KINGDOM OF LESOTHO

STRATEGIC PLAN FOR AGRICULTURE & RURAL STATISTICS FOR LESOTHO 2019/20 – 2023/24

African Development Bank
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Abbreviations and acronyms

AfDB	African Development Bank
AFSSD	Agriculture and Food Security Statistics Division
AP	Action Plan
APS	Agricultural Production Survey
BMGF	Bill & Melinda Gates Foundation
BOS	Bureau of Statistics
CAADP	Comprehensive African Agriculture Development Programme
CEDAMA	Committee on Environmental Data and Management
CFS	Crop Forecasting Survey
CHS	Community and Household Surveillance
DAR	Department of Agricultural Research
DFID	Department for International Development of United Kingdom
DFS	Department of Field Services
DLS	Department of Livestock Services
DMA	Disaster Management Authority
DPPA	Department of Planning and Policy Analysis
DOC	Department of Crops
EA	Enumeration Area
EACAS	Expert Advisory Committee on Agricultural Statistics
EP	Economic Planner
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FNCO	Food and Nutrition Coordinating Office
GDP	Gross Domestic Product
GS	Global Strategy
HEA	Household Economy Approach
HPS	Horticulture Production Survey
LAC	Lesotho Agriculture College
LENAFU	Lesotho National Farmers' Union
LFNP	Lesotho Food and Nutrition Policy
LMS	Lesotho Meteorological Services
LNDB	Lesotho National Dairy Board
LVAC	Lesotho Vulnerability Assessment Committee
MAFS	Ministry of Agriculture and Food Security
MDAs	Ministries, Departments and Agencies
MDGs	Millennium Development Goals

MDP	Ministry of Development Planning
MEM	Ministry of Energy and Meteorology
MFRSC	Ministry of Forestry, Range and Soil Conservation
MOH	Ministry of Health
MOS	Measure of Size
MSBDCM	Ministry of Small Business Development Cooperatives and Marketing
MTEC	Ministry of Tourism, Environment and Culture
MTI	Ministry of Trade and Industry
M&E	Monitoring and Evaluation
NAESD	National Accounts and Enterprise Statistics Division
NAPFS	National Action Plan for Food Security
NASCC	National Agricultural Statistics Coordination Committee
NASS	National Agricultural Statistics System
NRM	Natural Resources Management
NSC	National Statistical Council
NSC	National Strategy Coordinator
NSDP	National Strategic Development Plan
NSDS	National Strategy for the Development of Statistics
NSS	National Statistical System
NSWCP	National Soil and Water Conservation Policy
NUL	National University of Lesotho
PPS	Probability Proportional to Size
PRSP	Poverty Reduction Strategy Paper
PSU	Primary Sampling Unit
SADP	Smallholder Agricultural Development Programme
SDGs	Sustainable Development Goals
SPARS	Strategic Plan for Agricultural and Rural Statistics
SPARS_LES	Strategic Plan for Agricultural and Rural Statistics, Lesotho
SSU	Secondary Sampling Units
TTWG	Thematic Technical Working Group
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
VAA	Vulnerability Assessment and Analysis
WB	World Bank

Foreword

The agriculture sector in Lesotho plays the critical role in the economy, and is the main source of employment and income for the majority of rural households. In recognition of the importance of the agriculture sector with regards to job and wealth creation, it is necessary that agricultural policies are based on sound information. It is in this regard that the development of the Strategic Plan for Agricultural and Rural Statistics for Lesotho is essential to address agricultural data needs.

The Global Strategy is an initiative to improve agricultural and rural statistics adopted by the United Nations Statistical Commission in 2010. This strategy provides a framework and blueprint to meet current and emerging data requirements and needs of policymakers and other data users. It is in the context of this framework and the Action Plan for Africa of the Global Strategy that Lesotho undertook to develop Strategic Plan for Agricultural and Rural Statistics for Lesotho (SPARS_LES).

The SPARS_LES sets out medium and long term objectives and targets for the development of agricultural and rural statistics, covering all the sub-sectors (crops, livestock, forestry, range and environment). The achievement of these objectives and targets will have an impact in many ways but most importantly in assisting policy makers to make decision on a well informed manner and to monitor and evaluate the impact of agricultural policies and programmes.

This strategic document has been designed in a participatory and inclusive manner. The preparations of this plan were undertaken by the key stakeholders, and thanks to the technical and financial support from the African Development Bank (AfDB). Technical working groups were formed at the subsector level and they comprised stakeholders in the National Agricultural Statistical System (NASS), which are involved as producers, users or both. Each of the technical working groups contributed in a comprehensive manner during the in-depth assessment of agricultural statistics in its subsector and developed an Action Plan accordingly. Both the Assessment and Action Plans reports are used to inform the development of the SPARS_LES.

On behalf of the Lesotho Government, the Ministry of Agriculture and Food Security, and Ministry of Development Planning acknowledge with thanks the African Development Bank, the AfDB experts who backstopped the project, and other stakeholders for their contributions in the development of the Strategic Plan for Agricultural and Rural Statistics for Lesotho.

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Executive Summary

The development of SPARS_LES is part of the already existing development initiatives. These include the National Vision 2020, National Strategic Development Plan II (NSDP II) 2018/19-2022/23, National Action Plan for Food Security (NAPFS): 2007-2017, Lesotho Food and Nutrition Policy (LFNP): 2016 – 2025, and other national and sectoral strategic and policy frameworks. These frameworks support the use of evidence-based decision making to address multifaceted challenges faced by the country. The evidence-based approach requires quality statistics for systematic measurement and reporting of development results as well as for monitoring and evaluation of these development initiatives.

Agriculture contributes around 5 percent of GDP in Lesotho. The sector provides employment and income for most rural population and it is important for reducing poverty and improving food security. Over a half of the population live below the national poverty line, mainly in rural areas. Lesotho has food deficit, with a large part of the population exposed to chronic food and nutrition insecurity. Crop production is rain-fed and mainly charactirised by subsistence farming with little commercial activity while livestock production faces challenges of overgrazing and extreme weather variability. All these have adversely affected production of crops, livestock and livestock products.

The Government of Lesotho is committed to sustainable agricultural growth that will contribute towards food security and poverty reduction. This commitment is portrayed in the National Strategic Development Plan II (NSDP II) 2018/19-2022/23, where agriculture sector has been identified as a pillar for economic growth. The implementation of this strategy requires a system of monitoring and evaluation (M&E) to measure progress and impact. This system requires the sustained availability of comprehensive, reliable, up-to-date and consistent statistical data. The National Agricultural Statistical System (NASS) needs to evolve in order to strengthen its capacity to produce, analyse and disseminate agriculture, food and nutrition security information. The Government of Lesotho acknowledges a need for a comprehensive and coherent response to the weaknesses of the NASS by developing an appropriate strategy to upgrade the system and hence requested assistance from the AfDB to develop this Strategic Plan for Agricultural and Rural Statistics in Lesotho (SPARS_LES).

The development and implementation of SPARS by countries is one of the recommendations of the Global Strategy to Improve Agricultural and Rural Statistics, which was adopted by the international statistical community in February 2010 at the United Nations Statistical Commission meeting. The Action Plan of the Global Strategy for Africa encourages countries to develop and implement SPARS, which aims to improve evidence-based decision making for poverty reduction, increased food and security, sustainable agriculture and rural development.

The development of SPARS_LES follows guidelines developed by the Global Strategy Office in coordination with the AfDB. The process followed participatory approach where key stakeholders were identified and four Thematic Technical Working Groups (TTWGs) were created. The TTWGs covered four thematic areas: (i) Crops (including irrigation) and Food Security; (ii) Livestock (including aquaculture); (iii) Forestry and rangelands (including environment aspects related to agriculture); and (iv) Cross-cutting areas (Trade data, prices, gender, capacity building, Governance, Research, etc.). Each TTWG designated a coordinator to represent the TTWG on the National Technical Working Group (NTWG). A National Strategy Coordinator (NSC) and a deputy were appointed. International and national consultants were contracted by AfDB, to consolidate the outputs from the TTWGs leading to the production of SPARS_LES.

The plan is based on priorities identified by the stakeholders of the agricultural and rural statistics systems of Lesotho, while being realistic about funding levels. It covers a 5-year period from 2019/20 to 2023/24. The plan is also based on an assessment of the current status of the agricultural and rural statistics system, aimed at answering the question, where are we now? The assessment was the primary input into the development of the SPARS_LES Action Plan. It was carried out through literature review, face-to-face interviews and questionnaires sent to key stakeholders and group discussions with teams of experts representing each of the subsectors in the agriculture sector.

The vision and mission statements for production and development of agricultural and rural statistics was based on the analysis of the result of the sectoral evaluation of NASS and the ambition of Lesotho to develop its agricultural and rural statistics.

The **Vision** for SPARS_LES is: *An integrated, sustainable and coordinated national system of agricultural and rural statistics with ability to produce reliable and relevant data for measuring development results.*

The **Mission** for SPARS_LES is*: To facilitate the processes of producing, disseminating and archiving quality, sustainable, and coordinated agricultural and rural statistics.*

Implementation Plan

The identified SPARS_LES strategic objectives have a number of activities. The implementation of these activities would lead to the achievement of the objectives and eventually the achievement of the vision. The planned activities have been costed on the bases of estimated time for implementation. In the case of census and surveys, the lead agencies were identified and cost has been estimated based on the timing and frequency. The detailed action plan showing the priorities in the implementation of each census and

survey activity has also been included. The total cost for census and all surveys for the period of the plan (2019/20-2023/24) is estimated at 155 million Maloti, while the total cost of all activities in the plan of action is 188 million Maloti. The detailed plan of action for all planned activities is given in Annex 2. In line with the vision and mission statements of the SPARS_LES, the overall goal of the NASS is to provide users with quality agricultural statistics that support national agricultural development in an objective, timely and cost-effective manner.

The Strategic Plan has been developed to address the challenges identified in the assessment of the current status of the NASS. The plan is structured around the following six Strategic Objectives:
S.O 1: *Strengthen coordination of NASS and its integration into the NSS*
S.O 2: *Improving the production, analysis and accessibility of agricultural statistics*
S.O 3: *Improving the quality of agricultural statistics*
S.O 4: *Ensuring the availability, capability and motivation of NASS staff*
S.O5: *Strengthen the physical infrastructure for efficient and effective statistical operations*
S.O6: *Develop sustainable funding for agricultural and rural statistics activities:*

Activities associated with this strategy include presenting SPARS_LES to the NSC and development partners as well as reporting on progress every 6 months. A team of experts will be hired to conduct independent mid-term and end-of-term evaluations of the implementation of the strategy. An Awareness and Communication Plan to promote SPARS_LES will also be implemented. Other activities include sensitisation events and working with the media to develop programmes that will help to increase awareness of the importance of agricultural and rural statistics.

The total budget for all activities under SPARS_LES over the 5-year period is M 188 million, of which M119 million (63%) is anticipated to come from government or other sources, mainly for the Agriculture Census (M 49 million), Annual Agriculture Production (M 35 million), Horticulture Surveys (M 27 million), National Range Condition Assessment (M 6.4 million) and Food security Survey (M 0.75 million). In the remaining M 69 million, less than two-thirds (M 42 million) is for priority activities.

Monitoring and Evaluation

Implementation of the strategy needs to be monitored and evaluated so that managers will be timeously informed on any difficulties that may impede the implementation and, if necessary, suggest modifications or corrective measures for the successful implementation of the plan. It is imperative to have a continuous process of data collection and analysis so that assessment of the efficiency and effectiveness of the imple-

mentation programme will be results-based. The NASCC (composed of representatives of producers and users of agricultural and rural statistics) will be responsible for producing monitoring and evaluation reports for the implementation of this Strategic Plan. The reports will be submitted to NSC for endorsement and be disseminated through stakeholder meetings, workshops and review seminars and any other possible means. Progress reports will prompt formulation of corrective measures where appropriate.

The Logical Framework for monitoring this Strategic Plan presents the results chain, showing the expected impact, effects and products, together with performance indicators (baseline and targets), and the means of verification. The indicators will be used to track the implementation and achievements of the Strategy. In addition, for successful implementation of SPARS, activities should be prioritised in annual work plans and aligned to implementing institutions budgets and performance contracts.

The identification and evaluation of risks that would prevent or delay SPARS from achieving expected results was done as it is considered as part of the Monitoring and Evaluation Framework of the strategy. It was done with a purpose of establishing their likely impact, chances of occurring and suggesting appropriate mitigating measures.

CHAPTER 1: BACKGROUND AND METHODOLOGY

1.1 Introduction

This chapter introduces the development of Strategic Plan for Agricultural and Rural Statistics for Lesotho (SPARS_LES) which is an action plan for Global Strategy for Improving Agricultural and Rural Statistics. It further sets out the policy context, rationale and methodology for developing SPARS_LES. It describes the institutional environment for the NSS and NASS and their linkage with the National Strategy for the Development of Statistics (NSDS).

1.2 The Global Strategy to Improve Agricultural and Rural Statistics

The United Nations Statistical Commission adopted the Global Strategy (GS) to Improve Agricultural and Rural Statistics[1] in February 2010 in response to the declining availability and quality of agricultural statistics in many countries in recent years as well as the need to provide statistics to inform emerging issues in agriculture. The GS is a response to the shortcomings of existing statistics to meet the needs of users especially needs that relate to the identification, monitoring and evaluation of agricultural policies.

The GS provides a framework and methodology to improve the quality and availability of national and international agriculture and food security statistics to guide policy analysis and decision-making. The strategy aims at:

(i) Strengthening the statistical capacity of developing countries to produce reliable statistics on food security, sustainable agriculture and rural development

(ii) Encouraging the formation of a long-term vision for the development of agricultural statistical systems in developing countries

The Global Strategy is based on the following three pillars:

Pillar 1: Establishment of a minimum set of core data required to meet current and emerging demands

Pillar 2: Integration of agriculture into NSS

Pillar 3: Establish suitable governance processes and build the necessary statistical capacity to ensure sustainability of agricultural statistical systems

1.3 Implementation of the Global Strategy

A Global Office has been established within FAO, in Rome, to provide the overall technical coordination of GS activities. At the regional level, work on the GS is supported by partners who provide technical and other assistance to countries. Specifically, the partners that are assisting in the implementation of the GS in Africa are:

(i) The AfDB, which has been assigned the responsibility of providing technical assistance and governance to African countries

(ii) The United Nations Economic Commission for Africa (UNECA), which has been assigned the responsibility of providing training

(iii) The United Nations Food and Agriculture Organisation (FAO), which has been assigned the responsibility for conducting research into new and

[1] Global Strategy to Improve Agricultural and Rural Statistics, World Bank, Food and Agriculture Organization of the United Nations and United Nations Statistical Commission, 2011.

[2] Improving Statistics for Food Security, Sustainable Agriculture, and Rural Development: An Action Plan for Africa 2011-2017, African Development Bank (AfDB), the United Nations (FAO), and African Union Commission (AUC).

cost-effective data collection methods

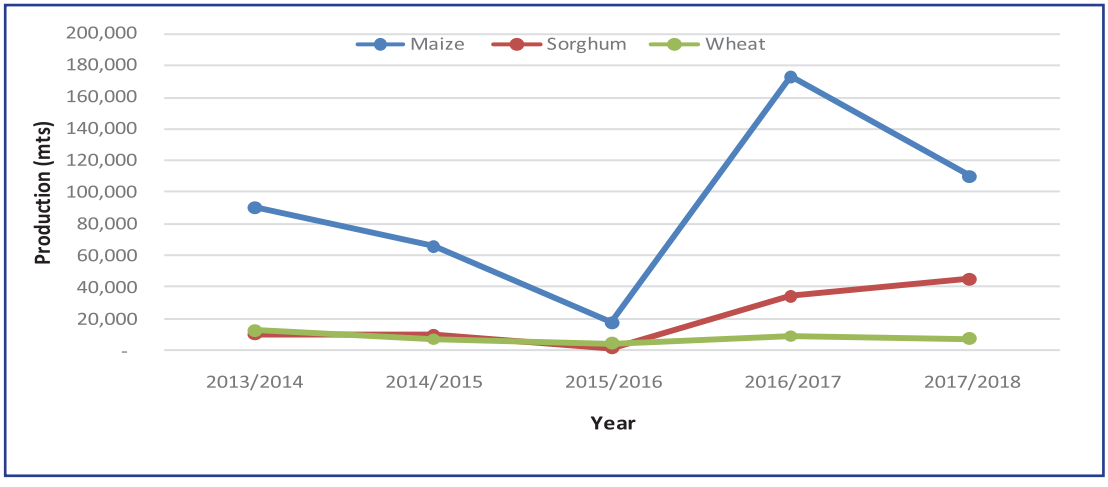
A regional action plan has been prepared to support the implementation of the GS in Africa [2]. One of the recommendations of the "Action Plan" is that countries should develop a Strategic Plan for Agriculture and Rural Statistics (SPARS), to be integrated into the NSDS and serve as a framework for the long-term development of agricultural statistics. It is in this context that Lesotho decided to address the weaknesses in its agricultural statistics system through the development of the SPARS_LES. Subsequent to this decision, the Ministry of Agriculture and Food Security (MAFS), in collaboration with the Bureau of Statistics (BOS), the department within the Ministry of Development Planning (MDP), requested for technical assistance from the AfDB for the development of SPARS_LES.

1.4 Policy Context and Rationale for SPARS_LES

The demand for agricultural statistical data and information has increased dramatically over the past few years. The increase has been brought by the increasing demand of quality agricultural statistics that supports development of policies, implementation, and monitoring and evaluation of agricultural programmes.

Agriculture contributes about 7.9 percent to the Gross Domestic Product (GDP) of the country. It is the source of livelihood for most of the rural population and it is certainly the key to food security and poverty reduction. Crop production in Lesotho is mainly from subsistence farming with minimal commercial farming. The main crops produced are maize (the main staple in country), sorghum and wheat. Maize production has been fluctuating from 2013/2014 to 2017/2018 with a decline from 2013/2014 to 2015/2016 where it was at its lowest. However, it rapidly increased in 2016/2017 and decreased drastically again in 2017/2018 (Figure 1). Sorghum and wheat shows a similar pattern from 2013/2014 to 2015/2016 whereby their production slightly decreased. Nonetheless, this pattern changed from 2015/2016 to 2017/2018 where there was moderate increase in sorghum production while wheat production did not show much change.

Figure 1: Production (mt) by Crop, 2013/2014 to 2017/2018 Agricultural Year



Source: Bureau of Statistics

The Government of Lesotho is committed to initiating interventions to advance sustainable agricultural growth in order to attain food security and poverty reduction objectives and has endowned the agricultural sector with instruments that meet these objectives. Therefore the sector (crops, livestock, fisheries, forestry and natural resources) as featured in the national development agenda and policy statements is identified as an avenue through which sustainable economic growth can be achieved. These development plans and policy statements include:

- National Vision 2020
- National Strategic Development Plan (NSDP II) 2018/19-2022/23
- National Action Plan for Food Security (NAPFS): 2007-2017
- National Forestry Policy (2008)
- National Range Resources Management Policy 2014
- Lesotho Food and Nutrition Policy (LFNP): 2016 2025

The implementation of these plans for agricultural development requires a system of monitoring and evaluation (M&E), based on a set of indicators which measure progress in the implementation and the impact of agricultural policies and programmes. This M&E system requires the sustained availability of comprehensive, reliable, up-to-date and consistent statistical data that are understandable and practicable for a variety of users.

The existing NASS needs to evolve in order to strengthen national capacity to produce, analyse and disseminate agriculture, food and nutrition security information. Government decided it needed a comprehensive and coherent response to the weaknesses of the NASS by developing an appropriate strategy to upgrade the system, and requested assistance from the AfDB to develop this Strategic Plan for Agriculture and Rural Statistics. The objective of this strategic plan is to strengthen the system of Agricultural and Rural Statistics for production of relevant and reliable data required to develop, analyse, monitor and evaluate agricultural policies.

1.5 Methodology for Development of SPARS_LES

The development of SPARS_LES was highly inclusive and participatory. It engaged all stakeholders in the agricultural statistical system including all sub-sectors to ensure ownership of the process at all levels. Four Thematic Technical Working Groups (TTWGs) were established to ensure complete coverage as well as to support and lead the development of SPARS_LES. The groups were as follows:

- TTWG 1: Crops and Food Security
- TTWG 2: Livestock (including Aquaculture)
- TTWG 3: Forestry and Rangelands (including Environment aspects related to agriculture)
- TTWG 4: Cross-cutting areas (Trade, Prices, Gender, Capacity Building, Governance, Research, etc.)

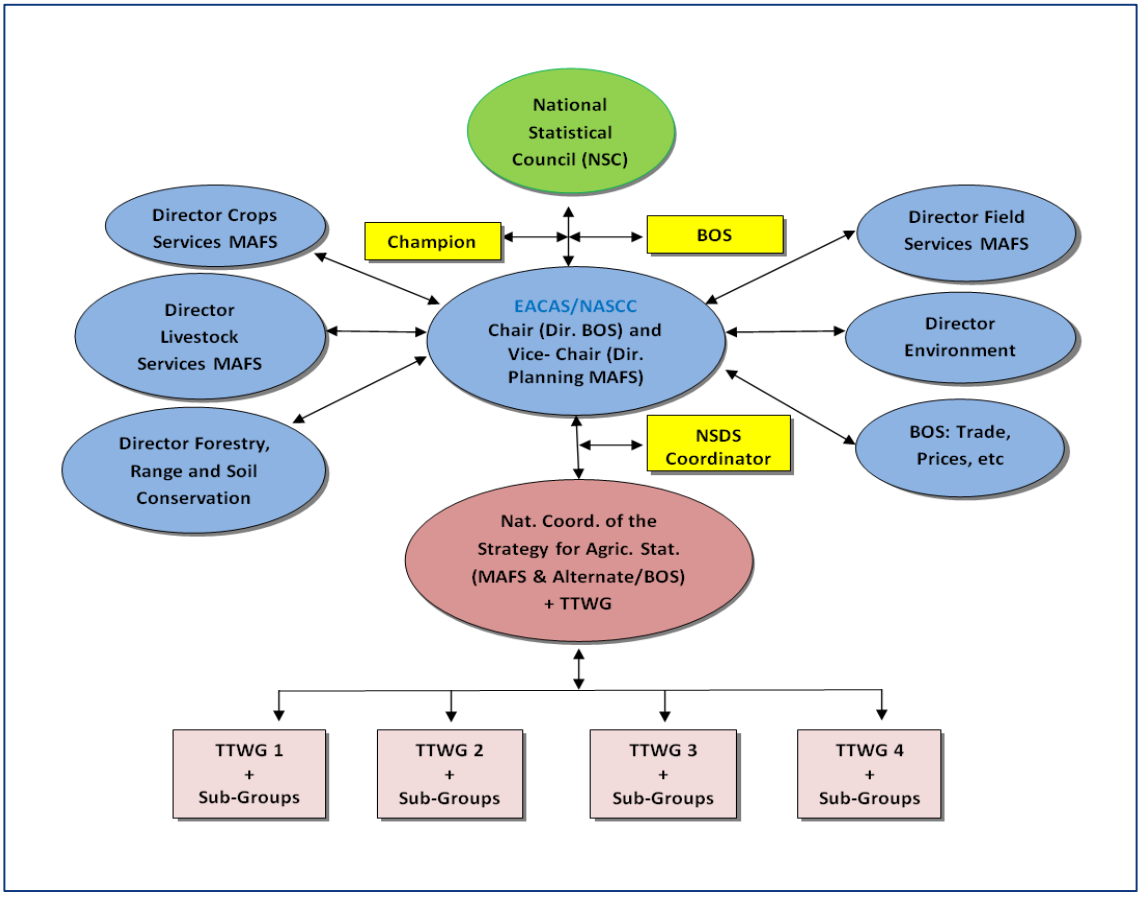
In addition, each TTWG could create sub-groups and call upon other institutions to make contributions on specific questions and issues (e.g. Lesotho Meteorological Services).

The governance structure for SPARS_LES is presented in Figure 2. According to the Statistics Act 2001, National Statistical Council may esta-

blish National Agricultural Statistics Coordination Committee (NASCC). Since this committee has not been established, it was agreed that the BOS should establish an ad hoc Expert Advisory Committee on Agricultural Statistics (EACAS), on behalf of the Council. This ad hoc committee would be replaced by an effective NASCC, once formally established by the Council. The EACAS is composed of members from the various subsectors of Agriculture and it is co-chaired by the Director of BOS and the Director of the Department of Planning and Policy Analysis (DPPA) of MAFS. The EACAS is the supervisory body for the preparation and implementation of SPARS_LES. It officially and technically approves documents to be produced to develop SPARS_LES and was given a timeframe of about 9 months to complete its work.

The day-to-day business of the design process of SPARS_LES has been led by the National Strategy Coordinator (NSC) from MAFS, together with a deputy from BOS. Each TTWG designated a coordinator to represent the TTWG on the National Technical Working Group (NTWG), chaired by the NSC. One international and one national consultant, both contracted by the AfDB, consolidated the TTWG sector reports into one overall document, leading to the production of SPARS_LES.

Figure 2: Governance Structure for SPARS_LES



The elaboration of SPARS_LES has followed the same principles for elaborating NSDS as described in the new Partnership in Statistics Development in the 21st Century (PARIS21) manual as well as in the guidelines for the formulation of SPARS. This approach has ensured that SPARS_LES can be integrated into the second generation of NSDS that Lesotho is planning to produce. SPARS_LES will be a building block of NSDS II with respect to Agricultural and Rural statistics. The activities proposed for the improvement of agricultural and rural statistics, build on existing surveys and capacity building programmes which are formulated in a realistic manner according to priorities identified by the relevant stakeholders, while considering availability of funds.

1.6 Institutional Environment

1.6.1 Administrative Structure

Lesotho is divided into 10 administrative District, namely, Botha-Bothe, Leribe, Berea, Maseru, Mafeteng, Mohale's Hoek, Quthing, Qacha's Nek, Mokhotlong and Thaba-Tseka. Districts are divided into constituencies and further sub-divided into Community Councils for ease of administration and development. There is ever-growing demand for agricultural and rural statistics, especially for planning and implementing agriculture programmes at all administrative levels.

1.6.2 The National Statistical System

The National Statistical System is defined in the Lesotho Bureau of Statistics Act 2001 to include all agencies in Lesotho, Governmental and non-governmental, whether under enactment or otherwise for gathering statistical data directly through surveys or through administrative action.

The existing Bureau of Statistics within the Government of Lesotho shall be deemed to be established as a Semi-Autonomous body under this Act, and it shall be responsible for all matters relating to official statistics, and shall also ensure that official statistics are produced in an objective, scientific and unbiased manner. The Act provides for NSC to furnish the Minister and the Bureau with the annual report in respect of its activities, including advice and outcome of the advice to the Minister, not later than a month after the end of each financial year. The membership of the Council includes representatives from key Ministries, major suppliers and users of official statistics,local universities and Central Bank of Lesotho. The Act further stipulates the powers of the Minister in charge of statistics, the statistical information to be collected and managed, the power to obtain information, access to records and confidentiality of personal information and restrictions on publication.

Lesotho's NSS is built on a centralized organizational structure with the BOS at the core to provide operational leadership. The BOS is responsible for censuses and major surveys as well as coordination of the NSS and data dissemination. As a result, BOS coordinates field operations from its field offices in the 10 districts. The BOS with a Director as the Head, has 9 Divisions namely: Agriculture and Food Security Statistics; Environment and Energy Statistics; Population Statistics; Socio-economic Statistics; National Accounts and Enterprise Statistics; Foreign Trade and Price Statistics; Survey Methodology and Cartography; Field Operations and Information and CommunicationsTechnology (ICT).In particular the BOS is responsible for:

- The formulation of policies, development of strategies and programme activities for the development and supervision of the NSS

- The establishment, harmonization and standardization of definitions, classifications and statistical methods used in the production and dissemination of official statistics
- Promotion of production, dissemination and utilization of official statistics
- The promotion of cooperation, coordination and rationalization among users and providers of statistics at central and local levels
- The provision of guidance and training to other users and producers of statistics
- The review of all initiatives to collect data at the national and local government levels and approve instruments developed for data collection

The main sources of data produced within Lesotho's NSS are censuses, sample surveys, administrative records and surveillance. The BOS generates survey data for most Ministries, Departments and Agencies (MDAs) to meet their planning, monitoring and evaluation requirements, and this reflects the cost effective use of resources. The MDAs work in collaboration with BOS in producing data from administrative records, censuses and surveys. Several MDAs carry out statistical functions with resources from the Government and development partners. This is done in consideration of the priorities of the national development agenda and the specialized nature of their statistical requirements.

1.6.3 The National Agriculture Statistics System (NASS)

The agricultural information system in Lesotho collects and produces information related to production and marketing in the agricultural sector. The main stakeholders in the agricultural information system are BOS, MAFS, Ministry of Forestry, Range & Soil Conservation, Disaster Management Authority (DMA), Lesotho Vulnerability Assessment Committee (LVAC), Lesotho Meteorological Services (LMS), Ministry of Health (MoH), Food & Nutrition Coordinating Office and Ministry of Small Business Development Cooperatives and Marketing (MSBDCM). BOS is the main producer of agricultural statistics, followed by MAFS in this respect.

The Division of Agriculture and Food Security Statistics in BOS is responsible for collecting agricultural statistics and producing a number of agricultural reports. The Division is divided into three sections; Crops, Livestock and Horticulture Statistics, respectively. This Division generates statistics on agriculture through the Agricultural Census conducted decennially and the annual Agricultural Production Survey (APS). NASS releases, in printed and electronic format, the following publications related to agricultural statistics:

Table 1: Institutions by Agricultural Statistics Activities

Institution	Agricultural Statistics Activity / Output
BOS	▪ Livestock Statistics Report ▪ Livestock Products Report ▪ Crops Statistics Report ▪ Crop Forecasting Report ▪ Availability and Utilization of Cereals Report ▪ Horticulture Production Statistics Report ▪ Agricultural Census Reports
MAFS	▪ Agricultural Situation Report
DMA	▪ Vulnerability Assessment of Food Security and livelihoods ▪ Crop Assessment
FNCO	▪ Nutrition Surveillance Systems

The Survey Methodology and Cartography Division of BOS is responsible for the development and improvement of survey methods and designs, maintenance of up-to-date master sample frame, development and maintenance of statistical standards and classification systems. In addition, this division manages and coordinates all cartographic and GIS projects relating to mapping and data generation including activities such as documentation, design, maintenance, and enhancement of GIS information to meet the needs of BOS and other MDAs.

The ICT Division supports all divisions including the Agriculture and Food Security Statistics Division. It provides ICT services by developing systems, supporting and maintaining ICT infrastructure, equipment and existing software systems to facilitate that all divisions operate efficiently and in a cost effective manner.

MAFS has five departments, namely Crops, Livestock, Research, Field Services and Planning & Policy Analysis (DPPA). DPPA has two divisions: Policy Analysis and Statistics Division, and Monitoring and Evaluation, Planning and Budgeting Division. The Ministry of Trade & Industry (MTI) conducts surveys on prices on a weekly basis. The MoH in collaboration with BOS conducts Lesotho Demographic and Health Surveys (DHSs), which provide nutrition indicators for children under five, as well as some indicators on maternal nutrition.

CHAPTER 2: EVALUATION OF NATIONAL AGRICULTURAL STATISTICAL SYSTEM

2.1 Introduction

This chapter gives an overview of the current status of the agricultural and rural statistics system in Lesotho, aimed at answering a question, where are we now? The evaluation is based on an in-depth country assessment of the existing agricultural statistical systems and is an essential input into the development of the strategic objectives and the action plan of the SPARS_LES. The assessment was carried out through review of the relevant literature, face to face interviews, self-administered questionnaires sent to a number of stakeholders (see Annex 1) as well as group discussions with technical teams of subject experts in each of the subsectors of the agricultural sector that were formed for purposes of developing SPARS_LES.

The chapter provides a summary of the current capacity of the NASS to produce agricultural and rural statistics with respect to human, financial and physical resources. This include an assessment of current data collection activities and users' perception of the adequacy of existing statistics, user needs, data gaps and coordination mechanisms. The main findings of the assessment are presented in a SWOT analysis.

2.2 Assessment of the Current Capacity of National Agricultural Statistics System

The development of SPARS_LES was preceded by an in-depth assessment of the current capacity of the NASS with respect to available resources that are required for efficient production of agricultural and rural statistics. This includes human and financial resources, infrastructure, equipment and information technology. The AfDB uses the Agricultural Statistics Capacity Indicator (ASCI) to assess African countries capacity to produce quality agricultural and rural statistics to inform the continent's agricultural development.

2.2.1 Agricultural Statistics Capacity Indicator

Agricultural Statistics Capacity Indicator is a composite indicator measuring the development of the NASS, aggregated across four dimensions, namely the Prerequisite Dimension (institutional infrastructure); Inputs Dimension (resources); Throughput Dimension (statistical methods and practices); and Output Dimension (availability of statistical information).

The Statistics Department of the AfDB has been carrying out biennial assessments of the capability of African countries to produce timely, reliable and sustainable agricultural statistics. The results are encapsulated in an 'Agricultural Statistics Capacity Indicator' (ASCI). The scores for Lesotho by dimension for ASCI are presented in Table 2.

The overall ASCI score for Lesotho shows an improvement in each of the assessments between 2013 and 2017, though Lesotho's ranking amongst African countries remained at 24th or 25th out of the 52 countries assessed.

Table 2: Agricultural Statistics Capacity Indicator Scores for Lesotho by Dimension

Dimension	2013	2015	2017
Prerequisite	66.7	46.4	53.0
Input	30.2	38.0	38.0
Throughput	49.6	55.7	64.3
Output	56.4	80.4	75.1
Overall ASCI	51.2	54.9	58.9

Source: Progress on the Capacity of African Countries to Produce Timely, Reliable, and Sustainable Agricultural Statistic – African Development Bank

Scores on the individual ASCI dimensions show more improvement in certain dimensions than others. The Prerequisite (institutional infrastructure) indicator decreased between 2013 and 2015, and increased between 2015 and 2017, though it is still lower in 2017 than in 2013. The Input (resources) and Throughput (statistical methods and practices) indicators steadily increased from 30.2%, and 49.6% in 2013 to 38% and 64.3% in 2017, respectively. After increasing between 2013 and 2015, the Output (availability of statistical information) indicator, fell in 2017.

2.2.2 Human Resources

Almost all the institutions that were interviewed reported that they do not have adequate human resources in terms of the number of staff, qualifications, skills and experience required for production of agricultural and rural statistics. The Agriculture and Food Security Statistics Division in BOS, which is currently the main producer of statistics on crops and livestock, do not have adequate staff with the necessary expertise. Its staff needs to be equipped with the required skills through short courses and degree programmes in agricultural and rural statistics.

Additionally, agricultural subsectors (crops, livestock and fisheries, forestry, rangelands and environment, and cross-cutting areas) do not have statistics units and hence they do not fully participate in the production of agricultural and rural statistics. There is a dire need to establish statistics units within the agricultural subsectors, and staff them with adequate human resources possessing relevant competencies.

The NASS needs to increase staff numbers with the expertise to enhance and expand the production of agricultural and rural statistics to meet the ever-increasing demand of data in all subsectors. In particular, the country needs to build local capacity to facilitate sustainable and continuing training of statisticians in the area of agricultural and rural statistics. In addition, the country needs a strategy or policy for retention of professional statistical personnel in the agriculture sector.

2.2.3 Infrastructure, Equipment and Information Technology

The BOS which is currently the main producer of agricultural and rural statistics does not have sufficient equipment for carrying out measurements during data collection at the farm level, for example Global Positioning System (GPS) used for area measurement are not sufficient in number. In addition, the BOS does not have adequate office space for staff in the Agriculture and Food Security Division. Transport facilities are also inadequate.

Some of the ICT infrastructure is not sufficient and the Local Area Network (LAN) needs to be refurbished. Advances in ICT required for improvement of data collection, management, archiving, analysis and dissemination are critical to enhance production of Agricultural and Rural Statistics.

Currently the collection of crops and livestock data is paper-based. The data are then captured using data screen developed by Visual Studio, exported to Microsoft Excel for cleaning and verification and SPSS is used for data analysis. The use of Computer Assistant Personal Interviewer (CAPI) to collect agricultural data are currently underway.

2.2.4 Financial Resources

The activities of the Agriculture and Food Security Statistics Division are fully funded by the Government of Lesotho. However, the challenges and constraints experienced by the Division are centred around limited financial resources for data collection and processing. Currently BOS is faced with a serious challenge to mobilise funds for the 2019/2020 agriculture census. These factors impede the efficient functioning of the NASS.

2.2.5 International Support

The Food and Agriculture Organisation (FAO) work in collaboration with MAFS, Food and Nutrition Coordinating Office (FNCO) and BOS to support several agricultural activities as well as food and nutrition security projects in Lesotho. These include; agricultural business development, management of natural resources, building capacities for better agricultural services and others. For agricultural statistics, FAO has supported several initiatives including; Agricultural Censuses; a study on the status of Livestock Disease Surveillance; Seed Security Assessment (in response to the drought effects related to 'El Niño' phenomena in Lesotho); and an assessment of the ability of local market to respond to increased consumer demand and the stability of food prices.

2.2.6 Coordination Mechanisms for Agricultural Statistics

According to the Statistics Act 2001, BOS is the agency responsible for coordinating, monitoring and supervising the NSS. As a result, it has the responsibility for establishing, harmonizing and standardizing definitions, classifications and statistical methods used in the production and dissemination of official statistics including agricultural and rural statistics.

From time to time user producer workshops are organized for relevant stakeholders to discuss specific survey instruments, mainly for large scale surveys and decennial Agricultural Census. In this regard, an effective coordination mechanism is in place for collaboration with respective MDAs in censuses and specialized surveys and facilitating access to data required by various users. Memoranda of Understanding (MoUs) are in the process

of being prepared between the BOS and MDAs in order to foster collaboration between BOS and other stakeholders mainly in the provision of Agricultural and Rural Statistics data or data exchange. There exists a Committee on Environmental Data Management (CEDAMA) with membership from key stakeholders including MAFS, MFRS, MDP through BOS and Non-Governmental Organisations (NGOs). The main objectives of this committee are:

- To advise the National Environment Secretariat (NES) on issues of environmental data management
- To promote a culture of environmental data exchange
- To establish data quality standards

2.3 Assessment of Current Data Collection Activities

The in-depth assessment also looked into the current data collection activities in the agricultural sector with standardised methodologies.

2.3.1 Agricultural Census

The main objective of the Agricultural Census is to provide data on the structure of agricultural holdings and aspects of agriculture that change relatively slowly over time. According to FAO guidelines Agricultural Censuses are conducted every 10 years. In Lesotho the first Agricultural Census was conducted in 1949/1950 whereas the last census was conducted in 2009/2010.The plan is to conduct the next one in 2019/2020.

The 2009/2010 Agricultural Census covered the whole country on a sample basis covering both urban and rural areas. Holdings covered included smallholdings, large farms, prison farms, school farms and project farms. The relevant information was collected from a sample of agricultural holdings and covered both summer and winter crops (temporary and permanent), livestock, farm-inputs, farm implements, land utilization and population engaged in agriculture. However, the questionnaire design did not allow the provision of gender disaggregated data. In addition, the census covered Community Level module which aimed to complement the holding-level data by collecting a variety of information on basic facilities such as health and education, the availability of roads, water, electricity and transport, and peace and order in communities. The data was collected by interviewing village chiefs, headmen or councillors in each village in the country.

Data collection for 2009/2010 Agricultural Census was undertaken using face to face interviews for the sampled farming households. The results were published by both printed copies and electronic format and they are available on BOS website.

2.3.2 Agriculture Production Surveys

The Bureau of Statistics has conducted annual Agricultural Production Surveys (APS) since 1973. The main objective is to collect annual information from farming households on major crops (maize, wheat, sorghum, beans and peas), livestock inventory and stock change (cattle, sheep, goats, horses, donkeys, pigs and poultry) and livestock products. The results are published by both printed copies and electronic format and they are available on BOS website. Release calendar for publication of agricultural statistics reports is available every year.

2.3.3 Crop Forecasting Surveys

The BOS Agriculture and Food Security Statistics Division in collaboration with MAFS and the National Early Warning Unit (NEWU) under DMA undertake Crop Forecasting Survey (CFS). The

objective of CFS is to determine the availability of food in the country and make informed, timely and necessary preparations in the event of a likely food shortage. The survey focuses on three main crops, namely, maize, sorghum and wheat.

2.3.4 Horticulture Production Survey

The first Horticulture Production Survey (HPS) was undertaken in 2015/2016 agricultural year and is expected to be carried out every year on a quarterly basis, by the BOS Agriculture and Food Security Division in collaboration with the MAFS. The sample is based on a list of horticulture farmers supplied by MAFS, for each of the 10 districts. The objective of HPS is to estimate production of fruits and vegetables.

2.3.5 National Nutrition Survey

The FNCO coordinated and led the National Nutrition Survey in 2007. The objective of the survey was to estimate malnutrition rate of children, mortality rate and provide a baseline for strengthening of nutrition surveillance system in Lesotho.

2.3.6 Livestock Products Statistics

The BOS collects, compiles and analyses data on livestock products and produces a report. Information on livestock products is obtained from secondary data mainly from the Department of Livestock of the MAFS, Department of Marketing of MSBDCM and Lesotho National Dairy Board (LNDB). Other livestock products' statistics are obtained from APS livestock data.

2.3.7 Livestock Disease Surveillance System

Livestock Disease Surveillance System is an interaction of events and resources that are integrated together towards achievement of the goals and objectives for effective prevention, containment and control of outbreaks in livestock diseases that interfere or greatly threaten with humanity. The livestock surveillance system is under the Department of Livestock Services (DLS) of MAFS.

2.3.8 Agriculture Marketing Information System

The Agricultural Marketing Information System is a service which involves the collection of information on prices and quantities of widely traded agricultural products on regular basis. The objective of the system is to support marketing decision making and marketing efforts of entrepreneurs and farmers. This information is collected by the Marketing Division of the Ministry of Small Business Development, Cooperatives and Marketing.

2.3.9 National Accounts

The National Accounts statistics is compiled by National Accounts and Enterprise Statistics Division of BOS. The compilation of national accounts statistics on the agriculture sector is based on agricultural data from the Agriculture and Food Security Statistics Division.

2.3.10 Other Surveys and Assessments

The Food and Agriculture Organisation in collaboration with BOS and MAFS conducted Seed Security Assessment in 2016. The objective of the assessment was to provide information that supported the design of appropriate seed security interventions.

Vulnerability Assessment and Analysis (VAA) is a process that defines, identifies, classifies and prioritises vulnerabilities and risk to understand the threats to its environment and react appropriately. Its objective is to determine levels of food insecurity amongst rural and urban populations and estimate vulnerable populations facing food insecurity.

The Community and Household Surveillance (CHS) is a bi-annual survey that is conducted during the post-harvest and the lean season each year with the main objective of monitoring the shot and long term effects of food assistance interventions. The CHS is anchored in DMA with the objective of broadening its objectives especially in strengthening and complementing LVAC food security monitoring initiatives in the country.

2.3.11 Sources of Administrative Agricultural Data

The main potential providers of administrative agricultural data are:

- Lesotho National Dairy Board
- Ministry of Small Businesses Development, Cooperatives and Marketing (Marketing Division)
- Ministry of Agriculture and Food Security
- Non- Governmental Organizations
- Development Partners
- Regional Organizations (SADC, SACU etc.)
- Research Institutions
- Other Ministries, Departments and Agencies

2.3.12 Data Quality

Agricultural statistics produced by the BOS are based on scientific methods and conform to international norms. Samples are drawn according to probabilistic methods but sampling errors are not measured. Field areas are physically measured and yields are estimated by weighing the harvest from demarcated crop-cutting areas. Item and unit non-responses are not documented and the magnitude of the non-response is not reported. The burden on farmers is not evaluated and hence it is not minimized, though information technology and communications are increasingly used in the collection, processing and dissemination of data.

2.4 User Needs and Data Gaps

2.4.1 Summary of Priority Data Needs

In order to meet requirements, agricultural statistics should cover the following:

- Crops, livestock and livestock products, aquaculture and fish productions and agricultural land uses;
- Farm structures ;
- Disposition of Agricultural production ;
- Economic data: prices, agro-processing, production costs and input uses of fertilizers, chemicals, seeds;
- Environmental data (forest and forest products, erosion, degradation / improvement of natural resources).

Agricultural statistics should be available for irrigated and non-irrigated areas and for each district. They should provide information needed for policy analysis and compilation of national accounts for agriculture including agricultural satellite account. They should also permit development of balance sheets for the major agricultural products. Agricultural statistics can then be used to assess adherence to the international standards used for compiling data relative to the availability and uses of agricultural production. There is a growing demand for quality and relevant data to inform investment, marketing and macroeconomic aggregation decisions, assessment of food security and impact of the implemented projects and programs. As the users of agricultural statistics are a diverse and constantly growing group, their needs vary in terms of the level of precision, sophistication, and diversification of data required. The needs of agricultural statistics are summarized Table 2 overleaf.

Table 1: Summary of Data Needs for Agricultural and Rural Statistics

Agricultural production and uses	Areas and production of crops, vegetables and fruits for irrigated and non-irrigated areas
	Crop production forecast
	Number of cattle, sheep and goats by sex, type of breeds and draught animals
	Monitoring herd changes at the farm: births, purchases, sales, mortality and slaughter on the farm, curling
	Number of slaughtered cattle, sheep, goats and draught animal
	Production of milk, wool, meat, eggs, other birds and beekeeping products
	Uses of agricultural production at farm and national levels: losses, sales, seeds, animal consumption, own human consumption, farm processing and agribusiness and stock levels and exports
	Import and exports of agricultural products, number of animals, in quantity and value.
Inputs and technologies	Uses of inputs in quantities and value for agricultural production: labour, seeds, fertilizers, pesticides and pest control, mechanization, energy, medicines and veterinary services.
	Uses of water by crops and animal activities, billing of irrigation water to farmers, and authorizations of digging wells
	Animal feed: forage, rangeland, raw agricultural products, by-products of agriculture and agribusiness, compound feed…
	Maintenance and repair of vehicles and capital goods and buildings
	Technologies (including irrigation) used and calendar of agricultural operations undertaken for agricultural productions
	Rental equipment for work on the farm and non-residential buildings
	Needs and sources for financing farm activities
	Production costs for crops, vegetables and animal production
	Farm capital and investments: agricultural equipment, vehicles, animals, agricultural land, farm buildings, hydro-agricultural equipment, fruits orchards, rejuvenation such as pruning
	Nature and levels of public investments in agriculture and subsidies allocated by the state to farmers
Marketing and prices	Transportation and marketing costs for agricultural products (plants and animals) and inputs
	Farm gate and wholesale prices for agricultural products and live animals
	Agricultural input and equipment prices: agricultural equipment, vehicles, hydro-agricultural equipment, fertilizers, pesticides.
	Farmer income sources: return on capital, land and family labour and other sources of income
	Level of underemployment of farmers and their families

2.4.2 The Gap between Available Agricultural Statistics and Users' Needs

The analysis of data production and users demand indicates an imbalance between the data that are being requested by users and the data that are actually being collected on the ground. The information available from the different sources (census, surveys and administrative sources), only partially cover the needs of users as detailed in Table 2. However, the available data cover physical production of major crops, livestock numbers, input use, and inventory changes. Data on agribusiness, wages, on-farm processing, purchases and disposals of non-produced assets such as land, sources of income and services ancillary to agriculture (such as credit, insurance, agricultural work carried out by third parties), are not available or they are available but inadequate.

Despite the enormous efforts made, in particular by BOS, MAFS, and other governmental agencies, it is critical to note the gap between the needs of different users of agricultural statistics as detailed above and the existing agricultural statistics with acceptable quality. This gap essentially involves:

- Production, yields and acreage of most vegetables;
- Range lands and forage production;
- The use of agricultural products (consumption of own produce, losses, storage, processing, sales by farmers and seeds);
- The use of inputs (such as water, labour, animal feeds, energy, veterinary services), by different agricultural activities;
- Wages paid by farmers for labour;
- Prices of a large number of agricultural and agro-industrial products at different stages of marketing (producer prices, wholesale prices and retail prices);
- Processing of agricultural products on the farm;
- Farm and non-farm income of farmers;
- Ancillary services to agriculture;
- Land improvements and hydro-agricultural equipment as well as equipment and constructions for own account;
- Data on forests and the use of forests products;
- Environmental data;
- Improvement of quality on some agricultural statistics.

2.5 SWOT Analysis of the National Agricultural Statistical System

Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis was carried out for the overall NASS in Lesotho. The SWOT analysis is a useful tool to identify strengths and opportunities on which to build the SPARS strategy, as well as the weaknesses to be addressed and to evaluate threats to the NASS which have a direct bearing on the production of agricultural and rural statistics. The detailed SWOT analysis is presented in Table 3, overleaf.

The main strengths of the NASS are seen to be the Statistics Act, the structure it gives through the NSC and its expert committees, the political independence of statistical operations and the development of the NSDS. Another set of strengths revolve around the BOS with its committed staff, its presence in the Districts, its IT infrastructure, website and publication schedule. However, the lack of the full implementation of the Statistics Act, with a non-functioning NSC and poor statistical coordination and data producer-user dialogue, and the lack of an up to date NSDS are seen as weaknesses. Other weaknesses include inadequate development of administrative data, including weak data quality, limited documentation to build institutional memory and inadequate statistical awareness amongst stakeholders. A final set of weakness reflect the limited availability of resources - funds, staff, training and office space.

Table 2 : SWOT Table for NASS

STRENGTHS	WEAKNESSES
▪ Existence of Statistics Act 2001 ▪ No significant interference in statistical operations by the government and other partners ▪ National Strategy for the Development of Statistics designed for 2011-2016. ▪ Existence of National Statistical Council and Committees of the Bureau ▪ Very committed technical human resource ▪ Existence of release schedule for agriculture Statistical Publications ▪ Existence of BOS website ▪ Availability of IT infrastructure and Frame Per Second (FPSs) to support statistical programs (BOS, MAFS) ▪ Deployment of Statisticians at district level	▪ The Statistics Act is not fully implemented and there is no regulation for statistical act ▪ Weak National Statistical System Coordination ▪ Lack of the current NSDS ▪ Limited or disorganized documentation of used resources (archives) for institutional memory ▪ National Statistical Council not functioning ▪ Inadequate feedback between data producers and users within the NASS ▪Development and management of administrative sources is not quite adequate and weak data quality ▪ No regular meetings between agriculture statistics stakeholders. ▪ Inadequate governmental funding of agricultural statistics activities ▪ Shortage of agricultural statistical staff ▪ Lack of capacity building ▪ Inadequate office space ▪ Inadequate statistical awareness among stakeholders

OPPORTUNITIES	THREATS
▪ Political will to implement and disseminate statistical information in a timely manner ▪ Strong demand for agricultural statistical data and increasing recognition of the importance of statistics at national and international level ▪ Important investments in the agricultural sector ▪ Awareness of the importance of statistics among stakeholders ▪ Partnership with the university ▪ Regional and international cooperation ▪ Advances in ICT making it possible to improve data collection, management, archiving, analysis, and dissemination	▪ Brain drain and inadequate qualified personnel ▪ Difficulty of recruiting statistical staff to work on agricultural statistics ▪ Lack of Staff Retention Strategy ▪ Dependence on external financing ▪ Economic and financial crisis ▪ Inadequate statistical awareness among stakeholders ▪ Inadequate financial resources ▪ Limited local suppliers of specialized ICT equipment ▪ No gazette of standardized village names ▪ Resistance of key players to share data

CHAPTER 3: STRATEGIC PLAN

3.1 Introduction

The SPARS_LES action plan will support the implementation of development policies in the agricultural sector. The activities are focused on the collection, processing and analysis of agricultural data for the production of indicators to assess the socio-economic impact of these policies and measure the contribution of the sector to national Gross Domestic Product (GDP). It provides a framework for producing statistics to inform decision making in the agricultural and rural sector of Lesotho.

SPARS_LES provides a holistic, realistic and sustainable approach addressing the main constraints that impede development of agricultural statistics and focuses on the achievement of the long-term goals.

On the basis of the assessment of the Lesotho NASS, the development plan for agricultural statistics aims to:

- Integrate the NASS into the NSS to avoid duplication and omissions as well as conflicting data releases;
- Define indicators for the monitoring and evaluation of the development of agricultural activities, food security, as well as for the needs of the national accounts;
- Identify priorities of data collection in terms of periodicity, coverage and geographical level;
- Identify data sources for computing indicators and identification of statistical operations' priorities and their timing;
- Build capacities required to collect and analyse agricultural data.
- Propose a schedule of comprehensive operations and methodologies to be used;
- Identify funding sources and conduct needs' assessment for human and material resources for implementation of SPARS_LES;
- Propose monitoring and evaluation framework and develop awareness and communication strategy for implementation of SPARS_LES.

As advocated by the Report of Friends of the Chair on Agricultural Statistics[3] , SPARS_LES defines an integrated framework of sources of data including surveys to produce quality statistics, using an integrated program of periodic surveys and consistent administrative records relevant to agricultural development.

3.2 Challenges

The assessment of NASS has identified weaknesses related to provision and access to reliable and up to date statistics for planning, policy and decision making. These weaknesses include:

- The NASS partly meets the requirements of agricultural statistical information needed for the design and implementation of agricultural policies;
- The NASS has mainly focused on statistics on some crops and livestock. Farm structure data are covered only during the decennial agricultural census. Microeconomic data are not adequate;
- The accuracy and coverage of agricultural statistics are insufficient;
- Development and management of administrative sources is not quite adequate;
- Weak National Statistical System

[3] United Nations Economic and Social Council Statistical Commission, Forty-first session 23-26 February 2010, Global Strategy to Improve Agricultural and Rural Statistics, Report ofFriends of the Chair on Agricultural Statistics

coordination: inadequate feedback between data producers and users within the NASS (Statistics Act makes specific requirement that coordination mechanisms such as inter-agency committees, task forces, etc., should be established but no mention of how they should operate);

- Though the governmental finances all activities that lead to the production of agricultural and rural statistics, this funding is not adequate;
- The sustainability of the Lesotho NASS is not guaranteed: the limited number of resources where raw data are not adequately used.

More specifically the main challenges that reflect the limitations of the National Agricultural Statistical System can be summarized as follows:

1. Lack of strategic, legal and institutional frameworks for the production of agricultural and rural statistics and lack of regulations for 2001 Statistics Act;
2. Members of the National Statistical Council were appointed but the Council is not functioning;
3. Lack of the current NSDS that follows the 2011-2016 NSDS;
4. Weak coordination of the National Statistical System and NASS;
5. Lack or poor coordination of statistical activities in the agricultural sector;
6. No formal user-producer forum necessary for coordinating user needs, activities leading to production of agricultural and rural statistics as well as discussing both demand and supply of agricultural data. Feedback between data producers and users within the NASS is inadequate due to lack of the formal user-producer forum;
7. Lack of statistics units in most of the agriculture subsectors;
8. Unwillingness to share information by some of the key stakeholders, lack of agricultural information platform (institutional networked platform) and hence lack of inter-institutional data sharing;
9. Non-existence of SPARS;
10. The analysis of data production and users' demand indicates that there is an imbalance between the data that are requested by users and the data that are actually being collected on the ground. Available agricultural information, from different sources (censuses, surveys and administrative records), partially covers users' needs. Hence needs for agricultural statistics largely exceed the available statistics, which are mainly on production, area planted and area harvested and yields of some crops;
11. Data on agribusiness, wages, on-farm processing, purchases and disposals of assets such as land, sources of income and services ancillary to agriculture (such as credit, insurance, agricultural work carried out by third parties), are not generally available. If there are some that are available, they are inadequate;
12. Limited use of data from administrative records for purposes of producing agricultural and rural statistics;

13. Lack of staff with statistical skills in some agricultural subsectors and shortage of staff with expertise in agricultural and rural statistics specifically, in the division of Agriculture and Food Security Statistics of the BOS;
14. Inadequate funding for activities and processes that lead to production of agricultural and rural statistics;
15. Lack of data quality management procedures for all processes involved in producing agricultural and rural statistics;
16. Limited resources allocated for production of agricultural and rural statistics and as a result main producers of agricultural and rural statistics do not have sufficient equipment for farm-level measurements;
17. The use of electronic equipment (PDAs, tablets, smart-phones, etc.) to collect agricultural data in the field is not yet generalized.

3.3 Vision and Mission

The construction of the vision and mission statements for the production and the development of agricultural and rural statistics was based on the analysis of the result of the sectoral evaluation of the NASS and the ambition of Lesotho for the development of its agricultural and rural statistics.

The SPARS_LES aims at enhancing the agricultural statistics system to enable it to present a comprehensive and accurate picture of the agricultural sector, contribute to the promotion of dialogue among its stakeholders, and to improve decision-making in the sector. The SPARS_LES aims also at the adoption and use of international best practices in the field of statistics for ensuring that produced agricultural statistical data are reliable, coherent, and effective in monitoring agricultural trends, and producing indicators for monitoring agricultural development, policies and projects. The vision, mission, and general objectives defined below, provide the strategy with sufficient flexibility to enable data producers to meet the users' current and evolving needs.

Vision:

An integrated, sustainable and coordinated national system of agricultural and rural statistics producing quality agricultural statistics that support national agricultural development in an objective, timely and cost effective manner.

Mission

To facilitate processes of producing, disseminating and archiving quality, sustainable, and coordinated agricultural and rural statistics.

3.4 Strategic Objectives, Calendar and Implementation Plan

3.4.1 Objectives & Strategies

The SPARS_LES Objectives which are Specific, Measurable, Achievable, Realistic and Time-bound (SMART) aim to address important issues, which were identified during the assessment phase. In line with the vision and mission statements of the SPARS_LES, the overall goal of the NASS is to provide users with high quality agricultural and rural statistics, which are accurate, complete, timely, reliable, up-to-date, and consistent. These statistics should cover various sub-sectors and be produced in an efficient, timely and sustainable manner, that

enables the design, implementation, monitoring and evaluation of programs and policies for agricultural sector development.

The analysis of challenges identified during the phase of the in-depth evaluation of the NASS has made it possible to define the following strategic objectives that describe the overall accomplishments to be achieved in the NASS:
Strategic Objective 1: Strengthen coordination of NASS and ensure its integration into the NSS;
Strategic Objective 2: Improve production, analysis and accessibility of agricultural and rural statistics;
Strategic Objective 3: Improve the quality of agricultural and rural statistics;
Strategic Objective 4: Ensure the availability, capability and motivation of NASS staff;
Strategic Objective 5: Strengthen the physical infrastructure for efficient and effective statistical operations;
Strategic Objective 6: Develop sustainable funding for agricultural and rural statistics activities.

Table 4 shows each Strategic Objective (SO), with its respective Operational Strategies (OS – these are the methods to be used for achieving the objective) and the challenges each Strategic Objective addresses.

Table 3: Objectives, Operational Strategies and the Challenges Addressed

Strategic Objectives (SO)	Operational Strategies (OS)	Challenges addressed
SO1: Strengthen coordination of NASS and ensure its integration into the NSS	**OS1.1** Strengthen the integration of the NASS into the NSS	1, 2, 3, 4, 5
	OS1.2 Strengthen the coordination of the NASS	6, 7, 8, 9
SO2: Improve production, analysis and accessibility of agricultural and rural statistics	**OS2.1** Implement an integrated Census & Survey programme	
	OS2.2 Improve reporting from administrative records	10, 11, 12
	OS2.3 Expand analysis of agricultural and rural statistics	
SO3: Improve the quality of agricultural and rural statistics	**OS3.1** Implement a Data Quality Assessment Framework	
	OS3.2 Strengthen compliance and ensure users' satisfaction	15
SO4: Ensure the availability, capability and motivation of NASS staff	**OS4.1** Establish and maintain a critical mass of NASS statisticians	13
	OS4.2 Enhance statistical capacity of NASS	
SO5: Strengthen the physical infrastructure for efficient and effective statistical operations	**OS5.1** Provide BOS and agricultural statistics units in other MDAs with adequate infrastructure for data collection and processing	16
	OS5.2 Strengthen the use of Information and Communication Technology (ICT).	17
SO6: Develop sustainable funding for agricultural and rural statistics activities	**OS6.1** Engage with policy makers and partners to set and finance agricultural and rural statistics programmes	14
	OS6.2 Raise awareness of the importance of agricultural and rural statistics	

3.4.2 Strategic Objective 1:

Strengthen coordination of NASS and ensure its integration into the NSS

This Strategic Objective has two Operational Strategies with activities to strengthen and clarify institutional relationships.

OS1.1 Strengthen the integration of the NASS into the NSS

The need for a review of the national legislation to enhance the management and coordination of the NSS is one of the work streams identified in the current NSDS. The role of BOS needs to be clarified and, in particular, BOS should

(i) be clearly mandated to coordinate the statistical system;
(ii) develop data security and data management policy for the entire statistical system in collaboration with all national statistical system's actors;
(iii) authorize, coordinate and supervise all official statistical programs undertaken within the NSS, establish standards and promote the use of the best practices and methods in the production and dissemination of statistical information;
(iv) assist line Ministries in the collection, compilation and publication of statistical information; and
(v) promote statistical awareness, in cooperation with all related entities.

The involvement of NASS participants in the review is important to ensure that any new statistical legislation being proposed promotes the collection and use of agricultural and rural statistics, including the identification of a regulatory and organizational framework for the national system of agricultural and rural statistics. This includes supporting the re-establishment of the NSC and the formal recognition of its expert advisory committees, including the National Agricultural Statistics Coordination Committee (NASCC).

The integration of the NASS in the NSS will also be strengthened by stakeholders in the NASS participating fully in the preparation of the NSDS II and, in particular SPARS_LES being used as one pillar for the building of the future NSDS.

OS1.2 Strengthen the coordination of the NASS

The NASS needs a coherent and effective framework for coordination between the various partners. A clear delineation of responsibilities for producing agricultural and rural statistics and close coordination of production will avoid duplication of efforts, prevent the publication of contradictory data and ensure the most efficient and effective use of resources. Coordination is essential to ensure the quality and coherence of statistical data, avoid confusion amongst users and reduce the costs of producing agricultural and rural statistics.

The NASCC needs to meet regularly (at least 2 times a year) to exchange information produced by different stakeholders as well as their respective work programs related to agricultural and rural statistics. This committee should focus in particular on the adoption of annual programmes for all agricultural and rural statistics activities.

In order to reinforce this coordination, MoUs should be signed between the BOS and all MDAs participating in NASS, and in particular with MAFS and MFRSC, to set the basis for their commitment to

develop agricultural and rural statistics by means of annual work programmes covering training, resources, exchange of information and data, and effective coordination of their statistical operations.

The NASS, through the NASCC, will also promote the use of internationally accepted concepts, definitions and classifications suitably adapted to the national environment. The NASS will produce and disseminate a Metadata handbook covering all indicators identified for the monitoring and evaluation of national agricultural development programmes.

3.4.3 Strategic Objective 2

Improve production, analysis and accessibility of agricultural and rural statistics

This Objective has 3 Operational Strategies with activities reflecting data collection programmes and secondary analysis of datasets.

OS2.1: Implement an integrated Census and Survey programme

The main activity under this strategy is a program of censuses and surveys designed to complement the information that can be retrieved from administrative records data, in order to meet data needs and fill data gaps. This programme focuses on promoting data collection and improving reporting and analysis to meet data needs, in particular the needs of the monitoring and evaluation of the agricultural policies as well as for compilation of national accounts. The data to be produced can be grouped under the following themes:

- Crop and livestock productions;
- Production costs and prices;
- Agricultural production techniques;
- Factors of production including labour;
- Irrigation and water management;
- Structure of farms;
- Number of farmers producing crops and rearing livestock;
- Demographic characteristics of agricultural populations;
- Farming employment and wages;
- Food safety ;
- Imports of agricultural and livestock products;
- Non-agricultural activities practiced by farming households.

The proposed program of operations, which has been built on Lesotho experience in the field of agricultural and rural statistics, will provide the statistical information that meets users' needs and fill data gaps (it integrates current and anticipatory future needs). This program is integrated, complimentary to administrative sources and will incorporate GIS. It is an extension of current and planned operations and launches new projects to extend the coverage of existing agricultural statistics. The proposed Census and Survey operations are as shown in Table 5, overleaf.

Table 4: Integrated Census and Survey Programme

Operation	Objective
Censuses	
General Agricultural Census	The Agriculture Census provides data on the structure of agricultural holdings and on aspects of agriculture that change relatively slowly over time, at all administrative units. It provides sampling frames for follow-up agricultural sample surveys. It provides mainly data on the basic organizational structure of agricultural holdings, such as size of holding, land tenure, land use, crop area, irrigation, livestock numbers, labour, use of machinery and other agricultural inputs. The agricultural census is undertaken every ten years
Quinquennial Surveys	
Land Degradation and Surveillance Survey	The Land Degradation and Surveillance Survey aims to assess rangeland, land use, land cover, impact on habitat, land degradation, soil health and topography/land form.
Cost of Production Survey	The main objectives of this survey are to estimate the following at the national level: - The distribution of cost of production, per hectare and per ton, of major crops; - The distribution of cost of livestock production (cattle, sheep, goats, piggery, poultry); - Input uses by each agricultural activity (irrigation water, seeds, fertilizers, pesticides, labour for each agricultural operation, animal feed, etc.); - Input prices and cost of using agricultural equipment (including depreciation), land rental etc.; - Timing of the application of inputs and agricultural operations; - The estimation of the investment and capital stock in the agricultural sector by types of investments and capital (buildings and constructions, wells and dams, machinery and equipment, fruit trees, livestock). It is recommended to undertake this survey every five years with a sample size that will enable national level results.

Agriculture Structure Survey	The survey on farm structure should cover the following items: - Input uses at farm level (water, fertilizer, seeds and pesticides); - Labour used to perform the work on the farm (family labour, permanent labour, temporary labour, etc.); - Irrigation techniques and sources of water used for irrigation; - Ages and levels of farm capital (agricultural equipment, buildings, machinery, etc.); - Investments (equipment, facilities, new plantings, installation of irrigation systems, funding, livestock etc.) - Non-agricultural sources of incomes for farmers. It is recommended to undertake this survey every five years with a sample size that will enable national level results.
Annual Survey	
Crop survey	The objective of this survey is to provide information on planted area and production, number of trees (young and productive) for the main crops and fruits. The size of the sample should be adequate for results with acceptable accuracy at the national level for the main crops as well as fruits. All results should distinguish between irrigated and non-irrigated crops and orchards. For major crops the yields are estimated using crop cutting measurements results, however BOS should undertake a comparison of results from these objective measurements and from the farmers' estimates.
Horticulture Survey	The main aim of the HPS is to estimate the production of vegetables and fruits in the country, income earned by farmers as well as employment in the horticulture sector. It focuses on both urban and rural commercial farmers and data are collected from the farmers every year on quarterly basis.
Livestock Survey	The objectives of this survey are to provide information on: - The number of animals (cattle, sheep, goats, horses, donkeys, pigs and poultry) by type, race, sex, age and the changes that occur on the farm in terms of births, deaths, sales, purchases, and slaughter within the farm, etc.; - The Production of livestock products (milk, eggs, skin and hides etc.) in quantities and values. The size of the sample should be adjusted to have an acceptable accuracy and to keep the cost at the manageable level.

Post-harvest Losses	The total losses that occur at the farm level include the losses that occur at the field level, the losses that occur during the transportation of the harvest within the farm and the losses during storage at the farm. These losses can be significant and deserve to be measured. It is proposed to evaluate them through crop losses' surveys. Every year losses of one crop are investigated with the size of the samples kept small.
Farm Gate Price Survey	The objective of this survey is to collect prices of agricultural inputs and outputs. Outputs include crops, fruits and vegetables, livestock products such as milk, poultry products, and live animals. The inputs include fertilizers, pesticides, seeds etc. The sample size should be adequate for national results with acceptable accuracy. Data should be collected every three months to monitor seasonal changes.
Food Insecurity Experience Scale Survey (FIES)	The objective of the FIES survey is to measures food insecurity based on past experience of households during the reference period of one year. During the course of the SPARS_LES, BOS will carry out this survey annually.

OS2.2 Improve reporting from administrative records

Ministries and different administrative entities hold information in the form of administrative records on the agricultural sector. For example, slaughterhouses hold data on the number of animal slaughtered (cattle, sheep, goats, poultry) and the quantity of meat produced and the prices of the meat at slaughterhouse. The successful transmission of such data to the statistical unit of the MAFS for analysis and publication will reduce the burden on agricultural surveys.

The BOS will advise and recommend concepts and definitions to be used to compile data from administrative records. Administrative sources of information should be reconciled to ensure consistency and accuracy of data from more than one source.

OS2.3 Expand the analysis of agricultural and rural statistics

Construction of Indices

It is proposed to construct indices of producer prices of agricultural commodities and indices of agricultural production. These indices will provide significant value added to the raw data, providing useful guidance to policymakers and be the first step in developing further analysis of agricultural data.

Food Balance Sheet

As recommended by FAO, it is proposed to develop Food Balance Sheet. Food Balance Sheet is an instrument for policy analysis of food security by establishing the relationships between food availability, food requirements and nutrition levels. In addition, food balance sheet constitutes a statistical framework for food and agricultural commodities as it serves as means of evaluating the coherence of all data used and can be an indicator for availability of agricultural data and its accuracy.

Agricultural Statistics Database and Archiving

The NASS needs a central repository where users and producers of agricultural and rural statistics as well as policy makers, development partners and researchers can access national agricultural data. An Agricultural Statistics Database will be developed and maintained to reflect the indicators in the Metadata handbook (see OS1.2 above) for monitoring the implementation and results of national agriculture development projects. The database will in particular;

(i) Improve the micro-data archiving and documentation system,
(ii) Conduct and maintain a comprehensive data inventory of all agricultural data sets and
(iii) Facilitate access to data.

GIS tools and applications will be incorporated to improve the effectiveness of data analysis.

3.4.4 Strategic Objective 3

Improve the quality of agricultural and rural statistics

There are two operational strategies under this objective with activities split between quality and methodological improvements.

OS3.1 Implement a Data Quality Assessment Framework

The NASS, led by the BOS, will produce a Data Quality Assessment Framework (DQAF), to be endorsed for use by the NASCC. The framework will strengthen quality control procedures by providing an assessment of the strengths and challenges facing statistical operations to produce quality, timely and reliable data. The framework will reflect international standards and practices and will meet the needs of data users by identifying data of known quality, and meet the needs of data producers by highlighting quality problems and proposing solutions. The specific objectives of DQAF are to:

- Assess, on a rotating basis, the quality of all NASS data outputs and of systems that produce them;
- Identify quality problems, highlight the major ones and propose improvements.
- Review the extent to which quality problems have been addressed (during the next assessment round); and
- Provide producers and users with quality summaries, including quality scores.

Once the framework has been completed a programme of regular assessments and evaluations of statistical operations within the NASS will be implemented.

OS3.2 Strengthen compliance and ensure user satisfaction

The entire system that produce agricultural and rural statistics, starting with data collection to analysis, should utilise effective and innovative tools. Best practices data collection methodologies and international standards (suitably adapted) covering the collection, processing, analysis and dissemination of data should be adopted and promoted. New methods of data collection including the use of hand-held computers to collect information in the field and the use of GIS to capture, present, analyse and disseminate data, are currently in place. The NASS, led by BOS, will produce and disseminate a Compendium of best practices methodologies for collecting agricultural data. This Compendium will identify best practices for methodological improvements, including the documentation of all procedures, methods, nomenclatures, criteria for monitoring, quality control of data collection, processing, dissemination, and calculation and publication of sampling errors (CV- Coefficients of Variation).

The aim of NASS is to provide high quality agricultural and rural statistics. User Satisfaction Survey (USS) will be conducted every two years to measure the degree to which BOS meets its obligation towards statistics users.

The User Satisfaction Survey will include questions on the:

- Perceived quality of agricultural and rural statistics and the services provided;
- Extent to which statistics influence policies and/or decisions;
- Ease and effectiveness of obtaining access to these statistics; and
- Information about the users, such as background, frequency of use, complexity and level of detail required.

3.4.5 Strategic Objective 4:

Ensure the availability, capability and motivation of NASS staff

The outcome for this objective is that adequate and well trained human resources are available at the NASS. This will be achieved by:

- Establishing statistics units in agricultural MDAs, beginning with MAFS;
- Defining and implementing a national recruitment and retention plan to increase the number of statistical personnel within the NASS;
- Establishing a training program of in-service courses and on-the job knowledge transfer to develop the capacity of agricultural statistics personnel.

OS4.1: Establish and maintain a critical mass of NASS statisticians

There is a need to establish statistics units in the agriculture subsectors to strengthen the production of agricultural and rural statistics. These units will work in collaboration with BOS to ensure efficient and effective production of agricultural and rural statistics. Moreover, there is an urgent need for MAFS to set up a statistical unit within its Department of Planning and Policy Analysis. This unit will produce some of the agricultural and rural statistics that are not produced by the BOS. The human resources capacity of this unit will have to be strengthened to enable it to produce quality statistics in a timely and cost effective manner. Other official entities may continue to produce statistics from their data but in agreement with the BOS and in accordance with the proposed NASS organization.

It is clear that currently the staff available at the various ministries and agencies that collect agricultural statistical data is far from being sufficient for undertaking all the agricultural statistical operations proposed in this strategy. Most of the staff members are not statisticians. For purposes of conducting all tasks in the framework of the programme of statistical operations planned in the SPARS, it is essential that adequate number of skilled and trained personnel be available for implementing SPARS_LES and undertaking statistical work required for the development and achievement of the planned statistical operations as described in this strategy.

It is also important to define the corresponding required skills. Skilled personnel must be recruited and trained in all areas of statistical operations, in order to accomplish all the objectives and activities required by the strategy. In addition to building the capacities, the statistical staff must be provided with sufficient occupational security, in order to produce high quality data. This can be done through:

- Formulating a description of each statistical post,
- Developing and managing a succession plan to identify or develop potential employees to fill vacant critical positions;
- Developing a continuous professional development (CPD) plan in agriculture statistics;
- Conducting regular workshop/training in work ethics;
- Adopting the procedures for staff compensation and promotion, and incentives for staff achievements and skills;
- Developing and implementing a performance –based management system and setting annual performance targets;
- Conducting quarterly or at least annually performance appraisals for every staff and establishing feedback mechanisms

and corrective actions;
- Increasing the number of extension officers that are dedicated for data collection only;
- Providing the physical infrastructure needed.

Given the proposed program and the shortage of human resources, it is necessary for the NASS to recruit at least 11 statisticians and 6 enumerators as set out in Table 6.

Table 5: Staff Recruitment for NASS

Ministry / Agency		2019/20	2020/21	2021/22	2022/23	2023/24	Total
Statistical and Information Unit (MAFS, Planning)	Statisticians	1	2				3
BOS	Statisticians	4	1	1	1	1	8
Total	**Statisticians**	5	3	1	1	1	11

OS4.2 Enhance statistical capacity of NASS

NASS needs to have sufficient and appropriate human resources to enable it to carry out all planned operations with statistical rigor. Training of staff is a key element in the success of the proposed strategy. Its objectives are to broaden the skill and expertise of the agricultural statistical personnel. Consequently, it is necessary to identify training needs and establish a medium and long-term training programme tailored to the specific needs of agricultural and rural statistics, especially in the areas of data collection methodologies; sampling, sampling frames and the calculation of sampling errors; GIS; questionnaire formulation; information technology; data processing; data analysis; dissemination; data quality; and databases as well as for the communication and advocacy of agricultural and rural statistics.

Training programme will be structured around three components: in-service training including scholarships to earn degrees in the areas of agricultural and rural statistics; exchange programmes to enhance skills and increase knowledge on statistics standards and methodologies in particular to be consistent with national statistical offices in other countries; and on job training of NASS staff. In pursuant to this, the NASS will pursue training partnerships with relevant institutions and liaise with local and international partners that offer statistics related training.

Technical assistance and the use of external expertise to the NASS will help where existing staff capacities and competences are over-stretched. It should aim at the real transfer of know-how and the implementation of specific actions. This expertise

could particularly cover the following topics:

- Definition of a training plan for NASS staff responsible for agricultural and rural statistics;
- Realization of a study on architecture, procedures and protocols necessary for IT management of agricultural statistical system, and networking of BOS Agriculture and Food Security Division with statistics units from other MDAs;
- Review and integration of all questionnaires;
- Drafting of the various manuals for supervisors and enumerators;
- Quality reports of various agricultural statistical operations;
- Selection of samples and determination of their sizes;
- Uses of GIS techniques in agricultural and rural statistics;
- Development of programs for use of PDAs in agricultural surveys;
- Yield and production estimation ; and
- Design and organization of agricultural census.

3.4.6 Strategic Objective 5:

Strengthen the physical infrastructure for efficient and effective statistical operations

This Strategic Objective has two Operational Strategies covering the use of ICT and other physical assets for data collection and processing.

OS5.1 Provide BOS and agricultural statistics units in other MDAs with adequate infrastructure for data collection and processing

Agriculture and Food Security Division of BOS and agricultural statistics units in other MDAs should be equipped with the necessary means of transport, office equipment and furniture, statistical software and IT equipment to collect data efficiently and effectively. Each officer within the NASS should have a computer or PDA with appropriate data processing software such as SPSS or STATA, linked to servers. Transport is an indispensable means for collecting information in the field. The acquisition of vehicles for the specific needs of agricultural surveys is therefore essential.

The NASCC will organise an assessment of physical infrastructure needs of each NASS member to enhance production and dissemination of statistical information and develop a comprehensive plan for providing the required assets.

OS5.2 Strengthen the use of Information and Communication Technology (ICT)

The use of ICT will improve data quality, starting with the data collection process, through data processing, capturing, storage, analysis and eventually publishing and dissemination. For example, replacing paper questionnaires with PDAs will minimise errors, reduce the time lag between data collection and the publication of results, allow data entry personnel to be allocated to other tasks and reduce the cost of data collection and capturing.

The NASCC will organise an assessment of the needs of each NASS member to facilitate the use of ICT to enhance the production and dissemination of statistical information and develop a comprehensive plan for procuring an appropriate ICT infrastructure system.

3.4.7 Strategic Objective 6

Develop sustainable funding for agricultural and rural statistics activities

This Strategic Objective has two Operational strategies. Activities are focused on engagement with policy makers, partners and other stakeholders to raise awareness of the importance of agricultural statistics and the purpose of SPARS_LES, so as to develop increased funding for the programme.

OS6.1 Engage with policy makers and partners to set and finance agricultural and rural statistics programmes.

Activities include presenting SPARS_LES to the NSC and development partners and reporting every 6 months on progress. An independent team will be hired to conduct mid-term and end-of-term evaluations of the programme. An Awareness and Communication Plan to promote SPARS_LES will also be implemented (more details in section 3.7).

OS6.2 Raise awareness of the importance of agricultural and rural statistics

Activities include sensitisation events and working with the media to develop educational programmes to increase awareness of the importance of agricultural and rural statistics for the development, monitoring and evaluation of national agricultural policies.

3.4.8 Calendar for Implementation of Main Statistical Operations

The calendar is presented in Table 7, below. The Agriculture Census is programmed for 2019/2020 as part of FAO WCA 2020 round of agriculture censuses. The quinquennial statistical operations must be undertaken after the Census so that it can be used as a frame for drawing samples for these surveys. The farm structure survey is planned for 2023/2024. The cost of production and input factor survey is proposed for 2022/2023. This survey is very important for economic and agricultural policy decisions. Annual surveys are programmed for the whole period. The compilation of farm gate prices is proposed to start in 2022/2023.

Table 6: Implementation Calendar for Main Statistical Operations

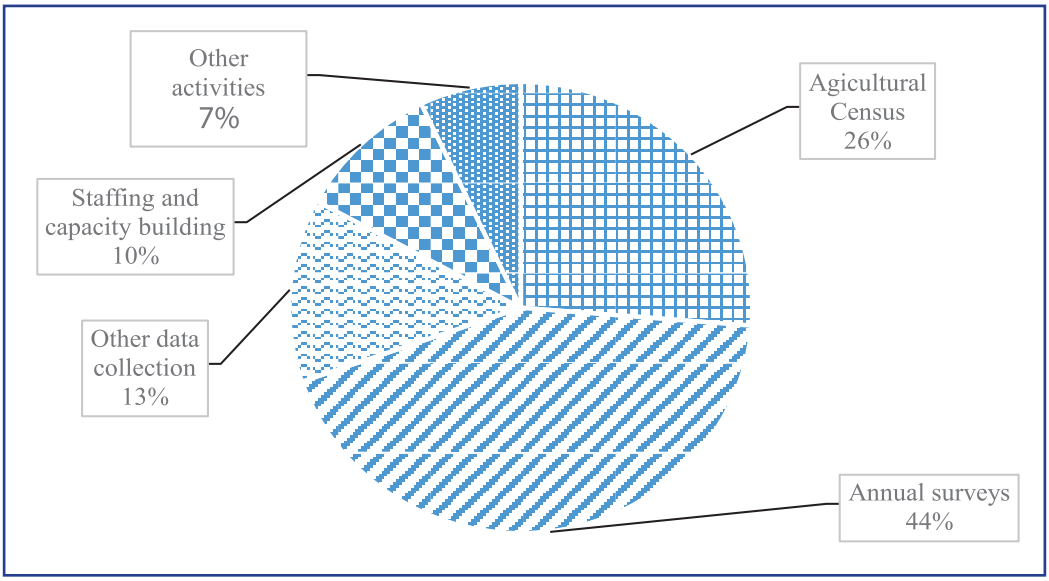
Activity	Operation	Frequency	Responsibility	2019/ 2020	2020/ 2021	2021/ 2022	2022/ 2023	2023 /2024
2.1.1	Agriculture Census	10 years	BOS & MAFS					
2.1.2	National range condition assessment	10 years	MFRSC					
2.1.3	Agricultural Structure Survey	5 years	BOS & MAFS					
2.1.4	Cost of Production survey	5 years	BOS & MAFS					
2.1.5	Agricultural Production Survey	Annual	BOS & MAFS					
2.1.6	Horticulture survey	Annual	BOS & MAFS					
2.1.7	Food security survey and Food Balance Sheet compilation	Annual	BOS & MAFS					
2.1.8	Post-harvest losses survey	Annual	BOS & MAFS					
2.1.9	Farm gate prices Survey	Quarterly	BOS & MAFS					
2.2.1	Promotion of use of administrative data	Continuous	MAFS & NASS.					
2.3.1	Statistical analyses & construction of Indices	Continuous	BOS and MAFS					
2.3.2	Agricultural Statistics Database	Continuous	BOS and MAFS					

3.1.2	Data quality evaluations	Continuous	BOS					
3.2.1	Compendium of best practice Data Collection Methods	Continuous	BOS and MAFS					
	Collection Methods							
3.2.2	User satisfaction surveys	2 years	BOS and MAFS					
4.1.1	Establish agricultural statistics unit of MAFS	Continuous	MAFS					
4.1.2	Recruitment and training of staff	Annual	BOS and MAFS					

3.5 Financing Strategy

The Action Plan with a detailed annual budget by activity level is set out in Annex 2. The total budget for all SPARS_LES activities over the 5-year period is M 188million, of which M 49 million (26%) is allocated for the Agriculture Census and M69 million (44%) is required for annual surveys.

Figure 3: SPARS_LES Budget by Activity



Each TTWG has set its own priorities for financing. These have been combined in one list which is presented in Table 8. This table shows, for each activity level, the amount of funding identified as available. The funding can be from routine government allocations to the various institutions or commitments from other sources or projects. Any additional funding required to complete the activities is identified either as high priority or as other funding required.

Table 7: Financing Strategy (M 000)

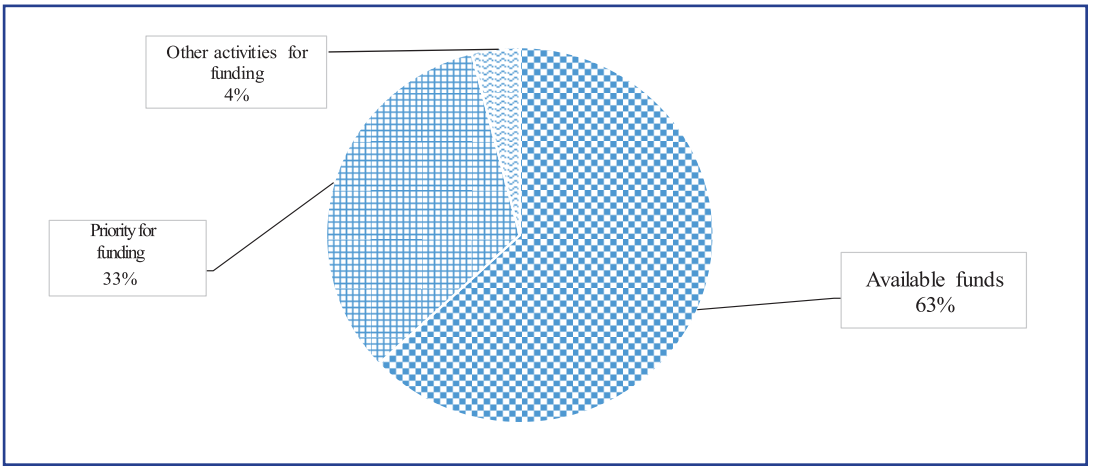
	Activity	'000 Maloti				Funding Source
		Available funding	Priority for funding	Other funding	TOTAL	
1.1.1	NASS participates in review & amendment of Statistics Act	Incorporated within overall budget for review of Statistics Act				Govt.
1.1.2	NASS units participate in preparation of NSDS2	Incorporated within overall budget for development of NSDS2				Govt.
1.2.1	MOUs developed and signed between BoS and NASS	Incorporated within overall budget for review of Statistics Act				Govt.
1.2.2	NSC sub-committee on agricultural statistics formed & functioning		500		**500**	Govt.
1.2.3	Produce and disseminate Metadata handbook		1,700		**1,700**	Govt.
	TOTAL SO1		**2200**		**2200**	
2.1.1	Agriculture census	49,495			**49,495**	Govt.
2.1.2	National range condition assessment	6,400			**6,400**	Govt.
2.1.3	Agriculture structure survey		10,451		**10,451**	Govt.
2.1.4	Cost of production survey		5,452		**5,452**	Govt.
2.1.5	Agricultural production survey (crops and livestock)	35,245			**35,245**	Govt.
2.1.6	Horticulture production survey	27,260			**27,260**	Govt.
2.1.7	Food security survey and Food Balance Sheet compilation	750			**750**	Govt.
2.1.8	Post-harvest losses survey		6,000		**6,000**	Govt.
2.1.9	Farm gates prices survey		10,245		**10,245**	Govt.
2.1.10	Incorporate GIS into agricultural data collection		1,530		**1,530**	Govt.
2.2.1	Improve reporting from administrative records		800		**800**	Govt.
2.3.1	Secondary statistical analysis and construction of indices		500		**500**	Govt.
2.3.2	Agricultural Statistics Database		1,000		**1,000**	Govt.
2.3.3	Incorporate GIS into agriculture data analysis		1,090		**1,090**	Govt

TOTAL SO2		**119,150**	**37,068**		**156,218**	
3.1.1	Develop Data Quality Assessment Framework		810		**810**	Govt /Dev Partners
3.1.2	Implement DQAF evaluations			800	**800**	Gov./Dev Partners
3.2.1	Develop & promote compendium of agricultural statistical methods		2,500		**2,500**	Govt
3.2.2	Conduct User satisfaction surveys		600		**600**	Govt.
	TOTAL SO3:		**3,910**	**800**	**4,710**	
4.1.1	Establish statistics unit in MAFS		2000		**2000**	Govt.
4.1.2	Recruit and deploy qualified staff across NASS		8,622		**8,622**	Dev. partners
4.2.1	Provide in-service training		5,000		**5,000**	Govt./ Dev. Partners
4.2.2	Promote Technical Assistance for knowledge transfer			5,000	**5,000**	Dev. partners
	TOTAL SO4:		**15,622**	**5,000**	**20,622**	
5.1.1	Assessment of physical infrastructure needs of NASS			760	**760**	Govt./ Dev. Partners
5.2.1	Develop comprehensive plan for ICT infrastructure for NASS		760		**760**	Govt./ Dev. Partners
5.2.2	Roll-out CAPI/PDAs for all agriculture data collection		500		**500**	Govt./ Dev. Partners
	TOTAL SO5:		**1,260**	**760**	**2,020**	
6.1.1	Present SPARS_LES to NSC and report annually on progress		275		**275**	Govt./ Dev. Partners
6.1.2	Implement Awareness and Communication Plan		400		**400**	Gov./ Dev. Partners
6.1.3	External reviews of SPARS_LES		760		**760**	Govt./ Dev. Partners
6.2.1	Hold sensitisation events for stakeholders and policy makers		225		**225**	Govt./ Dev. Partners
6.2.2	Use media to increase awareness and provide education		250		**250**	Govt./ Dev. Partners
	TOTAL SO6:		**1,910**		**1,910**	
	TOTAL SPARS_LES	**119,150**	**61,970**	**6,560**	**187,680**	

The table shows that 63% of the required budget to implement SPARS_LES should be available. M62 million of the remaining budget is required to fund priority activities and M7 million is from other funding.

For the sustainability of the NASS, the government should be the main source of the funding of the SPARS_LES. In particular, it should finance the regular surveys and institutions of NASS, especially salaries of personnel responsible for agricultural and rural statistics.

Figure 4: SPARS_LES Financing Strategy



3.6 Monitoring and Evaluation Framework

3.6.1 Introduction

Monitoring is an ongoing process of collecting and analysing information to judge the quality of implementation of the strategy, verify that the implementation is in line with the agreed programme and to have a clear vision on the achievements of strategic objectives. Managers should be informed in a timely manner on any difficulties that may impede implementation and, if necessary, suggest modifications or corrective measures for the successful implementation of the programme. There should be a continuous process of collecting and analysing information to assess the efficiency and effectiveness of the implementation. Hence SPARS_LES must be considered as a living document, requiring adjustments if the conditions for its implementation change.

The NASCC (composed of representatives of producers and users of agricultural rural statistics) will be responsible for producing the monitoring and evaluation reports for the implementation of this Strategic Plan. These reports will be passed to NSC for endorsement.

3.6.2 Results Based Logical Framework

The Logical Framework for monitoring this Strategic Plan has been developed and is shown in Annex 3. This presents the Results Chain, giving the expected Impact, Effects and Products for SPARS_LES, together with performance indicators (baseline and targets), and the means of verification. These indicators will be used to track the implementation

and achievements of the programme. In addition, for successful implementation of SPARS, activities should be prioritised in annual work plans and aligned to implementing institutions budgets and performance contracts.

3.6.3 Reporting and Feedback

Sub-sectors, working together as TTWGs, will provide status reports on activities being implemented along with key performance indicators on regular basis. The NASCC, through its secretariat, will consolidate these into one overall document on the progress of SPARS implementation. Additionally, external experts will be recruited to carry out mid-term (after 3 years) and end-of-term reviews. The following M&E reports will be produced: biannual and annual monitoring reports, mid-term review report, and end-of-term review report. These reports will be communicated through stakeholder meetings, workshops and review seminars, among others. The progress reports will prompt formulation of corrective measures where appropriate.

3.6.4 Risks and Mitigation

As part of Monitoring and Evaluation framework for SPARS_ LES the risks that would prevent or delay SPARS from achieving expected results have been identified and evaluated to establish their likely impact and probability. These are presented in Annex 4 together with appropriate mitigation measures.

3.7 Awareness and Communication Plan

The SPARS_LES advocacy and communication plan aims at reaching the entire spectrum of agriculture and rural statistics stakeholders through all-inclusive and participatory approach. It is a set of processes essential to building sustainable development initiatives and creating an environment in which policy makers and development actors share an understanding of goals as well as objectives, and implement measures that ensures the achievement of these goals and objectives. It aims at boosting public confidence in the agricultural and rural statistics system, improving users' awareness of the relevance of quality statistics for agricultural development, strengthening the use of agricultural and rural statistics, and informing relevant stakeholders about the conditions and challenges of implementing SPARS_LES.

The goal of advocacy and communication plan addresses the importance of agricultural and rural statistics in decision making processes as well as the characteristics of such statistics and how to access and use them. The objectives of the advocacy and communication plan of SPARS_LES are to:

(i) Increase visibility of agricultural and rural statistics by promoting the overall image of SPARS_LES;
(ii) Increase stakeholder awareness of agricultural and rural statistics and enhance stakeholder buy-in and good will for SPARS activities;
(iii) Popularize SPARS_LES main orientations through information and awareness on its implementation strategy,
(iv) Establish a permanent dialogue between users and producers of agricultural and rural statistics through a platform for dialogue and advocacy in agricultural and rural statistics; and
(v) Build knowledge sharing, adoption of new methodologies, and promote the emergence of new tools, good practices

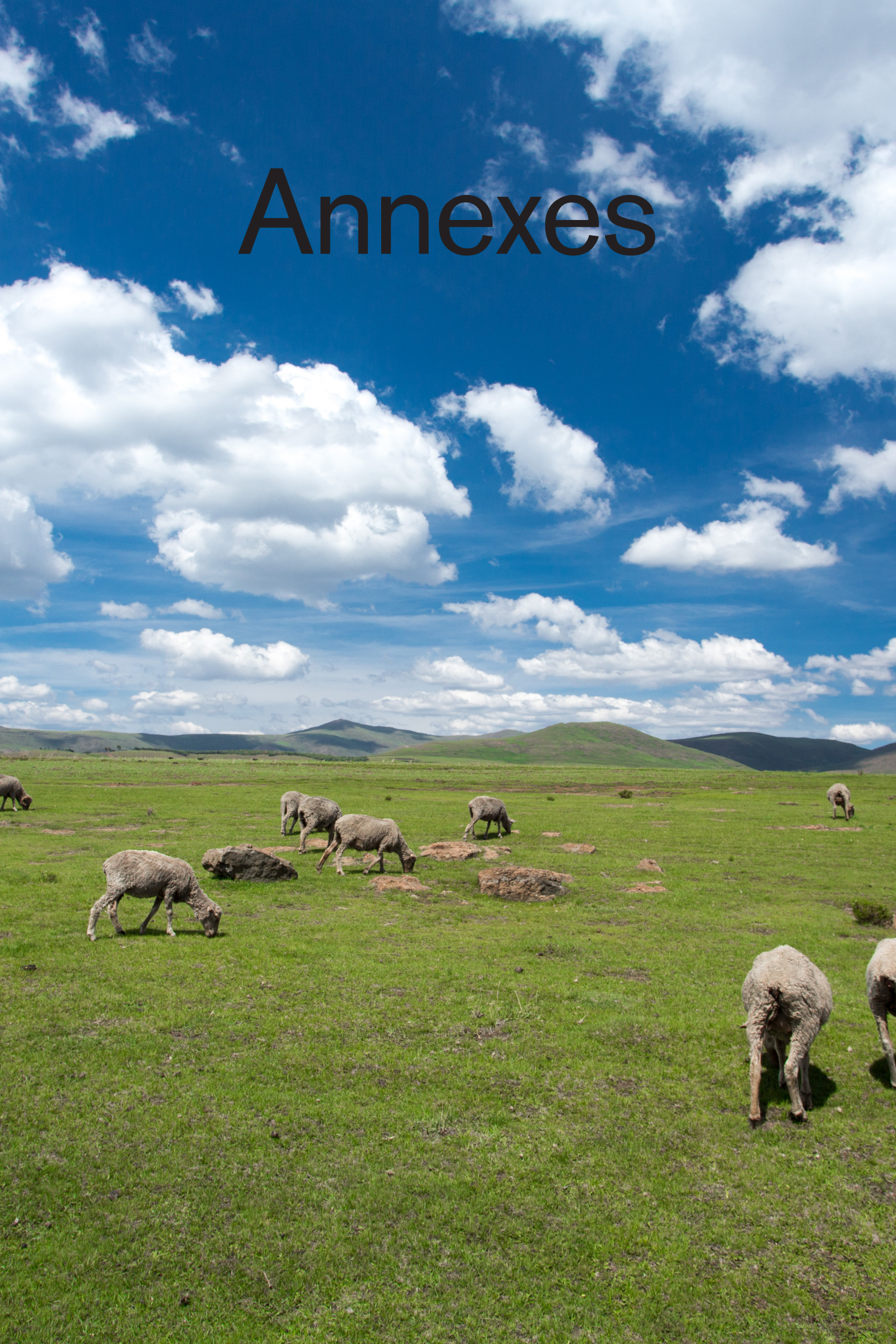
in the field of agricultural and rural statistics, together with dynamic and effective internal partnership for SPARS_LES.

Advocacy activities will clearly identify target audiences (political and administrative decision-makers, development partners, agricultural statistical system staff, media, NGOs, and universities) and cover all the subsectors of the NASS (crops, livestock, aquaculture and fisheries, and environment).

Awareness materials such as brochures, leaflets, posters, regular e-bulletins will be developed to keep stakeholders informed on agricultural and rural statistics activities, events, developments, reports and publications of the NASS. Advocacy activities will continue throughout the implementation of SPARS, with an emphasis on:

- Dissemination of this strategy and processes of its development to general public, emphasizing the importance of in formation availability for informed decision-making;
- Organization of regular dialogue between producers and users of agricultural and rural statistics through planned annual days to present agricultural statistical operations, their methodologies and results, and through mass-public information campaigns at the launch of major agricultural statistics operations such as agricultural census or farm structure survey;
- Regularly informing all the NASS stakeholders on progress and possible setbacks of the SPARS_LES implementation;
- Development of a specific website for SPARS_LES;
- A particular focus on the Ministry of Finance, which must be convinced of the soundness of this strategy, with regular meetings at different levels;
- Gaining support from international partners and the government's commitment to allocate the national resources required to implement the strategy; and
Disseminating Monitoring and Evaluation reports and methodological reports produced under SPARS.

Annexes



Annex 1: List of Participating Persons/Organizations

NAME	ORGANIZATION
Technical and Financial Support Mr. Vincent Ngendakumana	AfDB Principal Agricultural Statistician
International Consultants Dr. Hassane Serghini Idrissi	AfDB International Consultant
National Consultant Dr. Makhala Khoeli	National Consultant
National Strategy Coordinator Mr. Malefetsane Ratsoane	MAFS – DPPA, Senior Statistician
Alternate National Strategy Coordinator Mr. Tseliso Mosoaboli	BOS Agriculture and Food Security Statistics Division (AFSSD), Senior Statistician
Participants from Main Stakeholders	
Ms. Mathato Masemene	BOS, Head of Division of Agriculture and Food Security Statistics
Ms. Mabolaoana Phakisi	MAFS – DPPA, Chief Economic Planner
Ms. Maneo Jane	MAFS – Nutrition, Principal Nutrition Officer
Ms. Karabelo Letsoela	MAFS – DFS, Chief Extension Officer
Mr. Khabele Ntlopo	MAFS – DAR, Research Officer
Ms. Maitumeleng Fokothi	MAFS – DAR, Research Officer
Ms. Mankeane Mofoti	MAFS – DLS, Principal Livestock Development Officer
Ms. Rorisang Mantutle	MAFS – DOC, Principal Crops Production Officer
Mr. Lebamang Phafoli	MAFS – DPPA, Assistant Economic Planner
Mr. Mothibeli Mojaje	MAFS – DPPA, Economic Planner
Mr. Leeto Semethe	MAFS – DPPA, Economic Planner
Ms. Liemo Monaheng	MFRSC – Range Management Officer
Mr. Mojalefa Mohapi	MAFS – DOC, Principal Crop production Officer

Ms. Motseoa Molahlehi	BOS – NAESD, Senior Statistician
Ms. Mamoiloa Sebolai	BOS – AFSSD, Statistician
Mr. Refiloe Hlabisi	MAFS – DPPA, Assistant Economic Planner
Ms. Limpho Mathola	BOS – AFSSD, Assistant Statistician
Ms. Mathetela Ntsoele	BOS – AFSSD, Assistant Statistician
Mr. Nkololeko Fudumeli	MTEC, Assistant Data Management

	Activity	Responsibility	'000 Maloti 2019/20	2020/21	2021/22	2022/23	2023/24	TOTAL	Total '000 US $	% of TOTAL
SO1: STRENGTHEN THE COORDINATION OF NASS & INTEGRATION INTO THE NSS										
OS1.1 Strengthen the integration of the NASS into the NSS										
1.1.1	NASS participates in review & amendment of Statistics Act	NASCC	Incorporated within overall budget for review of Statistics Act							
1.1.2	NASS units participate in preparation of NSDS2	NASCC	Incorporated within overall budget for development of NSDS2							
OS1.2 Strengthen the co-ordination of the NASS										
1.2.1	MoUs developed and signed between BOS and all MDAs in NASS	NSC								-
1.2.2	NSC sub-committee on agricultural statistics formed & functioning	BOS / MDAs	100	100	100	100	100	500	37	-
1.2.3	Produce and disseminate Metadata handbook	BOS /MAFS	500	300	300	300	300	1700	126	1%
	TOTAL SO1		**600**	**400**	**400**	**400**	**400**	**2200**	**167**	**1%**
SO2: IMPROVE THE PRODUCTION, ANALYSIS & ACCESSIBILITY OF AGRICULTURAL STATISTICS										
OS2.1 Integrated Census & Survey programme										
2.1.1	Agriculture census	BOS /MAFS	48,636	859				49,495	3,666	26%
2.1.2	National range condition assessment	MFRSC	3,200	3,200				6,400	474	4%

	Activity	Responsibility	'000 Maloti 2019/20	2020/21	2021/22	2022/23	2023/24	TOTAL	Total '000 US $	% of TOTAL
2.1.3	Agriculture structure survey	BOS /MAFS					10,451	10,451	774	6%
2.1.4	Cost of production survey	BOS /MAFS				5,452		5,452	404	3%
2.1.5	Agricultural production survey (crops and livestock)	BOS /MAFS	7,049	7,049	7,049	7,049	7,049	35,245	2,611	19%
2.1.6	Horticulture production survey	BOS /MAFS	5,452	5,452	5,452	5,452	5,452	27,260	2,019	15%
2.1.7	Food security survey and Food Balance Sheet compilation	BOS /MAFS	150	150	150	150	150	750	56	-
2.1.8	Post-harvest losses survey	BOS /MAFS		1,500	1,500	1,500	1,500	6,000	444	3%
2.1.9	Farm gates prices survey	BOS /MAFS	2,049	2,049	2,049	2,049	2,049	10,245	759	6%
2.1.10	Incorporate GIS into agricultural data collection	BOS /MAFS		750	260	260	260	1,530	119	1%
OS2.2 Improve reporting from administrative records										
2.2.1	Improve reporting from administrative records	BOS / NASS	100	100	100	100	100	800	59	-
OS2.3 Expand the analysis of agricultural statistics										
2.3.1	Secondary statistical analysis and construction of indices	BOS / MAFS	100	100	100	100	100	500	37	-
2.3.2	Agricultural Statistics Database	BOS / MAFS		500	500			1,000	74	1%
2.3.3	Incorporate GIS into agriculture data analysis	BOS / MAFS		550	180	180	180	1,090	81	1%
	TOTAL SO2		**66,736**	**22,259**	**17,340**	**22,292**	**27,291**	**156,918**	**11,549**	**83%**

	Activity	Responsibility	'000 Maloti 2019/20	2020/21	2021/22	2022/23	2023/24	TOTAL	Total '000 US $	% of TOTAL
	SO3: IMPROVE THE QUALITY OF AGRICULTURAL STATISTICS									
	OS3.1 Implement a Data Quality Assessment Framework									
3.1.1	Develop Data Quality Assessment Framework	BOS	360	150	150	150		810	60	-
3.1.2	Implement DQAF evaluations	BOS		200	200	200	200	800	59	-
	OS3.2 Strengthen compliance & user satisfaction									
3.2.1	Develop & promote compendium of agricultural statistical methods	BOS / MAFS	500	500	500	500	500	2,500	185	1%
3.2.2	Conduct User satisfaction surveys	BOS / MAFS	200		200		200	600	44	-
	TOTAL SO3:		**1,060**	**850**	**1,050**	**850**	**900**	**4,710**	**349**	**3%**
	SO4: ENSURE THE AVAILABILITY, CAPABILITY & MOTIVATION OF NASS STAFF									
	OS4.1 Establish & maintain a critical mass of NASS statisticians									
4.1.1	Establish statistics unit in MAFS	MAFS	1000	300	300	200	200	2000	148	-
4.1.2	Recruit and deploy qualified staff across NASS	BOS / NASS	970	1,532	1,786	2,040	2,294	8,622	639	5%
	OS4.2 Enhance statistical capacity of NASS									
4.2.1	Provide in-service training	BOS / NASS	1,000	1,000	1,000	1,000	1,000	5,000	370	3%

	Activity	Responsibility	'000 Maloti 2019/20	2020/21	2021/22	2022/23	2023/24	TOTAL	Total '000 US $	% of TOTAL
4.2.2	Promote Technical Assistance for knowledge transfer	BOS / NASS	1,000	1,000	1,000	1,000	1,000	5,000	370	3%
	TOTAL SO4:		**3,970**	**3,832**	**4,186**	**4,240**	**,594**	**21,122**	**1565**	**10%**
	SO5: STRENGTHEN THE PHYSICAL INFRASTRUCTURE FOR EFFICIENT & EFFECTIVE STATISTICAL OPERATIONS									
	OS5.1 Provide NASS units in BOS & other MDAs with adequate infrastructure for data collection & processing									
5.1.1	Assessment of physical infrastructure needs of NASS	NASCC	360				400	760	56	-
	OS5.2 Promote the use of ICT									
5.2.1	Develop comprehensive plan for appropriate ICT infrastructure for NASS	NASCC	360				400	760	56	-
5.2.2	Roll-out CAPI/PDAs for all agriculture data collection	BOS / NASS	100	100	100	100	100	500	37	-
	TOTAL SO5:		**820**	**100**	**100**	**100**	**900**	**2,020**	**150**	**1%**
	SO6: DEVELOP SUSTAINABLE FUNDING FOR AGRICULTURAL STATISTICS ACTIVITIES									
	OS6.1 Engage with policy makers and partners to set & finance agricultural statistics programmes									
6.1.1	Present SPARS_LES to NSC and report on annually on progress	BOS/ MAFS / NASCC	55	55	55	55	55	275	20	-
6.1.2	Implement SPARS_LES Awareness and Communication Plan	BOS/ MAFS / NASCC	80	80	80	80	80	400	30	-
6.1.3	Monitoring & Evaluation of SPARS_LES (external mid & end of term reviews)	BOS/ MAFS / NASCC			360		400	760	56	-
	OS6.2 Raise awareness of the importance of agricultural statistics									

	Activity	Responsibility	'000 Maloti 2019/20	2020/21	2021/22	2022/23	2023/24	TOTAL	Total '000 US $	% of TOTAL
6.2.1	Hold sensitisation events for stakeholders and policy makers	BOS/ MAFS / NASCC	45	45	45	45	45	225	17	-
6.2.2	Use media to increase awareness and provide education	BOS/ MAFS / NASCC	50	50	50	50	50	250	19	-
	TOTAL SO6:		**230**	**230**	**590**	**230**	**630**	**1,910**	**141**	**1%**
	TOTAL SPARS_LES		**73,416**	**27,671**	**23,662**	**28,112**	**34,515**	**187,680**	**13,288**	**100%**

Annex 3: Results-Based Logical framework:

Strategic Plan For Agriculture & Rural Statistics For Lesotho 2019 – 2023
Purpose: To provide an integrated framework and system for producing quality agricultural and rural statistics that meet priority needs of users, define a program of statistical operations that are related to aspects of agricultural development and ensure integration of different statistical data through an integrated system of data management of all statistics relating to agriculture.

RESULTS CHAIN	PERFORMANCE INDICATORS			Means Of Verification
	Indicator	Baseline	Target	
IMPACT				
High quality agricultural and rural statistics are produced in an efficient, timely and sustainable manner, to enable the design, implementation, monitoring and evaluation of programmes and policies for agricultural sector development.	Agricultural Statistics Capacity Indicator -Overall	59% (2017)	79% (2025)	Calculated & published biennially by AfDB on Progress on the Capacity of African countries to Produce Timely, Reliable and Sustainable Agricultural Statistics
EFFECTS				
1. The coordination of NASS and integration into the NSS is strengthened	Agricultural Statistics Capacity Indicator – Prerequisite Dimension (Institutional Infrastructure)	53% (2017)	76% (2025)	Published by AfDB as above
2. The production analysis and accessibility of agricultural statistics is improved	Agricultural Statistics Capacity Indicator – Output Dimension (Availability of information)	75% (2017)	87% (2025)	Published by AfDB as above
3. The quality of agricultural statistics is improved	Agricultural Statistics Capacity Indicator – Throughput Dimension (methods & practises)	64% (2017)	82% (2025)	Published by AfDB as above
4. The availability, capability and motivation of NASS staff is ensured	Agricultural Statistics Capacity Indicator – Inputs Dimension – human resources staffing and training	44% (2017)	72% (2025)	Published by AfDB as above

5. The physical infrastructure for efficient and effective statistical operations is strengthened	Agricultural Statistics Capacity Indicator – Inputs Dimension – physical infrastructure	50% (2017)	75% (2025)	Published by AfDB as above
6. Sustainable funding for agricultural statistics activities is secured	All funds provided as a percentage of the total funds required to implement SPARS_LES	Tbc (2019/20) 58% (2017)	80% (2023/24) 79% (2025)	Table 8 in SPARS_LES for baseline. Annual reports to NSC for monitoring. Independent mid and end of term reviews Published by AfDB as above
PRODUCTS				
1.1 The integration of NASS into the NSS is strengthened	Integration of agriculture sectors into NSDS2	Partial integration (NSDS1)	Full integration (NSDS2)	Lesotho National Strategy for the Development of Statistics
1.2 The coordination of NASS is strengthened	Number of NASCC meetings per year with representation from all agriculture MDAs	NASCC not formed (2018/19)	At least 2 meetings per year (2023/24)	Minutes of NASCC meetings. Annual SPARS_LES monitoring reports to NSC. Independent mid-term and end-of-term reviews.
	Metadata handbook for agricultural statistics produced	No handbook (2018/19)	Handbook produced & disseminated (2020/21)	Handbook available. Minutes of NASCC meetings. Annual SPARS_LES monitoring reports to NSC.
2.1 Integrated Census & Survey programme implemented	Percentage of reports available for census & survey activities listed in the Calendar for Implementation of Statistical Operations	Calendar not in operation (2018/19)	90% (2023/24)	Table 7 in SPARS_LES. BOS website. Annual SPARS_LES monitoring reports to NSC. Independent mid-term and end-of-term reviews.
2.2 Reporting from administrative records improved	Environment Statistics Report Users reporting satisfaction with availability of agricultural statistics from administrative systems	2016 edition (2018) No survey	Report updated, expanded & published biennially (2024) 80% of users satisfied (2023/24)	BOS website. Annual SPARS_LES monitoring reports to NSC. Independent mid-term and end-of-term reviews. Report on User Satisfaction Survey Minutes of NASCC meetings. Annual SPARS_LES monitoring reports to NSC.

2.3 Analysis of agricultural statistics expanded	Food Balance Sheet	Food Balance Sheet not published (2018/19)	Food Balance Sheet published (2021/22)	BOS website. Minutes of NASCC meetings. Annual SPARS_LES monitoring reports to NSC.
	Producer Price Indices calculated and published	Producer price indices not produced (2018/19)	Producer price indices published (2021/22)	BOS website. Minutes of NASCC meetings. Annual SPARS_LES monitoring reports to NSC.
3.1 Data Quality Assessment Framework implemented	Data Quality Assessment Framework	No Framework (2018/19)	Framework produced (2020/21)	BOS website. Minutes of NASCC meetings Annual SPARS_LES monitoring reports to NSC.
	Completed DQAF assessments for agricultural statistics	None completed (2018/19)	At least 1 per year (2023/24)	BOS website. Minutes of NASCC meetings Annual SPARS_LES monitoring reports to NSC.
3.2 Compliance and user satisfaction strengthened	Compendium of best practice Data Collection Methodologies	No Compendium (2018/19)	Compendium produced &disseminated (2020/21)	BOS website. Annual SPARS_LES monitoring reports to NSC. Independent mid-term and end-of-term reviews.
	Users reporting satisfaction with quality of agricultural statistics	No survey	80% of users satisfied (2023/24)	Report on User Satisfaction Survey Minutes of NASCC meetings Annual SPARS_LES monitoring reports to NSC.
4.1 Critical mass of NASS statisticians established and maintained	Statistics Unit established & staffed in MAFS	No statistics unit (2018/19)	Unit established (2020/21)	MAFS annual report Annual SPARS_LES monitoring reports to NSC. Independent mid-term and end-of-term reviews.
	Number of statisticians and enumerators recruited for SPARS_LES	None (2018/19)	11 statisticians & 6 enumerators recruited (by 2023/24)	BOS & MAFS annual report Annual SPARS_LES monitoring reports to NSC. Independent mid-term and end-of-term reviews.
	Training programme for Continuous Professional	No programme (2018/19)	Training programme	BOS website. Minutes of NASCC meetings

4.2 Statistical capacity of NASS enhanced	Training programme for Continuous Professional Development in agricultural statistics Trainee feedback satisfaction rating	Not collected (2018/19)	established & functioning (2020/21) >80%	BOS website. Minutes of NASCC meetings Annual SPARS_LES monitoring reports to NSC. End of course evaluation reports Minutes of NASCC meetings Annual SPARS_LES monitoring reports to NSC.
5.1 NASS has adequate physical infrastructure for data collection and processing	Agricultural statistics units have appropriate office space and equipment	None (2018/19)	All (2023/24)	BOS & MAFS annual reports Minutes of NASCC meetings Annual SPARS_LES monitoring reports to NSC.
5.2 Use of ICT expanded	Percentage of agricultural statistics activities using PDAs for all data capture	None (2018/19)	All (2023/24)	BOS & MAFS annual reports Minutes of NASCC meetings Annual SPARS_LES monitoring reports to NSC.
6.1 Policy makers and partners engaged in setting and financing agricultural statistics programmes	NSC approves annual workplan for SPARS_LES Number of NASCC meetings per year with at least 1 development partner represented	No SPARS_LES (2018/19) No NASCC meetings (2018/19)	All annual workplans for SPARS_LES approved At least 2 meetings per year (2023/24)	Minutes of NSC meetings Minutes of NASCC meetings. Annual SPARS_LES monitoring reports to NSC.
6.2 Increased awareness of the importance of agricultural statistics	Percentage of stakeholder feedback rating sensitisation event highly	Not collected (2018/19)	>80%	End of event feedback reports

ACTIVITIES
Review of Lesotho Bureau of Statistics Act
Members of the NSC are appointed
The NASCC is set up as one of the NSC sub-committees and is fully functioning
The NSDS (2020-2025) is elaborated
The MAFS statistical unit is established
The MFRSC is responsible for producing forest and rangeland statistics
User needs drive the agricultural and rural statistical production
Agricultural census is conducted in 2020
Administrative data are collected, used and improved
Food Balance Sheets compiled annually
Integrated survey framework approach is adopted
Policy of quality management is formulated and implemented
Procedures, methods, nomenclatures on the quality of various statistical operations are documented
Metadata handbook for agricultural statistics is developed
Dissemination policy is set up
Main statistical operations are evaluated by internal and external audits
Continuous professional development plan in agriculture statistics is developed
Medium and long-term training program is established
Generalization of the use of CAPI in data collection for all agricultural surveys
Government provides sufficient fund to implement the SPARS program

Annex 4: Risk and Mitigation

Serial No.	Risk	Probability	Impact	Mitigation
1	Failure to mobilise resources on time	Medium	High	The implementation of the SPARS_LES Awareness & Communication plan, together with full integration into NSDS II, will raise the profile of agricultural statistics with government and development partners.
2	Loss of trained staff to posts outside the NASS	Medium	Medium	Development of capacity building and training programme. Implementation of SPARS_LES will raise profile and attraction of working within NASS.
3	Inability to attract new staff	Medium	Medium	
4	Statistics Act is not revised, NCA does not function and NASCC is not set up.	Medium	Medium	Build on current coordination mechanisms that have produced SPARS_LES, such as TTWGs and EACAS. Use the development of NSDS II to create peer pressure to bring MDAs together.
5	MOUs between BOS and NASS units are not signed.	Low	Medium	
6	New NSDS is not developed.	Medium	Medium	Use SPARS_LES to promote the development of statistical plans for all sectors and to build pressure for new NSDS.

7	Data Quality Assessment Framework is not developed; Data quality evaluations are not undertaken. Management do not react to data quality reports and do not take remedial action where necessary. MDAs unwilling to reform administration data systems	Medium	Medium	Use the proposed new Statistics Act to give the BOS a specific function to audit the quality of statistical data produced. Use NSC, NASCC and other coordination mechanisms to bring peer pressure to maintain standards across the sub-sectors.
8.	Compendium of best practice Statistical Methodologies is not produced.	Low	Low	Identify and promote best practices through the capacity building training programme. Use NSC, NASCC and other coordination mechanisms to bring peer pressure to maintain standards across the sub-sectors.
9.	Stakeholders unwilling, unable or lack awareness to use data for policy and decision making, monitoring and evaluation.	Medium	Medium	There is a high appreciation to develop and use monitoring frameworks in agricultural sector plans – this will be strengthened by the SPARS_LES components to expand data analysis and by including users in the capacity building training programme.

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