KENYA NATIONAL BUREAU OF STATISTICS

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STRATEGIC PLAN FOR AGRICULTURAL AND RURAL STATISTICS

SPARS-KENYA

2015-2022

AFRICAN DEVELOPMENT BANK GROUP

IMPROVING AGRICULTURAL & RURAL STATISTICS Global Strategy

REPUBLIC OF KENYA

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March 2016

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Vision

An integrated system for quality agricultural and rural statistics

Mission

To promote the collection and utilization of quality agricultural and rural statistics through collaboration, coordination and synergies, for enhanced user satisfaction

ACRONYMS AND ABBREVIATIONS

AfDB	African Development Bank
AFFA	Agriculture, Fisheries and Food Authority
AGRA	Alliance for a Green Revolution in Africa
ANES	Agriculture, Nutrition and Environment Statistics
ARS	Agricultural and Rural Statistics
ARSS	Agricultural and Rural Statistics System
AU	African Union
BMU	Beach Management Unit (BMU)
CAADP	Comprehensive Africa Agriculture Development Programme
CAS	Catch Assessment Surveys
COMESA	Common Market for Eastern and Southern Africa
Coop	Cooperatives Directorate
CSPro	Census and Survey Processing System
DQAF	Data Quality Assessment Framework
DRSRS	Department of Resource Surveys and Remote Sensing
EAC	East African Community
EIA	Environmental Impact Assessment
EMCA	Environment Management Coordination Act
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross Domestic Product
GS	Global Strategy
HCD	Horticultural Crops Directorate
ILRI	International Livestock Research Institute
IMF	International Monetary Fund
ISIC	International Standard Industrial Classification
IT	Information Technology
KALRO	Kenya Agriculture & Livestock Research Organisation
KCA	Kenya Census of Agriculture
KDB	Kenya Dairy Board
KEMFRI	Kenya Marine and Fisheries Institute
KFS	Kenya Forests Service

KMC	Kenya Meat Commission
KNBS	Kenya National Bureau of Statistics
KWS	Kenya Wildlife Service
M&E	Monitoring and Evaluation
MDA	Ministries, Departments and Agencies
MDGs	Millennium Development Goals
MENR	Ministry of Environment and Natural Resources
MoALF	Ministry of Agriculture, Livestock, and Fisheries
MoH	Ministry of Health
MoIED	Ministry of Industrialisation and Enterprise Development
MoM	Ministry of Mining
MoWI	Ministry of Water and Irrigation
NEMA	National Environmental Management Authority
NSC	National Strategy Coordinator
NSDS	National Strategy for the Development of Statistics
NSS	National Statistical System
PDA	Personal Digital Assistant
SADC	Southern African Development Community
SDGs	Sustainable Development Goals
SDL	State Department of Livestock
SPARS	Strategic Plan for Agricultural and Rural Statistics
SPSS	Statistical Package for Social Sciences
STATA	Data analysis and statistical software
STWG	Subsector Technical Working Group
SWOT	Strengths, Weaknesses, Opportunities and Threats
WCA	World Census of Agriculture
WRMA	Water Resources Management Authority

FOREWORD

This Strategic Plan for Agricultural and Rural Statistics (SPARS_KEN) is the first generation agricultural statistics sector plan for Kenya. The Plan draws its legitimacy from the existence of the Agriculture Sector Development Strategy (ASDS) and reflects the Kenya Government wish to produce accurate and timely agricultural and rural statistics in the future. This Plan has identified medium and long term objectives of the development of agricultural and rural statistics in Kenya. In addition, SPARS_KEN used the bottom-up approach in its design as recommended for the production of second generation of the National Strategies for the Development of Statistics (NSDS's).

The strategic approach in the field of agricultural statistics is new in Kenya and begins with SPARS_KEN. However, statistical activities have always existed in the agriculture sector of Kenya. This approach was recommended by the Action Plan for Africa of the Global Strategy for improving agricultural statistics which was adopted by the United Nations Statistical Commission in February 2010.

The SPARS_KEN has been designed according to the following procedure:

- At the participatory level, subgroups were formed at subsector level compose of stakeholders having a direct relationship with agricultural statistics either as user, producer or both. A focal point was appointed to work with the subgroup;
- With regard to capacity building, two AfDB international consultants, were put at the disposal of the process;
- At the level of diagnosis, data was collected and analyzed; and
- With regard to the Vision and Mission and Strategic Choices, several meetings were held at all stages of the process. A working retreat was organized at the end to ensure that the SPARS_KEN was drafted by the team of focal persons and that there was convergence on various views regarding the vision, mission and strategic choices for agricultural and rural statistics in Kenya.

This Strategic Plan for Agricultural and Rural Statistics will assist Kenya in improving statistics required for planning and decision making in the agricultural sector. It will also be an important component of the development of the NSDS of the National Statistical System (NSS) of Kenya.

Professor Terry Ryan
Chairman, Board of Directors,
KENYA NATIONAL BUREAU OF STATISTICS

ACKNOWLEDGEMENT

The Strategic Plan for Agricultural and Rural Statistics of Kenya (SPARS_KEN) was developed through a wide participatory and consultative process which was initiated in August, 2014. The process began with the preparation of a roadmap that clearly defined the various stages of development of the SPARS_KEN. In addition to the Kenya National Bureau of Statistics (KNBS) and its Board of Directors established by the KNBS Statistics Act No. 4 of 2006, ad-hoc Sub-sectoral Technical Working Groups (STWGs) were set up to ensure smooth organization and wide consultations with stakeholders. Several meetings were organized and held.

The development of this strategy was coordinated by Mr. James Gatungu, Director in-charge of Production Statistics at KNBS. Mr. Gatungu is also the National Strategy Coordinator (Kenya) of the Action Plan for Africa of the Global Strategy.

The actual technical work was undertaken by National Consultants appointed by the African Development Bank (AfDB) for this purpose covering different subsectors of agriculture. These were Mrs. Mary Wanyonyi, National Consultant for Cross Cutting and County Agricultural Statistics subsector of agriculture; Mr. Alex Mwaniki, National Consultant for Crops subsector of agriculture; Mr. David Muthami, National Consultant for Livestock subsector of agriculture; Mr. Peter Nyongesa Wekesa, National Consultant for Fisheries subsector of agriculture; and Mr. Anthony Mugane, National Consultant for Forestry and Environment subsector of agriculture.

The process also benefitted from the experience and expertise of the International Consultants of the AfDB namely Mr. Enock Ching'anda and Mr. Vincent Ngendakumana. These consultants worked closely with the Kenya National Consultants. Their experience and professionalism in facilitation and synthesis during the various phases of the process helped in the production of a complete SPARS_KEN.

The KNBS would like to also thank all those who have contributed directly or indirectly to the development of SPARS_KEN from the beginning to the end.

Finally the KNBS and MoALF would like to thank the AfDB for the financial support that enabled workshops and training seminars to be successfully conducted during the process of preparing SPARS_KEN. KNBS and MoALF would also like to thank the two International Consultants of the AfDB who technically supported the national team throughout the process of developing the SPARS_KEN.

Zachary Mwangi
Director General,
KENYA NATIONAL BUREAU OF STATISTICS

EXECUTIVE SUMMARY

Due to the importance of agriculture sector in the Kenyan economy, and motivated by the need to support the design, formulation and implementation of agricultural and rural development policies, the lack of relevant, reliable and up-to-date agricultural statistics can be a major constraint both for the development of strategies and policies in the sector and for monitoring and evaluation. This observation is shared by many Government Departments and also Development Partners in Kenya.

The Ministry of Agriculture, Livestock and Fisheries (MoALF) together with the Kenya National Bureau of Statistics (KNBS) decided to fully support the design of the Strategic Plan for Agricultural and Rural Statistics (SPARS).

The development of SPARS_KEN is based on the main recommendations of the Global Strategy adopted by the international community in February 2010 at the United Nations Statistical Commission. The Action Plan for Africa of the Global Strategy encouraged many developing countries in Africa to develop SPARS which would be integrated into their National Strategy for the Development of Statistics (NSDS). SPARS would become a framework for coordination of statistical activities within the agricultural sector through its vision on the development of agricultural statistics in the long-term and its mission. SPARS would also become a mechanism for consultation between the Kenya Government and Development Partners on the development and funding support of agricultural statistics.

In Kenya, the development of SPARS followed the basic principles recommended for the development of the NSDS, as described by PARIS 21 Manual and the SPARS guidelines developed by the Global Strategy Office located at the Food and Agriculture Organization of the United Nations (FAO) in Rome. The Kenyan SPARS development followed a participatory approach from the launching of the activities up to the validation of the document. Five Subsector working groups (STWG) namely Crops, Fisheries, Forestry and Environment, Livestock and, County agricultural statistics and cross-cutting areas were created to participate in the development of the strategic plan. The plan was based on the real needs resulting from the assessment of the agricultural statistical system. The needs of the main users of agricultural statistics were taken into account.

The different phases of the development of the SPARS in Kenya were as follows:

1. Launching phase
    - Preparation of the roadmap following consultations with stakeholders and the validation by stakeholders-August 2014. The Board of Directors of the Kenya KNBS approved the Roadmap on 30 October 2014. Subsector Technical Working Groups (STWGs) were established and National Consultants appointed by the African Development Bank (AfDB) to guide the work of the subsectors for the preparation of the SPARS.

- A national workshop was held on 4 November 2014 at Laico Regency Nairobi Hotel, Kenya to officially launch the process of developing SPARS.

2. Assessment phase

- A workshop to train national consultants on the assessment methodology and equip them with instruments was held on 5 November 2014 at Embu in Embu County, Kenya.

- A Consolidated Assessment Report was presented to stakeholders on 16th March, 2015 at Laico Regency Nairobi Hotel, Kenya.

3. Planning Phase

- The National Consultants and key KNBS staff were trained on 17th March 2015 to undertake activities of the planning phase.

- A retreat for the national consultants was organized by KNBS, 11-13 May 2015 to develop various components of the Strategic Plan including agreeing on the Vision and Mission, Strategic choices and Strategic Goals. The national consultants also developed the Logical Frame Matrix, Financing strategy, Monitoring and Evaluation (M&E) strategy, and implementation plan (Action plan) with costing.

- The draft SPARS_Kenya (SPARS_KEN) was presented to STWG members on 15 September 2015.

- The draft SPARS_KEN was presented to all stakeholders on 21 September 2015 for their validation.

In-Depth Country Assessment

In Kenya, the production of agricultural statistics is currently undertaken by many agencies and its coordination is weak. The Agriculture, Nutrition and Environment Statistics (ANES) Committee brings together all agencies to be informed on who is doing what in the field of agricultural statistics. The coordination aspect is yet to be strengthened through the Statistics Act of the KNBS which is currently under revision.

According to the statistical legislation, the KNBS activities are covered by this law while the other institutions Ministries, Departments and Agencies (MDAs) produce statistics on the basis of administrative mandates provided by the Government of Kenya and are not clearly covered by this law. The revision of the Statistical legislation is therefore important, to ensure that it takes into account the statistical activities undertaken in the agriculture sector and in general in all MDAs.

Apart from Fisheries subsector which has a statistics unit, the other MDAs do not have functional statistical units. There is therefore need to create these units in other MDAs to ensure production of quality agricultural statistics in the NSS.

The main weaknesses that were identified during the assessment were: (i) Lack of a strategic framework; (ii) Poor Coordination of Statistical Activities; (iii) Impact of devolution in the coordination of statistical work at county level; (iv) Inadequate resource allocation; (v) High turnover of staff; and (vi) Inadequate staff skills in statistics

The main threats that were identified during the assessment were: (i) Meagre allocation of resources; (ii) Limited awareness in national and county governments on the importance of statistics; (iii) Lack of a policy on agriculture; and (iv) Lack of data availability for M&E purposes.

Vision and Mission

From the SWOT analysis, the Vision of the National Agricultural Statistical System is "An integrated system for quality agricultural and rural statistics". The Vision reflects the future image of the national agricultural statistical system of Kenya.

The Mission of Kenya agricultural statistical system is "To promote the collection and utilization of quality agricultural and rural statistics through collaboration, coordination and synergies, for enhanced user satisfaction". The Mission reflects activities undertaken by KNBS and the agricultural sector in the field of agricultural and rural statistics.

Strategic Choices

For SPARS_KEN, five Strategic Goals (SG) were defined and are as follows: SG 1: Review the statistical legal frameworks in line with the Kenya Constitution and emerging data needs; SG 2: Develop and improve physical, statistical and modern ICT infrastructure; SG 3: Strengthen human capacity and enhance statistical operations across the agricultural and rural statistics system (ARSS); SG 4: Address agricultural statistics data gaps; and Strategic Goal 5: Secure adequate financial resources on a sustainable basis for agricultural statistical activities.

Plan of Action 2015 - 2022

The proposed five strategic goals have groups of activities. The implementation of these activities would lead to the achievement of the objectives and eventually to the achievement of the vision. The time frame of the activities and their cost has been estimated. For Censuses and Survey, in addition to the timing and frequency, the lead responsible agency was identified and cost has been estimated. The detailed action plan showing the priorities in the implementation of each census/survey activity has also been indicated. The total cost for all censuses and survey for the period of the plan (2015/16-2021/22) is 4, 155.5 million Kenya Shillings, while the total cost of all activities in the plan of action is 6, 319.5 million. The detailed plan of action for all planned activities is given in Annex 7. The priorities assigned to each activity, timing and annual cost of each activity are also shown in this Annex.

Monitoring and Evaluation Plan

Monitoring and evaluation of the SPARS will be entrusted to the Agriculture, Nutrition and Environment Statistics (ANES) Committee and will be on the basis of a Key Performance Indicators established in the Logical Framework Matrix and the Results-Based Logical

Framework for monitoring. Comments and recommendations made by the committee will be used to improve the implementation of the plan.

An annual activity report will be prepared and distributed in the same way as agricultural statistical data. Resources permitting, a mid-term review in the fourth year of implementation, will be undertaken and an assessment final ex-post in 2022. The logical framework matrix and the result-based logical framework of the SPARS have been established to serve as references for monitoring and evaluation system.

Financial Strategy

The identified priority one activities are likely to get funded through routine Exchequer allocations to the various institutions under the Agriculture and Rural Statistics System (ARSS) in addition to financial support from sector Development Partners. The SPARS_KEN document, once launched, will also be used as a resource mobilization tool. It is envisaged that the document will provide a fora to trigger resources commitment from development partners and relevant stakeholders to fund the gaps in activities of interest.

CHAPTER ONE

BACKGROUND AND METHODOLOGY

1.1 Introduction

This Chapter presents basic information on the Global Strategy, the objectives and rationale of preparing the SPARS; the methodology of preparing SPARS. Also included in this Chapter is the adoption of the agricultural and rural statistics concepts in the Global Strategy; policy context and demand for agricultural data; integration of SPARS into the NSDS, key stakeholders identified in all subsectors of agriculture which took part in the preparation of SPARS.

1.2 Basic information on the Global Strategy

As a result of the decline in the quantity and quality of agricultural statistics in many countries across the world, the Global Strategy (GS) for improving Agricultural and Rural Statistics was adopted in 2010 at the meeting of the United Nations Statistical Commission in New York.

The GS is a framework for improving agricultural statistics to enable countries to meet emerging data needs for policy making, food security, research, etc. This strategy aims at: (i) strengthening the statistical capacity of developing countries to produce reliable statistics on food security, sustainable agriculture and rural development; and (ii) allow having a vision on the development, in the long term, of an agricultural statistical systems in developing countries.

The GS is centered on three pillars:

a) The production of a minimum set of data to meet the current and future needs including those of policy makers and other users;
b) Proper integration of agriculture into the National Statistical System (NSS), and
c) Fostering sustainability of agriculture in the NSS through governance of the statistical system and the strengthening of the statistical capacity building of countries.

Scope of Implementation

Africa is the first region to implement the GS through the development of the Action Plan for Africa. In this plan, while taking into account the comparative advantage of institutions, the African Development Bank (AfDB) was assigned the responsibility of providing to African countries with technical assistance and governance; the United Nations Economic Commission for Africa (UNECA) was assigned the responsibility of providing training; while the Food and Agriculture Organization of the United Nations (FAO) was assigned the responsibility of conducting research.

For its implementation, the Action Plan for Africa requested countries to develop a Strategic Plan for Agricultural and Rural Statistics (SPARS), which must be integrated into the NSDS and serve as a framework for long-term development of agricultural statistics.

It is in this context that Kenya decided to address weaknesses in its agricultural statistical system through the development of the SPARS_KEN. Therefore towards this end KNBS in

collaboration with the MoALF requested technical assistance from AfDB for the preparation of SPARS_KEN.

This plan covers five subsectors of agriculture as follows:

- Crops (including Irrigation and inputs), Food Security/Safety/Nutrition;
- Livestock (including Apiculture);
- Fisheries (including Marine/In-land Fisheries and Aquaculture);
- Forestry and Environment/Natural resources (areas related to agriculture); and
- County Agriculture Statistics and Cross-cutting areas including and not limited to: Legislation/Legal framework/Institutional development for agricultural statistics as a whole, Governance, County agricultural statistics, Resource mobilization, Statistical capacity building, Research, etc.

1.3 Objectives and rationale

Agricultural Statistics refer to a branch of economic statistics that deals with the collection, processing and analysis of data on domesticated plants and animals. Rural statistics refer to broad range of statistics (economic, social, demographic, agricultural, etc.) covering the rural areas of a country. In this case rural statistics refer to those statistics that are agriculture related.

Agriculture sector is the backbone of Kenya's economy. It contributes about 25 percent to the Gross Domestic Product (GDP) of Kenya and is the source of livelihood for most of the rural population; as such it is inevitably the key to food security and reduction of poverty.

About sixty three percent (63%) of the Kenyan population lives in the rural areas and derive their livelihood directly or indirectly from agriculture. The sector accounts for 65 percent of Kenya's total exports and provides more than 60 percent of informal employment in rural areas. Agriculture is not only key to economic growth of Kenya but also the determinant of equity in development and is fundamental to reducing poverty and hunger.

Over the years, in order to improve the agricultural sector, Kenya has developed several policy documents the main ones being: Kenya Vision 2030 (2008-2030) which is the long term development blueprint for the country. Its aim is to transform Kenya to a newly industrializing middle income country providing a high quality life to its citizens by 2030. The Vision was motivated by a collective aspiration for a better society in Kenya by 2030. Implementation of the Vision would also enable achievement of the Millennium Development Goals (MDGs) or Sustainable Development Goals (SDGs) for Kenya.

Other agricultural policy documents developed over time included: Kenya's Strategy for Revitalizing Agriculture (launched in 2004); Agricultural Sector Development Strategy (2010-2020); National Horticulture Policy, 2012; Fisheries Policy, 2008; National Livestock Policy, 2008; Kenya Forest Policy, 2008; Cooperative Development Policy, 2008; Food and Nutrition Security Policy, 2011; etc.

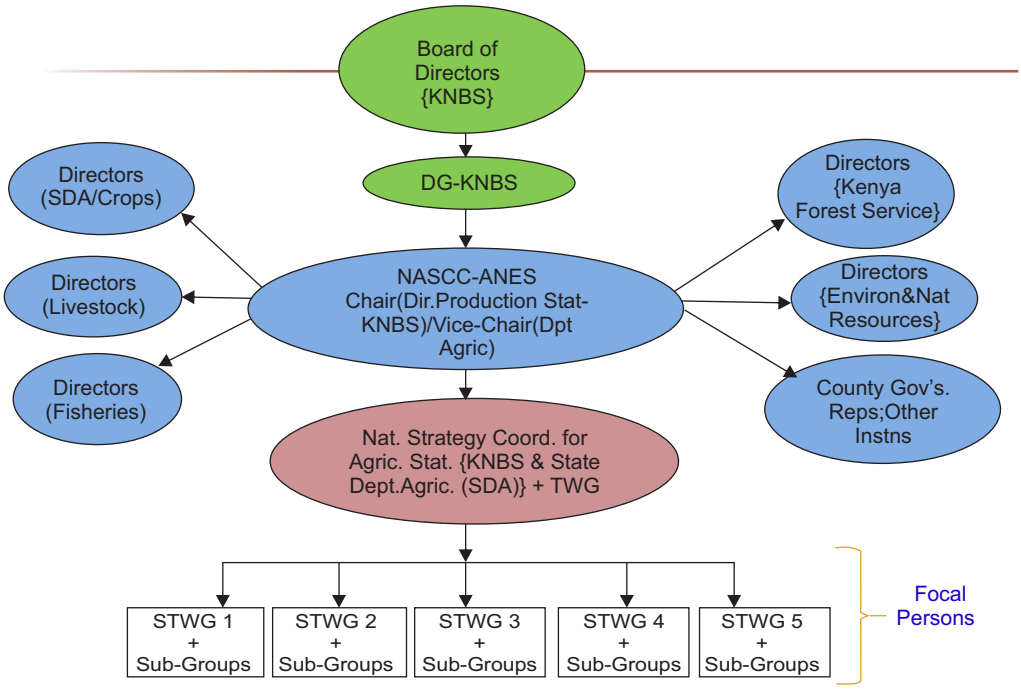
The Kenya National Panorama Reports stipulated that "the availability of reliable, consistent, comprehensive and timely agricultural data for the development of agriculture sector is critical. Credible data is required to inform and undertake the planning process; compilation of reliable national accounts; monitor sector performance; monitor and evaluate the impact of policies and programmes and contribute to the decision-making process. Agricultural data is required by a wide spectrum of stakeholders ranging from decision-makers in government, the private sector, academia for research and teaching and the donor community."

To enable monitoring and evaluation of the performance of agricultural development policies, through various indicators, it was imperative that the Kenya Ministry of Agriculture, Livestock and Fisheries and the Kenya National Bureau of Statistics, initiate the process of preparing the national strategy for the development of agricultural statistics.

1.4 SPARS Methodology

The development of SPARS_KEN was inclusive and participatory, engaging all stakeholders of the agricultural statistical system of all subsectors and throughout all the stages up to the validation of the SPARS document. Five sub-sector Technical Working Groups (STWG) were formed to lead the work of the subgroups at each stage of the development of SPARS. The process followed the bottom-up approach of the second generation of National Strategy for the Development of Statistics (NSDS). The list of all participants in the development of SPARS_KEN is given in Annex 1. The governance structure for the development of SPARS_KEN is given in Figure 1.1 below:

Figure 1.1: Governance Structure for SPARS_KEN Development



Each STWG was led by a focal person. The first task of the focal persons was to define and identify key stakeholders of the subgroup. Data was collected from the key stakeholders. Following the collection of information, the focal person analysed the information and prepared a report highlighting the findings including identifying the Strength, Weaknesses, Opportunities and Threats (SWOT) for the subsector.

The different phases of the development of the SPARS_KEN were as follows:

- Preparation of the Roadmap for the development of the SPARS_KEN: August 2014;
- Initial validation of the Roadmap by stakeholders, August 2014;
- Approval of Roadmap by the Kenya National Bureau of Statistics (KNBS) Board of Directors, 30 October 2014;
- Launching SPARS_KEN Assessment phase, November 2014;
- Review of the assessment reports by Subsector Technical Working Groups (STWG), 9-13 February 2015;
- Validation of the Assessment reports by STWGs, First week of March 2015;
- Preparation of the Consolidated Assessment Report, 9-19 February 2015;
- Validation of the Consolidated assessment Report by all stakeholders, 16 March 2015;
- Preparation of the Vision, Mission and Strategic goals and operational strategies of SPARS_KEN, April-May 2015;
- Development of the implementation plan (Action plan with costing and monitoring and implementation, and financing plan) May 2015);
- Technical review of the draft SPARS_KEN document by STWGs, 15 September 2015; and;
- Validation of draft SPARS_KEN document by all stakeholders, 21 September 2015.

1.5 Policy context and Demand for agricultural data

Kenya covers total area of 610,000 sq.km comprising 580, 609 sq. km land area and 29,391 sq. km water area and had a population of approximately 44 million people in July 2015. Agriculture dominates the Kenyan economy and is the largest contributor of Kenya's Gross Domestic Product (GDP). Almost 75 percent of working Kenyans make their living through farming. Kenya is one of the leading producer of tea and coffee, as well as one of the leading exporters of fresh produce, such as cut flower in the world.

Kenya has not carried out a comprehensive census of agriculture since independence in 1963. As a result, it has not been able to benchmark any agriculture indicators. All its agricultural indicators have been produced through estimation arising from sample surveys. This means that the reliability of key production indicators cannot be adequately verified due to lack of benchmark indicators.

The KNBS and agriculture sector line ministries have plans to be collecting agricultural statistics on a continuous basis. This will involve collecting agricultural data on seasonal basis using the area frame approach. The design of this methodology follows lessons learned during study tours to neighbouring Rwanda

In general the Continuous Seasonal Agricultural Surveys (CSAS) shall provide comprehensive information on the structure of agricultural sector. The specific objectives are to: (i) provide data on agricultural holdings disaggregated to County levels; (ii) provide data for use as benchmarks for agricultural statistics; (iv) establish land use and tenure; (v) establish gender roles in agriculture; and (vi) provide data to facilitate monitoring progress in the achievement of national goals.

The structure of the Kenya NSS is defined by its legal framework, infrastructure and institutional arrangements for collection, management, dissemination and utilization of official statistics. Official statistics are in general those produced or compiled by government ministries and departments and other related agencies. The NSS is coordinated by KNBS as anchored in the Statistics Act, 2006.

The availability of reliable, consistent, comprehensive and timely agricultural data for the development of agricultural sector is critical. Credible data is required to inform and understand the planning process; compilation of reliable national accounts; monitor sector performance; monitor and evaluate the impact of policies and programmes and contribute to decision-making process.

Agricultural data is required by a wide spectrum of stakeholders ranging from decision makers in government, the private sector and academia for research and teaching, and development partners, bilateral and multilateral communities. The quality of agricultural statistics is essential in improving efficiency, production, marketing and distribution of agricultural commodities. Agricultural statistics data users consist mainly of government ministries and departments involved in rural development, development partners, students and researchers both inside and outside academic institutions.

For the development of the statutory forty-seven counties in Kenya, there is need for agricultural and rural statistics at the county levels that are disaggregated to sub-county levels. This would ensure that appropriate decision-making is made with regard to food and nutrition levels of the communities, farm inputs, etc. to ensure that poverty level is reduced and also for meeting the MDGs as well as Sustainable Development Goals (SDGs).

1.6 Integration into the NSDS.

The development of SPARS_KEN came at the time when Kenya was developing its second generation NSDS. This opportunity will allow NSDS to integrate agriculture sector more adequately using the bottom-up approach.

An NSDS is expected to provide a country with a strategy for developing statistical capacity across the entire NSS. The NSDS will provide a vision for where the NSS should be in five to ten years and will set milestones for getting there. It will present a comprehensive and unified framework for continual assessment of evolving user needs and priorities for statistics and for building the capacity needed to meet these needs in a more coordinated, synergistic and efficient manner. It will also provide a framework for mobilising, harnessing, and leveraging resources (both national and international) and a basis for effective and results-oriented strategic management of the NSS.

As part of preparing the NSDS, KNBS intends to revise its institutional framework and coordination function in statistical development by enhancing stakeholders' participation. In addition, Sectoral Statistics Committees will be established. Also for purposes of coordination with other producers and users in the agriculture sector, the KNBS in collaboration with Agriculture sector line ministry and Departments and Agencies (MDAs), has established a working committee titled Agriculture, Nutrition and Environment Statistics (ANES) Committee which meets quarterly.

Key stakeholders.

The stakeholders were identified through the STWGs. These stakeholders included data producers, data users and data suppliers (see annex 2).

Crops STWG: the stakeholders that were identified were many. The key stakeholders identified by institution included: MoALF, KNBS, Ministry of Health (MoH), Ministry of Environment, Water, and Natural Resources (MEWNR), Department of Resource Surveys and Remote Sensing (DRSRS), Ministry of Co-operative Development and Marketing (MCDM), Green Dreams Tech Ltd., Eastern Africa Grain Council, Equity Bank, Ivory Consult Ltd., Progeny International, Pyrethrum Growers, Syngenta Foundation, M-farm, Amalgamated Chama Limited (ACL), Green Dreams, among others.

Fisheries STWG: the key stakeholder institutions included: Marine fisheries, Inland fisheries, Aquaculture, Kenya Marine Fisheries and Research Institute (KEMFRI), and The University of Eldoret.

Forestry and Environment STWG: the key stakeholder institutions included: National Environmental Management Authority (NEMA), Water Resources Management Authority (WRMA), Kenya Forests Service (KFS), Kenya Wildlife Service (KWS) and Ministry of Mining (MoM).

Livestock STWG: the key stakeholder institutions included MoALF-State Department of Livestock (SDL), Kenya Dairy Board, Ministry of Industrialization and Enterprise Development (MOI&ED), Cooperative Directorate, MoALF - Veterinary services, Kenya Meat Commission (KMC), Kenya Agriculture and Livestock Organisation (KALRO), Tegemeo Institute, International Livestock Research Institute (ILRI), Egerton, KNBS – National Accounts.

County and Cross-cutting areas STWG: the stakeholder institutions included MDAs of the National Government, the 47 County Governments, KNBS, KALRO, Agricultural Research Institutes; Focal Point STWG 1, Focal Point STWG 2, Focal Point STWG 3, Focal Point STWG 4, and Development Partners.

CHAPTER TWO

EVALUATION OF THE NATIONAL AGRICULTURAL STATISTICAL SYSTEM

2.1 Introduction

This Chapter answers the question, where are we now? It is the key phase (assessment) in the process of defining Strategic Goals, Outputs and Activities. In this Chapter the evaluation of satisfaction and needs of users, assessment of capacity for producing agricultural statistics, and assessment of statistical outputs were undertaken in all subsectors of agriculture by focal persons assigned to the subsectors. The required information was obtained through bilateral meetings, group discussions and sometimes use of a questionnaire, followed by a discussion. The main findings of the assessment are summarised in a SWOT analysis presented in this Strategic Plan.

2.2 Evaluation of the satisfaction and needs of the users

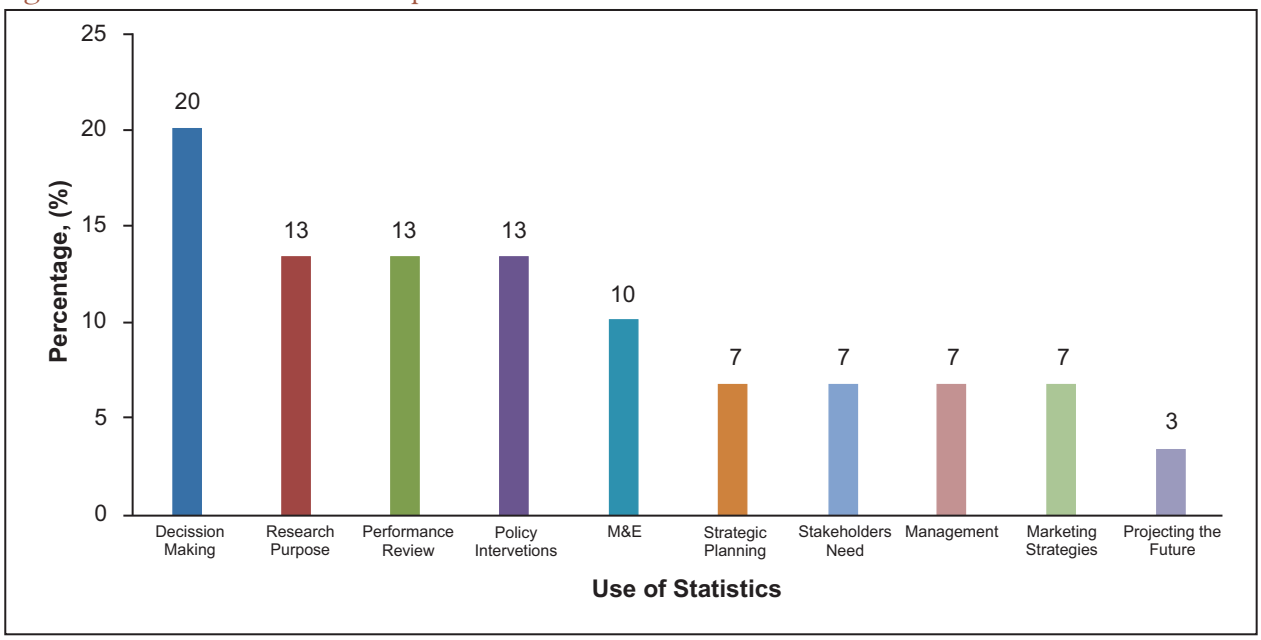
Assessment of the satisfaction of users on the products of statistics was made. None of the users expressed their real satisfaction due to the fact that they were not clear about the question of satisfaction. They however expressed their uses of various statistics, needs and quality for data that was being produced as follows".

Crops Subsector:

Uses of data: on the various uses of the statistics collected, the majority used the statistics for decision making (20%) with research, performance review and policy intervention having equal shares of 13% respectively. Monitoring and Evaluation (10%) while Strategic Planning, Stakeholders needs, Management, Marketing strategies all had an equal share of 7% respectively while Future forecasting was the least (3%) (see Figure 2.1 below).

Figure 2.1 shows the analysis of responses provided by stakeholders in the Crops subsector, on how they used data on crops. This information was obtained from survey data during the assessment phase of the SPARS, between November and December 2014. Clearly, the use of statistics was skewed towards the institutional mandate

Figure 2.1: Use of statistics on crops



Demand for data: the following data on crops was in demand but was not available: Crops imports data; Crops forecast data; Crops input data and utilisation; Farmgate prices; Inputs costs and utilisation; Crop production data; Food Balance Sheet & Nutrition data; Investment data; County GDP; Food consumption data; income expenditure data. Reasons for their unavailability were varied and included inadequate resources, lack of sampling frame, no resource allocation and lack of prioritisation of agricultural and rural statistics data in the development agenda.

Fisheries Subsector:

Uses of data: the users included scientists and fisheries administrators for stock assessment to determine the stock status of wild caught fish stocks in both marine and inland fisheries systems. Data is used for State Departments' reporting obligations to international fisheries bodies especially for shared migratory fish stocks in the Marine and Lake Victoria fisheries and monitoring the performance of fisheries management and conservation measures. Data is also used by KNBS in the preparation of the national Food Balance Sheet; contribution to scientific research by national research institutions like Kenya Marine and Fisheries Institute and universities; and preparation of national reports by the State Department of Fisheries.

Demand for data: data needs in Fisheries Subsector included: species level catch and effort data for capture fisheries; Fisheries marketing statistics; spatial data on fishing locations for the capture fisheries and Fish production from aquaculture.

Forestry and Environment Subsector:

Uses of data: Environment statistics is used for planning purposes, licences, environmental rules enforcement, and decision making on waste and development of Environmental Impact Assessment (EIA). In addition, data on forecasting crop harvest, wildlife and livestock informs

and guides on control, stocking and destocking. In case of forestry, data is used in management operations and sales, example being number of seedlings versus funds invested and, number of mature trees versus market value.

Demand for data: Data needs on forestry and environment were many and they included: Data on Forest Biomass; Tree cover disaggregated at county level; Number of Grazing animals by Gender/dead animal during the survey; Water bodies and water qualities; Ground water mapping; and Volume of organic waste.

Livestock Subsector:

Uses of data: livestock data is used to inform policy formulation aimed at guiding and regulating the subsector. Policy formulation, like any decision making process, requires detailed information in order to propose and develop interventions accordingly. Statistical information on the subsector facilitates focused planning, monitoring and evaluation of development initiatives.

Demand for data: some of the data needs/gaps included Number of abattoirs and slaughter slabs; Live animal weights and herd structures; Live animal prices; Cost of production; Household incomes from livestock activities; Data on emerging livestock; Number of veterinary and other extension officers and Number of workers on livestock activities.

County Agricultural Statistics and Cross-cutting Areas Subsector:
Uses of data: there were divergent needs across users ranging from regularity of data produced to level of disaggregation. Most data however revolve around production, acreage and yield of food and cash crops, agricultural inputs and real time information on prices of commodities and livestock.

Demand for data: data needs included number of farmers; Farm gate prices; Crop forecasting; Agricultural credit/inputs (e.g. fertilizer); Area planted; Production, yield & prices of specific crops; Land area under irrigation; Livestock weights; Consumption of milk; Acreage under field crops; Vaccination of livestock; Livestock numbers (by specie); Cost of transport; Input-Out-Supply Utilization Tables (SUT); Commodity farm gate prices; Food situation; Land under cultivation, and Value of destroyed crop.

2.3 Assessment of Capacity for Production of Agricultural and Rural Statistics

2.3.1 Governance-Statistical legislation

Crops Subsector: currently there is no legal framework to guide agricultural and rural statistics management in the subsector. The subsector relies on the Crops Act for its management. However, crops data is collected by Food Security Unit of the State Department of Agriculture (SDA) in collaboration with the Crops Directorate of Agriculture Fisheries and Food Authority (AFFA) which performs a regulatory function.

Fisheries Subsector: the principal legal instrument for the governance of the fisheries Subsector is the Fisheries Act (Cap 378) and its subsidiary regulations. The main limitation in the legal provisions is that the data provision requirements are only limited to subjects who are holders of licenses or permits that are granted under the Fisheries Act (Cap 378). This indeed excludes a large segment of fisheries value chain actors who are not obligated to provide such data to the government including fish dealers, retailers and many actors along the supply chain including the input suppliers. A large section of aquaculture producers and input suppliers are not covered by the sections of the Fisheries Act and are as such not obligated to provide statistics to authorities.

Forestry and Environment Subsector is governed under Environment Management Coordination Act (EMCA) 1999 which does not clearly include statistical activities. The EMCA Act 1999 article 37-41 discusses National Environment Action Plan whose activities entail analysis and profile of natural resources for sustainable exploitation. To undertake all the functions of the National Environment Action Plan committee, the underlying assumptions are that various types of statistical data are available and are disaggregated to analysis level, which consequently informs policy reviews and formulation. This foundation although silent and clearly or directly not authorizing statistical legislation for environment, water, forestry and other natural resources statistics, lays a base for a proactive environment office to establish a statistics unit.

Livestock Subsector is governed by the Statistics Act 2006 of KNBS to collect analyse and disseminate statistics across all sectors of the domestic economy. This mandate therefore empowers KNBS to directly manage agricultural and other related statistics including livestock production, crop farming, environment and natural resources, forestry and logging, and fisheries.

County Agriculture Statistics and Cross-cutting Areas Subsector is governed by the legal framework emanating from the Statistics Act 2006 together with the institutional mandate given to various line ministries and research organizations that produce statistical information through their routine operations. The KNBS was established by the Statistics Act with the mandate to collect, compile, analyze, publish and disseminate statistical information. The Bureau is therefore the custodian of official statistics and is responsible for establishing and maintaining a national socio-economic data base. The Act further gives KNBS the mandate to coordinate and supervise the National Statistical System composed of producers, users and suppliers of statistical information. The existing legal and institutional framework does not therefore adequately reflect the agriculture sector's mandate in relation to the overall NSS. It is in line with this that KNBS has embarked on the revision of the Statistics Act 2006 to conform to the constitution and strengthen its coordination role in regard to production and management of statistics.

2.3.2 Human Resources

The human resource devoted to the production of statistics in the subsectors covering statistics of Crops, Fisheries, Forestry and Environment, Livestock and County Agriculture Statistics and Cross-cutting areas is described below:

Crops Subsector: in the assessment, all respondents pointed to inadequate human resource in all the aspects measured (namely: numbers of staff, experience, skills, and qualifications). Availability of adequate and skilled human resources is critical for production of quality statistics. In the subsector, there is no statistics unit and personnel fully dedicated to the production of statistics.

Fisheries Subsector: at the national level, staff numbers within the statistical unit were inadequate and needed to be improved to meet the increasing data needs for the fisheries subsector. There was also greater need for a continuous capacity building programme in the areas of data analysis and database use for effective data storage, analysis and archiving. Due to shortage of human resource, the data collection role was increasingly being taken up by trained designated members of the Beach Management Unit (BMU) to complement the work of the government data collectors. Based on the subsector statistical operation workloads and currently prevailing gaps in statistics production, the sector faces substantial challenges in its human resource strength across many operational sites.

Forestry and Environment Subsector: the institutions of the subsector do not have a dedicated unit responsible for producing statistics. The same officers designated as statistics officers were involved and assigned other activities by their institutions. In terms of skills, some of the staff had basic level statistics training covering data collection, conducting surveys and censuses, data analysis and dissemination. Intensive training on analysis using various statistical softwares (Data analysis and statistical software (STATA), Census and Survey Processing System (CSPro), Statistical Software Package for Social Sciences (SPSS), among others) was necessary to enhance analysis skills and hasten dissemination especially for large sample surveys and censuses.

Livestock Subsector: based on the subsector statistical operations workloads and current prevailing gaps in statistics production, the subsector faced substantial challenges in its human resource strength across many operational sites. Most of the disciplines undertaking statistical work in the subsector were assessed as having inadequate number of staff. The limited number of staff deployed in the different areas of operation was a major challenge that strongly impaired capacity of the available staff to produce livestock statistics.

County Agriculture Statistics and Cross-cutting Areas Subsector: in general the Kenya counties did not yet have their own personnel but relied on those personnel seconded by the national Kenya Government. The workforce inherited from the national government for agricultural statistics was not adequate but below the expected optimal number. However, some of the officers in the livestock, agriculture, fisheries and irrigation areas that were seconded to the counties still saw themselves as working for national as opposed to county government. At KNBS, the number of personnel engaged in the production of statistics was inadequate to

conduct all the envisaged activities. The government policy to freeze employment had impacted negatively on the subsector resulting in aging personnel and succession challenges.

2.3.3 Infrastructure, Equipment, Information Technology

The assessment covered the following infrastructures, equipment and ICT facilities: Office buildings, vehicles for statistical work, existence of a local area network, existence of specialised software, and office materials.

Crops Subsector: Laptops were reported as the main Information Technology (IT) equipment used by most of the stakeholders for statistical purposes. However, other IT equipment was reported to be inadequate. In terms of infrastructure and equipment it was found that there were no specific Vehicles assigned for field data collection and for cases where they were available they were reported to be inadequate. Most buildings required improvement or were too old. Office materials were reported to be relatively adequate.

Fisheries Subsector: the IT equipment, software and office materials were insufficient. There was great need for further investments to upgrade the equipment and software in alignment with existing new technology. The data in this subsector was kept in personal computers and the software that was used was MS Excel and there was no other software to support advanced statistical analysis. The state of data holding facilities in the field offices was insecure. There was need to implement a filing system to ensure that all data sheets were properly labeled and stored.

Forestry and Environment Subsector: the current status of infrastructure mainly establishing a Website, desk top computers, laptops were valuable equipment available in large number at environment, water, forestry and other natural resource offices. The Information Technology enabled faster flows of information, data and statistics than any other time before. Hence, the infrastructure, equipment, IT was adequate. A replacement and maintenance schedule, regular upgrade of infrastructure, equipment and information technology in tandem with the digital changing was important

Livestock Subsector: most county offices did not have any vehicles that were assigned for data collection activities. Most transport facilitates in the counties were operated on a pool basis and this made it difficult to implement statistical activities when they were required. Most county offices faced a shortage of information technology (IT) equipment and accessories. Office buildings were inadequate, office materials were inadequate and transport facilities were inadequate for field data collection work.

County Agriculture Statistics and Cross-cutting Areas Subsector: most of the offices had desktops, laptops, tablets as well as Geographic Positioning System (GPS) for use. These gadgets were not specifically for Statistics work but for the general office use and as such they tended not to be adequate. With regard to other infrastructure such as office buildings, the status at head offices was good except for KNBS that was housed in three different buildings in Nairobi. Further, office and field vehicles for statistical work were not adequate.

2.3.4 Financial Resources

On the assessment of financial resources, their adequacy or lack of adequacy, whether donor supported or not, was documented by subsector as follows:

Crops Subsector: none of the stakeholder cited adequate statistical budgets. The main reasons being that the budget for statistical activities was drawn from other departments; Statistical work was usually not considered part of the core mandate and usually carried out alongside other functions and programmes;; Statistics, data management, surveys, census of agriculture, were perceived as non-tangible or non-essential expenses; There was need for continuous development in this area especially because there were no full time staff; and statistical work was carried out alongside other functions. Lack of appropriate mechanisms for dialogue between national and county governments and developments partners for agricultural statistics funding was reported by majority of the stakeholders.

Fisheries Subsector: the State Department of fisheries did not have a dedicated budget line to support data collection, analysis and archiving activities. This was in spite of the importance of accurate fisheries statistics in sustainable management of national fisheries. The current surveys, including the catch assessment surveys and frame surveys had been funded at various stages by the European Union (EU) and World Bank Projects for Lake Victoria and Government and World Bank funding for the marine fisheries. Future commitments to fund fisheries surveys were not there.

Forestry and Environment Subsector: financial resources were allocated mainly for short-term departmental research and, M&E of projects and programmes. The resources were not adequate and none of the Development Partners supported directly or indirectly development, collection, analysis, storage and dissemination of Environment, Water, Forestry and other Natural Resources Statistics. On funding for forestry statistics, a memorandum of understanding existed with the World Bank, Governments of Australia, Finland and Japan.

Livestock Subsector: the line ministries, counties, research bodies and other required statistics were produced even if they did not have a budget line for statistical activities. This meant that if the statistical component of the budget was not a priority within the work of organization, a planned statistical activity would most likely be shelved in the event of a reduced budgetary allocation.

County Agricultural Statistics and Cross-cutting Areas Subsector: availability of resources for agricultural statistics activities remains a major challenge. Financial resources were not sufficient to facilitate provision of demanded statistics. The budget cuts instituted by the national government also affected statistical operations in the subsectors. At the devolved level, approximately 75 percent of financial resources were for remuneration. The remaining resources were prioritised for development related activities with statistics getting no allocation. Dialogue with Development Partners on funding of agricultural statistics activities was difficult at that time especially for the devolved units given that they lacked comprehensive information that could be used as a baseline for negotiations.

2.4 Assessment of statistical outputs

Agricultural data can be grouped into three categories. The first category includes structural data. This data includes area and its characteristics, population and farms, the organizations of producers, equipment, livestock, infrastructure, fishing units among others. This data is mainly produced during an Agricultural Census.

The second category includes current data/statistics which changes frequently and is characterized by its variability which depend on several factors, some of which are random and "non-controllable". This category includes variables such as production, prices, marketing, nutritional status, fishing effort, the food balance sheet, etc.

The third category includes all other data and information which are not directly linked to agricultural activities in the broad sense but that however affect the current data. These data include weather data, prices of the products, exchange rates, etc.

The assessment of statistical outputs was done by stakeholders based on their understanding in the production or use of the data.

Crops Subsector: the crop sub-sector includes food crops, industrial and the horticultural crops. The main sources of data for compiling crop statistics includes surveys report, administrative records, farmers, extension officers, and other stakeholders. The methods of data collection include surveys, questionnaires, special studies, interviews and eye estimates/observations.

The main data collection method was administrative records. Some of the identified methods were interviews and in some cases observations. Over 90% of the institutions were using international standards and classifications except for farmer organizations, this was due to the nature of their operations as some were large scale operations and others small scale operations leading to limited data sharing. Most of the data sets that were assessed were reliable but some were assessd to be workable or acceptable.

Fisheries Subsector: the sources of fisheries data were mainly administrative records, sample surveys and fisheries frame survey (census). The administrative data source included the **Vessel registry** of Kenya which contained information on the operating fishing fleet mostly those vessels whose license was approved by the National Departmental Licensing Committee. The **Log book** system for catch and effort data reporting had been used by the State Department of Fisheries for local flagged fishing vessels which measured above 24 meters (LOA) including shrimp trawlers. The previously Kenyan flagged long liner and also licensed foreign fishing vessels operated in the Kenyan Exclusive Economic Zone. The **Export/Import data** was collected at the point of issuance of import or export documents by the State Department of fisheries. Information from the export/import declaration accompanying each consignment of fish and fishery products was collected and captured using computers.

Sample Based Data Collection included Catch Assessment Surveys. The implementation of catch assessment surveys in each case was guided by standard operating procedures that provided details on the sample designs and standardizing the data collection protocols. Generally the Catch Assessment Surveys (CAS) sampling employed a two-stage stratified sampling design. Fisheries frame surveys were census based on total enumeration of all fishing inputs namely vessels and gears at landing sites and other vital socio-economic data that was collected on biennial basis.

One of the major limitations was the lack of a developed procedure for data quality assessment in terms of relevance, accuracy, consistency, completeness, and timeliness within the sector. Nevertheless, specific surveys such as frame surveys and catch assessment surveys had standard operating procedures which included elements of data quality assessment including validation procedures during the assessments and analysis. In terms of assessment of data quality, most of the data was assessed to be reliable except for a few that were assessed to be acceptable.

Forestry and Environment Subsector: the methods of collection included sample census and administrative records. In terms of quality of data, the assessment revealed that data was reliable or acceptable in most cases.

Livestock Subsector: most of the livestock data was collected through administrative records. Some livestock data was estimated and where possible a livestock census/survey was conducted. Assessment of livestock data quality was rated good, reliable or acceptable.

County Agricultural Statistics and Cross-Cutting Areas Subsector: the method used to collect the data was either census or administrative records. The quality of cross-cutting data was assessed to be good and in the majority of variables to be acceptable.

2.5 National Agricultural Census

Since political independence in 1963, Kenya had not carried out a National Agricultural Census that would benchmark agriculture indicators. Currently KNBS and agriculture MDAs are jointly planning to conduct the first Kenya Census of Agriculture (KCA) during the Medium Term Plan (MTP II) (2013 – 2017).

So far, The Food and Agriculture Organisation of the United Nations (FAO) and The World Bank had supported the implementation of the Preparatory Phase which is complete. Some of the key activities carried out included: benchmarking study tours, establishment of the National Agriculture Census Office, development of census tools, establishment of national and county agricultural census committees, design of appropriate methodology, sensitization of stakeholders, National data needs assessment stakeholders' forum and training of the national team and staff in six counties.

In general the KCA would provide comprehensive information on the structure of agricultural sector within a defined time frame. The specific objectives of an Agriculture Census are to: (i) provide data on agricultural holdings disaggregated to lower administrative units; (ii) provide data for use as benchmarks for agricultural statistic; (iii) provide a list of farmers that will comprise a national sampling frame for agricultural surveys; (iv) establish land use and tenure; (v) establish gender roles in agriculture; and (vi) provide data to facilitate monitoring progress in the achievement of national agricultural development goals.

2.6 Main Findings: SWOT Analysis of the Agricultural and Rural Statistics System

It should be stated that as part of the evaluation each of the focal persons reviewed a considerable number of literature that included the Country Assessment Questionnaire from the African Development Bank which was completed by Kenya in 2012/13, Policy documents from the subsector (a good number of them), Guidelines prepared by the Global Strategy office at FAO, Rome, etc. The list of the documents that were reviewed is given in Annex 4. The review of these documents and the findings became important in preparing the SWOT analysis of each subsector before integration them into one SWOT analysis for the agricultural sector.

The main areas of weaknesses included: Legislation, Coordination, Production and dissemination of statistical data, Human resource improvement and Data quality. These have been addressed in Chapter Three. A detailed analysis of Strengths, Weaknesses, Opportunities and Threats (SWOT) of the Agriculture and Rural Statistical System is given in Table 2.1. below:

Table 2.1 Summaries of the Strengths, Weaknesses, Opportunities and Threats

Strengths	Weaknesses
1. The existence of the Kenya Constitution 2010. 2. The existence of the Statistics Act 2006 which is currently under revision. 3. The existence of the Agricultural Sector Development Strategy (ASDS), 2010-2020. 4. Existence of county administration to support subsector data collection activities. 5. Existence of trained personnel with IT and statistical knowledge in Agriculture sector and KNBS, to provide quality statistical data. 6. Strong partnership of KNBS with FAO to provide technical guidance on the production and analysis of livestock statistics. 7. Existence of comprehensive data collection infrastructure in the subsectors. 8. Existence of policy guidelines to support statistical work in the subsectors.	1. Lack of a strategic framework for the development of agricultural and rural statistics. 2. Poor coordination of statistical activities in the agricultural sector. 3. Inadequate office space including statistical infrastructures in some agriculture subsectors. 4. Inadequate number of staff with statistical skills in some agricultural subsectors. 5. Lack of dedicated budget line in the national budget to support agricultural statistical activities. 6. Lack of central statistical databases in agriculture subsectors. 7. Lack of data quality management procedures for agricultural statistics. 8. Lack of data dissemination strategy in the agriculture sector. 9. Inadequate resource allocation for both administrative records and survey data collection and analysis.

9. Existence of strong Institutions such KNBS and MDAs. 10. Use of ICT in the subsectors. 11. Existence of a statistical unit in the State Department of Fisheries. 12. Existence of coordination mechanisms to support statistical work such as ANES committee. 13. Existence of initiatives to support statistical work at KNBS and agriculture subsectors.	10. High turn-over of staff engaged in statistical work in agriculture sector. 11. Multiple data producers of agricultural statistics. 12. Low policy implementation with regard to statistical work in the agriculture sector. 13. Inadequate staffing levels for agricultural statistics, both in the agricultural sector and KNBS. 14. Poor documentation and record keeping of available agricultural statistical indicators. 15. Lack of statistical units in some agriculture subsectors and counties. 16. Inadequate statistical skills of staff for data compilation and analysis. 17. Lack of specialized statistical training for staff engaged in statistical work in the agriculture sector
Opportunities	**Threats**
1. Development of SPARS. 2. Existence of Development Partners to support agriculture statistics. 3. Existence of regional institutions to provide regionally agreed standards for data collection and reporting. 4. Participatory budget making cycle provides for an opportunity to lobby for specific budget line to support agriculture statistics. 5. Strong demand of agricultural statistics from users at county, national, regional, and international levels. 6. Strong use of statistics in the M&E of the subsectors management and development Plans. 7. Existence of the Comprehensive Africa Agriculture Development Programme (CAADP). 8. Well trained staff for the collection of sample survey data across the country. 9. Goodwill from Development Partners to support agricultural statistics. 10. Existence of strong research organizations devoted to agricultural research.	1. Inadequacy or lack of long-term commitment to support agricultural statistical activities by Development Partners. 2. Inadequate data and derived estimates for M&E purposes. 3. Economic hardships affecting respondents in providing agricultural data. 4. Meagre resource allocation to statistical development in the agriculture sector. 5. Inadequate consultation and feedback from important players in agricultural statistical production. 6. Limited awareness within both national and county governments on the importance of statistics in planning, management and decision making processes. 7. Insecurity. 8. Misuse of statistics for political gains. 9. Lack of/low prioritization of statistics in National and County Governments. 10. Disruption of data collection activities following devolution.

11. Availability of regional organizations blocks to support agricultural statistics (COMESA, EAC, SADC, and AU). 12. Existence of well-developed National Statistical System in some of the developing countries to promote South-South cooperation. 13. Ongoing development of a National Strategy for the Development of Statistics (NSDS). 14. Existence of Agriculture, Nutrition, Environment Statistics (ANES) Committee. 15. Existence of KNBS offices in counties. 16. Proposal to undertake the Census of Agriculture in the country.	

The results of the Evaluation/Assessment were discussed at a workshop that was organized by KNBS attended by all stakeholders. A list of agencies/institutions which participated in the workshops during the development of SPARS_KEN is given in Annex 3. The workshop participants validated the findings in the assessment and provided further guidance on the development of SPARS_KEN.

CHAPTER THREE

STRATEGIC PLANNING

3.1 Introduction

This Chapter presents the Vision and Mission statements. Also presented are the Strategic Goals, their Purposes and Operational Strategies. On the implementation a number of activities were defined for each Strategic Goal. A calendar of Censuses and Surveys showing the responsible lead Agency was compiled covering the period of the Strategic Plan 2015-2022. The monitoring and evaluation of the Plan has been described, and indicators for measuring progress have been defined. The Financing Strategy and Advocacy and Communication Plan have been described. The results-based logical framework for monitoring and the detailed plan of action have all been developed and are part of the Strategic Plan.

3.2 Vision

From the SWOT analysis the vision of Kenya SPARS is:

"An Integrated System for quality agricultural and rural statistics"

The vision reflects the future image of the national agricultural statistical system.

3.3 Mission

The mission of Kenya SPARS is:

"To promote the collection and utilization of quality agricultural and rural statistics through collaboration, coordination and synergies, for enhanced user satisfaction"

3.4 Strategic Choices

For the development of Kenya SPARS, five strategies goals were defined based on the assessment that was undertaken involving stakeholders in the various subsectors of agriculture. These strategic goals are: i) Review the Statistical legal frameworks in line with the constitution and emerging data needs; ii) Develop and Improve Physical, Statistical and ICT Infrastructure; iii) Strengthen human capacity and enhance statistical operations across the Agricultural and Rural Statistics System (ARSS); iv) Address agricultural statistics data gaps; (v) Secure adequate financial resources on a sustainable basis for agricultural statistical activities.

3.4.1 Strategic Goals, Purpose and Operational Strategies

Table 3.1 contains the operational strategic goals that have been developed as a result of the in-depth assessment (IdCA) that was undertaken involving stakeholders. The purpose of each goal and the operational strategies for each goal have also been developed and presented in Table 3.1 below.

Table 3.1: Strategic Goals, Purpose and Operational Strategies

Strategic Goals (SG)	Purpose (P)	Operational Strategies (OS)
SG 1: Review the Statistical legal frameworks in line with the Kenya Constitution and emerging data needs	P: Improved coordination of agricultural statistics data production	OS 1: Review and enact relevant laws , regulations and policies governing agricultural statistics
		OS 2: Enhance and strengthen agriculture statistics co-ordination and collaboration
SG 2: Develop and Improve Physical, Statistical and modern ICT Infrastructure	P: Efficient statistical operations within a conducive work environment for agricultural statistics	OS 1: Acquire appropriate physical infrastructure
		OS 2: Develop and adopt modern statistical infrastructure
		OS 3: Strengthen use and application of ICT in statistical operations
SG 3: Strengthen human capacity and enhance statistical operations across the Agricultural and Rural Statistics System (ARSS)	P: Highly skilled and professional statistical personnel in agricultural statistics	OS 1: Establish, develop and maintain critical mass of skilled and high performing agriculture statistics personnel
		OS 2: Promote adoption of best practices, methods and standards in all agricultural statistics processes
SG 4: Address agricultural statistics data gaps	P: Meet user data requirements	OS 1: Design and implement censuses and surveys
		OS 2: Undertake statistical activities specific to meet data needs
SG 5: Secure adequate financial resources on a sustainable basis for agricultural statistical activities	P: Timely implementation of scheduled agricultural statistical activities	OS 1: Raise the profile of agricultural statistics in the country
		OS 2: Mobilize adequate funds for agriculture statistics activities
		OS 3: Prudent use and management of financial resources

SG 1: Review the statistical legal frameworks in line with the Kenya Constitution and emerging data needs

This strategic goal consists of two operational strategies:

OS1: Review and enact relevant laws, regulations and policies governing agricultural statistics. The statistical law that currently exist covers only the activities of the KNBS. There is need to expand the coverage of this statistical law to take care of agriculture sector statistical activities. The review of the law is currently in progress and as such the preparation of SPARS_KEN is timely.

OS2: Enhance and strengthen agricultural statistics co-ordination and collaboration. The coordination of statistics is one of the tasks given to the KNBS by the statistical law. In agricultural statistics, the KNBS has established the ANES Committee which meets quarterly to discuss activities and decide the way forward in implementing various activities.

SG 2: Develop and improve physical, statistical and modern ICT infrastructure

OS 1: Acquire appropriate physical infrastructure. The assessment showed that good physical infrastructure for undertaking statistical activities in some MDAs is not in good shape. Therefore attempts should be made to improve the working environment of statistical staff.

OS 2: Develop and adopt modern statistical infrastructure. What is statistical infrastructure? Statistical Infrastructure refers to tools which support the operation of a statistical system. These tools help to organise the statistical system, improve efficiency, add value, create new outputs or simply perform tasks within the system. Examples of statistical infrastructure include: Master sample frame, Registers, Standards and classifications, and Methodologies and guidelines, among others.

OS 3: Strengthen use and application of ICT in statistical operations. Use of ICT has now become part and parcel of statistical work. Adoption of more advanced software should be encouraged. Software such as R should be used by statisticians to analyse statistical data. From time to time, the review of software applications should be undertaken.

SG 3: Strengthen human capacity and enhance statistical operations across the Agricultural and Rural Statistics System (ARSS)

OS1: Establish, develop and maintain critical mass of skilled and high performing agriculture statistics personnel. Availability of adequate skilled personnel to undertake statistical work both in the field and office is very much in great need. This is one of the weaknesses requiring to be strengthened.

OS2: Promote adoption of best practices, methods and standards in all agricultural statistics processes. The entire production of agricultural statistics, from collection to analysis should utilize effective and innovative tools. Best practices adopted internationally should be promoted. In all cases international standards that exist in the fields of agricultural statistics should be adopted to ensure comparability of data regionally.

SG 4: Address agricultural statistics data gaps

OS 1: Design and implement censuses and surveys. There are many ways of filling data gaps. These include the design of surveys and censuses to collect the much needed data by users. This includes conducting Agricultural Censuses and surveys. Data gaps can be assessed by conducting user need surveys.

OS 2: Undertake statistical activities specific to meet data needs. These may include analysis of administrative records, collecting cross-border trade data on agricultural commodities, etc.

SG 5: Secure adequate financial resources on a sustainable basis for agricultural statistical activities

OS 1: Raise the profile of agricultural statistics in the country. There is need to increase the attention that agricultural statistics get. A large number of agricultural data are available in private and public administrations. Accessibility of these statistics can be a problem. Therefore, there is need to develop these data and promote their use by third parties. This will bring profits to the primary producers of the data and will ensure visibility in raising improvement of professional practice in the agriculture and rural sectors.

OS 2: Mobilize adequate funds for agricultural statistics activities. Donors are usually ready to assist in resource mobilisation. The SPARS_KEN that is being developed has identified weaknesses in data and hence the requirements for its improvement. It will be easier to convince Development Partners about the need for additional resources to ensure the continued supply of the much needed data for policy and planning as well as decision making.

OS 3: Prudent use and management of financial resources. The wise use of financial resources to achieve the maximum results always pays. Statistical work demands the balancing of different requirements particularly in terms of field costs and materials. The budget should always be properly examined such that the best use of resources is achieved to cover field costs, materials for data collection, processing and analysis including the purchase of software.

To ensure that the strategic framework is complete, a Logical Framework Matrix was prepared containing Strategic Goals and Purposes, associated Strategies, Outputs, Activities, Indicators (for monitoring and evaluation purposes), Means of verification, Responsibility, Time Frame, Budget estimates and Assumptions and risks. This Logical Framework matrix is presented in Annex 5.

3.5 Implementation

3.5.1 Core Action Plan

Key results expected

The implementation of SPARS_KEN will lead to the improvement of the National Agricultural and Rural Statistics System. Outcomes of each strategic goal will be observed first to ensure achievement of the goal. These results should translate into the realization of the vision.

Some of the activities associated with each strategic goal are described below:

Strategic Goal 1: Review the statistical legal frameworks in line with the Kenya Constitution and emerging data needs

Activities:

- Review the existing statistical legislation to ensure that it takes into account all statistical activities.
- Review activities in the agriculture sector that should be taken into account in the statistical legislation in particular the collection processing and dissemination of agricultural statistics (Mainstreaming agricultural and rural statistics in all subsectors of agriculture).
- Ensure technical committees on agricultural statistics and their terms of reference are recognized and taken into account in the revised statistics Act.
- Draft chapter of the revised Statistics Act taking into account agricultural and rural statistics.
- Discuss the draft revised Statistics Act at convened relevant committees such as the ANES (User-Producer Committee).
- Present the revised Statistics Act to the KNBS Board of Directors for endorsement before submission to Cabinet for approval and enacting the law by Parliament.
- Coordinate the collection and compilation of agricultural and rural statistics.

Strategic Goal 2: Develop and improve physical, statistical and modern ICT infrastructure

Activities:

- Review the adequacy of physical structures in which agriculture and rural statistics are produced.
- Refurbished offices for agricultural statistics.
- Take inventory of the existing statistical and ICT infrastructures-KNBS, Counties and Subsectors of agriculture.
- Procure field data collection and transport equipment for agricultural statistics.
- Develop sampling frames for agricultural statistics.
- Procure computers, PDAs, build databases and acquire relevant software for statistical work.
- Build capacity in modern dissemination platforms.

Strategic Goal 3: Strengthen human capacity and enhance statistical operations across the Agricultural and Rural Statistics System (ARSS)

Activities:

- Review the existing staff involved in the production of agricultural statistics at KNBS, Counties and subsectors of agricultural statistics.
- Propose staffing of statistical units created in the agricultural subsectors.
- Recruit and train statistical personnel for the statistical units.
- Develop metadata dictionary for agricultural statistics.
- Motivate and improve staff wellness.
- Adopt and domesticate international agricultural statistics standards.

Strategic goal 4: Address agricultural statistics data gaps

Activities

- Conduct user needs survey.
- Conduct censuses and surveys to address user needs.
- Undertake various statistical activities to meet other data needs.

Strategic Goal 5: Secure adequate financial resources on a sustainable basis for agricultural statistical activities

Activities

- Conduct advocacy and communication campaigns for policy makers including development partners.
- Government budgets in the subsectors and counties to include adequate funds for the collection, analysis and dissemination of agricultural statistics (Lobby for specific budget lines if possible).
- Solicit funding for agricultural statistics (National, County and Development Partners).
- Eliminate duplication in statistical activities.

3.5.2 Calendar of Censuses and Surveys

As part of the process of filling data gaps in the agricultural and rural statistics, the following list of censuses and surveys was identified for implementation during the period 2015/16-2021/22. The frequency of conducting the censuses and surveys and the responsible lead agency was also identified for each census and survey (see Table 3.2) below.

Table 3.2: Calendar of Censuses and Surveys

Survey name	Frequency	Responsibility (Lead agencies)	Year						
			2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Seasonal Agricultural Survey	Bi-annual	KNBS and MoALF							
Census of livestock slaughter	Decennial	KNBS and SDL							
Census of horticulture production	5 yearly	HCD							
Census of Tree Cover	3 Yearly	KFS							
Kenya integrated household budget survey	5 yearly	KNBS							
Agricultural and livestock production (household and large farms) survey	Biennial	KNBS							
Milk production and marketing survey	5-yearly	KNBS, KDB							
Cost of agricultural production survey	Biennial	KNBS							
Crop forecast survey	Quarterly	KNBS							

Survey name	Frequency	Responsibility (Lead agencies)	Year						
			2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Producer prices survey	Quarterly	KNBS							
Retail market prices survey (food commodities and agriculture inputs)	Weekly	KNBS, MoALF							
Fisheries catch assessment surveys	Quarterly	Fisheries Directorate							
Inland fisheries frame surveys	Biennial	Fisheries Directorate							
Marine and coastal artisanal fisheries frame survey	Biennial	Fisheries Directorate							
Aquaculture Inventory	5-yearly	Fisheries Directorate							
Livestock and product market prices survey	Weekly	KNBS, SDL							
Tree Seedling Planted	Semi-Annually	KFS							
Tree Products Prices	Quarterly	KFS							
Food Security Assessment Survey	Quarterly	KNBS, MoALF							

Survey name	Frequency	Responsibility (Lead agencies)	Year						
			2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Development of sub-county specific Sampling Frame	10 Yearly	KNBS							
Wholesale Prices Surveys	Weekly	KNBS, MoALF							
Survey of Cooperatives	Biennial	KNBS, MoIED							
Irrigation Water Use Survey	5-yearly	MoWI							

3.5.3 Monitoring and Evaluation

Introduction

Monitoring and evaluation is an important phase in gauging the progress of implementation of SPARS. This will be a continuous process of collecting and analysing information to assess the efficiency and effectiveness in implementing the Strategic plan. The ANES committee will be responsible for monitoring and evaluation of the implementation of the Strategic plan. This provides a mechanism for SPARS management (Agricultural Statistics Steering Committee-ASSC) to realize its mandate to formulate and monitor implementation strategies for agricultural statistics.

Monitoring Tools

The indicators in the detailed logical framework will be used in tracking implementation of the SPARS. In addition, for successful implementation of SPARS, activities shall be prioritized in the annual work plans and aligned to implementing institutions budgets and performance contracts.

Monitoring, Evaluation and Reporting

Each subsector will provide status reports on activities and key performance indicators being implemented on a regular basis. The KNBS, through the ANES secretariat, shall consolidate the subsector reports on progress of SPARS implementation. The developed reports shall be:-

- Bi-annual report
- Annual report
- Mid-term review report
- End of plan period evaluation report

Feedback Mechanism

The reports generated will be communicated through management and stakeholders meetings, workshops and review seminars amongst others. The progress reports will prompt formulation of corrective measures where appropriate.

Results-Based logical Framework

A Logical Framework for Monitoring has been developed to provide the Results Chain giving the Impact, outcomes and outputs of SPARS and also the performance indicators (Baseline and Targets), Means of verification including Risks and Mitigation Measures.

The Logical Framework for Monitoring is given in Annex 6 of this Strategic Plan.

3.5.4 Advocacy and Communication Plan

Introduction

Agricultural data and statistics are generated by various agencies, institutions and Counties. The SPARS shall guide implementation of sector statistical activities, thereby enhancing production of agricultural and rural statistics in the country. It will facilitate prioritization of agricultural statistical programmes for informed planning, monitoring and evaluation, policy design and decision making. The SPARS communication plan aims at reaching the entire spectrum of agriculture statistics stakeholders through an all-inclusive and participatory approach.

The SPARS communication objectives include:

1. to increase stakeholder awareness of agricultural statistics;
2. to enhance stakeholder buy-in and goodwill for SPARS activities;
3. to create a platform for dialogue and advocacy in agricultural and rural statistics; and
4. to promote knowledge sharing and adoption of new methodologies, tools and good practices in the field of agricultural statistics.

Implementation approach

Implementing the communication plan for the SPARS_KEN will be underpinned by an integrated and holistic approach. The integrated approach will encompass use of various methodologies in communicating the identified SPARS outputs. These will include breakfast meetings, other fora, workshops and, print and electronic media. Holistic approach will entail constituting a multi-agency secretariat drawn from the implementing institutions and counties. This communication plan will also be anchored within the NSDS framework.

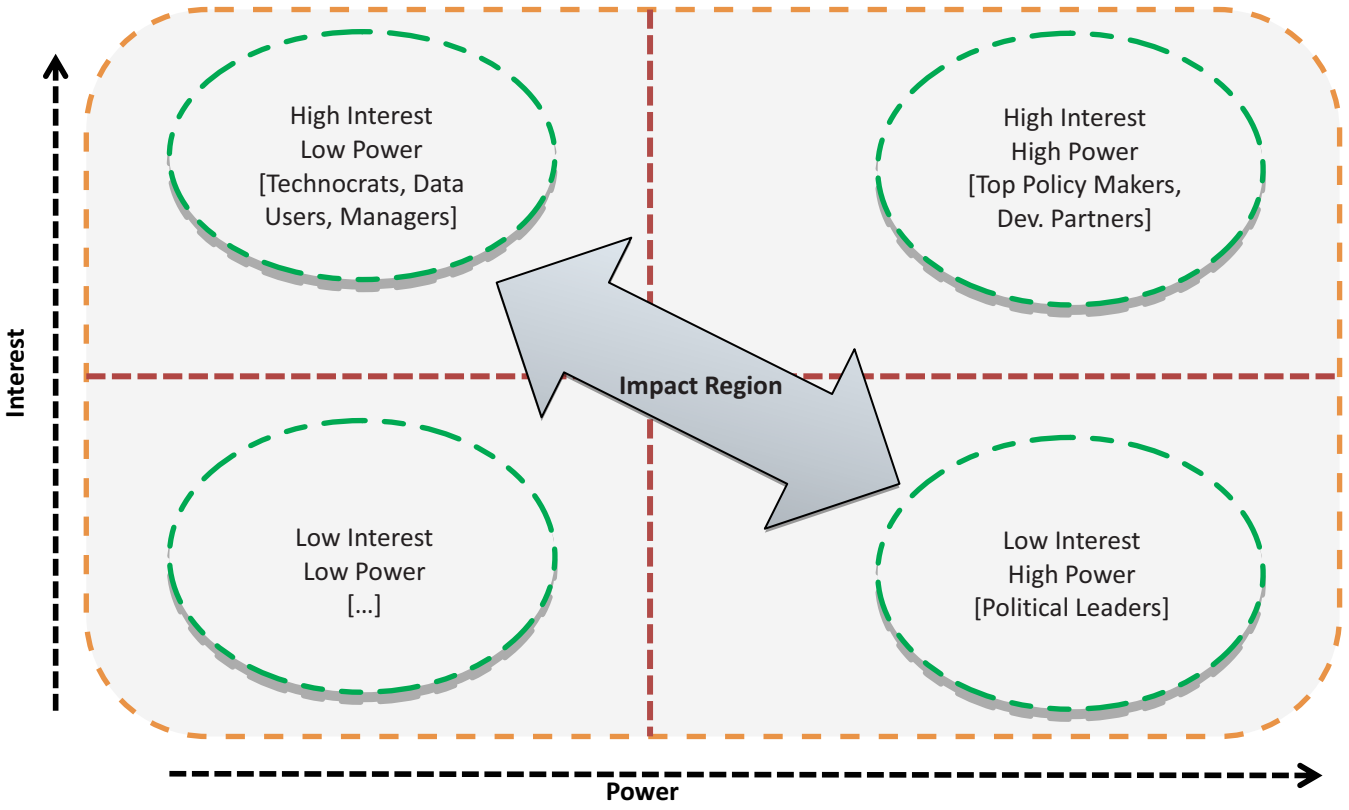
The following will be the members of the secretariat;

i. Kenya National Bureau of Statistics (KNBS)
ii. Ministry of Agriculture, Livestock and Fisheries (MoALF)
iii. Ministry of Environment and Natural Resources (MENR)
iv. County representative

Stakeholder Mapping and Prioritization Matrix

To effectively deliver its goals and objectives, the communication secretariat will as a first priority undertake a mapping of stakeholders' key in the delivery of the SPARS. This will assist in putting efforts in the weak areas for optimal results. The next crucial step will be to develop a priority matrix for categorization of the stakeholders into four categories according to their interest and influence in agricultural statistical activities. The structure of a Priority Matrix is given in Figure 3.1 below.

Figure 3.1: Priority Matrix



The SPARS shall guide implementation of sector statistical activities, thereby enhancing production of agricultural and rural statistics in the country.

It will facilitate prioritization of agricultural statistical programmes for informed planning, monitoring and evaluation, policy design and decision making.

The SPARS communication plan aims at reaching the entire spectrum of agricultural statistics stakeholders through an all-inclusive and participatory approach.

The Communication plan will be underpinned by an integrated and holistic approach. An integrated approach will encompass use of various methodologies/approaches in communicating the identified outputs. A multi-agency secretariat drawn from the implementing institutions and counties and will be anchored within the NSDS FRAMEWORK.

The groups of stakeholders (Audience /Target group) and the key messages to them are given in the table below:

Audience/Target Group	Key messages
High Interest, High Power [Top Policy Makers, Dev. Partners]	Importance of agricultural statistics
High Interest, Low Power [Technocrats, Data Users, Managers]	Statistics have a cost,
Low Interest, High Power [Political Leaders]	The production of reliable agricultural statistics is a profitable investment
Low Interest, Low Power […]	Why should statistics be produced?

3.5.5 Financing Strategy

The financing strategy would be that of setting priorities to activities for financing. There will be three priorities: Priority 1 will refer to those activities that will be fully financed through routine Exchequer allocations to the various institutions under the Agriculture and Rural Statistics System (ARSS) in addition to financial support from sector Development Partners. Priority 2 will be those activities likely/possible to be financed while Priority 3 will be those activities unlikely to be financed. The SPARS_KEN document will also be used as a resource mobilization tool.

Find in the table below activities, SPARS_KEN activities, budget estimates and the priority assigned to each activity

Table 3.3: Financing Strategy

Serial No.	Activities	Budget Estimates (KSh Million)	Priority (1=Fully Financed 2=likely/possible to be financed, 3=Unlikely)
1	Revision of The Statistics Act 2006	10	1
2	Strengthen the producer and user committee of Agriculture, Nutrition and Environment Statistics (ANES)	25	1
3	Set-up and strengthen functional statistics units	50	1
4	Recruit and deploy adequate personnel for statistical activities	10	1
5	Training of agricultural statistics personnel (Basic statistics and computing, data processing etc.)	50	1
6	Develop and disseminate the compendium of Agriculture statistical methods and definitions to statistical units across ARSS	20	1
7	Develop a metadata dictionary/handbook for agriculture statistics	10	1
8	Adopt and domesticate international agricultural statistics standards (WCA, ISIC etc.)	10	1
9	Conducting advocacy and communication campaigns for ARS to top policy makers (national and county), private sector and development partners	100	1
10	Lobby for specific budget lines for agriculture statistics activities	2	1
11	Solicit funding from governments (National & County) and development partners	5	1
12	Eliminate duplications in statistical activities	5	1

Serial No.	Activities	Budget Estimates (KSh Million)	Priority (1=Fully Financed 2=likely/possible to be financed, 3=Unlikely)
13	Mainstreaming agricultural and rural statistics in all subsectors of agriculture	1	2
14	Develop Regulations to govern the Act and policies	1	2
15	Create statistics awareness and sensitization	5	2
16	Acquire or refurbish offices for Agricultural Statistics activities	300	2
17	Procure field data collection equipment	10	2
18	Develop Sampling Frame for Agricultural Statistics	500	2
19	Procure computers and relevant software/applications for statistical work	250	2
20	Build capacity in modern dissemination platforms	20	2
21	Integrate modern technology (use of PDAs, tablets, android phones etc.) in data collection, transmission	50	2
22	Establishment of GIS based Agriculture databases	20	2
23	Motivate and improve staff wellness	10	2
24	Hold a national Agriculture Statistics conference	200	2
25	Conduct Censuses & Surveys	4,155.5	2
26	Procure transport equipment for statistics	500	3
	Total	**6,319.5**	

Costed Censuses and Surveys

Table 3.4 gives the cost of Censuses and surveys to be undertaken in the Agriculture Sector during the plan period 2015-2015.

Table 3.4: Costed Censuses and Surveys

Survey name	Frequency	Budget
Seasonal Agricultural Survey	Bi-annual	1,900.0
Census of livestock slaughter	Decennial	50.0
Census of horticulture production	5 yearly	500.0
Census of Tree Cover	3 Yearly	100.0
Kenya integrated household budget survey	5 yearly	-
Agricultural and livestock production (household and large farms) survey	Biennial	430.0
Milk production and marketing survey	5-yearly	50.0
Cost of agricultural production survey	Biennial	54.0
Crop forecast survey	Quarterly	140.0
Producer prices survey	Quarterly	70.0
Retail market prices survey (food commodities and agriculture inputs)	Weekly	45.5
Fisheries catch assessment surveys	Quarterly	140.0
Inland fisheries frame surveys	Biennial	54.0
Marine and coastal artisanal fisheries frame survey	Biennial	34.0
Aquaculture Inventory	5-yearly	20.0
Livestock and product market prices survey	Weekly	56.0
Tree Seedling Planted	Semi-Annually	21.0
Tree Products Prices	Quarterly	7.0
Food Security Assessment Survey	Quarterly	70.0
Development of sub-county specific Sampling Frame	10 Yearly	-
Wholesale Prices Surveys	Weekly	14.0
Survey of Cooperatives	Biennial	150.0
Irrigation Water Use Survey	5-yearly	250.0
Total		**6,319.5**

ANNEXES

Annex 1: LIST OF PARTICIPANTS IN THE DEVELOPMENT OF THE SPARS_KEN

Technical and financial support

African Development Bank (AfDB)

List of Resource persons

International consultants:

Mr. Enock Ching'anda, AfDB
Mr. Vincent Ngendakumana, AfDB

National Strategy Coordinators:

Mr. Zachary Mwangi, Director General, KNBS
Mr. James Gatungu, NSC, Director Production Statistics
Mr. Abner Ingosi, Food Security Unit, State Department of Agriculture

National experts/Consultants:

Mrs. Mary Wanyonyi, National Consultant, Cross Cutting and County Agricultural Statistics Subsector
Mr. Alex Mwaniki, National Consultant, Crops Subsector
Mr. David Muthami, National Consultant, Livestock Subsector
Mr. Peter Nyongesa Wekesa, National Consultant, Fisheries Subsector
Mr. Anthony Mugane, National Consultant, Forestry and Environment Subsector

KNBS Staff who participated in the development of SPARS_KEN

Mr. Patrick Mwaniki
Mr. John Mburu
Mr. Alphonse Orang'o
Ms. Tabitha Weru
Mr. Silvester Maingi

Annex 2: LIST OF STAKEHOLDERS BY SUBSECTOR

Crops subsector

S/No.	Institution	Department	Data type (Producer=1, User=2, Both=3)	Focal Person
1	Ministry of Agriculture, Livestock & Fisheries	Policy	2	Anne Onyango (MBS)
		Crops	3	Dr. Johnson Irungu, Jacinta Ngwiri, Tom Dienya, Abner Ingosi
		Agri-business	2	Oseko Edwin
		Irrigation Technology & Mechanization	2	Eng. Wilfred Onchoke
		Crops and Plant Protection	2	Joshua Oluyari
		Research Education and Advisory Service	3	Timothy Gacheha
		Ministry Projects/programmes	2	Philomena Chege/Agnes Kyalo Nginyangi
		Agricultural Mechanization	2	Dr. Samuel Guto
2	KNBS	Agriculture	2	Patrick Mwaniki
		Agriculture	2	John Mburu
3	Ministry of Health	Nutrition	3	
4	Ministry of Environment and Water, Irrigation Engineer	Environment	1	Augustine Njogu
5	Department of Resource Surveys and Remote Sensing DRSRS (MEMR)	-	3	Soita Wafuke
6	Ministry of Co-operative Development and Marketing, Co-operatives, Asst. Commissioner for Co-operatives	-	3	Maundu Maingi
Private Sector				

S/No.	Institution	Department	Data type (Producer=1, User=2, Both=3)	Focal Person
7	Green Dreams Tech Ltd.		2	Susan Kahumbu
8	Team Leader, Eastern Africa Grain Council		3	Jane Wanza
9	Vijana Business Executives SACCO		1	David Mugah
10	Equity Bank		2	Titus Kariuki
11	Ivory Consult Ltd.		3	Anja Oussoren
12	Ivory Consult Ltd.		3	Clive Wafukho
13	Progeny International		2	Elisabeth Ayesa Muhati
14	Pyrethrum Growers, Chairman			Justus Monda
15	Syngenta Foundation, Programme Director,		2	George Osure
17	M-farm, CEO		2	Jamila Abass
18	Amalgamated Chama Limited ACL, Chairman,		2	Mwai Kihu
19	Green Dreams, Technical Advisor,		2	Francis Kioko
20	Fresh Produce Exporters Association of Kenya (FPEAK), Technical Advisor		2	Brenda Muga
21	Co-operative bank		2	Mary Achine
	Farmer Organizations/Representatives/Associations			
22	Kenya National Federation of Agricultural Producers (KENFAP)		2	Libaisi Judith
23	Kenya Livestock		2	Michael Mboti

S/No.	Institution	Department	Data type (Producer=1, User=2, Both=3)	Focal Person
	Producers Association (KLPA)			
	Donors/International Organizations			
24	African Union Ecological Organic Agriculture Initiative (EOA)		2	Dr. Sarah Olembo
25	FAO-KENYA		2	Simon Muhindi
26	World Bank/Agriculture Section		2	Dr. Karanja
	Research Institutions			
27	KIPPRA			Dr. Omiti KIPPRA
28	Youth Agency for Development of Science, Technology & Innovation			Caleb Kiprono Metto
29	KALRO			Dr. Mulinge W
30	ILRI (International Livestock Research Institute), Regional Strategic Analysis & Knowledge Support System, Research Analyst,			Silvester Ogutu
31	ILRI, ReSAKSS, Co-ordinator,			Joseph Karugia
	Media/Journalists			
32	Africa correspondent Journalist			Miss Ruehl
33	One World Public Relations			Reuben Kyama
	PARASTATALS			
34	AFFA (Coffee Directorate)			Grenville Melli
35	AFFA (Horticultural Crops Directorate)			Zakayo Magara
36	County Agriculture			Dr .Orot Stephen

Fisheries Subsector

Stakeholder	Stakeholder interest	Focal Point
Marine fisheries	Collection, analysis and dissemination of marine fisheries	Stephen Ndegwa Waithaka
Inland fisheries	Collection, analysis and dissemination of marine fisheries	Peter Mateta Nzungi
Aquaculture	Collection, analysis and dissemination of marine fisheries	Raphael Mbaluka
Kenya Marine and research institute	Fisheries Research	Johnstone Omukoto
Universities (The University of Eldoret)	Teaching and research	Julius O Manyala

Forestry and Environment Subsector

Stakeholder	Stakeholder interest	Focal Point
National Environmental Management Authority	**Environment:** Solid, Liquid and Gaseous Waste Management	Wallace Ngolo
Water Resources Management Authority	**Water:** Volume, turbidity of Water available for Drinking, Industrial and Irrigation	Onorata Githendu
Kenya Forest Service	**Forestry:** Area of tree cover, Number of mature trees, Production of timber, and Production of non-timber products	Serah Kahuri
Kenya Forest Research Institute	**Forestry Research**	M. N. Muchiri
Kenya Wildlife Service	**Wildlife:** Number and type of Wildlife animals, Endangered species of Wildlife animals	Wycliff Mutero
Minerals	**Minerals:** Volume and type of minerals mapped and extracted	Omondi Okudo
Kenya National Bureau of Statistics	Environment	Silvester Maingi

Livestock Subsector

No.	Name	Organization	Mobile No.	Contact ~ Email
1	Benjamin Kibor	MoALF -SDL	071 253 9521	bkibor2001@yahoo.com
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5	Waweru Kabaka	MoALF -SDL		wkabaka@gmail.com
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11	Norah Kandie	MoALF - Vet	0725 118064	norajeruto65@yahoo.com
12	Mr. Obed Malala	MoALF - Vet	0722 331368	leather.division@yahoo.com
13	Gerald Gichuki	KMC	020 3542623	
14	Wellington Mulinge	KALRO	0720 788921	wellington.mulinge@kalro.org
15	James Githuku	Tegemeo Institute	0723 805970	jgithuku@tegemeo.org
16	Timothy Njagi	Tegemeo Institute	0202347297	tnjeru@tegemeo.org
17	Joyce Makau	Tegemeo Institute	0723 235481	jmakau@tegemeo.org
18	Paul Guthiga	ILRI	0725587381	p.guthiga@cgiar.org
19	Benjamin Muchiri	KNBS – National Accounts	0710 334963	bmuchiri@knbs.or.ke
20	Tabitha Wambui	KNBS – National Accounts	0721 540040	tmwangi@knbs.or.ke

County and Cross-cutting areas Subsector

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Maria Nyariki	State Department of Agriculture	+254 (0)722583138	mnyariki@gmail.com
Josiah Omosa	Kenya National Bureau of Statistics (KNBS)	+254 (0)722753952	jomosa@knbs.or.ke
Benjamin Avusevwa	Kenya National Bureau of Statistics (KNBS)	+254 (0)721246826	bavusevwa@knbs.or.ke
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List of Development Partners

- Food and Agriculture Organization of the United Nations (FAO)
- African Development Bank (AfDB)
- Alliance for a Green Revolution in Africa (AGRA)

Annex 4: CITED LITERATURE

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31. Kenya National Bureau of Statistics Strategic Plan

Annex 5: LOGICAL FRAMEWORK MATRIX

Outputs	Activities	Indicators	Means of verification	Responsibility	Time Frame (Year)	Budget Estimates (Kshs Millions)	Assumptions and risks
Strategic Goal 1: Review the Statistical legal frameworks in line with the constitution and emerging data needs							
Purpose : Improved coordination of agricultural statistics data production							
Strategy1: Review of relevant laws, regulations and policies governing agricultural statistics							
Revised Act	Revision of The Statistics Act 2006	Enactment of The Act.	Revised Statistics Act 2006;	KNBS	1	10	***Assumption:*** Political will to fast-track the Enactment
Mainstreamed Statistics	Mainstreaming agricultural and rural Statistics in all subsectors of agriculture.	Specific Clauses addressing Statistics in the policies	No. of Policies with Statistics Clauses	MoALF, MENR, County Government, Dev. Partners, KNBS	5	1	
Regulations	Develop Regulations to govern the Act and policies	Copy of developed regulations;	Published regulations in the Kenya Gazette	MoALF, MENR, County Government	5	1	

Strategy 2: Enhance and strengthen agricultural data collection and compilation							
Coordination of agricultural and rural statistics	Coordinate the collection and compilation of agricultural and rural statistics						
Awareness on importance of statistics created	Create statistics awareness and sensitization	Sensitization workshops	Number of sensitization forums held	KNBS	1	5	
Quality statistics produced	Strengthen the producer and user committee of Agriculture, Nutrition and Environment Statistics (ANES)	Counties and MDAs incorporated into ANES	Number of MDAs participating in ANES committee meeting. Minutes for the ANES	KNBS	5	25	***Assumption:*** Collaboration from the County Governments.
Strategic Goal 2: Develop and Improve Physical, Statistical and ICT Infrastructure							
Purpose : Efficient statistical operations within a conducive work environment for agricultural statistics							
Strategy 1: Acquire appropriate physical infrastructure							
Adequate office space	Acquire or refurbish offices for Agricultural Statistics activities	Established offices	Number of offices	MoALF, MENR, County Government, Dev. Partners, KNBS	5	300	-

Adequate data collection equipment	Procure field data collection equipment	Adequate number of equipment for field data collection	Number of field data collection equipment	MoALF, MENR, County Government, Dev. Partners, KNBS	1	10	***Assumptions Funds shall be allocated for procurement of equipment***
Transport equipment	Procure transport equipment for statistics	Transport equipment (Vehicle, motor cycles, motor boats, etc.)	Number of transport equipment dedicated to statistical work	KNBS, MoALF, MENR, County Government	3	500	***Assumptions Approvals shall be granted for vehicles procurement***
Strategy 2: Develop and adopt modern statistical infrastructure							
Sampling Frames	Develop Sampling Frame for Agricultural Statistics	Sampling Frame	Number of Sampling Frames	KNBS, County Government	5	500	
Agricultural statistical units established	Set-up and strengthen functional statistics units	Statistical units established	Number of statistical units established	MoALF, MENR, County Government, Dev. Partners, KNBS	2	50	

Strategy 3: Strengthen use and application of ICT in statistical operations

ICT Equipment	Procure computers and relevant software /applications for statistical work	Availability of computers and statistics software/applications	Number of Statistics Units with computers and statistical software.	Counties, KNBS, MoALF	2	250	***Assumption:*** Existence of Units
Trained staff on dissemination platforms	Build capacity in modern dissemination platforms	Staff trained on data dissemination	Number of staff trained	MoALF, MENR, County Government, Dev. Partners, KNBS	2	20	***Risk:*** High turnover
Use of modern technology	Integrate modern technology (use of PDAs, tablets, android phones etc.) in data collection, transmission	Data collected and transmitted on a real time basis	Reduced reporting time.	MOALF, MENR, County Government, Dev. Partners, KNBS	2	50	***Risk:*** Rapid changes in ICT technology
Database	Establishment of GIS based Agriculture databases	GIS based agriculture databases established	Number of counties with up to date GIS based socio-economic databases	Counties	1	20	***Risk:*** Rapid changes in GIS software
Strategic Goal 3: Strengthen human capacity and enhance statistical operations across the Agricultural and Rural Statistics System (ARSS)							
Purpose : Highly skilled and professional statistical personnel							

Strategy 1: Establish, develop and maintain critical mass of skilled and high performing agriculture statistics personnel							
Statistical cadre appointed in MDAs and counties	Recruit and deploy adequate personnel for statistical activities	Letters of appointments/ deployment of statistical personnel	No. of personnel recruited /deployed as statistical personnel	MoALF, MENR, County Government, Dev. Partners, KNBS	5	10	***Assumptions***
Skilled statistics staff	Train agricultural statistics personnel (Basic statistics and computing, data processing etc.)	Trained agricultural statistics personnel	Number of agricultural statistics personnel trained	MoALF, MENR, County Government, KNBS	5	50	***Risk:*** High staff turnover
Motivated Staff	Motivate and improve staff wellness	Bonding sessions, reward schemes and staff wellness programs	Number of programmes supporting staff wellness	MoALF, MENR, County Government, KNBS	5	10	
Strategy 2: Promote adoption of best practices, methods and standards in all agricultural statistics processes							
Harmonised reporting on statistical methods and definitions	Develop and disseminate the compendium of Agriculture statistical methods and definitions to statistical units across ARSS	Compendium of Agricultural statistics methods and definitions	Copy of Compendium of Agricultural statistics methods and definitions and number of disseminations fora	KNBS	1	20	- ***Assumption***: Active participation from agriculture sectors

Meta data handbook	Develop a metadata dictionary/hand book for agriculture statistics	Metadata handbook	Copy of Metadata handbook and number of dissemination fora	KNBS	1	10	***Assumption*:** Active participation from agriculture sectors
Use of harmonised standards and manuals	Adopt and domesticate international agricultural statistics standards (WCA, ISIC etc.)	National manuals on ARSS and implementation of international standards	Copy of National manuals for ARSS and adherence to the standards	KNBS	2	10	
Strategic Goal 4: Address agricultural statistics data gaps							
Purpose : Meet user data requirements							
Strategy 1: Design and implement censuses and surveys							
Data gaps minimized	Conduct Censuses and Surveys	reports	Number of census and surveys conducted	MoALF, MENR, County Government, KNBS	7	4,155.5	
Strategy 2: Undertake statistical activities specific to meet data needs							
Data gaps minimized	Analyse administrative records, incorporate cross-border data	datasets	Number of indicators generated from administrative records	MoALF, MENR, County Government, KNBS	1		
Strategic Goal 5: Secure adequate financial resources on a sustainable basis for agriculture statistical activities							
Purpose 5: Timely implementation of scheduled agricultural statistical activities							

Strategy 1: Raise the profile of agricultural statistics in the country							
Recognition and support for ARS	Conduct advocacy and communication campaigns for ARS to top policy makers (national and county), private sector and development partners	High profile fora	Number of fora held	MoALF, MENR, KNBS	1	100	***Risk***: Poor attendance of participants
Recognition and support for ARS	Hold a national Agriculture Statistics conference	Conference report	Copy of Conference report	MoALF, KNBS	1	200	
Strategy 2: **Mobilization of adequate funds for agriculture statistics activities**							
Agricultural Statistics Budget Line	Lobby for specific budget lines for agriculture statistics activities	Agricultural statistics Budget lines	Printed Estimates/County approved budgets	Counties, MoALF, MENR	1	2	
Increased funds	Solicit funding from governments (National & County) and development partners	Commitments for funding	Resources mobilized through proposals/MOUs/ Meetings	Counties, MoALF, MENR, KNBS	5	5	

Strategy 3: Prudent use and management of financial resources							
Optimal use of financial resources	Eliminate duplications in statistical activities	Harmonized ARS work plans	ARS Work plans	MoALF, MENR, County Government, KNBS	5	5	***Assumption***: Work plans are aligned to budgets
				Total		**6,319.5**	

Annex 6: LOGICAL FRAMEWORK FOR MONITORING

Strategic Plan for Development of Agricultural and Rural Statistics in Kenya (2015-2022) **Purpose: To ensure that agricultural statistics are adequately integrated in the national statistical system, improve coordination of agricultural statistics data production, build highly skilled and professional statistical personnel in agriculture sector and meet user data needs for decision making purpose**						
RESULTS CHAIN		**PERFORMANCE INDICATORS**			**MEANS OF VERIFICATION**	**RISKS MITIGATION MEASURES**
		Indicator	**Baseline (Reference situation)**	**Target**		
IMPACT	**IMPACT**					
	Good quality agricultural and rural statistics are produced covering all subsectors in a coordinated, timely and sustainable manner and are made available to all users	Number of surveys conducted and statistical indicators published on administrative records data in each subsector			Published statistics of each subsector	<u>Risks</u> -Lack of financial resources; -Inadequate human resources; -Non- existence of strong statistical units <u>Mitigation measures</u>
EFFECTS/ RESULTS	**EFFECTS**					
	1. the statistical legal framework is reviewed in line with the constitution and emerging data needs	Reviewed Statistics Act	Under review	Amendments made to the Statistics Act	Revised Statistics Act	Lack of political will to fast-track the enactment
	2. Physical, statistical and ICT infrastructures	Number of physical, statistical and ICT	Inadequate infrastr-ucture	70% Infrastr-ucture in	- Number of new offices acquired/created; -Number of new	-Lack of resources for establishing new

	are developed and improved	infrastructures improved		place	statistical infrastructure (e.g. Sampling Frames); -Number of new ICT infrastructures	infrastructures due to budget freeze - Rapid changes in ICT technology
	3. Human capacity and statistical operations across the agricultural and rural statistics system strengthened and enhanced	- Number of statistical staff trained by subsector -Number of statistical operations strengthened by subsector	<10%	50%	- Number of statistical staff trained by subsector -Number of statistical operations strengthened by subsector	High staff turnover
	4. Agricultural and rural statistics data gaps are addressed	Percentage coverage of data needs by subsector	20%	100%	Number of censuses and surveys conducted	- Lack of budgeted resources -Lack of resources from development partners
	5. Adequate financial resources for agricultural statistical activities are secured on a sustainable basis	Rate of mobilization of financial resources	<5%	30%	Printed estimates/approved budgets	Budgeted resources not available/shifted
PRODUCTS/ OUTPUTS	**PRODUCTS**					
	1.1.1 Revised Act	Enactment of the Act	0	1	Revised Statistics Act 2006	Assumption Political will to fast-track the enactment
	1.1.2 Statistics	Specific clauses	30%	80%	No of policies with statistics	

	mainstreamed	addressing statistics in the policies			clauses	
	1.1.3 Regulations established	Copy of developed regulations	0	2	Published regulations in the Kenya Gazette	
	1.2.1 Awareness of importance of statistics created	Sensitization workshops	30%	90%	Number of sensitization forums held	
	1.2.1 Quality statistics produced	Counties and MDAs incorporated into ANES	40%	90%	-Number of MDAs participating in Agriculture, Nutrition and Environment Statistics (ANES) committee meetings - Minutes of the ANES meetings	
	2.1.1 Adequate office space made available	Established offices	30%	70%	Number of offices	
	2.1.2 Adequate data collection equipment available	Adequate number of equipment for field data collection	45%	80%	Number of field data collection equipment	
	2.1.3 Adequate transport equipment	Transport equipment (vehicles, motor cycles, motor boats, etc.)	<5%	40%	Number of transport equipment dedicated to statistical work	
	2.2.1 Sampling frames for statistics	Sampling frames	1	2	Number of sampling frames	

	developed and available					
	2.2.2 Agricultural statistical units established in subsectors	Statistics units established	<2%	50%	Number of statistical units established	
	2.3.1 ICT equipment use strengthened	Availability of computers and statistics software/ applications	40%	80%	Number of statistics units with computers and statistics software	
	2.3.2 Staff trained on dissemination platforms	Staff trained on data dissemination	10%	60%	Number of trained staff	
	2.3.3 Use of modern technology strengthened	Data collected and transmitted on real time basis	No deadline	3 months after collec-tion	Reduced reporting time	
	2.3.4 Databases established	GIS based agriculture database established	--	30%	Number of Counties with up to date GIS based socio-economic databases	
	3.1.1 Statistical cadre appointed in MDAs and Counties	Letters of appointments /deployment of statistical personnel	<10%	50%	Number of personnel recruited/deployed as statistical personnel	
	3.1.2 Skilled statistical staff available	Trained agricultural statistical personnel	Few	50%	Number of agricultural statistical personnel trained	
	3.1.3 Staff in agricultural	Bonding sessions,	50%	90%	Number of programmes	

	statistics motivated	reward schemes and staff wellness programmes			supporting staff wellness	
	3.2.1 Harmonised reporting on statistical methods and definitions promoted	Compendium of Agricultural statistics methods and definitions	0	1	Copy of Compendium of agricultural statistics methods and definitions and number of dissemination fora	
	3.2.2 Metadata handbook developed	Metadata Handbook	0	1	Handbook and number of dissemination fora	
	3.2.3 Use of harmonised standards and manuals promoted	National manuals on ARS and implementation of international standards	30%	50%	Copy of National manual for ARS and adherence to standards	
	4.1.1 Data gaps minimized	Reports	20%	100%	Number of censuses and surveys conducted	
	5.1.1 Recognition and support for ARS	High profile fora	20%	100%	Number of fora held	
	5.1.2 Recognition and support for ARS	Conference report			Copy of Conference report	
	5.2.1 Agricultural statistics budget lines established	Agricultural statistics budget line	40%	90%	Printed or estimated/County approved budgets	
	5.2.2	Commitments	<5%	30%	Resources	

	Increased funds for agricultural statistics available	for funding			mobilised through proposals/MOUs/ Meetings	
	5.3.1 Optimal use of financial resources	Harmonised ARS work plans	10%	100%	ARS Work plans	
	MAIN ACTIVITIES				**RESOURCES**	
MAIN ACTIVITIES	Revision of the Statistics Act				**6,319.5 Million Kenyan Shillings**	
	Mainstreaming statistics in all crops, livestock, fisheries and forestry policies					
	Develop regulations to govern the Act and policies					
	Create statistics awareness and sensitization					
	Strengthen the producer and user committee of agriculture, nutrition and environment statistics (ANES)					
	Acquire or refurbish offices for agricultural statistics activities					
	Procure field data collection equipment					
	Procure transport equipment for statistics					
	Develop sampling frame for agricultural statistics					
	Set-up and strengthen functional statistics units					
	Procure computers and relevant software/applications for statistical work					
	Build capacity in modern dissemination platforms					
	Integrate modern technologies (use of PDAs, tablets, android phones, etc.) in data collection, transmission					
	Establishment of GIS based agriculture database					
	Recruit and deploy adequate personnel for statistical service					
	Training agricultural statistics personnel (Basic statistics and computing, data processing, etc.					
	Motivate and improve staff wellness					
	Develop and disseminate the compendium of agriculture statistical methods and definitions to statistical units across ARS					
	Develop a metadata/handbook for agriculture statistics					
	Adopt and domesticate international agricultural					

	statistics standards (WCA, ISIC, etc.)		
	Conduct Censuses and Surveys		
	Census of agriculture and livestock	Decennial	
	Census of livestock slaughter	Decennial	
	Census of horticulture production	5 yearly	
	Census of Tree Cover	3 Yearly	
	Kenya integrated household budget survey	5 yearly	
	Agricultural and livestock production (household and large farms) survey	5 yearly	
	Milk production survey	5-yearly	
	Cost of agricultural production survey	Biennial	
	Crop forecast survey	Quarterly	
	Producer prices survey	Quarterly	
	Retail market prices survey (food commodities and agriculture inputs)	Weekly	
	Fisheries catch assessment surveys	Quarterly	
	Inland fisheries frame surveys	Biennial	
	Marine and coastal artisanal fisheries frame survey	Biennial	
	Aquaculture Inventory	5-yearly	
	Livestock and product market prices survey	Weekly	
	Tree Seedling Planted	Semi-Annually	
	Tree Products Prices	Quarterly	
	Food Security Assessment Survey	Quarterly	
	Development of sub-county specific Sampling Frame	10 Yearly	
	Wholesale Prices Surveys	Weekly	
	Survey of Cooperatives	Biennial	
	Irrigation Water Use Survey	One time	
	Conducting advocacy and communication campaigns for ARS to top policy makers (National and County), private sector and development partners		
	Hold national agriculture statistics conference		
	Lobby for specific budget lines for agriculture statistics activities		
	Solicit funding from governments (National &County) and development partners		
	Eliminate duplication in statistical activities		

Annex 7: DETAILED PLAN OF ACTION

STRATEGIC GOAL/ EXPECTED RESULTS	ACTIVITIES	Priority (1=High, 2=Average, 3=Low)	COST PER YEAR (MILLION KENYA SHILLINGS)							
			2015 /16	2016 /17	2017 /18	2018 /19	2019 /20	2020 /21	2021 /22	Total
SG 1: Review the statistical legal framework in line with the constitution and emerging data needs										
1.1 Review of relevant laws, regulations and policies governing agricultural statistics										
1.1.1 Revised Act	Revision of the statistics Act 2006	1	10.0							10.0
1.1.2 Mainstre-aming of statistics	Mainstreaming statistics in all crop, livestock, fisheries and forestry policies	2		0.2	0.2	0.2	0.2	0.2		1.0
1.1.3 Regulations	Develop regulations to govern the Act and policies	2		0.3	0.2	0.2	0.2	0.1		1.0
1.2. Enhance and strengthen agricultural statistics coordination and collaboration										
1.2.1 Awareness of importance of statistics	Create statistics awareness and sensitization	2	5.0							5.0
1.2.2 Quality statistics produced	Strengthen the producer and user committee of ANES	1	10.0			5.0				25.0
SG 2: Develop and improve physical, statistical and ICT infrastructure										
2.1 Acquire appropriate physical infrastructure										
2.1.1 Adequate office space	Acquire or refurbish offices for agricultural statistical activities	2		60.0	60.0	60.0	60.0	60.0		300.0

2.1.2 Adequate data collection equipment	Procure field data collection equipment	2		10.0						
2.1.3 Transport equipment	Procure transport equipment for statistics	2		100.0	150.0	200.0			50.0	500.0
2.2 Develop and adopt modern statistical infrastructure										
2.2.1 Sampling frames	Develop sampling frame for agricultural statistics	2	50.0	50.0	400.0					500.0
2.2.2 Agricultural statistical units established	Set-up and strengthen functional statistical units	1		30.0	20.0					50.0
2.3 Strengthen use and application of ICT in statistical operations										
2.3.1 ICT equipment	Procure computers and relevant software/applications for statistical work	2	100.0	150.0						250.0
2.3.2 Trained staff on dissemination platforms	Build capacity in modern dissemination platforms	2	10.0	10.0						20.0
2.3.3 Use of modern technology	Integrate modern technology (use of PDAs, tablets, android phones, etc. in data collection,	2		35.0	15.0					50.0

	transmission									
2.3.4 Database	Establishment GIS based agriculture databases	2		20.0						20.0
SG 3. Strengthen human capacity and enhance statistical operations across the Agricultural and Rural Statistics System										
3.1 Establish, develop and maintain critical mass of skilled and high performing agricultural statistics personnel										
3.1.1 Statistical cadre appointed in MDAs and counties	Recruit and deploy adequate personnel for statistical activities	1			2.0	2.0	2.0	2.0	2.0	10.0
3.1.2 Skilled statistical staff	Training of agricultural statistics personnel (Basic statistics and computing, data processing, etc.)	1	10.0	10.0	10.0	10.0	10.0			50.0
3.1.3 Motivated staff	Motivate and improve staff wellness	2		2.0	2.0	2.0	2.0	2.0		10.0
3.2 Promote adoption of best practices, methods and standards in all agricultural statistics processes										
3.2.1 Harmonised reporting on statistical methods and definitions	Develop and disseminate the Compendium of agricultural statistics methods and definitions to statistical units across ARS	1		20.0						20.0
3.2.2 Metadata handbook	Develop a metadata dictionary/hand	1			10.0					10.0

	book for agricultural statistics									
3.2.3 Use of harmonised standards and manuals	Adopt and domesticate international agricultural statistical standards (WCA, ISIC, etc.	1	5.0	5.0						10.0
SG 4: Address agricultural statistical data gaps										
4.1 Design and Implement Censuses and Surveys										
4.1.1 Data gaps minimised	Conduct censuses and surveys	2	240.5	389.0	205.5	1498.5	633.5	560.5	628.0	4,155.5
	Survey name									
	Seasonal Agricultural Survey	1				700.0	400.0	400.0	400.0	1900.0
	Census of livestock slaughter		50.0							50.0
	Census of horticulture production					500.0				500.0
	Census of Tree Cover					100.0				100.0
	Kenya integrated household budget survey									-
	Agricultural and livestock production (household and large farms) survey		100.0		105.0		110.0		115.0	430.0
	Milk production					50.0				50.0

	survey									
	Cost of agricultural production survey		12.0		12.0		15.0		15.0	54.0
	Crop forecast survey		15.0	15.0	20.0	20.0	20.0	25.0	25.0	140.0
	Producer prices survey		10.0	10.0	10.0	10.0	10.0	10.0	10.0	70.0
	Retail market prices survey (food commodities and agriculture inputs)		6.5	6.5	6.5	6.5	6.5	6.5	6.5	45.5
	Fisheries catch assessment surveys		15.0	20.0	20.0	20.0	20.0	22.5	22.5	140.0
	Inland fisheries frame surveys			16.0		18.0		20.0		54.0
	Marine and coastal artisanal fisheries frame survey		8.0		8.0		8.0		10.0	34.0
	Aquaculture Inventory						20.0			20.0
	Livestock and product market prices survey		8.0	8.0	8.0	8.0	8.0	8.0	8.0	56.0
	Tree Seedling Planted		3.0	3.0	3.0	3.0	3.0	3.0	3.0	21.0
	Tree Products Prices		1.0	1.0	1.0	1.0	1.0	1.0	1.0	7.0
	Food Security									

	Assessment Survey		10.0	10.0	10.0	10.0	10.0	10.0	10.0	70.0
	Development of sub-county specific Sampling Frame									-
	Wholesale Prices Surveys		2.0	2.0	2.0	2.0	2.0	2.0	2.0	14.0
	Survey of Cooperatives			47.5		50.0		52.5		150.0
	Irrigation Water Use Survey			250.0						250.0
4.2 Undertake statistical activities specific to meet data needs										
4.2.1 Data gaps minimised	Analyse administrative records, incorporate cross-border data									
SG 5: Secure adequate financial resources on a sustainable basis for agricultural statistical activities										
5.1 Raise the profile of agricultural statistics in the country										
5.1.1 Recognition and support for Agriculture and rural statistics (ARS)	Conduct advocacy and communication campaigns for ARS to top policy makers (national and County), private sector and development partners	1		100.0						100.0
5.1.2 Recognition and support for ARS	Hold a national agricultural statistics conference	2		200.0						200.0
5.2 Mobilize adequate funds for agricultural statistics activities										

5.2.1 Agricultural Statistics Budget line	Lobby for specific budget lines for agriculture statistics activities	1	2.0							2.0
5.2.2 Increased funds	Solicit funding from governments (National and County) and Development Partners	1		1.0	1.0	1.0	1.0	1.0		5.0
5.3 Prudent use and management of financial resources										
5.3.1 Optimal use of financial resources	Eliminate duplication in statistical activities	1			1.0	1.0	1.0	1.0	1.0	5.0
								Total Cost		**6,319.5**

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