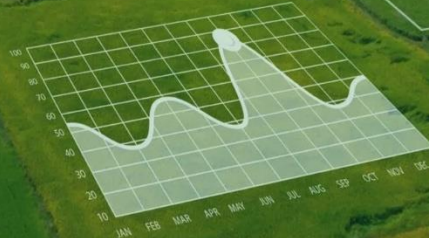




THE UNITED REPUBLIC OF TANZANIA

AGRICULTURE STATISTICS STRATEGIC PLAN 2022/23 - 2026/27



June 2022

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FOREWORD

The Second Agriculture Statistics Strategic Plan (ASSP II) is a working document that sets the roadmap to ensure the agriculture sector attains strategic progress for five years (July 2022 to June 2027). The plan, which is the part of National Statistical System guides the agriculture sector in providing harmonised, coordinated and quality statistics important for designing and implementing interventions and making appropriate decisions in agriculture sector. Likewise, this plan is a tool for overseeing the sector's performance in producing and managing key statistics related to agriculture. The ASSP II is an integral part of the Tanzania Statistical Master Plan Phase Two (TSMPII) 2022/23 – 2026/27, which also has put a special emphasis in reducing agriculture statistics gaps and further creating demand for such statistics to help the policy process and decision making.

The plan envisages contributing to the National Frameworks such as the Tanzania Development Vision 2025 through the Third Five-Year Development Plan (July 2021 - June 2026), Zanzibar Development Vision 2050 through the Zanzibar Development Plan (ZADEP) 2021-2026 and other sectoral frameworks. Indeed, a well-integrated system of official agricultural statistics into the National Statistical System is a strategic tool for contributing to the achievements of these key frameworks.

It is worth noting that the credibility of policies, development plans and decisions made within and outside the agriculture sector in the country depends much on reliable statistics. The production of reliable data ensures the country's efforts to plan for future growth and people's welfare. It includes the importance of using official statistics for measuring, evaluating and providing timely information on all interconnected aspects of socioeconomic development and agriculture performance.

Successful implementation of this Strategic Plan depends on the willingness and firm commitment, collaboration, participation and contribution of all stakeholders. The Government will work with stakeholders to mobilize resources for smooth implementation of the Plan and we look forward to the continued cooperation of all statistics actors in making ASSP II meet expectations of producers and users of agriculture statistics.



Hussein Mohamed Bashe (MP).

MINISTER FOR AGRICULTURE



Abdalah Hamis Ulega (MP)

MINISTER FOR LIVESTOCK AND FISHERIES

STATEMENT OF THE STATISTICIAN GENERAL



I am pleased to introduce the Second Five-Year Agriculture Statistics Strategic Plan (July 2022 to June 2027). The National Bureau of Statistics (NBS) and the Office of Chief Statistician General (OCGS) are committed to ensuring that the country continues to move forward strategically towards strengthening the national agricultural statistical system. Through this plan, we have positioned ourselves to ensure that the statistics contribute to measuring the social and economic development of the country by improving the contribution of official agriculture statistics in policy formulation, planning and informed decision-making in both public and private sectors.

We will strive to promote and facilitate the production, management and use of quality official agricultural statistics in an objective, timely and cost-effective manner through harmonised and coordinated statistical methods, standards and guidelines. This Strategic Plan has considered the interests of stakeholders in achieving this ambition. The Vision, Mission, Objectives, Targets and Performance Indicators will guide the implementation, monitoring, evaluation and reporting of the ASSP II results.

Our experiences, successes and lessons learnt from the first strategic plan will continue to be fundamental for improving service delivery to stakeholders and the public while observing our core values. Our core values centred on quality awareness, user focus, compliance, reliability, integrity, credibility, transparency, effectiveness and efficiency will guide our attitude and behaviour in service delivery.

I am delighted to extend my sincere gratitude to all stakeholders particularly, Food and Agriculture Organisation of the United Nations (FAO) for their valuable contributions to the preparation of the ASSP II. I also thank technical staff from Ministries, Departments and Agencies from Agriculture Sector Lead Ministries (ASLMs) who participated fully in formulating this Plan, including reviewing the ASSPI. We look forward to their continued cooperation in implementing this Plan. NBS and OCGS will ensure that implementation of the Plan is done in coordinated manner while acknowledging and valuing the contribution of all actors in the statistics ecosystem.

Dr Albina Chuwa
STATISTICIAN GENERAL

DEFINITIONS OF KEY TERMS

Term	Definition
Activity	Actions taken, or work performed to produce a given target. Activities are what institutions do and describe processes which are largely internal to an institution. They describe how a target is reached.
Appraisal	An overall assessment of the relevance, feasibility and potential sustainability of a series of interventions in a particular period.
Assumptions	Hypotheses about factors or risks which could affect the progress or success of an intervention.
Baseline Indicator Value	It is a historical value of an indicator and includes an associated date called the baseline indicator date.
Benchmark	Reference point or standard against which performance or achievement can be assessed. It often refers to the performance that has been achieved recently by other comparable institutions, or what can be reasonably inferred to have been achieved in the circumstances.
Coherence	The compatibility of interventions in a country, sector or institution.
Effectiveness	An extent to which an intervention's objectives are achieved, or are expected to be achieved, considering their relative importance.
Efficiency	A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to outputs or results.
Evaluation	An assessment, conducted as systematically and impartially as possible, of an activity, project, programme, strategy, policy, topic, theme, sector, operational area or institutional performance. It analyses the level of achievement of both expected and unexpected results, by examining the results chain, processes, contextual factors and causality, using appropriate criteria such as relevance, coherence, effectiveness, efficiency, impact and sustainability.
Feedback	The transmission of findings generated through an evaluation process to parties for whom it is relevant and useful to facilitate learning. This may involve the collection and dissemination of findings, conclusions, recommendations and lessons from experience.
Goal/ Development Objective	A statement concerning the successful realisation of an impact.
Governance	The way through which power and authority influence public life, especially economic and social development.
Impact	An effect on well-being. A significant long-term developmental change induced in the user of a service or product. It can be direct or indirect, intended or unintended.
Indicator	A quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, reflect changes connected to an intervention, or to help assess the performance of a party or institution, or a variable that allows the verification of changes in the development intervention and shows results relative to what was planned.
Input	The financial, human and material resources used during the completion of an activity. Inputs are frequently measured in terms of financial costs.
Log frame	A management tool used to improve the design of interventions, most often at project level. It involves identifying strategic elements (inputs, outputs, outcomes, impact) and their causal relationships, indicators, and the assumptions or risks that may influence success and failure. It thus facilitates planning, implementation and evaluation of an intervention.
Monitoring	A continuing function that uses a systematic collection of data on specified indicators to provide the management and stakeholders of an ongoing intervention with indications of the extent of progress and achievement of objectives in the use of allocated funds.

Term	Definition
National Statistical System	A system coordinated by the National Bureau of Statistics which involves data providers, producers or users of statistics, research and training institutions.
Objective	A broad statement of what is to be achieved and improvements to be made. An objective describes an intended outcome or impact and summarises why a series of actions have been undertaken.
Official statistics	Statistics produced, validated, compiled and disseminated by or under the authority of NBS.
Outcome	The likely or achieved short-term and medium-term effects of an intervention's outputs. A direct, but intermediary change or improvement in the welfare of a customer or beneficiary as a result of the use of a service (or output).
Output	The products, goods and services which result from an intervention and may include changes (usually of an immediate nature) resulting from interventions relevant to the achievement of outcomes.
Performance	The degree to which an intervention or an implementer operates according to specific criteria/standards/guidelines or achieves results in accordance with objectives or plans.
Relevance	The extent to which the objectives of an intervention are consistent with beneficiaries' requirements, country needs, global priorities and policies. Retrospectively, the question of relevance often becomes a question as to whether the objectives of an intervention or its design are still appropriate given changed circumstances or outcomes.
Results	The output, outcome or impact (intended or unintended, positive and/or negative) of a development intervention.
Results-Based Monitoring	A continuous process of collecting and analysing information to compare how well an intervention is performing against expected results.
Results-Based Evaluation	An assessment of an intervention to determine its relevance, efficiency, effectiveness, impact and sustainability. The aim is to incorporate lessons learned into a decision-making process.
Results Chain	The causal sequence for an intervention that stipulates the necessary sequence to achieve desired objectives, beginning with inputs, moving through activities and outputs, and culminating in outcomes, impacts, and feedback.
Stakeholders	All of those who have a direct or indirect interest in an institution, its activities and achievements, including clients or customers, partners, employees, shareholders/owners, Government or regulators.
Sustainability	The continuation of benefits from an intervention after it has been completed, the probability of continued long-term benefits and the resilience to risk net benefit flows over time.
Target	The goods or services produced over a given period of time by an institution to achieve its objectives.

EXECUTIVE SUMMARY

Agriculture plays a crucial role in the Tanzanian economy, and is the source of food, nutrition, income and employment for the majority, especially rural populations. It comprises crops, livestock, forestry and fisheries subsectors. In 2020, the agriculture sector in Tanzania Mainland contributed about 26.9 per cent of the total GDP and grew at an annual rate of 4.9 per cent. In terms of sub-sector contribution to the GDP, crop production contribution was 15.4 per cent, livestock 7.1 per cent, forestry 2.7 per cent and fisheries 1.7 per cent. Regarding annual growth, in 2020 the subsectors grew as follows: crops (5.0 per cent), livestock (5.0 per cent), forestry (3.2 per cent) and fisheries (6.7 per cent). In Zanzibar, the sector contributed 22.8 per cent to the total GDP and grew at 3.3 per cent in 2020. Likewise, the agricultural sector in Zanzibar contributed as follows: crops (8.8 per cent), livestock (7.9 per cent), forestry (1.2 per cent) and fisheries (4.9 per cent) of the GDP and the annual growth was 1.3 per cent, 8.2 per cent, 4.4 per cent and 3.5 per cent, respectively. Moreover, agriculture is the source of food and industrial raw materials and contributes significantly to foreign exchange earnings.

The importance of accurate and reliable agricultural statistics is enormous, especially for policy, planning and evidence-based decision-making. Moreover, agriculture statistics contributes to determining the sector's growth and percentage share of GDP, measuring employment and poverty reduction of the population in general in the country. Statistics are fundamental for decision-making processes as they enable the establishment of numerical benchmarks, monitoring and evaluation of the progress of a policy or programme. Moreover, statistics ensure that policies meet initial aims and identify areas that require improvement.

Given the evolution of agriculture statistics, the Government of the United Republic of Tanzania (URT) developed the first Agriculture Statistics Strategic Plan (ASSP I) 2014/15-2018/19 to provide an overall strategic framework for strengthening the agricultural statistics System (ASS) in the country. ASSP I was developed to comply with the Tanzania Statistics Master Plan (TSMP) and other national, regional and global strategies. There are diverse perceptions of the merit, worth and significance of the ASSP I. Overall, the assessment of ASSP I shows contributions to the improvement and strengthening of the agricultural statistics system in the country. The assessment also showed that it was very relevant and coherent. It was effective and efficient to a large extent while yielding a preliminary impact that exhibited the evidence of its sustainability in the agricultural sector.

Specific achievements of ASSP I include the enactment of the Statistics Act (Chapter 351) of 2015 to ensure mainstreaming and visibility of agricultural statistics in NSS. The capacities of personnel involved in data collection and analysis of agricultural surveys in the country, increased utilisation and awareness of the importance of reliable statistics among various stakeholders in decision and policymaking processes. Furthermore, ASSP I supported the conduct of regular censuses and surveys in the agricultural sector.

Accordingly, the assessment of ASSP I implementation reveals some learning, including the importance of a coordination budget in the plan to facilitate funding of coordination activities. There are adverse effects of not having an effective monitoring and evaluation system to track and inform the implementation of the strategy. Implementation gaps are attributable to issues related to inadequate awareness, participation of stakeholders and donor aid dependence.

Therefore, the Government developed the second Agricultural Statistics Strategic Plan (ASSP II) in a consultative and participatory manner. This ASSP II is based on the achievements and lessons from ASSP I. ASSP II formulation also considered the guidance provided in national, regional and global frameworks, key sector policies, and strategies. ASSP II is a five-year plan from July 2022 to June 2027 and will cover crops, livestock, fisheries and forestry subsectors in Mainland Tanzania and Zanzibar. ASSP II road map is articulated in its Vision, Mission and Core Values.

The development objective of ASSP II is to improve the contribution and use of official agricultural statistics in policy formulation, planning and informed decision-making both in public and private sectors. Notably, ASSP II has three strategic objectives: (i) To strengthen legal and institutional frameworks, (ii) To enhance the capacity of providing agricultural statistics and (iii) To improve data production, management and use.

ASSP II implementation arrangement covers governance, institutional arrangement, coordination, possible risks, an annual work plan and budget and advocacy. The implementation of ASSP II will involve several partners playing different roles in the implementation process. Key implementing partners include NBS and OCGS playing the coordination role, ASLMs and LGAs are the primary implementers and data users for policy, planning, decision-making, monitoring and evaluation.

Implementation of ASSP II will be on an annual basis, with the annual work plan and budget prepared each year together with the procurement, resource mobilisation, monitoring and evaluation and training plans. In preparing plans and budgets, inputs will be drawn from implementing Ministries and Institutions within the ASS. The estimated budget for implementation of ASSP II activities is US\$25,320,692, equivalent to TZS 58, 237,590,450. Improving Agricultural statistics in Tanzania will largely depend on financial support from the government budget, private sector, NGOs, the international community and individual contributions.

The advocacy of ASSP II at political and policy levels needs to be emphasised for its sustainability. Lack of awareness of the important role of agricultural statistics in development may lead to poor policy design, uninformed decisions, and an inability to monitor and evaluate the implementation of policies and development programmes in the agricultural sector. Therefore, ASSP II will host an annual stakeholder workshop attended by all ASS stakeholders. This forum will play a dual role in awareness of ASSP II and disseminating agricultural statistics for enhanced utilisation.

ASSP II has been developed with a framework to manage risks through the identification and analysis of issues, response or dealing with it and a follow-up. ASSP II risks are in three categories: (i) financial risks, which concern funds, (ii) operational risks, which concern activities and (iii) developmental risks, which concern results. Moreover, the implementation of ASSP II will be closely monitored and evaluated. To this end, the monitoring and evaluation system will play three major roles, which are (i) informed decisions underlying the effective and efficient coordination of ASSP II, (ii) accountability against plans and budget resources allocated for the implementation of the ASSP II and (iii) learning through documentation of best practices, lessons learned and success stories from the implementation of the ASSP II.

Implementation reports are expected to provide feedback on the progress and results achieved in the implementation of ASSP II and informed decision-making organs, which will be reported quarterly and annually. The coordination and technical working team will use quarterly progress reports for internal use. Annual progress reports will be an official progress report on the implementation of ASSP II to be submitted to a steering committee and shared externally.

ASSP II will establish a feedback mechanism between report producers and end-users, including seminars, workshops, review forums and stakeholders' meetings. These mechanisms will lead to stakeholders' sharing of achievements, experiences and challenges, including identifying collective actions to address challenges. Feedback mechanisms will enhance participation, ownership and the utilisation of statistics in the country.

The main uses of findings from Monitoring and Evaluation (M&E) reports for ASSP II will be to assist in making objective decisions, including operational resource allocation, to help in demonstrating results as part of accountability. Other uses are to assist in communicating better to build public trust to facilitate preparations and justification of budget requests, to contribute to staff motivation to continue making improvements in the implementation of their plans, to provide information on assessing ASSP II contribution to the overall NSS, FYDP III and reviews of national policies and strategies. Furthermore, the findings will support strategic and other long-term planning efforts by providing baseline information and later tracking progress, to provide data for special in-depth projects and programme planning, implementation and evaluation and to assist in initiating in-depth examinations of existing performance problems and corrections.

ABBREVIATIONS AND ACRONYMS

AASS	Annual Agricultural Sample Survey
ARDS	Agriculture Routine Data System
ASDP	Agriculture Sector Development Programme
ASLMs	Agricultural Sector Lead Ministries
ASS	Agricultural Statistics System
ASSP	Agriculture Statistics Strategic Plan
CARMATEC	Centre for Agriculture Mechanisation and Rural Technology
COSTECH	Commission for Science Technology
CSA	Climate Smart Agriculture
CSOs	Civil Society Organisations
DFA	Deep Fishing Authority
DPs	Development Partners
FAO	Food and Agriculture Organisation
FETA	Fisheries Education and Training Agency
FYDP	Five-Year Development Plan
GDP	Gross Domestic Product
GIS	Geographical information system
GPS	Global Positioning System
GSARS	Global Strategy to improve Agricultural and Rural Statistics
HH	Household
ICT	Information and Communication Technology
LGAs	Local Government Authorities
LITA	Livestock Training Agency
LVFO	Lake Victoria Fisheries Organisation
MBEF	Ministry of Blue Economy and Fisheries
M&E	Monitoring and Evaluation
MoA	Ministry of Agriculture
MAINL	Ministry of Agriculture, Irrigation, Natural Resources and Livestock
MDAs	Ministries, Departments and Agencies
MIT	Ministry of Industry and Trade
MLF	Ministry of Livestock and Fisheries
MNRT	Ministry of Natural Resources and Tourism
MoAs	Memorandum of Agreements
MOF	Ministry of Finance
MoUs	Memorandum of Understanding
NAFORMA	National Forest Resource Monitoring and Assessment
NASD	National Agricultural Sector Database/Databank
NBS	National Bureau of Statistics
NCCM	National Carbon Monitoring Centre

NGOs	Nongovernmental Organisations
NSCA	National Sample Census of Agriculture
OCGS	Office of Chief Government Statistician
OECD	Organisation for Economic Cooperation and Development
PDA	Personal Digital Assistants
PMO	Prime Minister's Office
PO-RALG	President's Office, Regional Administration and Local Government
PS	Permanent Secretary
RBE	Results-Based Evaluation
RS	Remote Sensing
SDGs	Sustainable Development Goals
SUA	Sokoine University of Agriculture
SUZA	State University of Zanzibar
SWOC	Strengths, Weaknesses, Opportunities and Challenges
TAFICO	Tanzania Fisheries Company
TAFIRI	Tanzania Fisheries Research Institute
TAFORI	Tanzania Forestry Research Institute
TALIRI	Tanzania Livestock Research Institute
TARI	Tanzania Agriculture Research Institute
TDV	Tanzania Development Vision
TFS	Tanzania Forest Services Agency
TSMP	Tanzania Statistics Master Plan
TZS	Tanzanian Shillings
UDOM	University of Dodoma
UDSM	University of Dar es Salaam
US\$	United States Dollar
VAEOs	Village Agriculture Extension Officers
WAEOS	Ward Agricultural Extension Officers
ZAFICO	Zanzibar Fisheries Company
ZAFIRI	Zanzibar Fisheries Research Institute
ZARI	Zanzibar Agricultural Research Institute
ZWBS	Zanzibar Wood Biomass Survey

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

1.1.1 Scope and Role of Agriculture

Agriculture plays a crucial role in the Tanzanian economy and is the source of food, nutrition, income and employment for the population. The agriculture sector comprises crops, livestock, forestry and fisheries subsectors. It acts as a wall in maintaining food, nutritional and national security. Altogether, the subsectors have a crucial role in improving the overall economic conditions, health, nutrition goods and services of the rural and urban populations. Improvements in agriculture and land use contribute to achieving food and nutritional security, poverty alleviation and overall sustainable development.

In 2020, the agriculture sector (crops, livestock, forestry and fisheries) contributed about 26.9 per cent of the total GDP and grew at an annual rate of 4.9 per cent. The contribution of each subsector to the GDP was as follows; crop production (15.4 per cent), livestock (7.1 per cent), forestry (2.7 per cent) and fisheries (1.7 per cent). With regard to annual growth, the subsectors in Mainland Tanzania (URT, 2021)¹ in 2020 grew as follows: crops (5.0 per cent), livestock (5.0 per cent), forestry (3.2 per cent) and fisheries (6.7 per cent). In Zanzibar, the sector contributed about 22.8 per cent to the total GDP and grew at an annual rate of 3.3 per cent in 2020. Likewise, the subsectors in Zanzibar contributed as follows: crops (8.8 per cent), livestock (7.9 per cent), forestry (1.2 per cent) and fisheries (4.9 per cent) of the GDP and the annual growth was 1.3 per cent, 8.2 per cent, 4.4 per cent and 3.5 per cent, respectively (OCGS, 2020).² Moreover, agriculture is the source of food, industrial raw materials and it contributes significantly to foreign exchange earnings.

The implementation of the sector-wide functions involves several actors under the umbrella of Agricultural Sector Lead Ministries (ASLMs). Key players constituting the ASLMs in Mainland Tanzania are the Ministry of Agriculture (MoA); the Ministry of Livestock and Fisheries (MLF); the Ministry of Investment, Industry and Trade (MIIT); the President's Office, Regional Administration and Local Government (PO-RALG); the Ministry of Lands, Housing and Human Settlements Development and the Ministry of Natural Resources and Tourism (MNRT). In Zanzibar, the players are the Ministry of Agriculture, Irrigation, Natural Resources and Livestock (MAINL) and the Ministry of Blue Economy and Fisheries (MBEF).

1.1.2 Agriculture Statistical System

The agriculture Statistical System includes the principal tasks of collecting, processing, analysing and disseminating statistical data. It involves the current status and development of agriculture and the fulfilment of production plans. In addition, such data is applied to develop short and long-term planning for agriculture

¹ URT, 2021. Hali ya Uchumi wa Taifa katika Mwaka 2020, Wizara ya Fedha na Mipango, Dodoma, Tanzania. Juni, 2021

² OCGS, Zanzibar Statistical Abstract 2020. Tanzania, Zanzibar.

and other sectors. The National Bureau for Statistics (NBS) and the Office of Chief Government Statistician (OCGS) coordinate all collection, processing, analysis and dissemination activities of official agricultural statistics for Mainland Tanzania and Zanzibar. Moreover, NBS and OCGS are responsible for the quality of official agricultural statistics to the public and maintaining a central depository of official statistics and data.

1.1.3 The Role of the Agriculture Statistics

Generally, statistics are fundamental in the decision-making process as they enable the establishment of numerical benchmarks, monitoring and evaluation of the progress of a policy or programme. Moreover, statistics ensure that policies meet initial aims and identify areas that require improvement. From an economic perspective, the collection, processing, analysis and dissemination of specific data help understand economic theories and denote correlations between variables such as demand, supply, price, output, etc.

The importance of statistics is enormous in today's life in the digital information world in which it is determined mathematically by statistics help. It implies that correct data and statistical concepts contribute to a better understanding and accurate description of nature's phenomena. They help in the proper and efficient planning of a statistical inquiry in any field of study. For example, statistical data help compare the rate of development of one sector against the other. Furthermore, production, distribution, marketing and consumption can be measured using statistical data, which together with methods render valuable assistance in the better understanding of economic problems and the formulation of economic policies. Most economic phenomena and indicators can be quantified and dealt with statistically sound logic. Tables, graphs and charts play a vital role in presenting data to draw appropriate conclusions.

As a key economic sector, agriculture requires reliable and timely statistics across the value chain. Therefore, the importance of accurate and reliable agricultural statistics is enormous, especially for policy processes (formulation, reviews, implementation, monitoring and evaluation), planning and evidence-based decision-making. Moreover, agriculture statistics contribute to determining the sector growth and percentage share of GDP, measuring employment, production and productivity trends and poverty reduction of the population at large in the country.

1.1.4 Genesis of Agriculture Statistics Strategic Planning

Increased demand for agricultural statistics to inform the national development process contributed to the Agriculture Statistics Strategic Planning. In particular, the benchmarking, monitoring and evaluation of national development initiatives and programmes have necessitated strategic planning in the country. The ASSP is an integral part of the Tanzania Statistical Master Plan (TSMP). This framework aims at providing strategic directions and appropriate mechanisms for guiding and accelerating the development of sustainable statistical capacity in the country. Moreover, it is part of the Tanzania National Statistical System to provide harmonised, coordinated and quality statistics for agricultural and rural development.

In 2010, the United Nations endorsed the Global Strategy to Improve Agricultural and Rural Statistics. Its objective was to provide a framework and methodology for improving the quality and availability of national

and international food and agricultural statistics, including guiding policy analysis and decision-making in the 21st Century. The Global Strategy and the African Action Plan of the Global Strategy have provided a framework for Tanzania to prepare the Agriculture Statistics Strategic Plan (ASSP). ASSP I (2014/15-2018/19) was developed to comply with the Tanzania Statistics Master Plan (TSMP) and other national, regional and global strategies.

These development strategies include the 2030 Agenda on Sustainable Development Goals (SDGs), Global Strategy to improve Agricultural and Rural Statistics (GSARS), the Malabo Declaration on Agriculture 2014, the National Development Visions (Tanzania Development Vision 2025, the Long-Term Perspective Plan 2011/12-2025/26, Agricultural Sector Development Strategy (ASDS) 2011/2012-2015/2016) and Agriculture Sector Policies (National Agriculture Policy 2013, National Livestock Policy 2006 and its Livestock Sector Development Strategy 2010, National Fisheries Policy 2015, and National Forest Policy 1998, Zanzibar Agricultural Policy (2002) Reviewed 2021 and Zanzibar Livestock Policy 2011).

Given the evolution of agriculture statistics, the Government of the United Republic of Tanzania (URT) developed the first Agriculture Statistics Strategic Plan (ASSP I) 2014/15-2018/19 to provide an overall strategic framework for strengthening the Agricultural Statistics System (ASS) in the country. The second Agricultural Statistics Strategic Plan (ASSP) II is a five-year plan from 2022/23 to 2026/27 which is in line with the Tanzania Statistical Master Plan Phase Two (TSMPII 2022/23- 2026/27). The ASSP II will cover the crops, livestock, fisheries and forestry subsectors in Tanzania Mainland and Zanzibar. National, regional and international strategies and initiatives specify a set of core data items that require the production of agricultural statistics for measuring the performance of established targets/indicators for each agriculture subsector, as shown in Table 1.

Table 1: Core Datasets

Category	Statistics needed
Core Crop Items	<ul style="list-style-type: none"> i. Area planted and harvested, yield and production. ii. Amounts in storage at the beginning of harvest. iii. Area of cropland that is irrigated. iv. Producer and consumer prices. v. Amounts utilised for own consumption, food, feed, seed, fibre, oil for food, bio-energy and net trade or imports and exports. vi. Early warning indications such as precipitation, wind-shield surveys of crop conditions and vegetative indices are provided by satellite observations.
Core Agricultural Inputs	<ul style="list-style-type: none"> i. Quantities of fertilisers and pesticides utilised. ii. Water and energy consumed. iii. Capital stocks such as machinery by purpose (i.e., tillage or harvesting) iv. A number of people of working age by sex. v. A number of workers hired by agricultural holders. vi. Employment of household members on agricultural holding.
Core Lvestock Items	<ul style="list-style-type: none"> i. Inventory and annual births. ii. Production of products such as meat, milk, eggs, hides, skins and wool and net trade or imports and exports. iii. Producer and consumer prices.

Category	Statistics needed
	<ul style="list-style-type: none"> iv. Livestock value added. v. Changes of components of livestock and poultry population by species vi. Per capita consumption data of milk, meat and eggs.
Core forestry production	<ul style="list-style-type: none"> i. Area in woodlands and forests, quantities removed and their prices for land associated with agricultural holdings. ii. Area in woodlands and forests, quantities removed and their prices for products from non-agricultural holdings and respective utilisation.
Core Aquaculture and Capture Fisheries products Items	<ul style="list-style-type: none"> i. Area cultured, production, prices and net trade or imports and exports for aquaculture. ii. Quantity landed and discarded, the number of days fished, amounts processed for food and non-food uses, prices and imports and exports.

1.2 Purpose of the ASSP II

The ASSP II provides a road map to ensure strategic direction towards improving the agriculture statistics system that addresses sectoral, national and global needs. Following the phasing out of ASSP I, the ASSP II guides the implementation efforts of improving the national statistical system to meet the statistical needs of public and other actors. Achievements and lessons learnt from the previous ASSP and other national planning and policy frameworks provided the foundation of ASSP II. In addition, the drive for the development of the ASSP II emanates from a need to respond to political and socioeconomic changes that have been taking place in the Tanzania Agriculture sector and other supporting subsectors.

The ASSP II considers opportunities offered by new international initiatives to build statistical systems producing and using quality and timely agricultural and rural statistics. Furthermore, it considers the evolution of policy demand and a need to enhance stakeholders' commitments at national, regional, and international levels. In this regard, ASSP II serves as a platform for orienting future investments in ASS. It is also serves as a reference for development partners providing technical and financial assistance to Tanzania.

1.3 The approach

ASSP II formulation process adopted both consultative and participatory approaches. Phase one of the formulation involved an in-depth assessment of the ASSP I. The second phase of the preparation of the plan involved the consultation of ASS stakeholders. As a result, ASSP II development commenced in May 2021 with designing an assessment methodology followed by a National Stakeholders' Workshop. The workshop was organised by the National Bureau of Statistics (NBS) in collaboration with the Office of Chief Government Statistician (OCGS) of Zanzibar and Food and Agriculture Organisation (FAO) of the United Nations (UN).

The workshop drew participants from Agricultural Sector Lead Ministries (ASLMs) and other Government Institutions and Agencies and thoroughly discussed the proposed framework, strategic areas and the roadmap during the development of ASSP II. The workshop marked the commencement of the assessment of ASSP I and initiated the formulation processes of ASSP II.

The ASS stakeholders' workshop was convened in September 2021 to discuss how to improve an assessment report and design of ASSP II. Later in November 2021, another ASS stakeholders' workshop was convened. Its emphasis was to review the ASS mission, vision, core values, strategic issues, objectives and a need to strengthen all stakeholders' coordination, monitoring system and involvement during the preparation and implementation of the ASSP II. ASSP II was prepared based on the Government Manual for Medium-Term Strategic Planning and Budgeting and other national, regional and global planning strategies. International and regional strategies include Sustainable Development Goals (SDGs), the Global Strategy to improve Agricultural and Rural Statistics (GSARS) and the Malabo Declaration on Agriculture. National strategies are Tanzania Development Vision (TDV 2025) through its Five-Year Development Plan, Zanzibar Development Vision 2050) and Zanzibar Development Plan (ZADEP) 2021-2026, Tanzania Statistical Master Plan (TSMP) and national policies of agriculture subsectors.

1.4 Layout of the ASSP II

The ASSP II document consists of five chapters. Chapter One is an introduction that describes the background of the agriculture sector, ASS and ASSP, the purpose of ASSP II, the approach and the structure of the ASSP II document. Chapter Two presents situational analysis, covering global and national planning frameworks that govern ASS and the performance of the ASSPI. Furthermore, ASSP I performance assesses the internal and external environment in which the ASSP I operated. Other tools applied include Strengths, Weaknesses, Opportunities and Challenges (SWOC) analysis and stakeholders' analysis. The situational analysis identified critical issues for consideration in ASSP II. Chapter Three consists of the vision, mission, core values, objectives, strategies, targets and indicators. Chapter Four outlines implementation arrangements, a work plan, budget and financing strategy of ASSP II and Chapter Five presents the Monitoring and Evaluation (M&E) System. The last part of the document includes references used and annexes.

CHAPTER TWO

2.0 SITUATION ANALYSIS

2.1 Overview

Best practices in any strategic planning require an assessment of the current situation to provide the basis for articulating the strategic direction. Such an assessment must be deep, realistic, objective, independent and critical, inclusive of the user's perspective. In addition, it should consider ongoing improvement programmes, best practices and international standards and frameworks as appropriate.

The ASS consists of various organisations and units that jointly collect, process, and disseminate official agricultural statistics. It is a system within the NBS and OCGS of collecting, processing, analysing and disseminating data on subsector issues. In contrast, the other ASS partners (i.e., MDAs) collect sector-specific data for planning and monitoring purposes. The ASS has registered improvements under the ASSP I implementation. Despite this progress, much remains to be done in some areas to develop and maintain institutional capacity and infrastructure. This chapter presents global, regional, and national planning frameworks governing agricultural statistics, performance review, SWOC analysis, ASSP I stakeholders' analysis and mapping, and critical issues.

2.2 Planning Frameworks Governing Agricultural Statistics

There are key strategies and the legal framework at the national, regional and international levels that drive and provide direct strategic guidance on statistical information to strengthen the ASS. The global and regional strategies include Sustainable Development Goals (SDGs), Global Strategy to improve Agricultural and Rural Statistics (GSARS), and the Malabo Declaration on Agriculture Growth. At the national level, the strategies are the Tanzania Development Vision (TDV 2025) through its Five-Year Development Plans, Zanzibar Development Vision (ZDV 2050), Tanzania Statistical Master Plan (TSMP), national policies of agriculture subsectors and the Statistics Act (Chapter 351 R.E. 2019). Many have targets and minimum data requirements and indicators for monitoring and evaluation purposes.

2.2.1 Agenda 2030: Sustainable Development Goals

Sustainable Development Goals (SDGs) underscore the importance of achieving sustainable agriculture, food security and mitigation of deforestation. These aspirations are integral to 4 of the 17 SDGs established in transforming our world: 2030 Agenda for Sustainable Development, namely: SDG 2, SDG 13, SDG 14 and SDG 15. These SDGs focus on ending hunger, poverty reduction, protection and restoration of water-related ecosystems, conservation of marine resources and combating climate change. As such, the production of agricultural-related statistics will be crucial for measuring the achievements of Agenda 2030 targets and indicators as presented in table 2 below.

Table 2 : Sustainable Development Goals

Goal	Indicators
SDG 2: End hunger, achieve food security and improve nutrition and promote sustainable agriculture.	<ul style="list-style-type: none"> i. Prevalence of moderate or severe food insecurity in the population. ii. The volume of production per labour unit by classes of farming/pastoral/forestry enterprise size. iii. Proportion of agricultural area under productive and sustainable agricultural practices.
SDG 13: Climate Action - Take urgent action to combat climate change and its impacts.	<ul style="list-style-type: none"> i. The number of countries with nationally determined contributions, long-term strategies, national adaptation plans, strategies as reported in adaptation and national communication.
SDG 14: Life below water - Conserve and sustainably use oceans, seas and marine resources for sustainable development.	<ul style="list-style-type: none"> i. The proportion of fish stocks within biologically sustainable levels. ii. Conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information. iii. Degree of implementation of international instruments aiming at combating illegal, unreported and unregulated fishing. iv. Sustainable fisheries as a percentage of GDP in small island developing states, least developed countries and all countries.
SDG 15: Life on Land - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss.	<ul style="list-style-type: none"> i. Forest area as a proportion of total land area. ii. The proportion of important sites for terrestrial and freshwater biodiversity covered by protected areas, by ecosystem type. iii. Progress towards sustainable forest management. iv. The proportion of land degraded over a total land area. v. Coverage by protected areas of important sites for mountain biodiversity. vi. The number of countries that have adopted legislative, administrative and policy frameworks to ensure fair and equitable sharing of benefits. vii. The proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species. viii. The number of countries that have established national targets under or similar to Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011–2020 in their national biodiversity strategy and action plans and the progress reported towards these targets. ix. Integration of biodiversity into national accounting and reporting systems, defined as the implementation of the System of Environmental -Economic Accounting.

2.2.2 Malabo Declaration

The Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods continues being among the fundamental continental initiatives which inform local policies and strategies in agricultural development in the country. The Malabo Summit held in June 2014 reconfirmed that agriculture should remain high on the development agenda of the African continent and was a critical policy initiative for African economic growth and poverty reduction. Furthermore, the Malabo Declaration (2014) recognizes a need to build Africa's capacity to generate, analyse and manage data and information. Notably, the Malabo Declaration is committed to

- i. Allocating at least 10 per cent of public expenditure to agriculture and ensure its efficiency and effectiveness.
- ii. Halving the current levels of post-harvest losses by 2025.
- iii. Improving nutritional status and in particular eliminating child under-nutrition in Africa to bring down stunting to 10 per cent and underweight to 5 per cent by 2025.
- iv. Sustaining annual agricultural GDP growth of at least 6 per cent.
- v. Creating job opportunities for at least 30 per cent of the youth in agricultural value chains.
- vi. Tripling by 2025 intra-African trade in agricultural commodities and services and
- vii. Ensuring by 2025 at least 30 per cent of households engaged in farming, animal husbandry and fishing are resilient to climate and weather-related risks.

2.2.3 Tanzania Development Vision (TDV 2025) and Zanzibar Development Vision (ZDV 2050)

The Tanzania Development Vision (TDV 2025) and Zanzibar Development Vision (ZDV 2050) use a results-based framework to guide the implementation of national development programmes. TDV 2025 advocates "Sustainable socioeconomic development by 2025", while the overall objective of Zanzibar Development Vision 2050 is centred on human development. The Government wants improvements in economic growth to be accompanied by a higher general standard of living, attaining near-zero extreme poverty in Zanzibar.

The two Development Vision documents emphasise transforming national economies from a low productivity agricultural economy to a semi-industrialised led by modernised and highly productive agricultural activities. They prioritise food self-sufficiency, food security and the absence of abject poverty in attaining a high-quality livelihood for all Tanzanians. Equally important, they underscore the need to effectively utilise domestic resources such as natural resources, tourism development, environmental sustainability and climate resilience to attain a high-quality livelihood for all Tanzanians. Therefore, the Development Vision documents provide an overall framework for the agricultural sector development through the Five-Year Development Plan.

2.2.4 Third Five-Year Development Plan (2021-2026)

The Third FYDP underlines that agriculture will continue being central to Tanzania's industrialisation and a source of livelihood for about 65 per cent of the population. Moreover, FYDP III directs its efforts towards consolidating, further scaling up the achievements recorded and exploring opportunities afforded by adopting Climate Smart Agriculture Approaches (CSA). Accordingly, FYDP III focuses on various interventions in the agriculture sector (crop, livestock, fisheries and forestry), which will increase productivity and efficiency. Furthermore, FYDP III specifies five indicators for sector performance assessment and the production of specific data types across four subsectors, which include: Average Growth rate (%); Percentage share of GDP (current prices); Percentage share of Total export Earning; Percentage Share on Total Employment; and Productivity (% growth). In addition, specific indicators for each subsector of agriculture are presented in Table 3. **Finally, Appendix 4** shows indicators and their targets to be achieved by the end of the FYDP II period.

Table 3. List of performance indicators for each agriculture subsector

Crops ³	Livestock	Fisheries	Forestry ⁴
Average growth rate (%)	Average growth rate (%)	Average growth rate (%)	Average growth rate (%)
Percentage share to GDP (current prices)	Share to GDP (at current prices)	Share to GDP (at current prices)	Percentage share of GDP from sustainable utilisation of forest, water and marine resources
Percentage share on total export earnings	Meat exports (tonnes)	Percentage share on total export earnings	Contribution from sustainable tourism to GDP
Hectare under irrigation	Livestock morbidity rate	Per capita consumption (kg)	Area under Community Plantations Forest and Woodlots Increase (ha)
	Livestock mortality rate		
Student enrolment increased	Livestock dipping rate	Contribution to the National animal protein intake	Reduced deforestation rate (ha)
Number of extension officers increased	Livestock vaccination coverage rate	Number of fisheries extension officers	Area of commercial forest Plantation established (ha)
Certified seed production increased	Endogenous herd milk average productivity (litres)	Number of aquaculture development centres (ADC)	Increased consumption of alternative charcoal in urban areas (tones)

³ Prioritised products are maize, rice, cotton, cashew nuts, tea, coffee, tobacco, sisal, palm, wheat, soybeans, cocoa, cassava, sugarcane, horticulture and sunflower.

⁴ Forest has been categorised under the environment and natural resources component and is considered as a national asset and the basis for sustainable development.

Crops ³	Livestock	Fisheries	Forestry ⁴
Percentage decrease in post-harvest loss	Meat processing (tonnes)	Number of fish processing industries	
National reserve capacity increased	Percentage of quality hides and skins	Fish feed production (tonnes)	
Volume of total horticultural production per year (tonnes)	Meat production (tonnes)	Fisheries production (tonnes)	
Volume production of the traditional commercial crops (tonnes).	Mature endogenous herd meat average productivity (Carcass weight)		
Percentage of agricultural land under mechanisation services along the value chain	Percentage of milk processed		
Number of large-scale farms (block farms) established	Milk production in (litres)		
Number of industries owned by cooperatives	Hides and skins processed (tonnes)		
Cooperatives using a formal market system increased	Finished leather exports (tonnes)		
Members in cooperatives societies (millions)			
Food sufficiency ratio			
Per capita consumption of cereals, legumes, fruits and vegetables (kg)	Per capita consumption of milk (kg)		
	Per capita consumption of meat (kg)		

2.2.5 Tanzania Statistical Master Plan

The national results-based agenda and the focus on evidence-based policy and decision-making have increased the demand for quality statistical information. A reliable statistical information system is a necessary infrastructure and part of the enabling environment for national and global development initiatives. In 2010, Tanzania formulated a Statistical Master Plan (TSMP) to improve coordination, increase statistical awareness and produce quality statistics. There is compatibility in terms of linkages and synergies of the

Agriculture Statistics Strategic Plan objectives, strategies and activities with other interventions in the statistics ecosystem. The TSMP has five components focusing on Institutional Development and Legal Reforms, Human Resource Development, Development of Statistical Infrastructure, Data Development and Dissemination and Physical Infrastructure and Equipment Development. The government has developed a second generation of TSMP to be implemented between 2022/2023 and 2026/2027. TSMP II has three main components namely: harmonization, quality and data dissemination; data production; and infrastructure and institutional development. Under component two, TSMP II aims at reducing agricultural statistics gaps and increase frequency of conducting surveys.

Based on these components, TSMP Plan is a government mechanism to address some constraints on statistical information, such as data gaps on socioeconomic indicators required for monitoring the results of development policies and initiatives, insufficient statistical coordination in the country, low awareness of the use of statistics among decision-makers and low priority given to statistics.

2.2.6 Statistics Act (Chapter 351)

The Statistics Act (Chapter 351) was enacted in 2015 and revised in 2019 to provide the country's legal framework for official statistics. The Act has legal provisions to ensure better mainstreaming and visibility of all official statistics in NSS. Moreover, Section 17 of the Act stipulates the need to develop and maintain a comprehensive national databank under NBS by using sectoral databank developed by Government institutions and agencies. In addition, Section 20 of the Act recognises Government institutions and agencies as official producers of statistics. Given this situation, the Act has sections that establish an enabling environment for the visibility of agriculture statistics within ASS and NSS.

2.2.7 National Agriculture Policy 2013

Although agricultural information is a vital tool for the agriculture sector development, the policy points out that the collection and dissemination of information to various actors in the sector are inefficient. The policy calls for a well-coordinated system to have an efficient mechanism for sharing agriculture-related information on a timely basis. However, the policy states that agricultural information is not readily available and is unreliable. There is also limited participation of the private sector in the collection, processing and dissemination as well as conflicting and inconsistent information from various sources.

One of the policy objectives is to increase the effectiveness of agricultural information services by strengthening agricultural information coordination and linkages. The policy insists a need for the Government to improve the mechanisms for the collection, analysis and dissemination of agricultural information and data. Therefore, the Government will continue enhancing the participation and collaboration of the private sector and other stakeholders in these activities.

2.2.8 National Livestock Policy 2006

The National Livestock Policy reiterates livestock information services that deal with the collection, retrieval, processing, storage and dissemination of livestock data and information to facilitate planning, control, coordination and decision-making. Data and information are effective management tools and should be comprehensive, accurate, consistent, accessible, timely and usable. The policy points out that issues that include data and information on livestock in the country are scattered amongst different sources. There is no one-stop-centre where harmonised livestock data and information is accessible and retrievable by users. Consequently, there is lack of designated official data on the livestock industry. It also adds that livestock information services are constrained by inadequate infrastructure and facilities, high cost in collection, insufficient expertise and the absence of a centralised database management system.

In its objective to avail credible data and information to stakeholders about the livestock industry for informed decision-making, the policy states that (i) the Government will strengthen infrastructure and facilities for livestock data and information services, (ii) efforts will be undertaken to harmonise and coordinate livestock data, (iii) the Government will strengthen technical support for livestock information services, (iv) in collaboration with other stakeholders, the Government will establish a comprehensive management information system for the livestock industry and (v) the Government will ensure and support regular livestock census in the country.

2.2.9 National Fisheries Policy 2015

The National Fisheries Policy 2015 has an overall objective to develop a robust, competitive and efficient fisheries sector that contributes to food security and nutrition, growth of the national economy and improvement of the wellbeing of fisheries stakeholders while conserving the environment. The policy has a vision by 2025 to have a progressive fisheries sector contributing significantly to socioeconomic development through sustainable utilisation of fisheries resources while the mission is to conserve the environment and ensure fisheries resources are developed, managed, conserved and utilised sustainably for economic growth and improved livelihoods.

Accordingly, the National Fisheries Policy 2015 recognises some challenges affecting the fisheries sector, including statistical challenges such as reliable and adequate information on fisheries and aquaculture. As such, the rationale for the National Fisheries Sector Policy is to address the challenges that hinder the development of the fisheries sector. Therefore, the National Fisheries Policy is used as a guide to achieve the vision and mission of the fisheries sector. The policy provides specific objectives for developing efficient and effective fisheries and aquaculture resource information which entails fisheries data.

2.2.10 National Forest Policy 1998

The National Forest Policy 1998 provides statements and directions that stress the importance of data and information availability, among other things. Specifically, it stresses regular forest resources assessment to ensure sustainable forest management and utilisation, including agroforestry practices. Furthermore, the

Policy Implementation Strategy underlines a need to streamline forestry resources information systems. It insists on assessing the current databases/registries and priority needs for new forestry resource information, conducting forest inventories and establishing new, cost-effective ways to conduct surveys. The strategy entails an implementation plan, resources and means to mobilise resources to enable proper forest policy implementation. The policy strategy has targets that focus on conducting national forest resources assessments, including updating and functioning the data management system and facilitating interventions related to forest statistics in the country.

2.3 Performance Assessment of ASSP I

2.3.1 Overview

An assessment of the implementation of the Agriculture Statistics Strategic Plan 2014/15 - 2018/19 was conducted from May 2021 to July 2021 to document lessons learned, gaps and challenges, best practices, and successes to inform formulation of the next Agriculture Statistics Strategic Plan. There were diverse perceptions of the merit, worthiness and significance of the ASSP I. However, the overall assessment shows that ASSP I implementation contributed to the improvement and strengthening of the agricultural statistics system in the country. The assessment showed ASSP I was very relevant and, to some extent, coherent. It was effective and efficient to a large extent while yielding a preliminary impact that exhibited evidence of its sustainability in the agricultural sector.

Generally, the ASSP I was vigorously implemented in the crop subsector followed by the livestock subsector, while less designed and implemented in fisheries and forest subsectors. This situation was attributed to the low participation and engagement of key stakeholders and custodians of the fishing and natural resources in Mainland Tanzania and Zanzibar. While the implementation of the ASSP I strategic goals (SG) during the planned period has been successful for the most part, several challenges have hindered NBS, OCGS and MDAs from achieving all the targets as planned. Some of these challenges have been beyond the control of coordinators and partners. In addition, several issues emerged during the implementation of the plan, which requires attention during the implementation of the ASSP II.

2.3.2 Main Achievements

Achievements of the overall performance of the implementation of ASSP I against the five strategic goals were sought and matched with the targets/interventions implemented under the planning period. The main achievements of ASSP I implementation were:

- i. The Government enacted the Statistics Act (CAP 351) in 2015 to ensure the mainstreaming and visibility of agricultural statistics in NSS. The Act recognises sectoral databanks developed by government institutions and agencies. Given this established legal framework, the Act provides an enabling environment for mainstreaming and ensuring the visibility of ASS within NSS.
- ii. Developed capacities of the personnel involved in data collection and analysis. Extension officers at district, ward and village levels from crop and forest subsectors were trained in survey and censuses activities, including training of trainers and enumerators.

- iii. The Government developed databases and datasets on forests and trees in the forest subsector. High-capacity data storage servers and GIS laboratories (computer hardware) were installed at Sokoine of Agriculture (SUA) National Carbon Monitoring Centre (NCCMC), TFS and TAFORI. Moreover, according to national and international standards, the forest subsector uses common statistical concepts, definitions and classification.
- iv. The Government enhanced the Agriculture Statistics Units within NBS, OCGS-Zanzibar and ASLMs.
- v. The Government raised the awareness of using quality data, procurement of equipment and transport facilities in the crop subsector to some institutions and district councils.
- vi. In the livestock subsector, publications like the Basic Data Booklet have gathered data contributing to the economic survey. The GDP for livestock is indicated every year and utilised for livestock sector development.
- vii. There was increased awareness of reliable forest data and information among professionals and planners in decision and policymaking. This awareness contributed to the increased use of analysed forest data and information in policy and strategic planning, including project/programme development and research and training development.
- viii. The Government implemented an integrated survey programme in crop and livestock subsectors. The surveys were conducted as planned in Mainland Tanzania and Zanzibar. The implementation involved capacity building by conducting basic agricultural training. Trainees were extension officers (district statisticians and M&E officers), ward agricultural extension officers (WAEOs), village agricultural extension officers (VAEOs), DAICOs, DS and M&E specialists.
- ix. Improved data storage and backup infrastructure in livestock and crop subsectors at ward and district levels, including ICT. The Government provided ICT equipment, especially computers and equipment supplied was used as intended. Respondents reported that ARDS's ICT infrastructure/equipment included laptops, printers, flash disks, modems and stabilisers.
- x. Although ASSP I did not fully accommodate forest-related surveys, specific surveys on NAFORMA and ZWBS for Mainland Tanzania and Zanzibar were primarily designed and conducted successfully. NAFORMA and ZWBS established a solid foundation and baseline information for strengthening the forest statistical system within the overall ASS and NSS.
- xi. In the fisheries subsector, Catch Assessment Surveys (CAS) and frame surveys were conducted annually in two major water bodies, notably Lake Victoria and the Indian Ocean that provided data on fish harvesting. Assessment covered fisheries stock assessments for Lake Victoria, which has the advantage of Lake Victoria Fisheries Organisation (LVFO).

2.3.3 Lessons Learned

Assessment of the implementation of the Agriculture Statistics Strategic Plan 2014/15-2018/19 reveals lessons and best practices, including:

- i. Having a budget in the plan to facilitate funding of coordination activities is key. Inadequate financing of coordination activities tends to affect implementation, especially if intervention involves many stakeholders.
- ii. Less participation of fisheries and forestry subsectors steering committee members during the implementation of ASSP I.
- iii. Monitoring and evaluation exercise was not conducted as scheduled and, therefore, the system failed to inform the ASSP I management to take necessary decisions timely. There was no comprehensive start-up and launch of strategic plans, which would have played a significant role in creating awareness of ASSP I.
- iv. Effective participation of stakeholders cultivates appetite and interest in interventions. Less involvement of fisheries and natural resources subsectors in ASSP implementation is a lost opportunity in strengthening statistics in the fisheries and forestry domains.
- v. Comprehensive start-up and launch of strategic plans play a significant role in creating awareness. ASSP should have taken advantage of bringing representatives during the launch from all categories of stakeholders in the agricultural statistics ecosystem, including public and private sectors, civil societies, development partners, communities, research and academic institutions
- vi. In most agricultural data collection activities, there has been inadequate funding and dependence on donors. Consequently, they have discontinued at the end of projects. Without adequate funding in the national budget by ASLMs to support key agricultural data collection activities, sustainability can be questionable.

2.3.4 SWOC Analysis

SWOC is an analysis framework that stands for strengths, weaknesses, opportunities and challenges. It established factors related to strengths and weaknesses and opportunities and challenges that influence the sector's ability to strengthen ASS. This analysis framework has summarised internal strengths and weaknesses to build and address respectively. The framework has also summarised perceptions on external opportunities for potential pursuit and external challenges to consider in the implementation of ASSP II. In addition, SWOC analysis has presented aspects concerning a legal and institutional framework, human resources, infrastructure and equipment and processes and systems (Tables 3 and 4).

Table 4. Analysis on Strengths and Weaknesses of ASS

	<u>Strengths to build on</u>	<u>Weaknesses to be addressed</u>
Legal Institutional Framework and	<ul style="list-style-type: none"> • ASSP has all legal and institutional frameworks to facilitate its operations, including the collection of joint official statistics. • Several partners and stakeholders in ASS are available. 	<ul style="list-style-type: none"> • A mechanism for effective dialogue with data users and producers through user - producer national/regional workshop not established. • Lack of a well-designed M&E and report framework for the implementation of the plan.

	<u>Strengths to build on</u>	<u>Weaknesses to be addressed</u>
	<ul style="list-style-type: none"> • National frameworks provide directions on a need for producing relevant data for each subsector. • Availability of the Statistics Act (Chapter 351) to safeguard statistics in the country. • A strong need for quality agricultural statistics both inside and outside the country. • NBS and OCGS have regional offices to coordinate the statistical system. • The Statistics Act (Chapter 351) promotes cooperation and racialisation among users or producers to avoid the duplication of efforts and ensure optimal utilisation of scarce resources. 	<ul style="list-style-type: none"> • Inadequate publicity and awareness creation of ASSP I, making some potential ASSP stakeholders less aware of its operations. • Weak institutional/intersectoral linkages on the collection and dissemination of Statistical information.
Human Resources	<ul style="list-style-type: none"> • Trained agricultural extension, livestock, fisheries and forestry staff on basic statistics skills. • Available trained staff in different capacities of statistics at NBS/ and OCGS. • Staffing plan well-stipulated in ASSP I. • Adequate support for human resources development. • Most MDAs staff have computers skills catalysed by the use of social media to share information. • Most field data-collection staff are trained at certificate and diploma levels. • The staff are aware of the importance of data. • Availability of data producers. 	<ul style="list-style-type: none"> • Regular long-term training on a survey methodology, ICT, data processing, analysis and report writing for the staff was not conducted within ASS. • Staffing issue at NBS and OCGS and the statistics units of ASLMs was not comprehensively reviewed under ASSP I. • Very low capacity of data collection using new technologies like tablets, PDAs and GPS. • Limited skills in basic data analysis. • Limited skills in report preparation.
Infrastructure, Facilities and Equipment,	<ul style="list-style-type: none"> • Availability of some offices equipped with ICT infrastructure/equipment for ARDS (laptop, printer, flash disk, modem, and stabiliser) and transport facilities. 	<ul style="list-style-type: none"> • Most of the statistical units currently available in ASLMs, LGAs, NBS and OCGS lack a minimum level of ICT equipment. • Inadequate equipment to facilitate data collection.
Processes/Systems	<ul style="list-style-type: none"> • Training in data collection and management of ARDS provided to the staff. • Strong data verification exercise for the collected data at ward and district levels. • Somewhat improvement in methodologies for data collection and analysis on agriculture production. • Manuals for biophysical and socioeconomic forestry data in place. • Both methodologies for collection of biophysical and socioeconomic data 	<ul style="list-style-type: none"> • Some collected data is based on field estimates. • Limited data on post-harvest losses for livestock products. • Inadequate disease surveillance and a livestock early warning system on diseases, rainfall and pasture conditions. • Lack of a specific master sample for livestock census, survey and studies. • Discontinued data collection e.g., imports and exports.

	<u>Strengths to build on</u>	<u>Weaknesses to be addressed</u>
	<p>accommodate the collection of data related to drivers of deforestation.</p>	<ul style="list-style-type: none"> • Limited analysis of data collected in some subsectors. For instance, the forestry for data collected during a NAFORMA exercise. • Inadequate involvement of NBS in the design of some of the programmes to identify data needs. For instance, in the case of NAFORMA. • The contribution of some subsectors to GDP is underestimated. For instance, the case of the forestry subsector concerning climate change, ecosystem services.

Table 5. Analysis on Opportunities and Challenges of ASS

	<u>Opportunities to be exploited</u>	<u>Challenges to be addressed</u>
Legal and Institutional Framework	<ul style="list-style-type: none"> • Policy and institutional support for ASSP operations. • The institutional and legal framework allows more agricultural statistics partners to take part in ASSP II. The Statistics Act (Chapter 351) stresses having an integrated national statistical system coordinated by NBS to ensure resource optimisation. • Increasing and emerging demand for agricultural statistics for planning, policy and decision-making. • Legal requirements under the Act for development of a sectoral databank developed by government institutions and agencies. • Setting standards for the collection, analysis, and publication of statistics to ensure uniformity in quality, adequate coverage and reliability of statistical information. 	<ul style="list-style-type: none"> • Deficient institutional arrangements and coordination of statistical functions in some MDAs. • Timely availability of quality agricultural statistics/data according to the needs of stakeholders.
Human Resources	<ul style="list-style-type: none"> • Adequate policy to facilitate human resource development. • Potential graduates for recruitment are available for a skills gap within ASS in ASSP II. 	<ul style="list-style-type: none"> • Some experienced staff who started the implementation of ASSP I have retired leaving a skills gap. • Low rate of recruitment has created a steady skills gap. • Limited funds to support long-term staff training in collection and analysis of agricultural data. • A shortage of staff to cover all areas where data can be collected.
Infrastructure, Facilities and Equipment	<ul style="list-style-type: none"> • More infrastructure and equipment can be procured in ASSP II. 	<ul style="list-style-type: none"> • Transportation facilities not adequate. • Most equipment is worn out and not in good working order. • Some organisations/institutions lack office space for statistics staff.
Processes and Systems	<ul style="list-style-type: none"> • ARDS can be potentially implemented in ASSP II. • Potential data collection areas in the fisheries and forestry subsectors. • HH budget surveys, human population and settlements census can integrate other subsectors socioeconomic data. 	<ul style="list-style-type: none"> • ARDS has not been implemented in Zanzibar • Limited of proper tools (tablets, PDAs and GPS) for taking some measurements, especially real-time data and cropped areas. • The remoteness of forest areas where data can be collected.

2.3.5 ASSP Stakeholders' Analysis and Mapping

Stakeholders collecting agricultural statistics in the country play a great role in implementing ASSP II. They include key data producers and users led by the National Bureau of Statistics in Mainland Tanzania and the Office of Chief Government Statistician (OCGS) in Zanzibar. The Agricultural Sector Lead Ministries are responsible for producing data on the performance of the sector. They include the Ministry of Agriculture (MoA), the Ministry of Livestock and Fisheries (MLF), the Ministry of Investment, Industry and Trade (MIIT), the President's Office, Regional Administration and Local Government (PO-RALG), the Ministry of Natural Resource and Tourism (MNRT) and Local Government Authorities (LGAs) at district, ward and village levels. In Zanzibar, players are the Ministry of Agriculture, Irrigation, Natural Resources and Livestock (MAINL) and the Ministry of Blue Economy and Fisheries (MBEF). ASLMs, as key stakeholders, are also data users for policy, planning, decision-making, monitoring and evaluation.

Moreover, ASSP II will involve research and training institutions. Research institutions include Tanzania Agricultural Research Institute (TARI), Tanzania Livestock Research Institute (TALIRI), Zanzibar Livestock Research Institute (ZALIRI), Kizimbani School of Agriculture (SOA). Others are Tanzania Forestry Research Institute (TAFORI), National Carbon Monitoring Centre (NCMC), Zanzibar Fisheries Research Institute (ZAFIRI), Tanzania Fisheries Research Institute (TAFIRI) and Centre for Agriculture Mechanisation and Rural Technology (CARMATEC). Other institutions will include Commission for Science Technology (COSTECH), Tanzania Fisheries Company (TAFICO), Zanzibar Agricultural Research Institute (ZARI) and Zanzibar Fisheries Company (ZAFICO), Lake Victoria Fisheries Organisation (LVFO) and Deep Fishing Authority (DFA).

Training institutions will include Sokoine University of Agriculture (SUA), University of Dar es Salaam (UDSM), University of Dodoma (UDOM) and SUZA School of Agriculture (SOA), Livestock Training Agency (LITA) and Fisheries Education and Training Agency (FETA).

Other key stakeholders of agricultural statistics are farmers, development partners, farmers/livestock keepers' organisations, civil society organisations (CSOs), NGOs, crop and livestock boards and private sector actors (seed companies, AgroVet companies and agro trade companies. Table 6 presents an overview of the expectations of stakeholders who are producers and users of data for policy design, decision-making, monitoring and evaluation.

Table 6. ASSP II Stakeholder analysis

	Stakeholder	Roles and Responsibilities	Expectations
1.	National Statistics Offices (NSOs).	Production, coordination and dissemination of official agricultural statistics (agriculture sample census and sample surveys and administrative records).	Compliance with statistical standards and methods to produce quality agricultural statistics. Publications on quality data, policy briefs, statistical bulletins.
2.	Agriculture Sector Lead Ministries (ASLMs).	Collection, analysis, dissemination and storage of agricultural data and information.	Compliance with statistical standards and methods to produce quality agricultural statistics. Publications on quality data, policy briefs, statistical bulletins.
3.	Regional level.	Identification of priority data at regional level. The provision of human resources for data collection at sub-national level. HR management.	An improved ARD collection system.
4.	LGAs: district, ward and village levels.	Identification of priority data at LGA level. The provision of human resources for data collection at sub-national level. HR management.	An improved ARD collection system.
5.	Research institutions.	Data collection and analysis through specific studies. Consultancy on research and special studies.	Publications on quality data, policy briefs, statistical bulletins.
6.	Training institutions/authorities.	HR training. Consultancy on research and special studies.	Production of qualified HR. Publications on quality data, policy briefs, statistical bulletins.
7.	Other Government institutions/agencies.	Assist in data collection and dissemination.	An improved data collection system.
8.	NGOs	Technical assistance, capacity building and additional funding.	Provision of data and statistics.
9.	Private sector.	Financing statistical activities.	Contribution to data collection.
10.	Development partners.	Technical assistance, capacity building and additional funding.	Coordination of statistical operations. Good management of financial and human resources.
11.	Farmers/livestock keepers, farmers/livestock keepers' organisations, crop and livestock boards, seeds and trade companies.	Producers and users of data.	Provision of data and statistics. Contribution to data collection.
12.	Media.	Dissemination of agricultural statistics.	Enhanced public awareness on the use of reliable data and statistics.

2.3.6 Critical Issues

Three broad categories of critical issues summarise the issues derived from the performance assessment of ASSP I, analyses of SWOC and stakeholders' roles and responsibilities in ASS. These categories include inadequate legal and institutional frameworks, inadequate capacity to provide agricultural statistics, limited data production, management and use for planning, policy and decision-making.

2.3.6.1 Inadequate legal and institutional frameworks

Despite the operations of ASSP I for five years, its assessment still reported some inadequacies. There is an inadequacy in awareness of the legal requirements stipulated in the Statistics Act (Chapter 351) that govern statistical functions in the country under the overall coordination of NBS and OCGS, deficiencies in institutional arrangements and coordination to handle statistical functions in MDAs. NBS and OCGS are crucial for the coordination of ASSP implementation.

Given their institutional and legal frameworks and technical capacity, the coordination of the implementation of ASSP I faced some challenges. There was inadequate awareness of the legal requirements stipulated in the Statistics Act (Chapter 351) that governs statistical processes in the country under the overall coordination of NBS and OCGS. Limited financial resources and deficiencies in institutional arrangement and coordination to handle statistical functions in MDAs exist.

Moreover, there were inadequacies in institutional and intersectoral linkages for collecting and sharing data and imbalances in planned statistical activities between subsectors. This revelation calls for more effort to strengthen legal and institutional frameworks to ensure agricultural statistics yield the expected results of its establishment. So, ASSP II intends to put in place institutional structures to strengthen coordination for implementation while adhering to the legal framework that fosters the existence of agricultural statistics in the country.

2.3.6.2 Inadequate capacity to provide agricultural statistics

Most ASLMs and institutions responsible for agricultural statistics still experience inadequate human resources in terms of the number of skilled members of staff. They experienced high staff turnover resulting from retirement that contributed to skill gaps due to low recruitment rates. Some units and departments have members of staff with a mixture of trained statisticians and agricultural experts who perform statistical tasks. However, due to limited planning for long-term training in statistics, there is a weak human resource capacity at regional and local government levels. There is also inadequate establishment and strengthening of statistics units in some MDAs. In addition, there was limited involvement of training institutions in the capacity development plan.

There has been inadequate funding and dependence on donors. Despite the importance of agriculture in the economy and people's livelihoods and the unsatisfactory situation of agriculture data in the country, the inclusion of agricultural statistics is rare in core statistics. Therefore, no provision is made in some ASLMs budgets for regular funding of these activities. There is a limited resource mobilisation plan for implementing statistical activities. This situation results in inadequate finances to undertake most activities such as regular

and comprehensive surveys, frame surveys, resource assessment and ARDS. Although the Government has contributed to surveys, most agricultural data collection activities are donor-driven and consequently discontinued at the end of projects. Without adequate funding in the national budget by ASLMs to support key agricultural data collection activities, sustainability is questionable.

Most MDAs have hardware and software for Information and Communications Technology (ICT). These facilities are not in good working conditions because of inadequate replacement of worn out equipment and transport facilities. Some districts and regional offices have limited ICT infrastructure and thus restrict their capacity to realise their mandate in agricultural statistics. In this era of fast advancing technology, IT equipment and servers need replacement to support statistical production and increased data access. There were also plans to promote collaboration with GIS and remote sensing units for accessing quality satellite images during the ASSP I period. However, the implementation of such plans was inadequate. There is the limited use of well-defined standards to harmonise agricultural data and limited office space, infrastructure and equipment.

Against this background, ASSP II will have to address the issues of low capacity on human resources, physical infrastructure, technology and financial resources to support the development of agricultural statistics in Tanzania.

2.3.6.3 Limited data production, management and use for planning, policy and decision making

Limitations of data production in the current agricultural statistical system is attributed to sub-sectoral data collection using different methods, sampling frames and sizes in surveys and censuses. The division of data by subsector leaves no opportunity to measure the impact of action in one subsector on another. This situation led to inadequate surveys in some subsectors, e.g., the fisheries subsector. It also portrays an imbalance in planned statistical activities between subsectors. In addition, there was an irregularity in conducting some annual surveys, e.g., large-scale farm surveys. Sometimes, the conduct of surveys was ad-hoc with no links to a master sampling frame or georeferenced units. This situation led to the insufficient production of accurate and timely data series. Yet, the agricultural statistical system is fragmented. Sometimes data and information are deficient in quality and quantity, but also their collection suffers from long lags. Therefore, it is challenging to integrate data from various surveys for in-depth analysis.

Methodologies for data production and management are not consistent and coordinated. There are disjointed data production efforts despite recognising the importance of data for appropriate decisions and policymaking. Subsectors generate plenty of data mainly for internal use and without consideration for the data needs of other users. Although most ASLMs collect plenty of administrative data, they are not published and made available to external users, making produced data inaccessible to expected beneficiaries. Fractional and isolated approaches cannot address the growth and development of agriculture. Accordingly, the first ASSP experienced information gaps among ASSP stakeholders comprising ASLMs, local government authorities, development partners, training and research institutions, communities (trade, crops, livestock, fisheries, forestry) and civil societies.

Moreover, there were inadequate campaigns for advocacy and raising awareness of the importance of statistics to most ASLMs and the LGAs. The advocacy of the ASSP at the political and policy levels is crucial to ensure its sustainability. These campaigns need to include decision-makers and development partners on the importance of the ASSP. The NBS and OCGS have increasingly disseminated their products through their websites. However, some ASLMs lack sites on their websites dedicated as potential dissemination platforms, so they could not advocate comprehensive data dissemination mechanisms. There is a need to organise regular dissemination workshops for sharing key statistical findings in ASSP II.

CHAPTER THREE

3.0 THE PLAN

The ASSP I successes, lessons learnt and the critical issues that still affect the agricultural statistical system have established the basis for the formulation of ASSP II. This chapter presents the vision, mission, core values, objectives, strategies, and targets that define the roadmap and drive the implementation of ASSP II.

3.1 Vision

A well-integrated system of official agricultural statistics in the National Statistical System.

3.2 Mission

To produce, manage and use quality official agricultural statistics in an objective, timely and cost-effective manner through harmonised and coordinated statistical methods, standards and guidelines.

3.3 Core Values

Seven core values will guide and influence the behaviour of actors in the implementation of ASSP II. These values describe continuing beliefs of the government and other stakeholders to have a mutual understanding and endeavour to put them into action.

- i. **Quality awareness:** Guarantee to employ cost-effective statistical methodologies that consider quality dimensions focusing on timeliness, completeness, comparability and accuracy.
- ii. **User focus:** Focus on ensuring that ASS constitutes the basis for its presence and meeting data needs and expectations of users and producers for various purposes.
- iii. **Compliance:** Strive to conform to methods and standards in providing statistical services.
- iv. **Reliability:** Commit to ensuring ASS produces data that is, correctly formatted, stored and trusted for planning, policy and decision-making.
- v. **Integrity and Credibility:** Promise to create and maintain public trust in official agricultural statistics by promoting professionalism and maintaining ethics in data production, dissemination, storage and archiving.
- vi. **Effectiveness and Efficiency:** Strive to ensure ASS is cost-effective and can clarify issues, evolve in responding to needs, is aware of priority information needs and capable of establishing priorities and accomplishing them with the least waste of time and effort.
- vii. **Transparency:** Diligently promote good practices that maintain regular consultation with users to ensure their needs are met, provide equal access to statistics for all users and ensure free public accessibility of basic statistics.

3.4 Development Objective

To have improved use and contribution of official agricultural statistics in policy formulation, planning, and informed decision-making in public and private sectors.

Rationale

Statistics for development entails both managing and using quality statistics. Any successful development planning, policy formulation and informed decision-making depend on the use of quality data. The credibility of policies, development plans and decisions made within and outside the agricultural sector in the country will continue depending on reliable statistics that contribute to substantiating national efforts to plan for future growth and people's welfare. It includes using official statistics for measuring, evaluating and providing timely information for all interconnected aspects of socioeconomic development and agriculture performance. Ultimately, quality statistics will meet policy needs and inform the public so that the effectiveness of strategic actions is evaluated based on established national, regional and global policy and planning frameworks.

The performance assessment of ASSP I revealed that the use of agricultural statistics in strategic planning, decision and policymaking is increasing and widely appreciated. There is a need to increase the use and advocacy of statistics in line with the increased resources and efforts to build sustainable statistical capacity. This development objective intends to ensure that ASS is well-integrated into NSS to ensure accessibility and visibility of quality agricultural statistics. This integration will eventually contribute to measuring and evaluating the country's agricultural performance and socioeconomic aspects. The monitoring and evaluation system will apply the following four impact indicators to monitor the performance of the long-term results of this development objective of ASSP II:

- i. The proportion of planned agricultural statistical publications produced and made public.
- ii. Agriculture subsector policies reviewed and formulated based on published agricultural statistics.
- iii. The proportion of projects, studies or research conducted to generate agricultural statistics.
- iv. The proportion of resource allocation for agricultural statistical operations.

3.5 Objectives

Strategic objective areas of ASSP II have been formulated based on the synthesis of crucial issues arising from the performance assessment of ASSP I. The following three strategic objectives are designed to contribute to the developmental objective:

- i. Objective A: Legal and institutional framework strengthened.
- ii. Objective B: Capacity to provide agricultural statistics enhanced.
- iii. Objective C: Data production, management and use improved.

3.5.1 Objective A: Legal and Institutional Framework Strengthened

Rationale

Legal framework and institution coordination is fundamental to integrating ASS into the NSS. National legislation plays a role in governing the compilation of official statistics to safeguard the professional independence of the statistical system. Moreover, it protects the head of NSS from political interference. Legislation must also give the statistical system power to compel institutions, businesses and persons to provide information for statistical purposes. Equally important, institutional coordination offers an enabling environment where institutions of the statistical system can cooperate and coordinate their activities with other specialists, national and international agencies and institutions. The GSARS, among other things, highlights the need to improve coordination between national statistical institutions and other national agencies that produce agricultural statistics.

During the ASSP I period, the Statistics Act (Chapter 351 R.E. 2019) was enacted as an instrument for defining the roles, responsibilities and actions of producers and users of statistics. The Act gives the primary responsibility and authority for data collection, analysis and dissemination to NBS and OCGS. Moreover, the Act stipulates governing structures of boards and committees and arrangements or procedures to facilitate data sharing and coordination between data producing agencies (reporting requirements).

Notwithstanding this achievement, weak legal and institutional framework for agriculture statistical operations still exist. There is a need to strengthen institutional arrangements and coordination and promote cooperation among users and producers of statistics to avoid duplication of efforts. All stakeholder representatives should be in the agriculture statistical ecosystem. They must include the government, the private sector, development partners, communities, research and academic institutions. It is crucial to ensure adequate financial resources for effective coordination and strengthening the monitoring and evaluation system. Furthermore, it is paramount to raise advocacy and awareness of the legal instrument provided by the Act that governs statistical functions.

Strategies

- i. Strengthen the legal framework of agricultural statistics.
- ii. Promote collaboration among producers and users of agricultural statistics.
- iii. Strengthen implementation, M&E and coordination of statistics operations at all levels.

Targets, Output and Outcome Indicators

Five targets will implement three strategies to strengthen the legal and institutional framework. Moreover, 13 output and seven outcome indicators will measure the performance of the targets and the objective, respectively (**Table 7**).

Table 7. Strategies, Targets, Output and Outcome Indicators for Objective A

Strategies	Targets	Output Indicators	Outcome Indicators
To strengthen implementation, M&E and coordination of statistical operations at all levels.	<ul style="list-style-type: none"> i. To streamline statistical units in MDAs' structures by June 2024. ii. To implement, coordinate, monitor and evaluate statistical operations by June 2027. 	<ul style="list-style-type: none"> i. Statistical units are established/strengthened in MDAs. ii. Number of MDAs with functional statistical structures. iii. Board and committees' fora are facilitated. iv. Periodic reports on statistical operations are produced by ASS partners. v. Number of quarterly meetings of ASS TWGs. vi. Number of quarterly NSS steering committee meetings are conducted. vii. A mid-term evaluation of ASSP II is conducted. viii. An end-term evaluation of ASSP II is conducted. ix. RSs with functional statistical structures. x. Number of LGAs with functional statistical structures. 	<ul style="list-style-type: none"> i. Developed MDAs structures with clear roles, responsibilities, reporting lines and statistical functions. ii. Percent of MDAs are producing new or improved statistics. iii. The percentage of ASS partners produce official agriculture statistics. iv. An average number of visits to MDAs websites per day to consume agricultural statistical data. v. Percentage change in resource allocation to statistical operations.
To promote collaboration among producers and users of agricultural statistics.	<ul style="list-style-type: none"> iii. To harmonise, promote and implement subsector guidelines for statistical operations by June 2024. iv. To develop institutional collaboration and coordination mechanisms by June 2024. 	<ul style="list-style-type: none"> xi. Guidelines are developed within and between subsectors xii. Number of meetings for sharing statistic information. 	<ul style="list-style-type: none"> vi. Guidelines are shared within and between subsectors.
To strengthen the legal framework for agricultural statistics.	<ul style="list-style-type: none"> v. To strengthen coordination and collaboration mechanisms of a Memorandum of Understanding (MoU) between NBS/OCGS and other producers of agricultural statistics within ASS - signed by December 2022. 	<ul style="list-style-type: none"> xiii. MoUs are developed among agricultural statistics producers within ASS. 	<ul style="list-style-type: none"> vii. MoUs are signed among agricultural statistics producers within ASS.

3.5.2 Objective B: Capacity to Provide Agriculture Statistics Enhanced

Rationale

Capacity building in the provision of agricultural statistics refers to strengthening the capacity of government institutions to produce and provide data to the agricultural statistical system on a sustainable basis. In this context, capacity-building encompasses the development of human resources, financial resources, statistical infrastructure and physical components of the working environment (workspace, equipment and facilities). Nevertheless, ASS continued facing challenges related to low capacity for the production of quality agriculture statistics on a sustainable basis. Therefore, this objective intends to address these four challenges as follows:

- i. **Human resource capacity development:** Human resource capacity is one of the crucial pillars to improve institutional performance in carrying out statistical functions. Efficient and effective data collection and dissemination depend on competent human resources. Human capital entails knowledge, technical skills and attitudes. Therefore, recruitment, training, changes in attitudes and increased motivation can improve human capacity. There is a need to continue with capacity building interventions for MDAs, RSs and LGAs. Training institutions also need to review and update their curricula to integrate essential agricultural statistics.

MDAs, RSs and LGAs should provide statistical infrastructure and capacity building to polish and update staff skills and training methodologies. The first phase of the Global Strategy to improve Agricultural and Rural Statistics (GSARS I- 2010 -2020) underlined a need to build the capacity of national agricultural statistical systems in the systematic collection of reliable data. The second phase of GSARS II (2020 - 2025) will continue strengthening the statistical capacities of countries through the provision of training and technical assistance at national, regional and global levels. Therefore, it is evident to continue with efforts to strengthen human resource capacity during phase II of ASSP.

- ii. **Financial resources mobilisation.** Financial management and resources mobilisation will be fundamental elements for improving institutional performance in service delivery related to agriculture statistics to all stakeholders. Demand for financial resources for the production of agriculture statistics is ever-increasing and surpasses available resources in government budgets. Subsidies and grants to support specific projects are crucial policy instruments to promote investments in strengthening ASS. Given this situation, among other things, the ASSP II strategy will focus on funds mobilisation.
- iii. **Statistical infrastructure capacity development:** An effective statistical system requires a well-developed statistical infrastructure such as computer systems, metadata repositories, legislation, standards and classifications, frameworks and information development plans. These tools help organise statistical production processes, improve efficiency and add value. They also play a fundamental role in simplifying statistical tasks and promoting common methods and standards across the statistical system. Despite some efforts made in the ASSPI period, there is a need to improve statistical infrastructure across all four subsectors. The improvement of statistical infrastructure will lead to adequate production of data.

Established frames and registers, frameworks and methodologies for application in data collection and analysis should form the basis for improvement. It should entail using modern technologies such as spatial GIS to provide maps for survey fieldwork. Moreover, it should provide the basis for disseminating disaggregated and referenced statistical data.

- iv. **Physical infrastructure capacity development:** The sustainability of a statistical system depends on adequate physical components of the work environment such as workspace, equipment and facilities to ensure ongoing support for the functioning of a statistical system. A conducive physical working environment for statistical operations comprises adequate office accommodation, comfortable sitting and facilities equipment to expedite office and field work.

During the ASSP I period, the physical components of the working environment were inadequate to most agricultural statistics units within NBS, OCGS and ASLMs. Therefore, the sustainability of the agricultural statistical system will continue depending on suitable and reliable infrastructure that supports the collection, processing, and dissemination of statistical data at appropriate intervals.

Strategies

- i. To strengthen the capacity of human resources.
- ii. To strengthen mobilisation of funds.
- iii. To promote the use of modern technologies for statistical operations.
- iv. To adopt the use of standard concepts, methods and classifications in conformity with international standards within ASS.
- v. To provide adequate physical components of the working environment.

Targets, Output and Outcome Indicators

Nine targets will implement five strategies. Furthermore, 11 outputs and 10 outcome indicators will measure the performance of the targets and the objective, respectively (**Table 8**).

Table 8: Strategies, Targets and Performance Indicators for Objective B

Strategies	Targets	Output Indicators	Outcome Indicators
Human Capacity Development			
To strengthen the capacity of human resources.	i. To train 70 per cent ASS staff in various agricultural statistical courses by June 2026. ii. To deliver human resources management services by June 2026.	i. Number of staff trained in various agricultural statistics courses.	i. Percentage change in staffing levels. ii. The level of satisfaction of data users.
Mobilisation of Financial Resources			
To strengthen mobilisation of funds.	ii. To increase mobilisation of funds by 50 per cent by June 2026.	i. Number of workshops to mobilize resources conducted ii. Number of Resources Mobilization Strategies developed.	iii. Amount of funds mobilised from bilateral and multi-lateral agreements. iv. Funds are mobilised through GoT budget. v. Funds are mobilised through the private sector.
Statistical technology development			
To promote the use of modern technologies for statistical operations.	v. To develop contracts (MoUs) and collaboration meetings with units responsible for GIS and Remote Sensing (RS) technologies by June 2023. v. To develop and access data assets for the compilation and management of agricultural statistics by June 2024.	iii. MoUs/MoAs are prepared and signed. iv. Statistical units with functioning GIS and RS databases. v. Preparation of meeting reports. vi. Units at higher learning Institutions and stakeholders responsible for ASS, GIS and Remote Sensing (RS) technologies are developed by June 2023.	vi. Percentage of statistical staff using ICT infrastructure, modern data collection and processing tools.
To adopt standard concepts, methods and classifications in conformity with international standards within ASS	i. To adapt/adopt updated international statistical classifications by June 2023. ii. To adopt updated statistical concepts, definitions and methodologies published within ASS by 2023.	ii. A set of classifications, concepts, definitions and methodologies.	vii. The level of adoption of updated concepts, definitions and methodologies. iii. The level of compliance with national and international statistical standards.

Physical infrastructures development			
To provide adequate physical components of a working environment.	viii.	To provide statistical units at MDAs and agriculture departments at RSs and LGAs with physical infrastructure by June 2026.	viii. Units and departments with conducive office space.
	ix.	To equip statistical units at MDAs and agriculture departments at RSs and LGAs with tools and facilities by June 2026.	ix. Units and departments with appropriate ICT infrastructure. x. Units and departments with working tools and equipment facilities. xi. Units and departments with transport facilities.
			ix. Percentage of statistical staff with conducive office space. x. Percentage of statistical staff with reliable transport facilities for statistical operations.

3.5.3 Objective C: Data Production, Management and Use Improved

Rationale

A data production system entails the collection, processing and analysis of data. Meanwhile, the data management system fulfils main three functions - access to official statistics for dissemination purposes, storage and retrieval of survey results and access for different uses such as development planning, policy and informed decision-making. Despite considerable work done in the ASSPI period, much has to be improved to generate statistics across all four subsectors. A multidisciplinary and holistic approach between agriculture subsectors and other sectors is required to ensure the production of a large body of data is incorporated into agriculture sectoral interventions. It is fundamental to integrate activities and streamline procedures to access statistics by stakeholders and interested parties. Moreover, it is crucial to ensure flexibility on how the master sample frame and resulting survey designs consider national requirements and statistical capabilities.

This objective will continue relying on strategic guidance provided by key planning frameworks at global, regional and national levels to improve the production of agricultural statistics. Still, the second phase of the Global Strategy (GSARS II 2020-2025) underlines the application and use of existing methodologies and approaches developed in the first phase. These frameworks provide strategic directions on national priority data and indicators required to assess the performance of interventions and targets. The objective further seeks to improve agricultural statistics within the ASS by strengthening surveys and routine data collection, processing, analysis, reporting, storage, dissemination, usage and archiving.

In addition, advocacy and awareness-raising activities on the importance of agricultural statistics are pertinent. Start-up and launch interventions create awareness to ensure broader dissemination and understanding of ASSP. Dissemination support is vital to ensure official agricultural statistics are readily

available, clearly identified by source and time and are comparable with aggregation purposes, both within and across countries.

Strategies

- i. To harmonise data production methods.
- ii. To promote the integration of data management systems.
- iii. To promote the use of appropriate, cost-effective technological methods and tools for data production and management.
- iv. To promote the use of quality agricultural statistics.

Targets, Output and Outcome Indicators

Ten targets are planned to achieve four strategies to improve data production and management. Moreover, 12 output and six outcome indicators will measure the performance of the targets and the objective, respectively (**Table 9**).

Table 9: Strategies, Targets, Output and Outcome Indicators for Objective C

Strategies	Targets	Output Indicators	Outcome Indicators
To harmonise data production methods.	<ol style="list-style-type: none"> i. To develop master sample frames for agricultural statistics (crop, livestock, fisheries and forestry) by June 2024 ii. To establish an integrated survey framework of priority national core datasets by subsector by June 2024 iii. To adopt the use of common concepts, methods, and classifications in conformity with international standards within ASS. 	<ol style="list-style-type: none"> i. Updated statistical registers and sample frames. ii. Integrated survey questionnaire for national priority core datasets. iii. Implemented subsector censuses and surveys according to planned schedules. 	<ol style="list-style-type: none"> i. Number of Periodic ii. Integrated agricultural censuses, surveys and studies. iii. Published statistical facts, figures and bulletins based on core indicators of priority national agricultural data items.
To promote the integration of data management systems.	<ol style="list-style-type: none"> iv. To harmonise subsector databases/databanks by June 2023. v. To develop and harmonise an integrated agricultural database with National Database (ND) by June 2024. 	<ol style="list-style-type: none"> iv. Frequency datasets uploaded in each subsector database/databank. v. Frequency datasets uploaded in National Agricultural Sector Database/ Databank (NASD) or National Database (ND). 	<ol style="list-style-type: none"> iv. Data Management systems integrated
To promote the use of appropriate cost-effective technological methods and	<ol style="list-style-type: none"> vi. To adopt remote sensing and geographical Information system technologies for periodic data collection by June 2023. 	<ol style="list-style-type: none"> vi. Number of people access to a satellite imagery. vii. Number of people access to a global positioning system (GPS) technology. 	<ol style="list-style-type: none"> v. Percent of people use appropriate cost-effective technological methods and tools for data production and management.

Strategies	Targets	Output Indicators	Outcome Indicators
tools for data production and management.	vii. To adopt web-based technologies in data collection and management by June 2023.	viii. Number of people access to GIS technology. ix. Access to personal digital assistants (PDAs). x. Access to a web-based information system.	
To promote the use of quality agricultural statistics.	viii. To have in place an advocacy and awareness programme on the application of statistics by June 2024. ix. To sensitise MDAs, RSs, LGAs and other data users by June 2023. x. To increase data dissemination channels by June 2024.	xi. Published agricultural statistical facts and figures by subsectors. xii. Number of MDAs, RSs, LGAs and other data users reached.	vi. Percent of users of quality agricultural statistics.

CHAPTER FOUR

4.0 IMPLEMENTATION OF ASSP II

4.1 Overview

This chapter presents implementation arrangements of ASSP II and considers lessons learned and experiences from ASSP I. To this end, the chapter delineates how to implement ASSP II concerning key implementing partners, governance and institutional arrangements, an annual working plan and budget, a financing strategy, communication and risk management.

4.2 Key Implementing Partners

Implementation of ASSP II will involve many partners, playing different roles in the implementation process. Key implementing partners include NBS and OCGS, playing the coordination role, ASLMs and LGAs are the leading implementers and data users for policy, planning, decision-making, monitoring and evaluation. Generally, academia and research institutions are expected to use generated data in conducting further research. Agriculture based research institutions include the Tanzania Agriculture Research Institute (TARI), Tanzania Livestock Research Institute (TALIRI), Tanzania Forestry Research Institute (TAFORI), National Carbon Monitoring Centre (NCMC), Zanzibar Fisheries Research Institute (ZAFIRI), Tanzania Fisheries Research Institute (TAFIRI), Zanzibar Agricultural Research Institute (ZARI) and Zanzibar Livestock Research Institute (ZALIRI).

Training institutions will include Sokoine University of Agriculture (SUA), University of Dar es Salaam (UDSM), University of Dodoma (UDOM), Nelson Mandela African Institution of Science and Technology (NM-AIST), Eastern Africa Statistical Training College (EASTC), SUZA School of Agriculture (SOA), Livestock Training Agency (LITA) and Fisheries Education and Training Agency (FETA). Other institutions will include Commission for Science Technology (COSTECH), Tanzania Fisheries Company (TAFICO), Zanzibar Fisheries Company (ZAFICO), Lake Victoria Fisheries Organisation (LVFO) and Deep Fishing Authority (DFA). Similarly, Development Partners will play the role of technical and funding support, and NGOs and civil society organisations will support advocacy. In contrast, the private sector and communities are expected to collaborate, especially in the production and use of agricultural statistics.

4.3 Governance and Institutional Arrangements

The ASSP II will be implemented in a coordinated and participatory manner across all institutions in the Agricultural Statistics System. NBS, OCGS and ASLMs will prepare annual working plans and budgets through ASSP II Coordination and Technical Working Group (responsible persons from statistics units in ASLMs) before submission to ASSP Executive Board (DPP level). They will review and endorse for submission to ASSP II Steering Committee (Permanent Secretaries level) for approval. At institutional level, within the National Statistical System, institutions will share reports with the National Agricultural Statistics Coordinator quarterly.

Statistician General from NBS and Government Statistician from OCGS will coordinate the implementation of ASSP II. To this end, the Statistician General and Government Statistician will be responsible for the performance and co-accounting of programme officers. Therefore, NBS and OCGS are essentially the coordination unit for the implementation of ASSP II. As a result, the ASSP II Institutional Arrangements will be depicted in **Figure 1**.

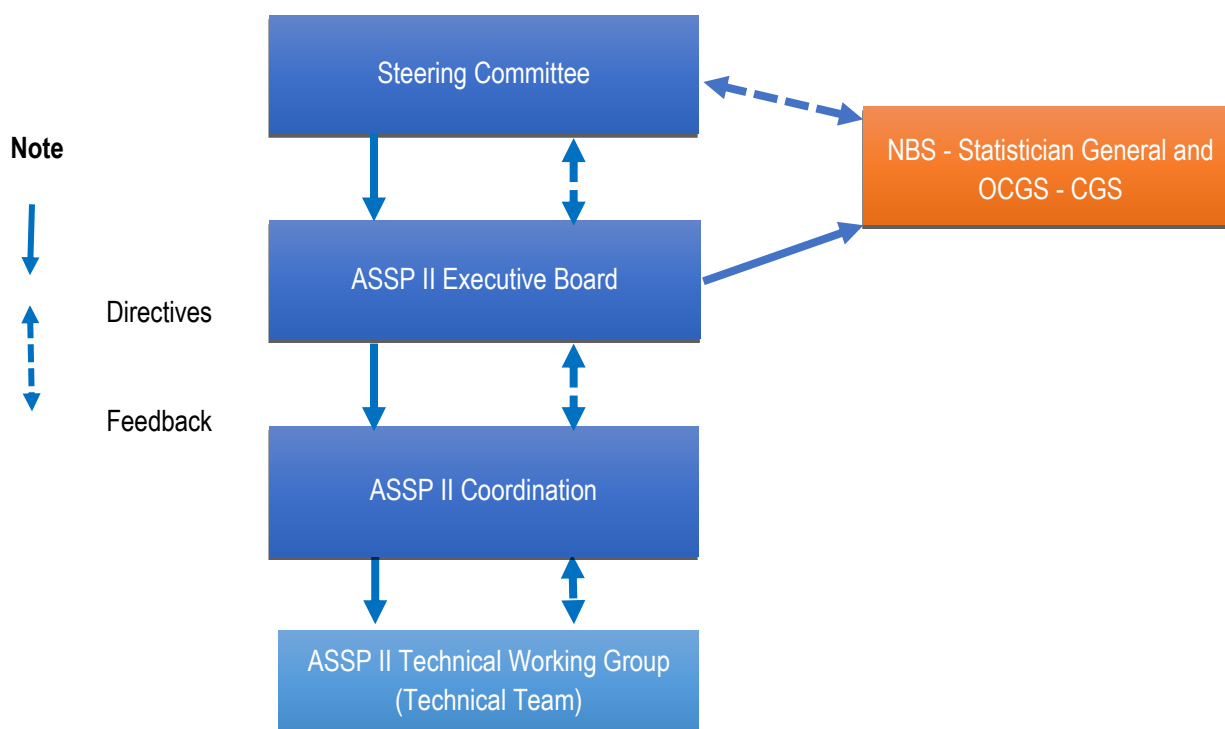


Figure 1: ASSP II Institutional Arrangements

The composition, roles and responsibilities for governance and institutional arrangements for the ASSP II are presented in **Table 10**. Generally, the steering committee is the supreme committee with a policy and oversight function in implementing ASSP II. Specifically, the steering committee will oversee the overall performance to ensure the goals and objectives of the ASSP II are achieved. The steering committee will hold meetings on an annual basis for both restricted and extended meetings and wherever needs arise.

The steering committee meetings will be chaired by the Permanent Secretary from the Ministry of Finance and Planning. The ASSP II executive board has an overall role in endorsing annual working plans and budgets and assisting with implementation issues and challenges presented in progress reports. An executive board meeting will be held twice a year. NBS and OCGS chief executive officers have the overall responsibility for the coordination of ASSP II. The chief executive officers will meet twice a year. ASSP II coordinator is responsible for the day-to-day coordination of ASSP II, including updating M&E results and coordinating resource mobilisation for ASSP II.

The technical working team is responsible for coordinating the implementation of working plans and reporting the progress. The ASSP II coordinator and technical working team meetings will be held quarterly. Details of the responsibilities of the different committees of ASSP II are presented in Table 8. The ASSP II Technical Working Group will be one of the working groups under TSMP to ensure articulation and coherence with the TSMP process. In addition, PMO, PO-RALG, Regional Secretariats and Local Government Authorities will coordinate statistical activities, budgeting and implementation.

Table 10 Composition, Roles and Responsibilities

Committee	Composition	Roles and Responsibilities
1. Steering Committee	(i) Restricted meeting: PS-MOFP, PS-PMO, PS-ASLM's (URT and RGoZ), PS-VPO, NBS SG and GS OCGS (ii) Extended meeting: ASLM's Permanent Secretaries (URT and RGoZ), PS-MOF, PMO, PO-RALG, development partners contributing to the implementation of ASSP II, NBS SG and GS OCGS.	<ul style="list-style-type: none"> • To provide policy guidance and oversight on the implementation of ASSP II. • To approve annual ASSP II plans and budgets. • To oversee the overall performance to ensure the goals and objectives of ASSP II are achieved. • To recommend resource mobilisation strategies by the Government and DPs contributions to ASSP II. • To sign Memorandums of Understanding between the Government and DPs.
2. ASSP Executive Board	ASLMs Directors of Policy and Planning, Directors of the subsectors covered by ASSP II in both Zanzibar and Mainland Tanzania and NBS and OCGS Directors responsible for agricultural statistics.	<ul style="list-style-type: none"> • To recommend to the Steering Committee on the effective implementation of ASSP II. • To review and endorse annual working plans and budget as well as progress reports of ASSP II. • To recommend resource mobilisation strategies.
3. NBS and OCGS Chief Executive Officers	NBS Statistician General and Government Statistician OCGS.	<ul style="list-style-type: none"> • To be responsible for coordinating and ensuring effective implementation of ASSP II. • To coordinate M&E.
4. ASSP II Coordinator	NBS and OCGS Head of Agricultural Statistics.	<ul style="list-style-type: none"> • To be responsible for the coordination of ASSP II implementation • To update monitoring and evaluation results. • To coordinate resourcing ASSP II and manage resource mobilisation plans.
5. Technical Working Group	Technical Officers from ASLMs, Statistics Officers from ASLMs, NBS and OCGS responsible for agricultural statistics.	<ul style="list-style-type: none"> • To consolidate annual working plans, procurement plans and budget within ASSP II. • To prepare a progress report for submission to the Executive Board. • To interact with DPs on technical issues of ASSP II. • To propose agricultural statistics national priorities.

4.4 Annual Work Plan and Budget

The ASSP II is a five-year plan, starting from 2022/2023 to 2026/2027 to be implemented annually. The implementing agencies will prepare an annual working plan each year together with procurement, resource mobilisation, monitoring and evaluation and training plans. The plans will constitute tangible and measurable performance indicators, targets, activities' timeline and persons responsible. It will also ensure that operational plans are incorporated and aligned with the available budget.

The estimated budget for implementation of ASSP II activities is **US\$25,320,691**, equivalent to **TZS⁵ 58,237,589,300** from July 2022 to June 2027 as indicated in Table 11 below. This estimate is based on a detailed working plan with a list of proposed activities to be carried out during the next five years by significant statistical units producing agricultural statistics at NBS, OCGS and ASLMs, including their agencies and institutions. A budget breakdown per strategic objective is presented in Table 9. In addition, proposed multi-year budgets for each objective and target are presented in **Appendix 1**. **Appendix 2** indicates activities against targets to guide the annual working plan and budget. Furthermore, a budget for coordination, monitoring and evaluation activities of ASSP II is provided for each objective.

Table 11: Budget breakdown per strategic objective⁶

Strategic Objectives	Year						% Allocation
	2022/23	2023/24	2024/25	2025/26	2026/27	Total \$	
Objective A: To Strengthen Legal and Institutional Framework	1,012,828	1,519,241	1,519,241	759,621	253,207	5,064,138	20 per cent
Objective B: To Enhance Capacity to Deliver Services in Agricultural Statistics	1,519,241	2,278,862	2,278,862	1,139,431	379,810	7,596,207	30 per cent
Objective C: To Improve Data Production, Management and Use	2,532,069	3,798,104	3,798,104	1,899,052	633,017	12,660,346	50 per cent
Total USD	5,064,138	7,596,207	7,596,207	3,798,104	1,266,035	25,320,691	
% Allocation per year	20 per cent	30 per cent	30 per cent	15 per cent	5 per cent		

4.5 Financing strategy

Improving agricultural statistics in Tanzania will largely depend on financial support from the government budget, private sector, the international community and individual contributions. However, an integrated approach and a coordinated working system are highly required to ensure that funds to address agricultural issues are used to achieve the objectives presented in this plan.

The following are envisaged sources of funding mechanism:

⁵ASSP II budget is presented in USD currency denomination. Therefore, currency conversion has been done using the Bank of Tanzania exchange rate for October 2021: 1USD exchanged for TZS2,300.

⁶ This budget has been estimated based on ASSP I budget whereby 1.5 factor has been applied to take care of inflation, currency fluctuation, and activities scope.

- i. **National Funds:** The ASSP II will mainly be funded by Government revenue. The Government will allocate these funds to various MDAs and Local Government Authorities to support agricultural statistics interventions. Other sources of domestic funds include funds from Public-Private Partnership and local NGOs.
- ii. **International Funds:** International funds financing agricultural statistics include the World Bank Funds, Africa Development Bank (ADB) Funds and Bilateral Funds, which are provided in arrangements between one of the donor countries and a developing country, institution, or NGO.
- iii. **Multilateral Funds:** These include funds established under the United Nations Frameworks and multilateral agreements to facilitate the implementation of agricultural statistics activities.

ASSP II will receive funds from the Government in collaboration with development partners. The Government will provide funds for staff salaries and recruitment, conducive office space for statistical operations and maintenance of infrastructure. Moreover, the Government budget will support and facilitate staff training, censuses, surveys, studies and routine data collection activities, and other operational costs such as telephone and electricity bills.

The Government will mobilise funds from development partners (DPs), including preparing proposals for specific research and survey projects and studies. DPs will be requested to contribute to technical assistance in identified areas and funding censuses, surveys, studies and routine data collection activities and supporting short- and long-term training. Government procedures will be employed to manage the ASSP II budget.

4.6 Advocacy and Communication

According to experience and lessons learned from the implementation of ASSP I, there was an information gap among key stakeholders of ASSP, including ASLMs, local government authorities, development partners, training and research institutions, communities (trade, crops, livestock, fisheries, forestry) and civil societies. Therefore, there is a need to raise awareness of the importance of ASSP among key players, including decision-makers and development partners. Hence, there is a need for sensitisation activities. Measures will focus on using statistics for development (S4D), including trade and evidence-based policy and decision-making, prioritisation of resources towards agricultural statistics activities and soliciting funds from different sources.

The advocacy of the ASSP at the political and policy levels needs to be emphasised for its sustainability. Limited awareness of the critical role of agricultural statistics in development may lead to poor policy design, uninformed decisions and the inability to monitor and evaluate the implementation of policies and development programmes in the agricultural sector. Similarly, lack of awareness and accessibility to agricultural statistics by some stakeholders such as business and farming communities jeopardises the utilisation of agriculture statistics for development. Therefore, ASSP II will host an annual stakeholders' workshop to be attended by ASLMs, local government authorities, development partners, training and research institutions, communities (trade, crops, livestock, fisheries, forestry) and civil societies to reflect on the overall implementation progress of ASSP II and opportunities and issues around agricultural statistics as

a whole. This forum will play a dual role in awareness of ASSP II and disseminating agriculture statistics for enhanced utilisation.

4.7 Risk Management

ASSP II implementation will consider the experience and lessons learned from ASSP I regarding potential risks affecting performance. As such, ASSP II will put in place a framework to manage risks through identification of risk or issue, analysis of risk or issue, response or how to deal with a risk or issue and a follow-up. ASSP II risks are in three categories: (i) financial risks, which concern funds, (ii) operational risks, which concern activities and (iii) developmental risks, which concern results. Table 12 presents strategies to manage three risks envisaged in the ASSP II implementation.

Table 12: Risk Management

No	Risk Description	Likelihood	Potential impact	Mitigation Measures
1	Insufficient funds allocated to implement the plan.	Medium	High	The Steering Committee, Executive Board and Coordination Team's concerted efforts on resource mobilisation strategies, mainstreaming resource mobilisation activities in the implementation plan.
2	Inadequate participation of some of the subsectors/ASLMs.	Low	High	ASSP II Coordinator's improved and proper planning and communication will help enhance participation of the ASLMS and other partners.
3	Inadequate human resources within ASS to support agricultural statistics activities.	Medium	Medium	<ul style="list-style-type: none"> • Integration of activities at department a level. • Recruitment and designation of focal points for agricultural statistics.

CHAPTER FIVE

5.0 MONITORING AND EVALUATION

5.1 Overview

The implementation of ASSP II needs to be closely monitored and evaluated. Therefore, there will be a monitoring and evaluation system that will play three major roles:

- i. Steering and controlling through informed decisions underlying the effective and efficient coordination of ASSP II;
- ii. Accountability against plans and budget resources for the implementation of ASSP II; and
- iii. Collecting lessons from the documentation of best practices – that is lessons learned and success stories from the implementation of ASSP II.

A detailed explanation of the specific functions of the monitoring and evaluation strategy is presented in the following paragraphs.

5.2 Monitoring and Evaluation System

The monitoring and evaluation (M&E) system will generate requisite data to inform the implementation of ASSP II. Specifically, the M&E system intends to establish benchmarks, a guide working plan and budget, performance and control. In addition, the results-based monitoring system will track how effectively MDAs and LGAs are demonstrating over time the extent to which ASSP II is achieving its strategic objectives. The system will track implementation (inputs and activities) and results (outputs, outcomes and impact).

The monitoring process will help track the performance of the strategic plan in terms of inputs, activities, and expected outputs, determine whether the ASSP II implementation is on track and assess how much is being achieved. Therefore, monitoring ASSP II will provide regular updates on the progress made in implementing the objectives. Similarly, this monitoring system will collect routine data on indicators, compare actual results against targets and report progress, including implementation challenges.

5.3 Results-Based Monitoring

Although outputs are often noted, outcomes and impacts are the main focus of M&E as implementation processes (inputs and activities) are not emphasised. The M & E system will use a logical framework as a management tool to monitor results, including assumptions or risks that may influence the success and failure of ASSP II interventions. Moreover, the system requires taking action in response to what is measured and reported. If monitoring shows that the plan is off track, then taking appropriate interventions or corrective measures will be crucial or revising the implementation strategies accordingly.

The ASSP II will be a living document that will require adjustments as objective conditions change. Therefore, monitoring will be essential for providing necessary information for accountability purposes. Designed performance indicators of M&E will measure the achievement of the objectives of ASSP II coordinated by

NBS and OCGS in collaboration with ASLMs. Reports on the progress of the implementation of ASSP II will be quarterly and annually.

5.4 Monitoring and Evaluation Framework

The Monitoring and Evaluation Framework of ASSP II is a logical framework (log frame). The logical framework presents the alignment of objectives with outputs, outcomes and impact indicators. The framework includes projected indicator targets, means of verification and assumptions for monitoring progress, and monitoring and evaluation plans detailing information gathering against the indicators. The M&E framework will employ three impacts and 22 outcome indicators of ASSP II for monitoring and evaluation purposes and the trend is reported annually. At the same time, the framework will use 35 output indicators in tracking the outcome indicators quarterly.

Notably, it is crucial to collect baseline data and targets against results indicators at the beginning of the implementation of ASSP II. **Annex 2** shows the log frame for monitoring the results of ASSP II, while **Annex 4** is the results framework for tracking outcome indicators annually. Subsectors will prepare separate log frames using Annexes 2 and 4 with indicator baselines and target values that will help consolidate the ASSP II log frame.

5.5 Results-Based Evaluation

Results-based evaluation (RBE) system will analyse factors that led to the achievements or non-achievements of intended results and assess specific causal contributions of activities to outcomes and the implementation process. This evaluation system will further explore unintended effects, provide lessons learnt, highlight significant accomplishments and recommendations for improvement. The ASSP II will be evaluated twice, in mid and at the end of the implementation period.

The evaluation process will assess the performance of the implementation of ASSP II in relation to the objectives. Mid-term evaluation or review (MTR) will focus on evaluating strategic objectives and outcomes to establish whether the ASSP II implementation is on track or not. The main evaluation criteria for MTR and final evaluation of ASSP II will be relevance, design quality, coherence, effectiveness, efficiency, sustainability and impacts. Additionally, the final evaluation will assess the performance of ASSP II, provide lessons learnt, highlight significant accomplishments and present recommendations for improvement.

5.6 Reporting Framework

5.6.1 Performance Reporting

M&E reports are expected to provide feedback on the progress made and the results achieved in the implementation of ASSP II and inform decision-making organs. The ASSP II coordination will determine the structure format of progress reports. Generally, it is expected that the reports should contain narrative, financial and results against the progress of the indicators. Further, the reports are expected to highlight challenges and learn lessons and best practices. The main M&E reports to be generated include:

- i. progress reports
- ii. performance reports

- iii. evaluation reports
- iv. study and survey reports

The reporting schedule and the types of M&E reports are presented in Table 13 below.

Table 13: Performance Reporting Schedule

Type of Report	Contents	Frequency
1. Progress Report	Consolidated reports will cover progress on cumulative targets, milestones and expenditures against annual plans and budgets.	Quarterly
2. Performance Report	Consolidated reports on targets and outcome monitoring against the annual plan and budget with a focus on assessing effectiveness and efficiency.	Annually
3. Mid-Term Review Report	Report against strategic objectives and outcomes mainly focusing on assessing whether ASSP II implementation is on track concerning evaluation criteria, namely relevance, effectiveness, efficiency, sustainability and impacts.	Second Quarter of 3 rd FY of ASSP II
4. Final Evaluation Report	Report against evaluation criteria focusing on relevance, effectiveness, efficiency, sustainability, impacts, lessons learned and recommendations.	End of 5 th FY of ASSP II
5. Study and Survey Reports	Findings and recommendations for improvement on specific agricultural statistical issues.	As per need

5.6.2 Reporting Plan

5.6.2.1 Internal Reporting Plan

ASSP II implementation will be reported on a quarterly and annual basis. The coordination and technical working team will use quarterly progress reports for internal use. The annual progress reports will be the official progress report on the implementation of ASSP II to be submitted to the steering committee and shared externally.

5.6.2.2 External Reporting Plan

The plan will require the submission of five reports to various external stakeholders from institutions implementing ASSP II. These reports include quarterly progress, annual performance, financial, mid-term, final evaluation and donor-funded projects. In addition, the reporting plan will follow statutory requirements as directed from time to time and Government performance reporting requirements. Table 14 shows an external reporting plan.

Table 14. External Reporting Plan

SN	Type of Report	Recipient	Frequency	Responsible Person
1.	Financial Statements	Controller and Auditor General	Annually	NBS/OCGS
2.	Annual Performance Report	ASLMs, DPs	Annually	NBS/OCGS
3	Mid-Term Report	ASLMs, DPs	After two years	NBS/OCGS
4	Development Project Reports	ASLMs, DPs	Annually	NBS/OCGS
5.	Five-Year Evaluation Report	ASLMs, DPs	After every five years	NBS/OCGS

5.6.3 Feedback Mechanism and Use of Monitoring and Evaluation Information

Establishing a feedback mechanism between report producers and end-users will become fundamental. This feedback mechanism may include seminars, workshops, review forums and stakeholders' meetings. This mechanism will lead to stakeholders sharing achievements, experiences and challenges, including identifying collective actions to address challenges. Moreover, the mechanism is expected to improve reports' quality and timely submission.

The main use of result findings arising from monitoring and evaluation (M&E) reports for ASSP II will:

- i. Assist in making objective decisions, including operational resource allocation decisions,
- ii. Help in demonstrating results as part of accountability,
- iii. Assist in communicating better to build public trust,
- iv. Facilitate preparation and justification of budget requests,
- v. Contribute to motivating staff to continue making improvements in the implementation of their plans,
- vi. Provide information on assessing ASSP II contribution to overall NSS, FYDP III, ZADep and reviews of national policies and strategies,
- vii. Support medium-term strategic and other long-term planning efforts by providing baseline information and later tracking progress,
- viii. Provide data for special in-depth projects and programme planning, implementation and evaluations, and
- ix. Assist in initiating in-depth examinations of existing performance problems and needed corrections.

Appendix 1: ASSP II Budget

Strategic Objective/Target	2022/23	2023/24	2024/25	2025/26	2026/27	Total in US\$
Objective A: Institutional Framework Strengthened						
<i>AT1: Statistical units streamlined in MDAs' structures by June 2024</i>	50,641	227,886	0	0	0	278,527
<i>AT2: Statistical operations implemented, coordinated monitored and evaluated by June 2027</i>	506,414	607,697	303,848	113,943	37,981	1,569,883
<i>AT3: Subsector guidelines for statistical operations harmonised and implemented by June 2024</i>	202,566	303,848	379,810	227,886	126,603	1,240,713
<i>AT4: Institutional collaboration and coordination mechanisms developed by June 2024</i>	202,566	303,848	759,621	379,810	75,962	1,721,807
<i>AT 5: MoU for strengthening coordination and collaboration mechanisms between NBS/OCGS-Zanzibar and other producers of agricultural statistics within ASS - signed by December 2022.</i>	50,641	75,962	75,962	37,982	12,661	253,208
Total Objective A	1,012,828	1,519,241	1,519,241	759,621	253,207	5,064,138
Objective B: Capacity to Deliver Services in Agricultural Statistics Enhanced						
<i>BT1: 70 per cent staff involved in ASS trained various agricultural statistics courses by June 2026</i>	205,131	113,943	227,886	100,000	91,009	737,969
<i>BT2: Human resource management services delivered by June 2026</i>	151,924	113,943	227,886			493,753
<i>BT3: Funds mobilised increased by 50 per cent by June 2026</i>	151,924		227,886			379,810
<i>BT3: Collaboration with units responsible for GIS and remote sensing (RS) technologies developed by June 2023</i>	151,924	13,943	227,886			393,753
<i>BT4: Contracts (MoUs), meetings collaboration with units responsible for GIS and remote sensing (RS) technologies developed by June 2023</i>		227,886				227,886
<i>BT5: Data assets for compilation and management of agricultural statistics developed and made accessible by June 2024</i>	151,924	1,139,431	227,886	227,886	75,962	1,823,089
<i>BT6: Updated international statistical classifications adapted/adopted by June 2023</i>	151,924			241,829	63,943	457,696

Strategic Objective/Target	2022/23	2023/24	2024/25	2025/26	2026/27	Total in US\$
DT7: Updated statistical concepts, definitions and methodologies published and adopted within ASS by 2023		43030	227,886	227,886	34,953	533,755
BT8: Statistical units at local central levels provided with physical infrastructure by June 2026	351,925	113,943	227,886	170,915	37,982	902,651
BT8: Statistical units at local central levels equipped with tools and facilities by June 2026	202,565	512,743	683,660	170,915	75,962	1,645,845
Total Objective B	1,519,241	2,278,862	2,278,862	1,139,431	379,811	7,596,207
Objective C: Data Production and Management System Improved						
CT1: The master sample frame for agricultural statistics by subsector developed by June 2023	300,000	441,000	441,000	229,000	88,000	1,499,000
CT2: An integrated survey framework of priority national core datasets established by June 2023	262,069	402,069	402,069	192,069	52,069	1,310,345
CT3: Subsector databases/databanks harmonised by June 2023	400,000	542,000	542,000	330,000	80,000	1,894,000
CT4: An integrated agricultural database developed and harmonised with national database (ND) by June 2024	255,000	395,000	395,000	180,000	40,000	1,265,000
CT5: Remote sensing and geographical information system technologies for periodic data collection adopted by June 2023	355,000	495,000	495,000	280,000	80,000	1,705,000
CT6: Web-based technologies adopted in data management by June 2023	250,000	392,000	392,000	180,000	70,000	1,284,000
CT7: Advocacy and awareness programme on the application of statistics in place by June 2024	200,000	340,000	340,000	130,000	90,000	1,100,000
CT8: MDAs and data users sensitised by June 2023	260,000	400,000	400,000	190,000	80,000	1,330,000
CT9: Data dissemination channels increased by June 2024	250,000	391,035	391,035	187,983	52,948	1,273,001
Total Objective C	2,532,069	3,798,104	3,798,104	1,899,052	633,017	12,660,346
GRAND TOTAL	5,064,138	7,596,207	7,596,207	3,798,104	1,266,035	25,320,691

Appendix 3. Indicative Main Activities for Strategic Objectives

Objective A: Legal and Institutional Framework Strengthened		
S/N	Targets	Main Activities
1.	To streamline statistical units in MDAs' structures by June 2024	<ul style="list-style-type: none"> i. Review organisational structures to streamline statistical functions ii. Clarify roles and responsibilities on statistical functions within MDAs iii. Clarify roles and responsibilities on statistical functions between central and local levels
2.	To implement and monitor statistical operations by June 2024	<ul style="list-style-type: none"> i. Prepare statistical annual plans and budgets ii. Prepare periodic reports on agricultural statistics
3.	To harmonise and implement subsector guidelines for statistical operations by June 2024	<ul style="list-style-type: none"> i. Prepare subsector guidelines on statistical operations ii. Disseminate guidelines
4.	To develop institutional collaboration and coordination mechanisms by June 2024	<ul style="list-style-type: none"> i. Establish fora for sharing experiences ii. Establish coordination committees for harmonising agricultural statistical guidelines, surveys and studies
5.	To sign MoU for strengthening coordination and collaboration mechanisms between NBS/OCGS-Zanzibar and other producers of agricultural statistics within ASS by December 2022	<ul style="list-style-type: none"> i. Prepare MoU between NBS, OCGS, ASLMs and LGAs and other agricultural data producers ii. Facilitate implementation of MoU

Objective B: Capacity to provide agriculture statistics enhanced		
S/N	Targets	Main Activities
1.	To train 70 per cent of staff involved in ASS in various agricultural statistics courses by June 2027	<ul style="list-style-type: none"> i. To conduct training needs assessment (TNA). ii. To prepare training plans based on MDAs training programmes. iii. To train staff in statistical methodologies for sampling, census and survey design, data collection, compilation, data analysis and report writing. iv. To train staff in important statistical analysis software.
2.	To provide human resource management services by June 2026	<ul style="list-style-type: none"> i. To build a network of statisticians and supporting staff, including data collectors. ii. To deploy/recruit competent statisticians.
3.	To collaborate with units responsible for GIS and remote sensing (RS) technologies by June 2023	<ul style="list-style-type: none"> i. To prepare MoU/MoA for accessing technologies. ii. To develop appropriate infrastructure for handling GIS and Remote Sensing data. iii. To build required technical capacity for GIS and RS. iv. To popularise basic GIS data with information on the agricultural sector. v. To provide the satellite imagery georeferenced by land use.
4.	To develop and access datasets for compilation and management of agricultural statistics by June 2024	<ul style="list-style-type: none"> i. To identify and prepare appropriate core datasets, identifiers and registers. ii. To prepare data standard guidelines that define how data should be collected or structured. iii. To maintain agricultural sector register.
5.	To publish and adopt updated international statistical classifications, concepts, definitions and methodologies within ASS by 2023	<ul style="list-style-type: none"> i. To establish agricultural master sampling frame for census and surveys by subsector from Population and Housing Census of 2022. ii. To update and adopt agricultural statistical concepts, definitions, methodologies and agricultural statistical classifications within ASS in line with national and international standards
6.	To provide statistical units at local central level with physical infrastructure by June 2026	<ul style="list-style-type: none"> i. To provide adequate office space for statistical units within ASLMs. ii. To provide ICT infrastructure (computers, software, printers, projectors, photocopier, cameras and scanners) and office equipment.
7.	To equip statistical units at local central level with tools and facilities by June 2026	<ul style="list-style-type: none"> i. To provide data collection tools (GPS, CAPI, smartphones, weighing scale) ii. To provide motor vehicles, motorbikes, and bicycles for data collection iii. To maintain available transport facilities for data collection.

Objective C: Data Production and Management System Improved		
S/No	Targets	Main Activities
1.	To develop a master sample frame for agricultural statistics by subsector by June 2023	<ul style="list-style-type: none"> i. To identify set of priority core data for data items by category, variable and frequency of collection ii. To establish a menu of priority national set of core data and associated data iii. To develop, update and maintain a master sample frame
2.	To establish an integrated survey framework of priority national core datasets by June 2023	<ul style="list-style-type: none"> i. To conduct special studies to establish baseline data for certain data types ii. To conduct data needs assessment between subsectors and beyond the agricultural sector. iii. To implement a new survey framework iv. To conduct users-producers' workshops of agricultural statistics
3.	To harmonise subsector databases/databanks by June 2023	<ul style="list-style-type: none"> i. To develop a data management system by subsector. ii. To develop and maintain a livestock early warning system iii. To update and maintain a crop early warning system iv. To analyse data based on a survey plan v. To archive and produce reports
4.	To develop and harmonise an integrated agricultural database with National Database (ND) by June 2024	<ul style="list-style-type: none"> i. To conduct sample surveys, inventories, censuses, routine data collection and specific studies ii. To establish core data items by subsector iii. To design and prepare an integrated survey programme for core data items iv. To collect data based on integrated survey framework- annual and periodic surveys/censuses
5.	To adopt remote sensing and geographical information system technologies for periodic data collection by June 2023	<ul style="list-style-type: none"> i. To support acquisition of RS and GIS technologies ii. To train staff in the application of RS technologies
6.	To adopt web-based technologies in data management by June 2023	<ul style="list-style-type: none"> i. To support acquisition of web-based technologies ii. To establish desktop and web-based database for the compilation and management of agricultural statistics iii. To train staff in the application of web-based technologies
7.	To put in place an awareness programme on the application of statistics by June 2024	<ul style="list-style-type: none"> i. To prepare and implement awareness programme/plan ii. To raise awareness on the importance of data iii. To support publication of policy briefs, facts and figures
8.	To sensitise MDAs and data users by June 2023	<ul style="list-style-type: none"> iv. To sensitise MDAs on the use of simple technologies for collection and dissemination v. To disseminate the results and respond to requests

Appendix 3: ASSP II Logical Framework

Strategic Objectives	Results	Impact/Outcome Indicators	Baseline		Targets (June 2027)	Means of Verification	Assumptions
			Year	Value			
Development Objective:	Impact: Improved contribution and use of official agricultural statistics in policy formulation, planning and informed decision making for both public and private sectors.	i. Proportion of produced agricultural statistical publications made public by MDAs	2021/2022	To be collected in 2022/2023	85%	i) MDAs websites and Booklets ii) Survey report of public and private institutions	1.MDAs and private institutions will have human and financial resources 2. MDAs and private institutions should have commitment to produce and publish agriculture statistics 3. MDAs and private institutions are aware of the availability of agriculture statistics and ready to use for various purposes
		ii.Proportion of public and private institutions which use agricultural statistics in policy formulation, planning and informed decision making	2021/2022	To be collected in 2022/2023	80%		
Strategic objective A: To Strengthen Legal and Institutional Framework	Outcome: Legal and Institutional Framework Strengthened	i. Percent of developed MDAs structures with clear effective statistical functions	2021/2022	To be collected in 2022/2023	75%	Survey report of MDAs.	1.MDAs and private institutions will have human and financial resources 2. MDAs and private institutions should have commitment to produce and publish agriculture statistics 3. MDAs and private institutions are aware of the availability of agriculture statistics and ready to use for various purposes
		ii. Percent of MDAs producing new or improved agricultural statistics	2021/2022	To be collected in 2022/2023	75%		
		ii. Percentage change in number of visits to MDAs websites to access agriculture statistics	2021/2022	To be collected in 2022/2023	80% increase from baseline	MDAs websites and Booklets	

Strategic Objectives	Results	Impact/Outcome Indicators	Baseline		Targets (June 2027)	Means of Verification	Assumptions
			Year	Value			
		iv. Percentage change in number and type of Agricultural subsector policies, laws or regulations formulated or reviewed based on published agricultural statistics	2021/2022	To be collected in 2022/2023	50% increase from baseline	Survey report of MDAs.	
		v. Percentage change in budget allocation to support statistical operations	2021/2022	To be collected in 2022/2023	10% increase from baseline		
Strategic Objective B: To Enhance Capacity to Deliver Services in Agricultural Statistics	Outcome: Capacity to provide agricultural statistics enhanced	i. Percentage of MDAs' staff with skills to deliver services on Agricultural Statistics	2021/2022	To be collected in 2022/2023	100%	Survey report of MDAs.	
		ii. Satisfaction levels of users of agriculture statistics service	2021/2022	To be collected in 2022/2023	75%		
		iii. Percent of MDAs which mobilized funds from bilateral or multi-lateral agreements to support agricultural statistics services	2021/2022	To be collected in 2022/2023	75%		
		iv. Percentage change in amount of funds mobilised by MDAs from bilateral or multi-lateral agreements to	2021/2022	To be collected in 2022/2023	.50% increase from the baseline		

Strategic Objectives	Results	Impact/Outcome Indicators	Baseline		Targets (June 2027)	Means of Verification	Assumptions
			Year	Value			
		support agricultural statistics services					
		v. The percentage of statistical staff using ICT infrastructures for data collection and processing.	2021/2022	To be collected in 2022/2023	100%		
Strategic Objective C: To Improve Data Production, Management and Use	Outcome: Data production, management and use improved	i. Periodic subsector-specific surveys	2021/2022	To be collected in 2022/2023	20	Survey report of MDAs	1.MDAs and private institutions will have human and financial resources 2. MDAs and private institutions should have commitment to produce and publish agriculture statistics 3. MDAs and private institutions are aware of the availability of agriculture statistics and ready to use for various purposes
		ii. Annual Agriculture Sampled Survey (AASS)	2016/2017	1	5	AASS report	
		iii. Percent change in number and type of projects, studies or research conducted to generate agricultural statistics	2021/2022	To be collected in 2022/2023	25%	Survey report of MDAs	
		iv. Levels of staff satisfaction on access and use of modern technologies to produce agricultural statistics	2021/2022	To be collected in 2022/2023	80%		
		v. Levels of staff satisfaction on access and use of agricultural statistics	2021/2022	To be collected in 2022/2023	80%		

Strategic Objectives	Results	Impact/Outcome Indicators	Baseline		Targets (June 2027)	Means of Verification	Assumptions
			Year	Value			
		vi. Change in time used to produce AASS	2016/2017	6 months	4 months		

Appendix 4: Set of indicators planned along with the targets to be achieved by the end of the FYDP III period

S/No	Indicator	Target	
		2019/20	2025/26
1. Agriculture			
1.1	Average growth rate (%)	5.0	6.1
1.2	Percentage share to GDP (current prices)	25.7	23.4
1.3	Percentage share on total export earning	13.0	19.0
1.4	Percentage share on total employment	65	60
1.5	Productivity (% growth)	4.0	4.7
2. Crops			
2.1	Average growth rate (%)	5.1	5.7
2.2	Percentage share to GDP (current prices)	14.2	12.3
2.3	Percentage share on total export earnings	13.0	19.0
2.4	Hectare under irrigation	694,715	1,200,000
2.6	The number of extension officers	6,704	20,538
2.7	Certified seed production	71,000	140,000
2.8	A percentage decrease in postharvest loss	35	17.5
2.9	An increase in national reserve capacity	501,000	700,000
2.10	Volume of total horticultural production per year (tonnes)	6,556,102	14,600,000
2.11	Volume production of the traditional commercial crops (tonnes).	794,500	1,583,200
2.12	Percentage of agricultural land under mechanisation services along a value chain	47	75
2.13	Established large-scale farms (block farms)	110	200
2.14	Industries owned by cooperatives	113	183
2.15	Cooperative using formal a market system	3,001	4,039

S/No	Indicator	Target	
		2019/20	2025/26
2.16	Members of cooperatives societies (millions)	5.9	14.5
2.17	Food sufficiency ratio (%)	124	130
3. Livestock			
3.1	Average growth rate (%)	5.1	6.5
3.2	Share to GDP (at current prices)	7.0	6.8
3.3	Livestock mortality rate	27	12
3.4	Livestock morbidity rate	6	3
3.5	Livestock dipping rate	70	85
3.6	Livestock vaccination coverage rate	25	50
3.7	Endogenous herd milk average productivity (litres)	2	4
3.8	Mature endogenous herd meat average productivity (carcass weight in kg)	75	130
3.9	Percentage of quality hides and skin	10	50
3.10	Meat production (tonnes in '000')	702	951.7
3.11	Milk production in (litres in billions)	3.01	4.3
3.12	Percentage of milk processed	5	14
3.13	Meat processing (tonnes)	286	500
3.14	Hides and skin processed (tonnes)	1,190	9,210.6
3.15	Meat exports (tonnes)	692	7,200
3.16	Finished leather exports (tonnes)	25.5	92
4. Fisheries			
4.1	Average growth rate (%)	6.3	8.4
4.2	Share to GDP (at current prices)	1.8	1.9
4.3	Percentage share on total export earnings	3.0	4.5
4.4	Per capita consumption (kg)	8.5	10.5
4.5	Contribution to national animal protein intake	30	35
4.6	Fisheries production (tonnes)	497,567.28	600,000
4.7	Fish processing industries	12	17
4.8	Aquacultural development centres (ADC)	9	12
4.9	Fish feed production (tonnes)	464	2,500
4.10	Fisheries extension officers	657	1,850

S/No	Indicator	Target	
		2019/20	2025/26
5. Forestry			
5.1	Percentage share of GDP from sustainable utilisation of forestry, resources	3	4
5.2	Area under community plantations forest and woodlots increase (ha)	120,000	160,000
5.3	Reduced deforestation rate (ha)	469,420	234,710
5.4	Area of commercial forest plantation established (ha)	500,000	550,000
5.5	Increased consumption of alternative charcoal in urban areas (tonnes)	100	100,000

