these methods and methods documented as standard GSS practice.	New estimation methods added to compendium of statistics and all reports containing socio-demographic indicators will use these methods.
2.2.4	Collaboration with Statistics South Korea for training on preparing easy to understand statistical bulletin (socio-demographic) for primary, Junior and senior high students	GSS (HR, SDSD)	▓					30 members of GSS staff to take part in training and statistical bulletin for primary, junior and senior high students respectively produced on an annual basis.	Bulletins publish on GSS website to coincide with the beginning of each school year.
2.2.5	Undertake short courses in environmental statistics (Statistics for ecologists)	EPA		▓	▓	▓	▓	4 officers of EPA's RSIM division to undertake statistics for ecology training resulting in an improvement of statistical products and services provided by EPA.	As assessed through training reports and certificate of participation
2.2.6	Training of 2 officers yearly in data collection, processing and analysis for Road Traffic Statistics at Delft Technology University in the Netherlands	NRSC	▓	▓	▓	▓	▓	10 officers to undergo training by the end of 2021 resulting improvement of road traffic statistics produced by NRSC in an annual report.	Training course report produced and annual road traffic statistics report available on NRSC website.
2.2.7	Undertake short courses in crime statistics	GPS	▓	▓	▓	▓	▓	10 members of head office and regional staff to take short course in crime statistics every year resulting in improvement of regional and national level reporting in quarterly and annual reports.	Course certificates and quarterly and annual reports available on GPS website.
2.2.8	Organize a study tour of statistics units of well-developed national police service	GPS	▓					Number of study tours organized	Study tour report including lessons learnt submitted o NSS Steering Committee
2.2.9	50 ToTs from the 10 Regional Offices trained on effective data collection and monitoring of Health Related SDGs as well as building the capacity of key staff on data analysis and information usage at the various facilities at all the levels.	MoH	▓					MoH is producing all health-related SDG indicators at the national level	SDG indicators submitted to SDG coordinator according to agree upon schedule

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
2.2.10	Training in Monitoring and evaluation for data managers to effectively undertake data quality checks	MoH	■	■	■	■	■	Number of M&E undertaken	SDG indicators submitted to SDG coordinator according to agree upon schedule
2.2.11	Training of 2 Data capturers for each of the 1078 sub-districts nationwide to increase electronic data capture at the sub-District level	GHS	■	■	■	■	■	By 2022, 90% of data capture at the sub-district level will be electronic.	Data capture report submitted by GHS to NSS Technical Committee on annual basis to assess progress
2.2.12	Train Staff of RSIM in Labour Statistics and Research Methods	MELR		■				4 members of MELR staff to be trained by the end of 2019.	New knowledge to be evident in statistical reports
2.2.13	Training of Estate staff on facilities management and report writing	GSS	■					Number of staff trained	Report from training
2.2.14	Train staff on Occupational health and safety measures by January every 2 years	GSS						Number of staff trained	Training report
2.2.15	Orientation of Staff on security and safety	GSS						Number of staff orientated	Training report

Goal 3: Modernising Physical infrastructure

3.1 Refurbish office structures of GSS and MDAs statistics units

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
3.1.1	Upgrade GSS Data Centre to ISO 90001 & 27001 tier 1 standard.	GSS (IT/ Admin)	■	■				By 2021 have a Tier 1 data center in place to reduce risk of data loss or service interruption and provide assurance of security of data A state of the art data processing center will provide storage space for all data processing equipment and a good environment for effective and efficient job output.	Annual IT audit report submitted to NSS Steering Committee
3.1.2	Outsourcing cleaning activities for GSS head office and regional office	GSS (Admin)	■	■	■	■	■	All cleaning being carried out by external company by close of 2018 and on ongoing basis by close of 2022	Administration report to GSS management and NSS technical committee
3.1.3	Refurbishment of nine regional residences and build/acquire a residence for the Greater Accra	GSS (Admin)	■	■	■	■	■	2 residences per year to be completed	Building reports submitted to NSS steering committee on an annual basis

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
3.1.4	Liaise with service providers for maintenance of GSS Assets and continuously provide telephone, water, electricity and air-condition service	GSS (Admin)	■	■	■	■	■	No interruption in supply of services to GSS	GSS management
3.1.5	Outsourcing security of the GSS's property at Head office, census secretariat, census annex, 10 regional offices	GSS (Admin)	■	■	■	■	■	Security provided by external firm	Annual security report submitted to GSS management
3.1.6	Procure furniture for Head Office	GSS (Admin)		■				All required furniture to be procured	Assets register submitted to GSS management
3.1.7	Procure office equipment	EPA	■					All equipment in place to ensure efficient functioning of the statistical unit at head office of EPA	Store receipts and assets register submitted to NSS technical committee
3.1.8	Furnish statistical unit at NRSC Head office and 10 regional offices	NRSC		■				Statistical unit at head office and in 10 regional offices have adequate equipment to carry out their statistical activities	Store receipts and assets register submitted to NSS technical committee
3.1.9	Establish and furnish office space for Statistical Units in 8 regional offices for Registrar General to enable regional level data collection and collation	RGD		■	■			8 regions will be sufficiently equipped to produce regional level marriage data	regional reports on marriage data
3.1.10	Procure fixtures for the office including air conditioners	MoFA	■					Head office RSIM division is sufficiently resourced to carry out its statistical activities	Store receipts and assets register submitted to NSS technical committee
3.1.11	Refurbishment of one statistics office	MoH	■					One MoH statistics office refurbished	Store receipts and assets register submitted to NSS technical committee
3.1.12	Refurbishing office space at Centre for Health Information Management (both regional and District Offices)	GHS	■					Office equipment procured for Centre for Health information management and 10 regional/ district offices	Store receipts and assets register submitted to NSS technical committee
3.1.13	Furnishing of office for RSIM directorate at MoE head office for 2 staff to enable functioning of the statistics directorate	MoE	■					Head office RSIM division is sufficiently resourced to carry out its statistical activities	Store receipts and assets register submitted to NSS technical committee
3.1.14	Enhance the storage and retrieval of immigration records using mobile shelving	GIS		■				Mobile shelving system in operation with accompanying instructions	Store receipts, assets register and instructions submitted to NSS technical committee a

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
3.1.15	Refurbish RSIM office	MoTCCA		X				Head office RSIM division is sufficiently resourced to carry out its statistical activities	Store receipts and assets register submitted to NSS technical committee
3.2 Procure vehicles and accessories and maintain existing vehicles for data collection									
3.2.1	Six Saloon/ Sedan cars	GSS (Admin)	X	X	X	X	X	Number of saloon cars procured	Assets register and log book
3.2.2	Procurement of 41station wagons (4x4 vehicles) over 5 year period to replace overaged vehicles in implementing MDAs to support data collection exercises	All MDAs	X	X	X	X	X	Number of station wagons procured	Assets register and log book
3.2.3	Procure 16 pick-ups vehicles to support data collection exercises in implementing MDAs	All MDAs	X	X	X	X	X	Number of pick-ups procured	Assets register and log book
3.2.4	Procure 5 mobile registration vans for births and deaths registration in very low coverage areas	BDR		X		X		Number of mobile vans procured	Assets register and log book
3.2.5	Maintenance and repair of vehicles	GSS		X		X		Number of vehicles maintained	Assets register and log book
3.2.6	Procure 800 assorted Tyres	GSS (Admin)		X		X		GSS fleet of vehicles is sufficient to carry out data collection and related statistical activities	Stores inventory
3.2.7	Procure 300 batteries	GSS (Admin)	X	X	X	X	X	GSS fleet of vehicles is sufficient to carry out data collection and related statistical activities	Stores inventory
3.2.7	Procure insurance for existing and newly acquired vehicles	GSS (Admin)	X	X	X	X	X	GSS fleet of vehicles is sufficient to carry out data collection and related statistical activities	Assets register and schedule of vehicle usage for upcoming activities submitted to NSS technical committee on an annual basis
3.3 Improve ICT infrastructure (computers, storage, archiving, central repository)									
3.3.1	Connectivity maintenance including Regional offices (monthly)	GSS (IT/ Admin)	X	X	X	X	X	Internet connectivity is at 90% or higher at head office and in the regions	IT report to GSS management
3.3.2	Maintenance and upgrade of GSS web-portal for easy access of data/information.	GSS (IT)	X	X	X	X	X	The web-portal is continuously available	Report on website traffic, downloads etc. submitted to GSS management annually

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
3.3.3	Maintain GSS digitized document and record management system	GSS (IT)	■	■	■	■	■	By 2021 70% of E-documentation, record keeping, and meeting management automated throughout GSS	Report on progress of implementing the automated system submitted to GSS management annually
3.3.4	Procure 400 laptops for implementing MDAs	GSS (IT/ Procurement)	■	■	■	■	■	Laptops procured and distributed on an ongoing basis	Assets register submitted to NSS technical committee
3.3.5	Procure 560 desktops for implementing MDAs	GSS (Admin)	■	■				All desktops procured and distributed	Assets register submitted to NSS technical committee
3.3.6	Procure 5 photocopiers (1 per 2 directorates) over the next 5 years to support statistics production	GSS (Admin)	■	■	■	■	■	Equipment procured and distributed on an ongoing basis	Assets register submitted to NSS technical committee
3.3.7	Procure 5 projectors (1 per 2 directorates) over the next 5 years to support statistics production	GSS (Admin)	■	■	■	■	■	Equipment procured and distributed on an ongoing basis	Assets register submitted to NSS technical committee
3.3.8	Procure 30 printers (1 per 2 directorates) over the next 5 years to support statistics production	GSS (Admin)	■	■	■	■	■	Equipment procured and distributed on an ongoing basis	Assets register submitted to NSS technical committee
3.3.9	Install stores management software eg. Save or Paskel and training of 5 officers on the use the software by December 2017 to facilitate management of procured items to support statistics production	GSS (IT)	■					Stores management software installation and training to be completed	Installation and training reports submitted to GSS management
3.3.10	Procure and maintain mobile devices to enable GSS communication/ dissemination on social media	GSS (IT/ CDD)	■	■	■	■	■	GSS to establish a social media presence and to maintain presence over the lifetime of the plan by updating social media platforms at least once a week	social media report submitted to GSS management on a quarterly basis
3.3.11	Procure175 GPS for use in crime data collection	GPS	■					Number of GPS procured	Assets register submitted to NSS technical committee
3.3.12	Procure 50 users software license for the GPS	GPS		■				Number of user software license procured	Waybill, stores receipt book
3.3.13	Train 1,350 officers in the use of GPS	GPS		■				Use of GPS in crime data collection to increase year on year	GPS Annual report available on GPS website
3.3.14	1000 tablets for registration of births and deaths	B&D	■	■				Equipment procured by end of 2018	Assets register submitted to NSS technical committee
3.3.15	Procure document digitizing equipment to digitize GIS data	GIS		■	■			Equipment procured to enable data to be electronically collected at all entry/ exit points	Assets register submitted to NSS technical committee

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification

Goal 4: Updating Statistical Infrastructure

4.1 Revise as appropriate the standardized and harmonized statistical classifications and frameworks, e.g. System of National Accounts, ISIC etc.

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
4.1.1	Promote the use of common concepts, definitions, standards and classifications within international requirements over the next five years for users of statistics (2018-2022).	GSS (CPMD)	X	X	X	X	X	The compendium on statistics is updated and communicated to stakeholders on an annual basis	Compendium revision published on GSS website by end of Q1 of each year
4.1.2	Harmonisation of concepts, definitions and standards of classification of data/statistics on water, housing and works	MWRWH		X				All agencies of MWRWH using same classifications/ definitions thereby reducing conflicting estimates	Annual report available on MWRWH website

4.2 Develop a reporting framework for NSS statistical activities, e.g. standard reports from the PHC, GLSS, Annual Schools Census, etc. and from administrative data collection.

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
4.2.1	Collaboration with STATISTICS NORWAY to improve national accounts reporting	GSS (ESD)	X	X	X			Quarterly GDP by expenditure approach produced and environmental indicators made available for ECOWAS and SDGs and business registers updated annually	Quarterly GDP, environmental indicators, and updated business registers available on GSS website
4.2.2	Annual update of the Business Register using validated government registers	GSS (ESD)	X	X	X	X	X	Updated business register produced in September of each year	Available from ESD of GSS
4.2.3	Collaboration with ISSER and IFPRI for production of Ghana Social Accounting Matrix (SAM)	GSS (ESD)	X	X	X	X	X	Improve GDP compilation and reduce the gap between GDP by production approach and GDP by expenditure approach and produce annual Supply and Use tables	GDP and SUT publications on GSS website
4.2.4	Collaboration with Ministry of Tourism, Ghana Tourist Board and other stakeholders to produce Tourism Satellite Accounts (TSA)	GSS (ESD)	X	X				Size of Ghanaian tourism sector will be estimated, activities generating income etc.	Report available on GSS website
4.2.5	Produce an annual national and regional reports on crime, accidents, arms etc. in consultation with GSS by March each year	GPS		X		X		Provide more detail at the regional level to strengthen collaboration between police and GSS at the regional level	

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
4.2.6	Produce and monitor labour and employment indicators to fulfil reporting requirements for national policies, SMTDP, SDGs and international Conventions annually	MELR	X	X	X	X	X	Monitoring Report. Indicators on labour and employment standardized	Stakeholders utilising monitoring report for data generation. Reporting requirement for national policies, SMTDG and SDG's met.
4.2.7	Produce 1 research report per year on a thematic area such as teacher absenteeism	MoE	X	X	X	X	X	1 report on a thematic area produced each year	report available on MoE website
4.2.8	Produce and make available quarterly reports on migration information 2 weeks after every quarter	GIS	X	X	X	X	X	Reports on migration information 2 weeks after every quarter	Reports available on GIS website
4.2.9	Develop and disseminate annual statistical reports/bulletins (water, housing etc.) on the activities of the Ministry and its Departments/Agencies to the general public.	MWRWH	X	X	X	X	X		Bulletin available on MWRWH website in the first quarter of each year covering the previous year
4.2.10	Coordinate the production of indicators for the SDGs (Goal 6 and 9) annually, working with statutory bodies and NGOs.	MWRWH	X	X	X	X	X		
4.3 Strengthen and maintain the GSS Resource and Data Centre									
4.3.1	Train staff to design and implement a standard data warehouse architecture	GSS (CDD)	X	X				Data warehouse architecture in place	report to GSS management
4.3.2	Build the capacity of staff in client service management	GSS (CDD)	X					Training in client service management completed and method of measuring client satisfaction put in place	Client satisfaction reports submitted to GSS management
4.3.3	Build capacity of 4 staff of GSS Resource and Data Centre in data warehousing and mining techniques through external training	GSS (HR)		X	X	X		4 staff of GSS Resource and data center to be trained by the end of 2021	training reports submitted to GSS management
4.4 Design a formal data production/ management cycle for the NSS									
4.4.1	Hire a consultant to design and implement data management cycle for NSS	GSS (IT)	X	X				Formal data management cycle to be established by end of 2019 and adhered to from 2020 onwards	Data management cycle document submitted to NSS technical committee

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
4.4.2	Hold 2-day consultative forum for 40 persons on the development of a National Gender Statistics Programme (NGSP) for the country	MoGCSP	■					Gender statistics programme to be in place	Gender statistics programme documents submitted to NSS technical committee
4.5 Strengthen the Management Information Systems (MIS) of the NSS by building 1 cloud/ web based solution for the NSS									
4.5.1	Business Process Mapping, Modelling and Improvement for all NSS members	GSS (IT)	■					Have documented and approved business processes for NSS statistical activities, ready for implementation	Documents approved by NSS steering committee
4.5.2	Enterprise Architecture design and Integrated Architecture Framework	GSS (IT)		■				Enterprise architecture designed and framework built based on the business processes mapped in previous activity.	Documented framework approved by NSS steering committee
4.5.3	Enterprise Architecture Automation	GSS (IT)		■	■			Functional NSS statistical information system in place and being used on a daily basis by all NSS members	Final consultancy report
4.5.4	Undertake maintenance of IT systems	GSS (IT)				■	■	System remains at optimal functioning	IT report on faults/ queries
4.5.5	Build capacity of IT team to support the National Statistical System	GSS (IT)	■	■	■	■	■	The NSS statistical system is being constantly supported by a trained team	IT report on support offered to the statistics system
4.5.6	Harmonize and ensure secure information system environment	GSS (IT)	■					All MDA statistics directorates are using licensed software and anti-virus to ensure that the information being input into the system is safe	IT report on virus detections

Goal 5: Enhancing data production, quality, dissemination, and use

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
5.1 Adopt an integrated census and survey programme that can produce disaggregated data (e.g. gender, income group, migratory status etc.)									
5.1.1	Conduct 2020 Population and Housing Census	GSS (SOCD)	■	■	■	■	■	Availability of yearly progress report on the 2020 census. Dataset of the 2020 census available six months after the field work	Reports from 2020 PHC written and disseminated and available on GSS website. Dataset accessible on National Data Archive housed at GSS.
5.1.2	Conduct Census of Agriculture Phase 1 & 2	GSS (ESD)	■		■			All documents on the 2018 CA available including the final dataset six months after the field work.	Final reports written and disseminated and available on GSS website. Dataset accessible on National Data Archive housed at GSS.
5.1.3	AGRIS core and rotating modules	GSS (ESD)		■	■	■	■	AGRIS core and rotating modules carried out 2019-2022 and datasets available 6	Final reports written and disseminated and available on GSS

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
				▓	▓	▓	▓	months after field work	website. Dataset accessible on National Data Archive housed at GSS.
5.1.4	Conduct GDHS ROUND 7	GSS (SOCD)			▓	▓		New set of demographic and health data produced for Ghana. Report available 6 months after field work	Final reports written and disseminated and available on GSS website. Dataset accessible on National Data Archive housed at GSS.
5.1.5	Conduct MICS ROUND 4	GSS (SOCD)	▓	▓				New set of MICS data produced for Ghana. Report available 6 months after field work	Final reports written and disseminated and available on GSS website. Dataset accessible on National Data Archive housed at GSS.
5.1.6	Conduct GLSS ROUND 8	GSS (SOCD)				▓	▓	New set of Living Standards data produced. Report available 6 months after field work.	Final reports written and disseminated and available on GSS website. Dataset accessible on National Data Archive housed at GSS.
5.1.7	Malaria Indicators Survey	GSS (SOCD)	▓	▓		▓		Malaria indicators dataset produced and report available 6 months after field work.	Final reports written and disseminated and available on GSS website. Dataset accessible on National Data Archive housed at GSS.
5.1.8	User Satisfaction Survey	GSS (CDD)		▓		▓		User satisfaction report available 3 months after field work.	Final report available on GSS website,
5.1.9	Conduct Labour Force Survey	GSS (SDD)		▓		▓		Report on the Labour Force Survey available including the final dataset 6 months after field work concludes.	Final reports written and disseminated and available on GSS website. Dataset accessible on National Data Archive housed at GSS.
5.1.10	Undertake CPI rebasing	GSS (ESD)	▓					Basket of items used to calculate CPI updated to ensure it reflects consumption expenditure	New CPI basket being utilized from 2018 onwards
5.1.11	Undertake GDP rebasing	GSS (ESD)	▓					GDP rebased by end of 2018	Rebased GDP available on GSS website.
5.1.12	Undertake Producer Price Index (PPI) & Index of Industrial Production (IIP) rebasing and publication of these indices	GSS (ESD)	▓					PPI expanded to include sectors outside of manufacturing and utilities and IIP will begin to be produced to allow for the deflation of GDP figures	Publication of indices on GSS website
5.1.13	Conduct annual Economic survey to estimate output, inputs and stock indicators for medium, small, and micro establishments	GSS (ESD)	▓	▓	▓	▓	▓	Updated data on economic output, inputs and stock indicators to aid GDP compilation on an annual basis	Yearly reports on Annual Economic survey published and disseminated
5.1.14	Conduct annual GAPS survey in all districts	MoFA	▓	▓	▓	▓	▓	Data captured and validated on an annual basis	Final reports written and disseminated and available on MoFA website. Dataset accessible on National Data Archive housed at GSS.

Goal/Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
5.1.15	Conduct a 14 day yield studies with 17 SRID staff in all ecological zones of the country in the 3rd quarter of the year.	MoFA	X	X	X	X	X	Crop yield figures are obtained to serve as a benchmark/point of reference for further analysis.	Final reports written and disseminated and available on MoFA website. Dataset accessible on National Data Archive housed at GSS.
5.1.16	Conduct a vegetable survey with 15 ASCU staff in ten Districts annually.	MoFA	X	X	X	X	X	Data captured will be validated on an annual basis	Final reports written and disseminated and available on MoFA website. Dataset accessible on National Data Archive housed at GSS.
5.1.17	Annual food market price data collection	MoFA	X	X	X	X	X	Quality market data collected and made available on an annual basis	Final reports written and disseminated and available on MoFA website. Dataset accessible on National Data Archive housed at GSS.
5.1.18	Maternal Death Survey	MOH			X		X	Reports of maternal death survey and dataset available 3 months after field work	Final reports written and disseminated and available on MoH website. Dataset accessible on National Data Archive housed at GSS.
5.1.19	Systematic geological mapping	MLNR	X	X	X	X	X	Produce information on the geological makeup of Ghana	Mid-year and annual reports submitted to NSS technical committee and available on MLNR website
5.1.20	Regional Geochemical Soil Sample of twenty-five field sheets (five field sheets annually)	MLNR	X	X	X	X	X	Produce information on the geochemical makeup of the land of Ghana and impact on agricultural use of land and human health to enable land use planning	Mid-year and annual reports submitted to NSS technical committee and available on MLNR website
5.1.21	Process and Interpret Airborne Geophysical Data	MLNR	X	X	X	X	X	establish mineral zones and presence of underground water in the country	Mid-year and annual reports submitted to NSS technical committee and available on MLNR website
5.1.22	Data collection on forest resources	MLNR	X	X	X	X	X	Provide information on plantations, areas eligible for mining, and forest reserves to serve the data needs of the business community	Mid-year and annual reports submitted to NSS technical committee and available on MLNR website
5.1.23	Data collection on minerals resources	MLNR	X	X	X	X	X	Produce a map that will show the distribution of minerals in the country	Mid-year and annual reports submitted to NSS technical committee and available on MLNR website
5.1.24	Capture gender disaggregated data in relation to age, urban and rural land transactions to satisfy data requirements of policy-makers	MLNR	X	X		X		Provide data on gender disaggregated access to and ownership of land	2 reports available 2017 and 2018 respectively on MLNR website and submitted to NSS technical committee

Goal/Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
5.1.25	Data collection on stool lands, family lands in 2018-2022	MLNR	■	■	■	■	■	Provide data on revenue disbursement and estimate the number of stool and family lands in the country	Searchable database and report available on MLNR website and submitted to NSS technical committee
5.1.26	Conduct Child Labor Survey to update the 2002 child labor survey	MoGCSP		■				Updated child labor indicators	Final reports written and disseminated and available on MoGCSP website. Dataset accessible on National Data Archive housed at GSS.
5.1.27	Conduct Labour Market Survey every 2 years	MELR	■		■		■	Data gathering on Labour market conducted every 2 years. Final reports and dataset produced 3 months after completion of fieldwork.	Final reports written and disseminated and available on MELR website. Dataset accessible on National Data Archive housed at GSS.
5.1.28	ICT Survey to collect disaggregated data for measuring SDGs	NCA	■	■	■	■	■	Survey to collect SDG data conducted on an annual basis. Final report and dataset produced 3 months after fieldwork	Data submitted to SDG coordinator at GSS and available on NCA website
5.1.29	Undertake Annual Schools Census	MoE	■	■	■	■	■	Annual school census report and dataset available 3 months after end of field work	Report available on MoE website and dataset available on National Data Archive housed at GSS
5.1.30	Collaborate with GSS to carry out a survey to establish the number of households that use underground water without recourse to Water Resources Commission	MWRWH	■					Meet user demand for data with regard to the number of boreholes and volume of underground water used in the country.	Report available on the MWRWH website and microdata available on NDA
5.1.31	Use GIS mapping to determine the areas that are vulnerable to erosion along the coastline by end of 2021.	MWRWH				■			
5.2 Expand compilation and use of data from administrative records that can produce disaggregated data (e.g. gender, income group, migratory status etc.)									
5.2.1	Build a database of Environmental Impact Assessment allowing for the issuing of permits on a sector by sector basis	EPA	■	■				Information on the number/ location of permitted undertakings across the country	Available via a portal on the EPA website
5.2.2	Collecting data to monitor compliance of permitted projects and chemicals nationwide	EPA	■	■	■	■	■	Regular data on compliance of projects to the conditions of their environmental permits available	Available via e portal on EPA website
5.2.3	Collecting data on environmental quality indicators by the regions	EPA	■	■	■	■	■	Data on environmental quality indices more readily available on a regular basis	More timely data collection ensuring that the annual programme of activities can be adhered to

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
5.2.4	Continuously collect data on the level of greenhouse gas emissions by Head Office	EPA	■		■			Fulfil reporting requirements for national and international agendas such as the SDGs	Annual statistical report & Annual State of Environment report
5.2.5	Development of templates in consultation with GSS Social Statistics Directorate for capturing and reporting data from police stations throughout the nation	GPS	■					A template for crime data collection is developed which is fit for purpose to produce disaggregated data	Template included in workshop report and submitted to NSS technical committee
5.2.6	Two (2) officers per Region will coordinate the collection of official statistics from MMDA's monthly to produce a Regional/District report of administrative data.	ROD	■					Increase in administrative data collected and evidenced in regional/ district report	Regional/ district reports available on GSS website
5.2.7	Produce data for annual report on civil registration and vital statistics	SDD		■				Number of reports prepared	Report
5.2.8	Train 20 officers on Statistical Management System at the head office and regional levels to enhance administrative data collection	GPS		■				Agree and validate the administrative data collection templates and system processes	Templates and process in training report submitted to NSS technical committee
5.2.9	Establish an IT infrastructure for data transmission from regions and districts to the headquarters	GPS	■					IT infrastructure capable of transmitting data to headquarters in	IT report submitted to NSS technical committee
5.2.10	Training of national, zonal and district representatives on the implementation of crime data collection templates	GPS	■	■				District level reporting to the regional level will follow the new template to provide disaggregated data and ensure that the district officers understand the importance of their role in statistics production for cascading to the station officers	District, regional and annual reports
5.2.11	Train stakeholders at the district level on completion of marriage registration forms and submission of returns	RGD		■				The quantity of correctly completed marriage returns forms will increase at the district level	Quarterly reporting to NSDS technical committee
5.2.12	Train 40 staff to compile data on all types of businesses registered (current)/ liquidated/ industrial property (collaborate with GSS)	RGD		■				RGD is able to produce business and Industrial property data updated annually	Data is available on RGD website
5.2.13	Scale-up community register programme	B&D	■	■	■	■	■	Coverage of community register programmes increased by at least 20% year on year	Annual progress report submitted to NSS technical committee

71

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
5.2.14	Annual statistical report writing of detailed analysis and validation of disaggregated health data from key Agencies (15) within the sector	MOH	■	■	■	■	■	Statistical report available by end of Q3 annually	Report available on MoH website and submitted to NSS technical committee
5.2.15	Sensitize out-stations of the forest sub-sector on the importance and their role in producing quality statistical data	MLNR	■					Reduction in time lags in reporting of data and increased quality of data submitted to head office	Annual report available on MLNR website and submitted to NSS technical committee should reflect a decrease in challenges in dealing with data collection from sub-sectors
5.2.16	Develop statistical templates to collect administrative data from Departments/Agencies for annual statistical report on labour and employment	MELR	■	■	■	■	■	Templates developed and implemented with new agencies each year and utilized to produce data for statistical reports on labour and employment	Statistical reports on labour and employment available on MELR website and submitted to NSS technical committee
5.2.17	Collect administrative data for and publish quarterly statistical bulletin on ICT in Ghana on the NCA website,	NCA	■	■	■	■	■	Bulleting published quarterly	Available on NCA website and submitted to NSS technical committee
5.2.18	Establish data cells in each of the 20 agencies under MoE to collect administrative data	MoE-RSIM Coordinator	■	■				Be in a position to capture and report on administrative data for analysis at MoE	Information integrated into the reports on the annual schools census available on the MoE website and submitted to NSS technical committee
5.3 Advance the awareness of the importance of statistics through targeted advocacy and communication for decision-makers, media, the business community and the general public									
5.3.1	Conduct an annual statistics fair for stakeholders ,2018-2022	GSS (CDD)	■	■	■	■	■	Hold a statistics fair annually with at least 70% of stakeholders from various sectors attending and rating it highly	Results from visitor feedback forms submitted to NSS steering committee
5.3.2	Hold awareness creation and sensitization programme on appropriate use of statistical data for decision making	GSS (CDD)	■		■		■	The increase use of statistics in decision making	Training reports and report of number of policy documents that cite NSS statistics as evidence submitted to NSS steering committee on annual basis
5.3.3	Utilize social media to increase awareness and education and address critical issues on statistics production and dissemination.	GSS (IT)	■		■		■	GSS will improve its visibility and create awareness of statistics amongst the general public by having a presence on major social media sites such as twitter, facebook, youtube etc.	Social media reporting produced by IT directorate submitted to NSS technical committee
5.3.4	Organize media training and sensitization workshop for 50 journalists to increase public awareness and appropriate use of statistical data	GSS	■	■	■	■	■	Number of training organized	Training report

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
5.3.5	Run a biannual advertisement in the three newspapers and 3 TV stations three times aimed at informing and educating the public on existing statistical products to enhance statistical literacy	GSS	■	■	■	■	■	Number of adverts made	Pulications
5.3.6	Hold annual statistical literacy & advocacy programmes on gender statistics	MoGCSP	■	■	■	■	■	Increased awareness & usage of gender statistics by stakeholders	Report on number of policy/ official documents utilising gender statistics

5.5 Develop an NSS dissemination policy (e.g. data release calendars and creating an Open Data ecosystem) and more effectively utilise dissemination channels including web-based channels

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
5.5.1	Hire consultant to write NSS dissemination policy	GSS (CDD)	■					Dissemination policy approved by all stakeholder at a stakeholder workshop	Dissemination policy accessible on GSS website
5.5.2	Implementing NSS dissemination policy	GSS (CDD)		■	■	■	■	All products disseminated according to policy	Report submitted to NSS technical committee
5.5.3	Training staff in website content management	GSS (CDD)		■		■		4 staff trained in content management such that GSS has ability to management its own website content	Training reports submitted to GSS management
5.5.4	12 monthly CPI, PPI and GDP Press releases each year	GSS (ESD)	■	■	■	■	■	CPI, PPI and GDP release calendar published by December of previous year for upcoming year	Release calendar and publications available on GSS website
5.5.5	Publish 4 quarterly GDP by Income & Expenditure Approach each year (2018 to 2022).	GSS (ESD)	■	■	■	■	■	Quarterly GDP releases carried out according to release calendar published on GSS website	Release calendar and publications available on GSS website
5.5.6	Publish twelve (12) National and Regional consumer Price Indices (CPI) newsletters and bulletins each year at the end of Week 2 of the month	GSS (ESD)	■	■	■	■	■	CPI newsletter published in week 2 of every month	CPI newsletters on GSS website by end of week 2 of every month
5.5.7	Publish twelve (12) producer price indices (PPI) newsletters and bulletin each year in 3rd week of every month	GSS (ESD)	■	■	■	■	■	PPI newsletter published in week 3 of every month	PPI newsletters on GSS website by end of week 3 of every month
5.5.8	Publish four (4) Prime Building Cost Indices newsletters and bulletins each year in the 4th week in March, June, September and December	GSS (ESD)	■	■	■	■	■	Prime Building Cost Indices reports published in 4th week March, June, September, and December of each year	PBCI available on GSS website in 4th week March, June, September, and December of each year
5.5.9	Publish four (4) Merchandise Trade newsletter and bulletin each year in the 4th week in March, June, September and December	GSS (ESD)	■	■	■	■	■	Merchandise and trade newsletter published in 4th week March, June, September, and December of each year	Merchandise and trade newsletter available on GSS website in 4th week March, June, September, and December of each year

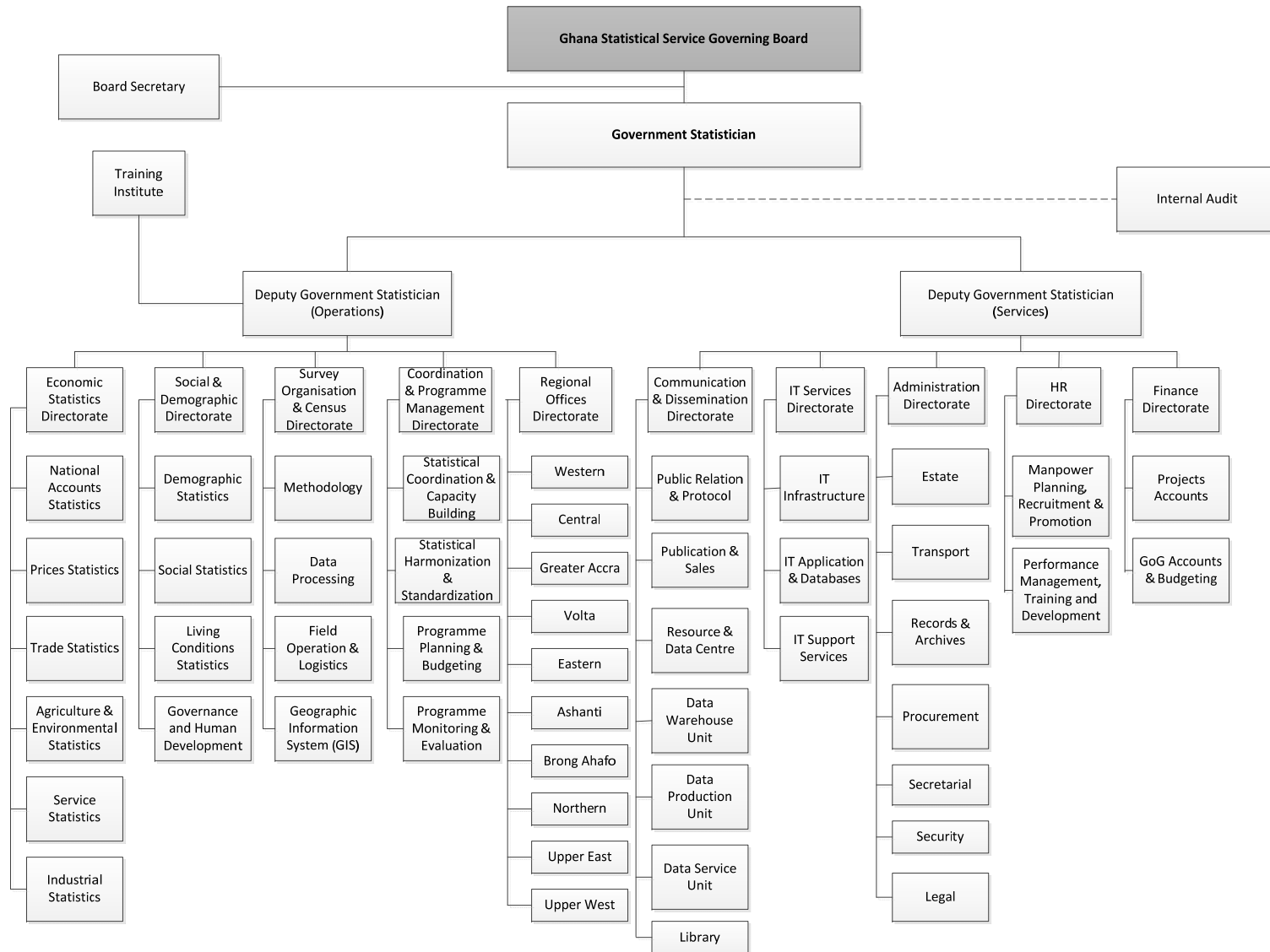| Goal/Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
5.5.10	Publish four (4) Transport Indicators bulletin each year with a publication in the 4th week in March, June, September and December	GSS (ESD)						Data on Transport indictors updated	Quarterly transport bulletin uploaded at GSS website
5.5.11	Publish four (4) Public Finance Statistics bulletin each year in the 4th week in March, June, September and December	GSS (ESD)						Collect data on public income and expenditure and publish in compliance with COFOG classification	4 public finance statistics bulletins published every year in 4th week march, June, September and December
5.5.12	Four (4) times updates of CountryStats Website with agricultural data each year in the 4th week in March, June, September and December	GSS (ESD)						Ensure that agricultural information on countrystat database is updated four times per year	The updated database is available on GSS website
5.5.13	Publish four (4) Agriculture Indicators bulletin each year with a publication in the 4th week in March, June, September and December	GSS (ESD)						Agricultrual statistics bulletins published in 4th week March, June, September, and December of each year	Agriculture statistics bulletins available on GSS website in 4th week March, June, September, and December of each year
5.5.14	Publish annual Economic survey report	GSS (ESD)						Economic survey report published annually	Report available on GSS website
5.5.15	Publish Annual Socio-demographic profile of Ghana 2018 to 2022	GSS (SDD)						Report prepared annually	Report available on GSS website
5.5.16	Prepare and publish thematic reports on selected topics annually (2018-2022)	GSS (SDD)						Report prepared annually	Report available on GSS website
5.5.17	Publish annually (GSS website) SDG/Agenda 2063 indicators report	GSS (SDD)						Report prepared annually	Report available on GSS website
5.5.18	Publish annual analytical report from crime statistics	GSS (SDD)						Report prepared annually	Report available on GSS website
5.5.19	Publish annual analytical report from birth and death statistics	GSS (SDD)						Report prepared annually	Report available on GSS website
5.5.20	Publish annual analytical report from road traffic statistics	GSS (SDD)						Report prepared annually	Report available on GSS website
5.5.21	Prepare, publish and disseminate easy to understand statistical bulletin for primary, Junior and senior high school students 2018-2022)	GSS (SDD)						Report prepared annually	Report available on GSS website
5.5.22	Prepare and disseminate annual analytical reports using administrative data, 2018-2022	GSS (SDD)						Report prepared annually	Report available on GSS website

Goal/Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
5.5.23	Dissemination of all information generated by SRID to all RADU's and DADU's and other relevant stakeholders annually.	MoFA	■	■	■	■	■	All reports generated are validated by stakeholders and disseminated annually	Reports are available on MoFA website and submitted to NSS technical committee
5.5.24	Enhancing data production, dissemination and use within the Health Sector	MoH	■	■	■	■	■	Dissemination of data increased year on year	Dissemination reports submitted to NSS technical committee
5.5.25	Dissemination of findings on child labour survey	MoGCSP		■				Dissemination of findings by end of 2018	Dissemination report submitted to NSS technical committee
5.6 Capitalise on technological advances to collect, process and make data available in a more efficient and timely manner, e.g. use of CAPI									
5.6.1	To acquire, develop and utilize modern technology in capturing RTC data	NRSC		■				Equipment procured by the end of 2018 and in use by the end of 2019	Assets register and stores receipt submitted to NSS technical committee
5.6.2	Digitization of Backlog of marriage data (1m per year for 5 years)	RGD	■	■	■	■	■	By 2022, 5million records should be digitised beginning with 2015 records and working backwards	Searchable database created and housed on RGD website
5.6.3	Upload digitized backlog of 5 million records on registered births and deaths data onto national database (1m per year)	B&D	■	■	■	■	■	By 2022, 5m records should be digitized	Searchable database created and housed on B&D website
5.6.4	Web portal for data capturing and intelligence system to generate real-time ICT indicator reports (Dashboard)	NCA	■					Web portal developed and operational by end of 2018	Web portal available to access on NCA website
5.6.5	Pilot use of CAPI for data collection and processing through the Enhanced EMIS application in 3 regions	MoE	■					Assess feasibility of moving from paper based data collection to web-based data collection for the annual school census by end 2018	Pilot completion report submitted to NSS technical committee
5.6.6	Maintenance of the enhanced education management information system (EMIS)	MoE	■	■	■	■	■	EMIS system is available and providing accurate information	Reports utilising EMIS information available on MoE website on an annual basis and submitted to NSS technical committee
5.6.7	Designing and deploying of CAPI questionnaires and hiring of consultant for moveable and immoveable properties survey	MoTCCA		■				CAPI application finalized and piloted by end of 2019	Pilot report submitted to NSS technical committee by end of 2019
5.7 Explore new sources of data for official statistics									
5.7.1	Conduct scoping exercise on use of Big Data for official statistics	GSS	■	■				By end of 2018, report on the potentials of Big Data for official statistics based on desktop review submitted. By end of	Report submitted to NSS technical and steering committee, and Pilot project documentation submitted to

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
			■	■				2019, pilot project on using Big Data to be initiated with support from external, e.g. UN Pulse	NSS steering committee
5.8 Develop a country-specific Quality Assessment Framework for all statistics produced									
5.8.1	Develop a quality assessment framework with assistance from consultant	GSS (CDD)	■					All statistics produced based on the quality Assessment framework	Quality assessment framework available on GSS website
5.8.2	Implement quality assessment framework	(GSS (CDD)		■		■		First roll out of QAF in 2020 with refresher training in 2020 ensuring that all GSS and MDA staff are aware of the QAF parameters	Review of implementation based on review of products published by GSS and MDAs submitted to NSS steering committee on an annual basis
5.8.3	Conduct national data quality audit every two years	GHS		■		■		Data quality audit to be conducted with sample of MDAs and regions every 2 years	Data quality Audit reports submitted to NSS technical committee
5.9 Sensitise non-institutional data suppliers to the importance of their role in producing quality statistics									
5.9.1	Devise and implement a publicity strategy on the need for registration of marriages, filing marriage returns and businesses	RGD	■	■	■	■	■	Publicity must reach 10,000 people in the targeted communities each year	Publicity strategy document and implementation reports including listenership/ viewer/ reader figures submitted to NSS technical committee
5.9.2	Devise and implement a publicity strategy on early registration of births and deaths	B&D	■	■	■	■	■	Publicity must reach 10,000 people in the targeted communities each year	Publicity strategy document and implementation reports including listenership/ viewer/ reader figures submitted to NSS technical committee
5.9.3	Organize awareness workshop on tourism satellite account for tourism industry players	MoTCCA	■	■	■	■		Data collection times reduced/ number of refusals/ non-response reduced through better cooperation of stakeholders	Annual TSA reports quoting data collection times/ non-response etc. available on GSS website
5.10 Enhance Monitoring and Evaluation of NSS statistical activities									
5.10.1	Field work for M&E	CPMD	■	■	■	■	■	Quality of NSS statistical products enhanced	Monitoring reports submitted to NSS technical committee
5.10.2	Training of all 15 staff of CPMD in M&E	CPMD	■		■		■	All staff are available for monitoring and evaluation activities	Training reports submitted to NSS technical committee
5.10.3	M & E orientation for GSS and MDA staff	CPMD	■		■			GSS and MDAs reporting according to guidelines format	Ongoing monitoring by NSS technical committee

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
5.10.4	Annual M&E activities review	CPMD	X	X	X	X	X	Annual reporting based on reviews	Annual reports submitted to NSS steering committee
5.10.5	To improve the quality of Surveys and Administrative data collection in the Region, ten (10) RS and RoD officers will visit two (2) districts per month to validate data collected in the Regions/Districts	GSS (RoD)	X				X	Data revisions in Questionnaires submitted to Head office and MMDA's for data review.	Monthly reports submitted by field officers collated and submitted on a quarterly basis to NSS steering committee
5.10.6	Undertake an annual monitoring visit to the agencies and regions to assess the challenges in data capturing, data gaps, delay in reporting and its completeness	MoH	X	X	X	X	X	Data gaps and barriers assessed on an annual basis and action plan to address these issues drawn up	Assessment report and action plan submitted to NSS technical committee
5.10.7	Train and monitor the collection of data by 2 data capturers in 1,143 sub-district staff on Health Related SDGs	GHS	X	X	X	X	X	Monitor the collection of data at the sub district level to assure its quality	Monitoring reports submitted to NSS technical committee
5.10.8	Undertake quarterly monitoring and evaluation of Gender Statistics Programme	MoGCSP	X	X	X	X	X	Quarterly monitoring trips and desktop review undertaken	Quarterly monitoring reports submitted to NSS technical committee
5.10.9	Organize monitoring and evaluation of data collection entry points	MOTCCA	X	X	X	X	X	Quarterly monitoring trips and desktop review undertaken	Quarterly monitoring reports submitted to NSS technical committee

Goal 6: Developing sustainable funding and collaborative arrangements with national and international institutions

6.1 Identify and establish links with national (e.g. GSS and NDPC), global/regional statistical operations and programmes

Goal/ Strategy	Activity	Implementer	2018	2019	2020	2021	2022	Verifiable Indicator	Means of Verification
6.1.1	Prepare Annual CRESS Report	GSS	X					Annually	CRESS Report
6.1.2	Scoping exercise to be carried out into potential partnerships with external organizations	GSS	X					Report on potential partnerships to be carried out	Report submitted to NSS Steering Committee
6.1.3	Sponsor two Senior officers of ASC Unit to attend AFCAS (African Commission on Agriculture Statistics) biannual meeting.	MoFA	X		X		X	AFCAS meeting attended by 2 staff from ASC Unit every 2 years	Attending officers to produce report and action plan based on their experiences and submit to NSS technical committee
6.1.4	Participation in international SDG conferences	GSS (SDG desk - SDSD)	X	X	X	X	X	3 members of GSS staff to attend international SDG conferences every year to represent Ghana and report on best practice	Best practice report submitted to NSS Steering Committee

ANNEXES

Annex 1: GSS organogram

Ghana Statistical Service Governing Board

Board Secretary

Government Statistician

Training Institute

Internal Audit

Deputy Government Statistician (Operations)

Deputy Government Statistician (Services)

Deputy Government Statistician (Operations)

Economic Statistics Directorate
- National Accounts Statistics
- Prices Statistics
- Trade Statistics
- Agriculture & Environmental Statistics
- Service Statistics
- Industrial Statistics

Social & Demographic Directorate
- Demographic Statistics
- Social Statistics
- Living Conditions Statistics
- Governance and Human Development

Survey Organisation & Census Directorate
- Methodology
- Data Processing
- Field Operation & Logistics
- Geographic Information System (GIS)

Coordination & Programme Management Directorate
- Statistical Coordination & Capacity Building
- Statistical Harmonization & Standardization
- Programme Planning & Budgeting
- Programme Monitoring & Evaluation

Regional Offices Directorate
- Western
- Central
- Greater Accra
- Volta
- Eastern
- Ashanti
- Brong Ahafo
- Northern
- Upper East
- Upper West

Deputy Government Statistician (Services)

Communication & Dissemination Directorate
- Public Relation & Protocol
- Publication & Sales
- Resource & Data Centre
- Data Warehouse Unit
- Data Production Unit
- Data Service Unit
- Library

IT Services Directorate
- IT Infrastructure
- IT Application & Databases
- IT Support Services

Administration Directorate
- Estate
- Transport
- Records & Archives
- Procurement
- Secretarial
- Security
- Legal

HR Directorate
- Manpower Planning, Recruitment & Promotion
- Performance Management, Training and Development

Finance Directorate
- Projects Accounts
- GoG Accounts & Budgeting

80

Annex 2: Drafting team members: NSDS 2018 - 2022

Stephen Amoah - CPMD, GSS

Isaac Odoom - CPMD, GSS

Daniel Agumeh - HR, GSS

Omar Seidu - Social Statistics Directorate, GSS

Francisca Thompson - Economic Statistics Directorate, GSS

Emmanuel Boateng, Survey and Census Organization Directorate, GSS

Yaw Misefa - Data Processing, GSS

Michael Opoku Achaempong - Communication and Dissemination Directorate, GSS

Mary-Anne Addo - Ministry of Employment and Labour Relations

Emmanuel Yeboah - Ministry of Employment and Labour Relations

Efua Anyanful - Ministry of Gender, Children and Social Protection

Patience Thrinny-Tawiah - Ministry of Gender, Children and Social Protection

Oversight provided by

Dr. Philomena Nyarko - Government Statistician

Mr. Baah Wadieh - Deputy Government Statistician (Services)

Mr. Anthony Amuzu - Deputy Government Statistician (Operations)

Mr. Sylvester Gyamfi - Director, CPMD

Support provided by

Charles Machinjili - PARIS21 Consultant

Eleanor Carey - ODI Fellow

Annex 3: Major censuses and surveys calendar, 2010-2021

Survey/ Census	Implementer	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Population and Housing Census	GSS (SOCD)	▓										▓	
Post Enumeration Survey	GSS (SOCD)	▓										▓	
Ghana Living Standards Survey	GSS (SOCD)			▓	▓				▓	▓			*
Demographic and Health Survey	GSS (SOCD)					▓					▓		
Multiple Indicator Cluster Survey	GSS (SOCD)		▓						▓				
Maternal Health Survey	GSS (SOCD)												
Malaria Indicators Survey	GSS (SOCD)							▓					
User Satisfaction Survey	GSS (CDD)			▓				▓		▓		▓	
Agricultural Census (Phase 1&2)	GSS (ESD)									▓			
AGRIS Surveys	GSS (ESD)								▓	▓	▓	▓	▓
National Household Transport Survey	GSS (ESD)			▓									
Annual Economic Survey	GSS (ESD)								▓	▓	▓	▓	▓
Integrated Business Establishment Survey	GSS (ESD)					▓							
Ongoing Price Data Collection	GSS (ESD)	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓
Annual Industrial Survey	GSS (ESD)								▓	▓	▓	▓	▓
Institutional and Household Surveys on good governance	GSS (SDD)									▓		▓	
Labour Force Survey	GSS (SDD)						▓					▓	

*Planning for GLSS8 may start in 2021 after the 2020 Population and Housing Census.

Annex 4: Major statistical benchmarking activities, 2018-2022

Major Statistical Activity	Implementer	2018	2019	2020	2021	2022
CPI Rebasing	GSS (ESD)					
PPI Rebasing	GSS (ESD)					
GDP Rebasing	GSS (ESD)					

Annex 5: Centralised training plan 2018

Program Title	Delivered by	Location	January	February	March	April	May	June	July	August	September	October	November	December
Data Analysis (STATA)	External Trainer	Onsite			X	X		X	X		X	X		
Excel	IT	Onsite		X				X			X			
Communicating statistics (including powerpoint)	IT	Onsite			X			X			X			
Questionnaire Design and Report writing	CSD	Onsite		X				X			X			
Data Documentation and Archiving (IHSN Toolkit)	External Trainer	Offsite								X				
Research Methods and Data Management	GSS staff	Onsite		X										
Training in the use of GIS Software	GIS Team	Onsite			X				X				X	
Training in database management	CDD	Onsite		X										
Training in Open and Big Data	External Trainer	Onsite				X								
Training in conducting surveys	CSD	Onsite				X				X				
Training in Multivariate data analysis using Surveys and Census Data	External Trainer	Onsite		X			X					X		
5 days training on demographic software analysis in (Spectrum, Q-Five, Mortpack and other spreadsheets)	SSD	Onsite			X				X			X		

Produced with the generous support of PARIS 21 and The World Bank.