



# Regional strategy for setting up an **Agricultural Information Management System** en Afrique Australe

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Strategic framework 2020-2025

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Southern African Development Community

**Regional strategy**

# **SADC**

# **Agricultural Information**

# **Management System Strategy**

# **2020-2025**

Southern African Development Community (SADC) Secretariat  
Gaborone, 2020

SADC Regional Strategy for Setting up an Agricultural Information Management System, 2020-2025

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This SADC Agricultural Information Management System Strategy is available in print and online on the SADC website, and published in the official SADC languages - English, French and Portuguese.

Citation: *SADC AIMS Strategy 2020-2025*, Gaborone, Botswana, 2020

ISBN: 978-99968-952-6-5

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# FOREWORD

*The agriculture sector contribution in Southern African Development Community (SADC) Member States ranges from 4 to 27 percent of the Gross Domestic Product. Its contribution on average is around 13 percent of total export earnings and 66 percent of the value of intraregional trade. Other sources reveal that 70 percent of the population depend on agriculture for food, income and employment<sup>1</sup>. These figures not only show that the agriculture sector plays a significant role in the development of SADC economies including its regional trade and integration, but also highlight that agriculture is one of the main sources of income for most households.*

Considering the importance of the agriculture sector to governments and ordinary citizens with regard to wealth creation, it is fitting that decision-making in the field of agricultural policy is based on evidence, factual data and sound information. In this regard, the development of the SADC Agricultural Information Management System (AIMS) Strategy is the response to the needs expressed by the SADC Secretariat and its Member States. The AIMS Strategy is intended to populate SADC Vision 2050 with reliable information to make available to policy-makers, planners, stakeholders and statistical users an integrated system at regional level dedicated to agricultural information and other related statistics, to better guide and track progress and performance in the implementation of the SADC Regional Indicative Strategic Development Plan (RISDP) 2005–2020 and derived policy documents. These are notably the SADC Regional Agricultural Policy (RAP) approved in June 2013 by the SADC Council of Ministers, and support for its operationalization by the SADC Regional Agricultural Policy Investment Plan (RAIP).

While this Strategy draws its legitimacy from SADC commitment to operationalize the RAP and its efforts to accelerate progress towards implementation of SADC regional integration policy, it intends to contribute to strengthening the regional and national statistical systems through the setting up of an integrated information management system in the region. The Strategy, like other strategies such as the Global Strategy to Improve Agricultural and Rural Statistics (GSARS) and SADC Regional Strategy for Development of Statistics, aims to remedy the inadequacies pertaining to availability and accessibility of statistical information, notably agricultural information observed in the SADC region. It will (i) guide the identification of indicators, data and information that need to be uploaded into the system; (ii) guide the designing and implementation of a web-based system to meet current and future information needs; (iii) guide the methodology for data collection aimed at populating the system and data management of information on the system; (iv) ensure seamless integration of the national entities and agencies producing agricultural information into the National Statistical System (NSS) in order to meet the demand for information from decision-makers and other users of statistical information; (v) ensure adequate ICT infrastructure for data comparability within and among SADC Member States; and (vi) improve the viability of the NSS in producing agriculture information by strengthening statistical capacities and good governance.

The implementation of this Strategy will enhance the availability, quality and timeliness of agricultural information, setting of achievable targets and decision-making on a rational basis, as mentioned above, and will provide reliable information necessary to guide the designing and formulation of policies in the agriculture sector. However, the successful implementation of the activities selected in the Strategy will only be possible with a substantial allocation of human and financial resources from governments, collaboration of all relevant stakeholders at national and regional levels as well as with technical and financial support from development partners.

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<sup>1</sup> SADC Regional Agricultural Policy - Country Summary Agricultural Policy Reviews Reports, January 2011

# ACKNOWLEDGEMENTS

*This Strategy has been made possible through a joint collaboration between SADC and the Food and Agriculture Organization of the United Nations (FAO) under the 11th Economic Development Fund programme of 2014–2020 (EDF 11), financed by the European Union (EU) with the overall objective to accelerate progress towards implementation of SADC regional integration. It was developed under the project “Support Towards the Operationalization of the SADC Regional Agricultural Policy (STOSAR)” and ran from March 2019 to August 2021. Its specific objectives were to improve production, productivity and competitiveness of agricultural products and food and nutrition security.*

The development of this Strategy was undertaken in a participatory, inclusive and consultative process. The process was coordinated by Dr Mathew Abang (Plant Production and Protection Officer, FAO) and Mr Duncan Samikwa (Senior Programme Officer – Food Security and Agriculture, SADC). Production was managed by Ms Elma Zanamwe (STOSAR Coordinator, FAO) and Ms Panduleni N. Elago (Programme Officer – Food Security and Information, SADC). The technical work was carried out by Nzingoula Gildas Crépin (Statistics Specialist, FAO) and Aboubacar Daman (Information Systems Specialist, FAO). Contributors include Dr Magona Joseph (Animal Health Specialist, FAO), Mr Mwape Chiluba (Plant Health Specialist), Mr Deepchand Singh Jagai (Senior Statistics and Research, SADC), Mrs Zarafenosoa M. Ruth (Research and Statistics Officer, SADC), Mr Michael Ernest (ICT Expert, SADC), Mr Alphonci Muradza (Information Systems Officer, SADC), Mr Esaiiah Tjelele (Crops Programme Officer, SADC) and Mr Gaolathe Thobokwe (Livestock Development Officer, SADC).

The process also benefited from the experience and expertise of Mr Bedane Berhanu (Animal Production Health Officer, FAO) and Mr Stuart Tippins (Information Technology Officer, FAO).

In addition, the Strategy was developed with the valuable technical and thematic contributions of AIMS focal points and expert statisticians from SADC Member States, namely Angola, Botswana, Comoros, Democratic Republic of the Congo, Eswatini, Kingdom of Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Tanzania, Zambia and Zimbabwe.

We would also like to thank all those not listed above who have contributed directly or indirectly to the development of the Strategy, in particular the support provided by FAO’s national STOSAR focal points. National STOSAR consultants from the Democratic Republic of the Congo, Kingdom of Lesotho, Mozambique and Zambia are also thanked for their diligence and the technical assistance they rendered during the development of the Strategy.

Furthermore, we extend our heartfelt gratitude to the Regional Statistical System stakeholders for their support in the formulation of this document and their commitment to its implementation.

# ABBREVIATIONS AND ACRONYMS

<b>ACBF</b>	African Capacity Building Foundation
<b>AfDB</b>	African Development Bank
<b>AIMS</b>	Agricultural Information Management System
<b>AU</b>	African Union
<b>AUC</b>	African Union Commission
<b>CAADP</b>	Comprehensive Africa Agriculture Development Programme
<b>CCARDESA</b>	Centre for Coordination of Agricultural Research and Development for Southern Africa
<b>DFID</b>	Department for International Development
<b>ECA</b>	Economic Commission for Africa
<b>EDF 11</b>	The 11th Economic Development Fund programme of 2014–2020
<b>EU</b>	European Union
<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>FANR</b>	Food, Agriculture and Natural Resources
<b>FNSS</b>	Regional Food and Nutrition Security Strategy
<b>GDP</b>	Gross domestic product
<b>GIS</b>	Geographic information systems
<b>GSARS</b>	Global Strategy to Improve Agricultural and Rural Statistics
<b>ICT</b>	Information and Communications Technology
<b>IFPRI</b>	International Food Policy Research Institute
<b>ILRI</b>	International Livestock Research Institute
<b>LIMS</b>	Livestock Information Management System
<b>M&amp;E</b>	Monitoring and evaluation
<b>MS</b>	Member States
<b>NASS</b>	National Agricultural Statistical System
<b>NBS</b>	National Bureau of Statistics
<b>NEPAD</b>	New Partnership for Africa’s Development
<b>NGB</b>	National government body
<b>NSDS</b>	National Strategy for the Development of Statistics
<b>NSI</b>	National Statistical Institute
<b>NSS</b>	National Statistical System
<b>PPRM</b>	Policy, Planning and Resources Mobilization

<b>RAP</b>	Regional Agricultural Policy
<b>RAIP</b>	Regional Agricultural Investment Plan
<b>RECs</b>	Regional economic communities
<b>ReSAKSS</b>	Regional Strategic Analysis and Knowledge Support System
<b>RISDP</b>	Regional Indicative Strategic Development Plan
<b>RSDS</b>	Regional Strategy for Development of Statistics
<b>SADC</b>	Southern African Development Community
<b>SDGs</b>	Sustainable Development Goals
<b>SHaSA</b>	Strategy for the Harmonization of Statistics in Africa
<b>SPARS</b>	Strategic Plan for Agriculture and Rural Statistics
<b>SRSS</b>	SADC Regional Statistical System
<b>STOSAR</b>	Support Towards the Operationalization of the SADC Regional Agricultural Policy
<b>SWOT</b>	Strengths, weaknesses, opportunities and threats
<b>TOR</b>	Terms of reference
<b>UNECA</b>	United Nations Economic Commission for Africa

# EXECUTIVE SUMMARY

*Recognizing the importance of the agriculture sector, SADC Member States have taken steps to unleash its potential in the region. To achieve that ambition and provide guidance in the implementation process, SADC Vision 2050 and the Regional Indicative Strategic Development Plan (RISDP) were formulated, resulting in the development of a set of policy documents, notably the Dar-es-Salaam Extraordinary Summit Declaration and Plan of Action on Agriculture and Food Security, the Regional Agricultural Investment Plan and the Regional Agricultural Policy (RAP). The latter provides the SADC middle- to long-term vision for the development of the agriculture sector.*

Considering the importance of the agriculture sector in SADC Member States, and motivated by the need to support the implementation of the aforementioned policies, a wide range of timely, reliable, relevant and accurate statistics is required to help in formulating, managing, monitoring and evaluating the impact of the policies and investments. This increasing demand for statistics, especially agricultural statistics, has prompted the need to redefine the collection and dissemination of statistical information, notably agricultural statistical information at national and regional levels, by setting up an integrated Agricultural Information Management System (AIMS) and designing a Strategy to ensure the successful rollout of the system in SADC.

The Strategy was developed in a consultative manner after considering the objectives and guidance outlined in the SADC RSDS<sup>2</sup> and RAP. It provides the necessary guidance in strengthening regional and national statistical systems by implementing SADC AIMS<sup>3</sup>. Through the development of the Strategy a SWOT analysis focusing on production and dissemination of agricultural information as well as ICT infrastructure used in Member States was realized. It emerged from those analyses that : i) systems used to produce and disseminate agricultural information are either partially integrated or not integrated at all; ii) in most national agricultural statistical systems (NASSs) entities or main stakeholders work in isolation and there are gaps in the coordination of these NASSs; iii) there is a discrepancy between what is expected and resources allocated to these institutions (either human or financial resources or ICT infrastructures); and iv) there are gaps in the adequacy of training for persons involved in the collection, processing, analyses or dissemination of agricultural information.

The Strategy is expected to enhance accuracy, reliability, relevance and timely dissemination of official statistics through a system that will provide free access to agricultural information, comparable over time and across Member States. This will further help countries to address the data demand for monitoring National Development Plans and regional policies including SADC RAP, Sustainable Development Goals (SDGs) and Comprehensive Africa Agriculture Development Programme (CAADP).

Therefore, the implementation of the Strategy will not only ease the flow of statistics production and dissemination, but also intends to ensure the production of quality data to inform national and international development priorities pertaining to prudent economic management, development of policies aimed at poverty reduction and improvement of living conditions and, ultimately, narrowing the gap between social class incomes.

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<sup>2</sup> SADC RSDS: SADC Regional Strategy for Development of Statistics: 2013–2018, July 2012

<sup>3</sup> AIMS: Agricultural Information Management System

The Strategy document is divided into four parts and two annexes. The four parts are:

- Introduction;
- Situation analysis of AIMS in the SADC region;
- The SADC AIMS Strategy; and
- Governance, coordination, implementation and monitoring.

**Chapter 1** provides background information pertaining to SADC Vision 2050 and the RISDP, the rationale of this Strategy, its links to CAADP, GSARS <sup>4</sup> and RSDS, key concepts used in the document and the reasons leading to the establishment of SADC AIMS. **Chapter 2** summarizes the information from the assessment done, looking at user needs and the extent to which these have already been met; the current capacity of the data-producing agencies; the quality of the main outputs; and an overall assessment of the main strengths and weaknesses of the Regional Statistical System and its main opportunities and threats. **Chapter 3** sets out the proposed action plan, including the proposed vision and mission statement, and the desired strategy goals and operational strategies to be achieved by 2025. **Chapter 4** looks at how the Strategy will be implemented, including how it will be coordinated and managed, how progress will be monitored and reported on, and how it could be financed.

Although in the literature and depending on contexts a distinction is sometimes made between data, statistics and information, in this document the concept of statistics, data and information will be used interchangeably.

Moreover, given that legislation or laws establishing Ministries in charge of agriculture, livestock, forestry, food security, the environment, natural resources and fisheries vary from one country to another, for purposes of having a common understanding, the term “Ministry of Agriculture” used in this document refers either to the Ministry of Agriculture and Food Security; or Ministry of Agriculture and Livestock; or Ministry of Agriculture, Livestock and Fisheries; or Ministry of Agriculture, Livestock, Forestry and Fisheries; or Ministry of Agriculture, Livestock and Forestry; or Ministry of Agriculture, Fisheries, Natural Resources and the Environment, or any other combination made by countries and pertaining to the Ministry of Agriculture.



<sup>4</sup> GSARS: Global Strategy to Improve Agricultural and Rural Statistics

This SADC AIMS Strategy has been developed under the framework of the STOSAR project. The latter has been running since December 2018 and will end in August 2021. The SADC AIMS Strategy will last for five years starting from September 2020 following its validation and endorsement by SADC Member States.

Given that its implementation period goes beyond August 2021, the Strategy shall guide the delivery of key achievements within the period ranging from September 2020 to August 2021 among the exhaustive list of achievements outlined in this Strategy.

An overview of achievements is presented in the figure below, which provides a screenshot of the key achievements to be completed from September 2020 to August 2021. The remaining achievements and activities highlighted in the document are required to be completed in the remainder of the implementation period – from September 2021 to August 2025.

**Figure 1: Sample of the key achievements to be completed from September 2020 to August 2021**



# 1. INTRODUCTION

*This chapter presents information on SADC Vision 2050 and its RISDP. It provides insight into the SADC RAP, CAADP, GSARS, RSDS and their relevance to the current Strategy. It introduces the objectives and provides the rationale for preparing the Strategy and the methodology used during the drafting process. Also included in this chapter are some key concepts pertaining to agricultural statistics and information; concepts defined for the purpose of having a common understanding and approach.*

## 1.1 Background

Over the past two decades, the major economic sectors in the SADC region have been agriculture, manufacturing, mineral and petroleum, building and construction, transport and telecommunications, finance, trade and tourism. With 61 percent<sup>5</sup> of the region's population living in rural areas and with around 70 percent<sup>6</sup> of the region's population depending on agriculture for food, income and employment, the performance of the agriculture sector has a strong influence on food security and poverty reduction. According to the SADC 2019 Synthesis Report on the State of Food and Nutrition Security and Vulnerability in Southern Africa, agriculture is inevitably the key to food security and reduction of poverty. The SADC Member States recognize the importance of the agriculture sector in the economy and its contribution to eradicating hunger and malnutrition.

In recent years, several initiatives have been undertaken to promote and modernize agriculture to improve production efficiency, achieve food security and improve profitability for farmers. Among these initiatives are the Maputo Declaration on Agriculture and Food Security in Africa, CAADP, Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods, Dar-es-Salaam Declaration on Agriculture and Food Security, and RAP.

For effective implementation of those initiatives and to ensure the success of SADC Vision 2050 and the RISDP, good and reliable statistics are essential for measuring progress in reaching goals and providing essential information about their effectiveness. Therefore, the importance of accurate and reliable statistical information cannot be overemphasized. Statistical data and information on all aspects are required to evaluate policy and development initiatives in Member States, to underpin the planning processes, compile National Accounts, inform public policy analyses and debate, and enlighten the decision-making processes. In addition, these statistics are required by the private sector and individual farmers for various investment and trade purposes, like agricultural prices and trade information.

### 1.1.1 Global Strategy for Agricultural and Rural Statistics

The Global Strategy for Agricultural and Rural Statistics is a comprehensive framework for improving and ensuring the sustainability of agricultural and rural statistics. It is an innovative international partnership programme implemented on a global scale across five regions: Africa, Latin America and the Caribbean, Asia and the Pacific, the Near East and the Commonwealth of Independent States. A major element of the programme's success is the fact that it is underpinned by a broad and solid partnership of regional and international organizations.

The initiative came as a response to the declining quantity and quality of agricultural statistics. The global strategy has also addressed the emerging data requirements posed by the Sustainable Development Goals

<sup>5</sup> European Union – SADC Regional Co-operation Factsheet 2016

<sup>6</sup> Regional Agricultural Policy

(SDGs), mainly on biofuels, global warming, the environment and food security. The purpose of the global strategy is to provide the vision for national and international statistical systems to produce the basic data and information to guide the decision-making required for the 21st century. The global strategy is based on a thorough assessment of data user needs and what is currently available. Its aim is to improve the statistical capacities of the countries to enable them to produce agricultural and rural statistics and use these statistics to design more effective food security and agricultural and rural development policies.

The global strategy is founded on three pillars:

- Establish a minimum set of core data that countries will disseminate on a regular basis to meet current and emerging demands;
- Integrate agriculture into NSS to meet the emerging requirements that statistical information be linked across the economic, social and environmental domains; and
- Foster the sustainability of agricultural statistical systems through governance and statistical capacity building.

### 1.1.2 Comprehensive Africa Agriculture Development Programme

The Comprehensive Africa Agriculture Development Programme (CAADP) is Africa's policy framework for transforming the agriculture sector and achieving broad-based economic growth, poverty reduction and food and nutrition security. It was officially ratified by African Union (AU) heads of state and government in the 2003 Maputo Declaration on Agriculture and Food Security and has two main targets – achieving a six-percent annual agricultural growth rate at the national level and allocating 10 percent of national budgets to the agriculture sector. In 2014, AU heads of state and government reaffirmed their commitment to CAADP by adopting the Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods, in which they made seven broad commitments including upholding the CAADP principles and targets, ending hunger and halving poverty by 2025, tripling intra-African agricultural trade and enhancing mutual accountability for results by conducting a continental Biennial Review using the CAADP Results Framework. The latter was developed in order to facilitate CAADP implementation. It presents indicators and the critical actions required to achieve agricultural development agenda targets. The indicators are accompanied by baseline data and targets that can be achieved within the next 10 years.

### 1.1.3 SADC vision

The vision of SADC is one of a Common Future, a future within a regional community that will ensure economic well-being, improvement of the standards of living and quality of life, freedom and social justice, and peace and security for the people of Southern Africa.

### 1.1.4 SADC Regional Indicative Strategic Development Plan

The Regional Indicative Strategic Development Plan (RISDP) is a 15-year regional integration development framework setting the priorities, policies and strategies for achieving the long-term goals of SADC. It is intended to guide Member States, SADC institutions, regional stakeholders and international cooperating partners in the process of deepening integration to turn the Community's vision into reality.

The RISDP fully acknowledges statistics as one of the cross-cutting issues and essential to generate an accurate picture and track progress of its implementation. In that regard, four intervention areas for statistics were identified in the SADC RISDP, namely development of a legal statistics framework, harmonization of statistics in the SADC region, provision of relevant statistics for regional integration and development of statistical capacity building within SADC.

The Strategy fits into this framework and intends not only to sustain progress achieved through the implementation of the SADC RSDS and other related strategies and agendas, but would also make available timely data in one portal and ease data dissemination.

### 1.1.5 Regional Agricultural Policy overview

The Regional Agricultural Policy (RAP) was approved by the SADC Council of Ministers in June 2013, but to support its operationalization, SADC Member States have designed the SADC Regional Agricultural Policy Investment Plan (RAIP) (2017–2022). The RAIP was approved in July 2016 and prepared in the context of the CAADP, which was established in Maputo in 2003 as a pan-African policy framework to transform agriculture, create wealth, improve food security and nutrition and promote inclusive economic growth. The RAIP prioritizes areas for investment and builds on the principle of subsidiarity between national and regional levels. It is aimed at ‘promoting collaborative actions at the regional level and complementing national actions that stimulate competitive production and trade of agriculture-based products whilst ensuring the sustainable utilization of natural resources and effective protection of the environment’.

To support the implementation of RAP, a project titled “Support towards Operationalization of the SADC Regional Agricultural Policy” (STOSAR) has been established. This project forms part of the 11th Economic Development Fund (EDF) Regional Indicative Programme (RIP) identified under the SADC subregional envelope in line with the 11th EDF RIP for Eastern Africa, Southern Africa and the Indian Ocean (2014–2020). The overall objective of this action is to accelerate progress towards implementation of SADC regional integration, with a focus on:

- enhancing information on agricultural production, sustainability and competitiveness for evidence-based decision-making;
- improving access to markets through implementation of plant and animal pest- and disease-control strategies at the regional level; and
- facilitating implementation of some components of the Regional Food and Nutrition Security Strategy (FNSS).

To ensure successful implementation of STOSAR, the EU and SADC Secretariat have identified FAO as the lead implementing agency for the first and second components of the STOSAR project, while the third component is led by SADC.

The combined impact of the two components is expected to create sustainable agricultural growth, socio-economic development and a food- and nutrition-secure SADC region. This will be achieved through enhanced production, productivity, competitiveness and improved regional and international trade as well as improved access to markets for agricultural products.

### 1.1.6 SADC Regional Strategy for Development of Statistics

Statistics is one of the cross-cutting priority intervention areas explicitly identified within the RISDP. Its overall goal is to make available relevant, quality harmonized statistical information for SADC planning and the formulation, implementation, monitoring and evaluation of SADC programmes and protocols. In this context, the Regional Strategy for Development of Statistics (RSDS) 2013–2018 is designed to improve development outcomes and governance by strengthening national statistical systems in the region. In particular, it is intended to raise awareness of the critical role of statistical information in planning, policy research, monitoring and evaluation; promote its greater use and adoption for evidence-based decision-making; and improve capacity for statistical production and the sustainability of statistical information systems in the region in line with international best practice and norms, using relevant state-of-the-art technological innovations.

The RSDS 2013–2018 defines and articulates the priority regional statistical needs to serve the Integration and Development Agenda; current state of the SADC Regional Statistical System including its main components, strengths, weaknesses and key challenges; main strategic thrusts for statistical development for the period 2013–2018 including the vision, mission, core values, key strategic themes, objectives and results; and the tentative implementation strategy including the envisaged programme of activities for the six-year period, the institutional framework and the proposed monitoring and evaluation framework.

The RSDS provides the vision and key ingredients central to the development and strengthening of the SADC Regional Statistical System (SRSS) and sets the key milestones in getting where it should be at the end

of the six-year reference period. It outlines the importance of agriculture statistics for economic integration on the one hand, and its importance for planning, monitoring and evaluation of agricultural policies and programmes to ensure food security for the region on the other hand.

## 1.2 Rationale

The rationale for developing the SADC AIMS Strategy is to provide proper guidance in setting up an AIMS at regional level on the one hand and strengthening or setting up an AIMS at national level on the other hand. This system will provide timely, easy access to statistical information necessary for evidence-based decision-making. Moreover, this system intends to address issues pertaining to reliability, accessibility, standardization and harmonization of data for international comparability purposes. It will also address dissemination challenges faced in sharing agriculture information and provide guidance in strengthening national and regional committees working on processes ranging from collection to dissemination of agricultural data and statistical information.

The Strategy emphasizes the use of accurate agricultural data and information which have progressed to become essential tools for planning, policy formulation and legislation, promotion of trade and for advocacy to attract and promote investment and the allocation of resources to the agricultural subsector (crop, livestock, forestry and fisheries) for development purposes.

Within this context, an AIMS Strategy is anticipated to provide a framework that will guide the development of an AIMS in SADC that will benefit all players involved in collecting, processing, analysing, disseminating, storing and use of agricultural statistics. Specifically, the Strategy is expected to respond to increased user demands for statistical information and set direction for the provision of a broad range of agricultural data, statistical information and services to stakeholders. Furthermore, the Strategy will enable major actors from National Statistical Systems, especially those involved in the production of agricultural and related information, to sustain optimum capacity to assess and satisfy identified needs, providing a roadmap for strengthening the SRSS in a coordinated, synergistic and sustainable manner, as well as a framework for harnessing adequate resources.

## 1.3 SADC AIMS overview and objectives

An agricultural information system is considered to be a system in which agricultural information is generated, transformed, transferred, consolidated, received and fed back in such a manner that these processes function synergistically to underpin knowledge utilization for both users and producers. Therefore, an agricultural information system consists of components (subsystems), information-related processes (generation, transformation, storage, retrieval, integration, diffusion and utilization), system mechanisms (interfaces and networks) and system operations (control and management).

In the case of SADC, the AIMS is a web-based online system with the overall objective to set up an integrated and interoperable agricultural information management system facilitating production and timely dissemination of quality agricultural and related statistics for policy formulation, planning and decision-making. This system intends to revitalize, strengthen and expand the features and capabilities of the embryo SADC AIMS initiated in 2008, of which only one module is still functional out of eight initially developed. The main development agenda was to provide planners and policy-makers easy access to information necessary for revitalizing the growth of agricultural and natural resources, enhancing food security and promoting rural development. That AIMS version sought to establish an effective monitoring system for implementing both the RISDP and the Dar-es-Salaam Extra-Ordinary Summit Declaration and Plan of Action on Agriculture and Food Security. The AIMS programme was therefore tasked to establish a food-, agriculture- and natural resources-integrated database and data-sharing networks in the SADC region. The contents of the database included crop and livestock production, livestock numbers, populations vulnerable to food insecurity, national requirements for staple commodities, population, national budgets, macroeconomics data and other socio-economic data.

Within this context, the AIMS is designed and developed for computerizing agricultural information and related statistics, enhancing data collection and making information instantly accessible to ordinary citizens, policy-makers, senior government officers, researchers, the mass media, academia, civil society organizations, development partners, etc. AIMS will not only be a central storing facility for most of the agricultural statistics but will also reduce difficulties and time spent on reviewing and obtaining agriculture information and related statistics from various locations instead of in one location or portal. The online system will enable users to generate country and SADC profiles just with a click, and will facilitate data collection as well as harmonization and comparison of agriculture data and statistics across Member States.

The system will have a wide range of functionalities including functions allowing users to easily access agricultural information as well as generate Dashboard, country profiles and reports. The source of data is primarily the Member States themselves, with a few secondary sources to cover any gaps. With regard to its crucial role in enhancing information on agriculture production, sustainability and competitiveness, the importance of this system cannot be overemphasized.

## 1.4 Scope and methodology

### 1.4.1 Scope of the information on the system

In the AIMS, a wide range of data is covered, including data from agriculture subsectors such as production, livestock, forestry, fisheries, land and water use, and trade. The disaggregated data covered from the subsectors are as follows:

- a) Crop production accounts for a major proportion of agricultural land use, overall food supply and value added from agriculture. Data required include area planted and harvested, yield and production; amounts in storage at the beginning of harvest; area of cropland that is irrigated; producer and consumer prices; amounts utilized for own consumption, food, feed, seed, fibre, oil for food, bio-energy and net trade or imports and exports; and early-warning indicators.
- b) Core livestock items include cattle, sheep, pigs, goats and poultry, which are major sources of food supply and agricultural income. Data required include inventory and annual births, as well as production of products such as meat, milk, eggs, wool, skins and hides.
- c) Forestry and agroforestry both relate to the production of forest products and to the interface between forestry and agriculture as an area of environmental impact. Forestry is a major land use, which provides income and has a significant role in understanding the forces affecting climate change. Data required include area in woodlands and forests, quantities removed for different uses and their prices, land associated with agricultural holdings and from non-agricultural holdings and respective utilizations.
- d) Aquaculture and capture fisheries are important components of both food supply and security and household income. All aquaculture and capture production provide information which is within the scope of agricultural statistics. In the case of aquaculture, production entails the use of land as well as of water resources. Fisheries provide livelihoods for operators of small-scale and inland holdings. Data required include area cultured, production, prices, frequency of stocking and net.
- e) Water use includes use of water for agricultural purposes, including irrigation, livestock and other uses.
- f) Trade includes value of imports and exports; volume of quantity imported and exported, prices of items at local markets, import and export prices, net trade; producer and consumer price indexes.

### 1.4.2 Methodology

The process of designing the AIMS Strategy began with the preparation of a roadmap that clearly defined the various stages of development of the Strategy and identified key documents needed to be developed to support the Strategy as well as SADC AIMS. This Strategy, which aims to provide guidance on how a sustainable SADC AIMS could be set up at regional and national levels, was developed through a wide

participatory and consultative process which was initiated in October 2019. Two different questionnaires focusing on statistics and ICT infrastructures respectively, were sent to 16 SADC Member States.

The ICT questionnaire was aimed at collecting information on the type of ICT infrastructures used to store and disseminate agricultural information. The statistics questionnaire set out to collect information aimed at painting an accurate picture of the type of agricultural data, statistics and information produced in SADC Member States, as well as methodologies used for data collection.

Two regional workshops held in Johannesburg, South Africa, were used as a platform to collect information regarding the status of AIMS in SADC Member States. The process benefited from the expertise of the national consultants recruited in some of the Member States to assess their National Agricultural Information Systems.

**Figure 2: Methodologies used for gathering information**



During the drafting of the AIMS Strategy core values, guidance for official statistics provided in the Ten Fundamental Principles of Official Statistics of the United Nations, the principles of the African Charter on Statistics and the Strategy for the Harmonization of Statistics in Africa was taken into consideration. Moreover, in the process, face-to-face meetings were held with SADC Secretariat staff and during working visits in some countries to collect information to be used as essential elements in drafting this Strategy.

In short, the development of this Strategy was a fully inclusive and participatory process, engaging key stakeholders in all subsectors of the agricultural statistical system, throughout all stages of development. The techniques illustrated in Figure 1 were used to ensure that the information collected is exhaustive and reflects an accurate picture of the situation on the ground.

## 2. SITUATION ANALYSIS OF AIMS IN THE SADC REGION

*This chapter analyses the current internal and external environments of the Agricultural Statistical System at micro and macro levels and answers the following questions: What is the current status regarding the collection and dissemination of agricultural information within SADC by using AIMS? What are the main infrastructures used to make agricultural information accessible to ordinary citizens? What types of systems are found in the Member States (integrated or non-integrated)? The main findings of the assessment are summarized in a SWOT analysis presented in this chapter.*

### 21 Diagnostic review

SADC Member States normally have various institutions including government ministries, statistical agencies, private sector companies, civil society organizations and cooperating partners that produce and use statistics related to agriculture. These different institutions and departments generally function in silos, which typically leads to a lack of integration of agricultural information. Additionally, due to a lack of a proper coordinating mechanism, there has been a perpetual overlap and untimely provision of data during the reporting period. Several institutions and departments would rather collect their own data and have it on a timely basis, than being dependent on other institutions and/or departments. There is currently poor coordination at all levels of the agricultural sector in Member States, which results in the inefficient dissemination of agriculture-related data.

The typical ICT infrastructure and skills assessed to evaluate ICT capacity at each department within the Ministries of Agriculture include computers, software, databases and websites. The evaluation revealed that there are inadequate office computers to support statistics activities of the agricultural sector. Furthermore, there is limited access to appropriate statistical analytics tools and geographic information systems (GIS), which has a negative impact on producing timely and accurate agricultural production data.

Some Member States were observed to have the ICT capacity to host the AIMS in their national data centres. Some of these data centres are fully operational and can host high-performance applications such as financial systems, collaborations and Treasury applications. In others, AIMS has been partially integrated, but systems lack proper analytical and GIS tools or tools that allow them to generate statistical information in real time.

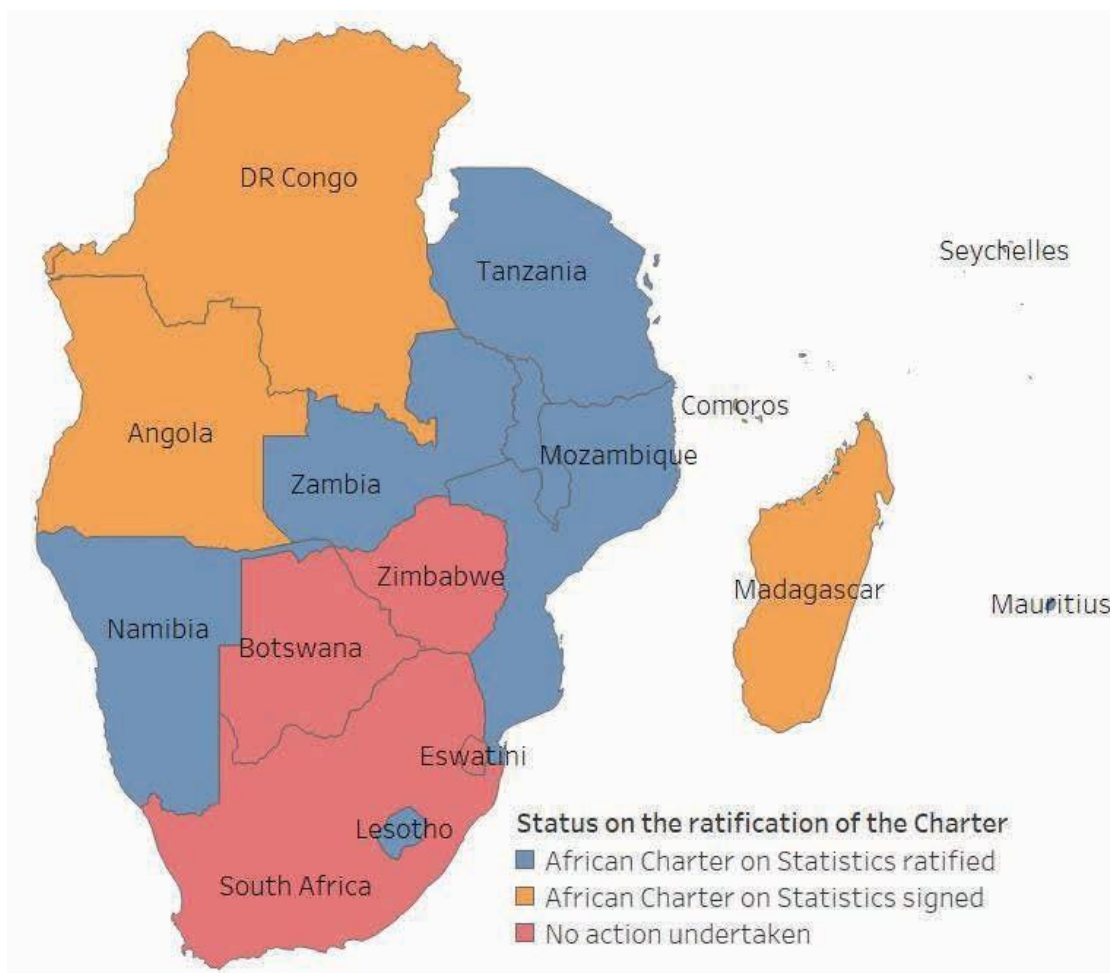
### 22 Legislation

In order to strengthen and institutionalize coordination within the National Statistical Systems and prevent any interference in the latter, some Member States have ratified the African Charter on Statistics. This Charter is a continental legal instrument and goes beyond national borders. Its ratification would allow Member States to:

- have reliable information to better inform and guide policy-makers, politicians, governments, the private sector, bilateral and multilateral donors, etc. for efficient and optimal decisions;
- have the necessary tools for better monitoring and evaluation of policies and programmes and to develop good planning;
- anticipate and prepare for future challenges;
- use national resources properly and efficiently;

- have a strategic policy framework to enable the emergence of quality statistics and better monitor the implementation of the regional agendas including RAP; and
- have a code of conduct, professional code of ethics and good practices for the statistics profession.

**Figure 3: Ratification status of the African Charter on Statistics in SADC**



Source: FAO/SADC

Although some SADC Member States have not yet ratified the African Charter on Statistics, all of them have a Statistical Act or Law which provides a mechanism for coordination of statistical activities including those pertaining to production and dissemination of agriculture statistics. The goal of the law is also to ensure independence and guidance on how the National Statistical System should be coordinated and activities should be run. It intends to guide the National Statistical System in producing reliable statistics in compliance with the fundamental principles of the United Nations and the African Charters on Statistics. The Law defines the essence, goal and principles of the official statistics and prescribes the legal foundations for producing statistics and for storing and disseminating the information.

The Statistics Act, which provides a mechanism for coordination among the players in the National Statistical System, could be used to guide the coordination of the Agricultural Statistical System. The National Bureau of Statistics or national government body which is empowered by the Statistics Act with the responsibilities for coordination, collection, production, dissemination and archiving of official statistics in the country including agricultural statistics, has the mandate to produce or co-produce and publish agricultural statistics required by respective Ministries.

Despite this mandate, the production of agricultural statistics is not well-coordinated and collaboration not effective in a number of Member States as some surveys are done without involving other key players in the agriculture sector. This situation can either be attributed to the law not being clear in terms of the role each actor should play, or to implementation not being effective in the country.

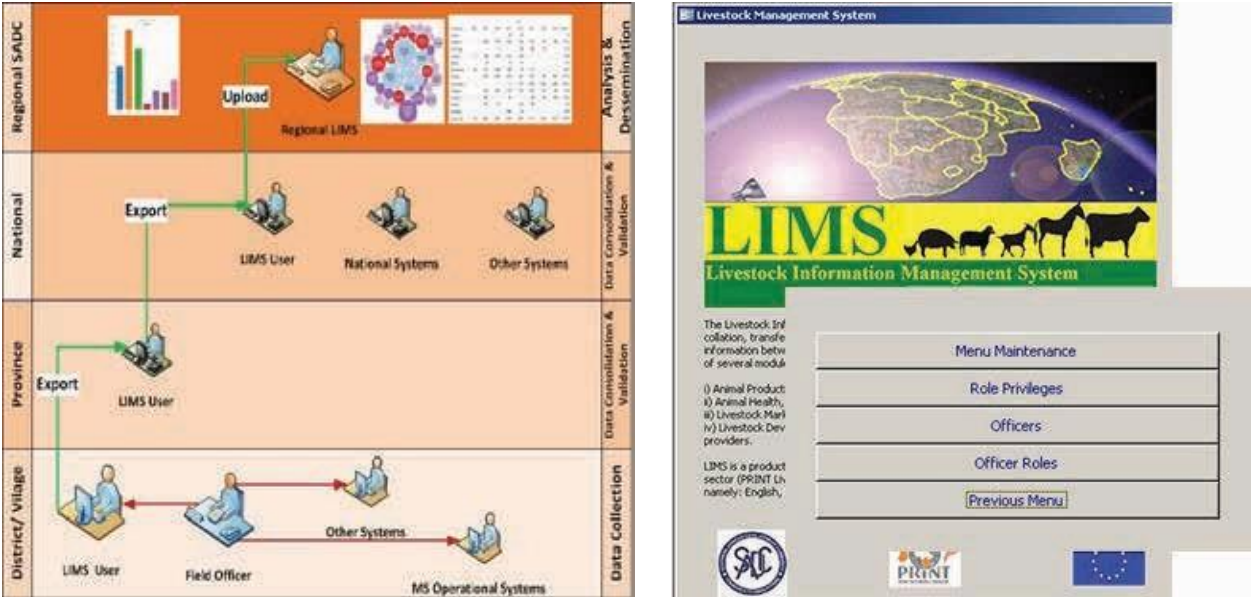
### 2.3 Previous SADC AIMS and SADC National Statistical System status

#### 2.3.1 Previous version of SADC AIMS

The development of the previous version of SADC AIMS was completed in December 2012 using open-source software (MySQL/PHP, Yii, www.yiiframework.com) designed to be intuitive and user-friendly. The system was developed with the objective to ensure accurate and reliable information for evidence-based planning and decision-making. It includes eight modules, namely national population, gross domestic product (GDP), national budgets, food insecurity, crop production (national and subnational), livestock production, fish production and forest production.

For all the modules above, data entry and query-generation forms are available. The queries generate reports which show tables and time-series graphs where applicable. There are also facilities for managing all data records for the same (including update and delete). Where subnational records are available, they could be immediately accessed online through the system.

Figure 4: LIMS architecture



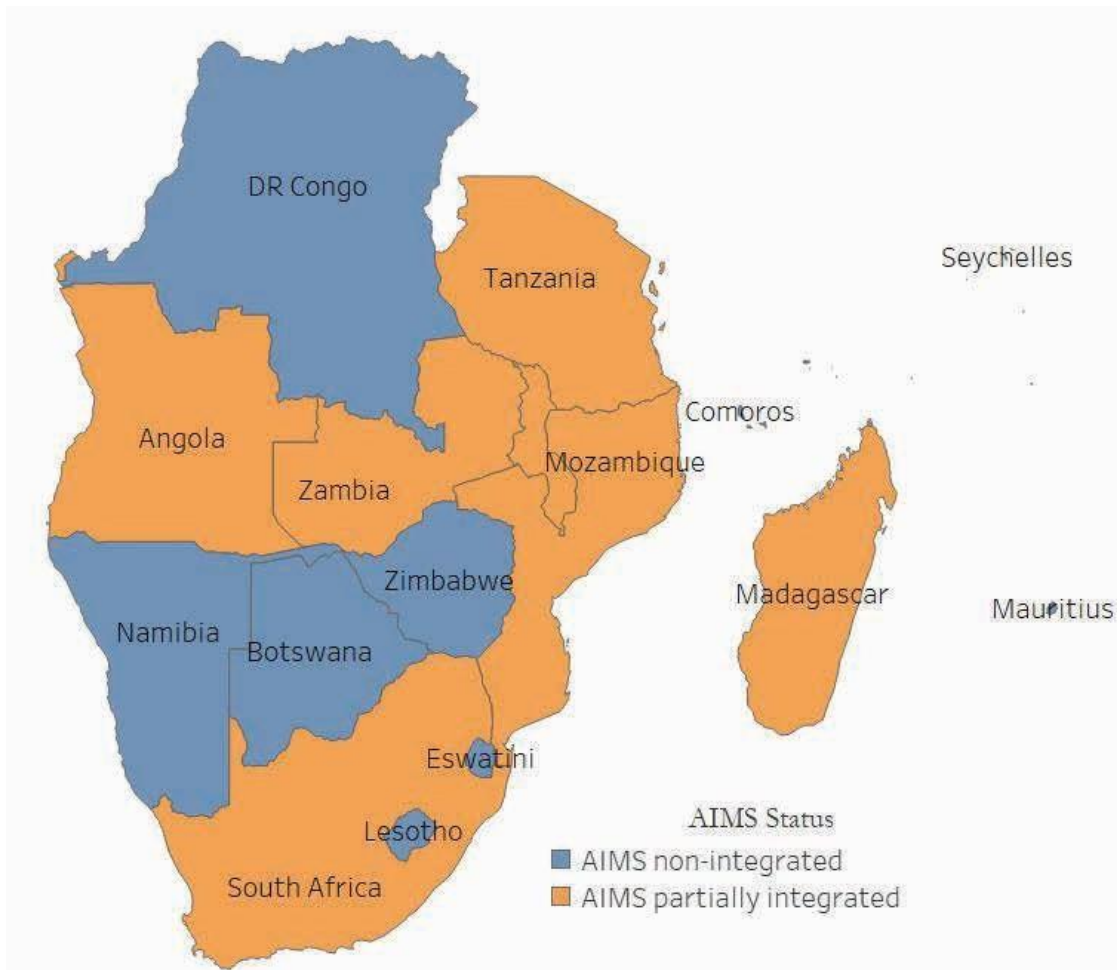
Source: SADC

However, among those modules developed to ease access to information, only the Livestock Information Management System (LIMS) is still operational. This module, which deals exclusively with the livestock sector, is the first component of AIMS to be comprehensively designed and developed with almost all sectors in livestock being considered. LIMS is not just a database or application, but a system for collecting, collating, analysing and sharing regional livestock information. To ease flow of information from the national to the regional level and to make it user-friendly, the system was designed at two levels – the first is the national LIMS Database deployed in Member States to collect data and the second is the regional LIMS. Although this system is still operational, its updating and upgrading to ensure interoperability among the new systems is a challenge and has not been done for a substantial period of time. Moreover, four Member States out of 16 are still providing information by using the electronic system, while three countries are providing information by means of hardcopy or Excel templates.

### 2.3.2 National AIMS status

As identified, no SADC Member State has an integrated AIMS. The existing systems are either partially integrated or non-integrated.

**Figure 5: AIMS status**

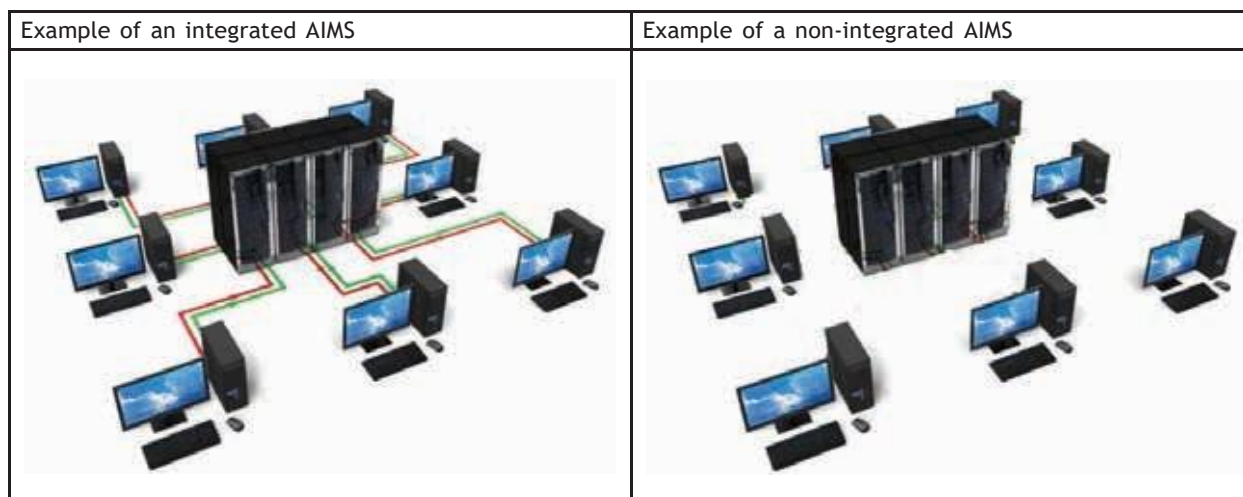


Source: FAO/SADC

A system is a set of components that operate together to achieve a common purpose or objective. The existing information management systems at national or regional levels are either integrated or non-integrated.

An integrated information management system is a system that consists of subsystems communicating among themselves into one functional system and where the issue of interoperability among systems is concrete, while a non-integrated information management system consists of systems where the issue of interoperability among systems does not exist or are not standalone systems and operating in silos.

**Figure 6: Examples of integrated and non-integrated AIMS**



## 24 Existing ICT infrastructures and data-collection framework

ICT infrastructure plays a critical role in ensuring that systems run smoothly and meet emerging requirements pertaining to data collection in real time, cloud storing capabilities and upgrading of outdated systems. The assessment conducted indicates that not all SADC Member States have the required ICT infrastructures to host the AIMS. While all countries have taken steps to computerize the entire data-collection process, some are still using paper questionnaires and others are using personal digital assistants for small surveys and paper questionnaires for larger surveys or census surveys. The criteria used to measure the ICT infrastructure were the availability of computers, internet connectivity, analytical software, storing capacities and the availability of servers, as well as the technical capacity at country level. An overview of the findings is summarized in Table 1.

**Table 1: Status of ICT infrastructure and data-collection tools**

Status	Description
Computers	Some Member States have computers, mostly desktops, to support day-to-day agriculture activities, especially those related to collection, processing and analysis activities.
Servers	Some Member States have servers to host their databases at local level. However, most of them do not have updated infrastructures to host their databases on cloud.
Internet connectivity	Internet connectivity was found to be challenging in some Member States, mostly those who have a number of users accessing a shared connection, as well as in terms of cost per bandwidth.
Analytics software	A number of statistical software applications is used by the various institutions, but prominent among these are MS Excel, STATA, CsPro and SPSS. Other software used include R, RATS, GAMS, ArcGIS, CPro, SAS and MS Access as well as some sector-specific packages such as Pasgear for fisheries and HYDSTRA for natural resources. SPSS is the main software used for data analysis. However, the high cost of purchasing these and other proprietary software was an issue raised by many institutions. The lack of access to analytical software (including GIS software) negatively affects the timely production of quality information.
Capacity building	The ICT, data-management and data-analysis skills are not homogeneous among Member States. There is a need to strengthen capacities of the SRSS in data collection, processing, analysis and dissemination. Continuous training is recommended for all AIMS officers as well as statisticians and experts involved in the production and sharing of agricultural information.
Data collection	Paper questionnaires, mobile phones, tables and other personal digital assistants are used for data collection in the field.

## 25 SWOT analysis

This section analyses the internal (strengths and weaknesses) and external (opportunities and challenges) factors affecting the production and dissemination of quality agricultural statistics within SADC. The analysis is aimed at identifying the Agricultural Statistics System's strengths and weaknesses and, based on this analysis, recommendations are given on how to improve on the current status.

The elements of the diagnostic review, based on the matrix of strengths, weaknesses, opportunities and threats (SWOT), are summarized in Table 2.

**Table 2: Summary of the strengths, weaknesses, opportunities and threats**

Strengths	Weaknesses
<ol style="list-style-type: none"> <li>1. Existence of the Statistics Act in all Member States.</li> <li>2. Ratification of the African Charter on Statistics by some SADC Member States.</li> <li>3. Existence of the Strategic Plan for Agricultural and Rural Statistics in some SADC Member States.</li> <li>4. Existence of facilities at lower level of administration to support subsector data-collection activities.</li> <li>5. Existence of trained personnel with IT and statistical knowledge in Ministry of Agriculture and National Bureau of Statistics, to provide quality statistical data.</li> <li>6. Strong partnership of Ministries of Agriculture with FAO to provide technical guidance on a wide range of projects.</li> <li>7. Existence of comprehensive data-collection mechanisms in some subsectors.</li> <li>8. Existence of policy guidelines to support statistical work in the subsectors.</li> <li>9. Existence of strong institutions such as the National Bureau of Statistics, Statistics Department/ Division in the Ministries of Agriculture.</li> <li>10. Use of ICT in the subsectors.</li> <li>11. Existence in some Member States of CountrySTAT coordination mechanisms to support statistical work committee.</li> <li>12. Existence of some initiatives to coordinate agricultural statistical activities between National Bureau of Statistics and Ministries of Agriculture (National Team on CountrySTAT, National Team on CAADP, etc.).</li> </ol>	<ol style="list-style-type: none"> <li>1. Lack of a strategic framework for the development of agricultural statistics and information in some Member States.</li> <li>2. Poor coordination of statistical activities in the agriculture sector.</li> <li>3. Inadequate statistical infrastructures in some agriculture subsectors.</li> <li>4. Inadequate number of staff with statistical skills in some agriculture subsectors.</li> <li>5. Lack of a dedicated budget in the national budget line in some Member States to support agricultural statistical activities.</li> <li>6. Lack of central statistical databases in agriculture subsectors.</li> <li>7. Lack of a fully integrated agricultural information management system in all SADC Member States.</li> <li>8. Lack of data quality management procedures for agricultural statistics in some Member States.</li> <li>9. Lack of data-dissemination strategy in the agriculture sector in some Member States.</li> <li>10. Inadequate resource allocation for both administrative records and survey data collection and analysis.</li> <li>11. High turnover of staff engaged in statistical work in agriculture sector.</li> <li>12. Multiple data producers of agricultural statistics.</li> <li>13. Low policy implementation regarding statistical work in the agriculture sector.</li> <li>14. Inadequate staffing level for agricultural statistics, both in the agriculture sector and NBS.</li> <li>15. Poor documentation and record-keeping of available agricultural statistical indicators.</li> <li>16. Lack of statistical units in some agriculture departments.</li> <li>17. Inadequate statistical skills for some staff in data compilation and analysis.</li> <li>18. Lack of specialized statistical training for staff engaged in statistical work in the agriculture sector.</li> <li>19. Lack of an integrated or interoperable agricultural information management system in Member States.</li> </ol>

Opportunities	Threats
<ol style="list-style-type: none"> <li>1. Development of SPARS.</li> <li>2. Existence of development partners to support agricultural statistics.</li> <li>3. Existence of regional institutions to provide regionally agreed standards for data collection and reporting.</li> <li>4. Participatory budget-making cycle provides for an opportunity to lobby for a specific budget to support agricultural statistics.</li> <li>5. Strong demand for agricultural statistics from users at county, national, regional and international levels.</li> <li>6. Strong use of statistics in the M&amp;E of the subsector management and development plans.</li> <li>7. Existence of SADC Livestock Information Management System in some SADC Member States.</li> <li>8. Existence of CAADP.</li> <li>9. Well-trained staff for the collection of sample survey data across the country.</li> <li>10. Goodwill from development partners to support agricultural statistics.</li> <li>11. Existence of strong research organizations devoted to agricultural research.</li> <li>12. Availability of regional organization blocks to support agricultural statistics (SADC, AU and EU).</li> <li>13. Existence of a well-developed National Statistical System in some of the developing countries to promote South-South cooperation.</li> <li>14. Existence of SPARS in some Member States.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inadequacy or lack of long-term commitment to support agricultural statistical activities by development partners.</li> <li>2. Economic hardship, accentuated by the coronavirus outbreak, affecting SADC Member States.</li> <li>3. Meagre resource allocation to statistical development in the production of agriculture statistics.</li> <li>4. Inadequate consultation and feedback from important players in the agriculture sector.</li> <li>5. Statistical production decreasing.</li> <li>6. Limited awareness within both national and county governments about the importance of statistics in planning, management and decision-making processes.</li> <li>7. Probable political turmoil in countries.</li> <li>8. Misuse of statistics for political gain.</li> <li>9. Lack of or low prioritization of statistics in countries.</li> <li>10. Lack of political commitment.</li> <li>11. Institutional constraints.</li> <li>12. Technical constraints.</li> <li>13. Financial constraints.</li> <li>14. Disruption of data-collection activities.</li> <li>15. Lack of commitment to change existing legislation and allow migration of the existing systems to fully integrated agricultural information management systems at country and regional levels.</li> </ol>



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An effective implementation of the current Strategy is essential on the one hand to address weaknesses and threats identified following the diagnostic review, to strengthen and sustain opportunities and strengths singled out on the other hand.

The analysis for SADC Member States against regional initiatives aiming to strengthen the National Statistical System, improving and enhancing the quality of statistical information is summarized in Table 3.

**Table 3: Compliance of SADC Member States with regional initiatives**

Countries	CountrySTAT	NSDS	SPARS	Peer Review (2018-2019)
Angola	Yes	Yes		Yes
Botswana		Yes		Yes
Comoros		Yes		Yes
DR Congo		Yes		
Eswatini		Yes		
Lesotho		Yes	Yes	
Madagascar	Yes	Yes		
Malawi	Yes	Yes		
Mauritius		Yes		Yes
Mozambique	Yes	Yes		Yes
Namibia		Yes		Yes
Seychelles		No	Yes	
South Africa		Yes		
Tanzania	Yes	Yes	Yes	Yes
Zambia	Yes	Yes	Yes	
Zimbabwe		Yes		Yes

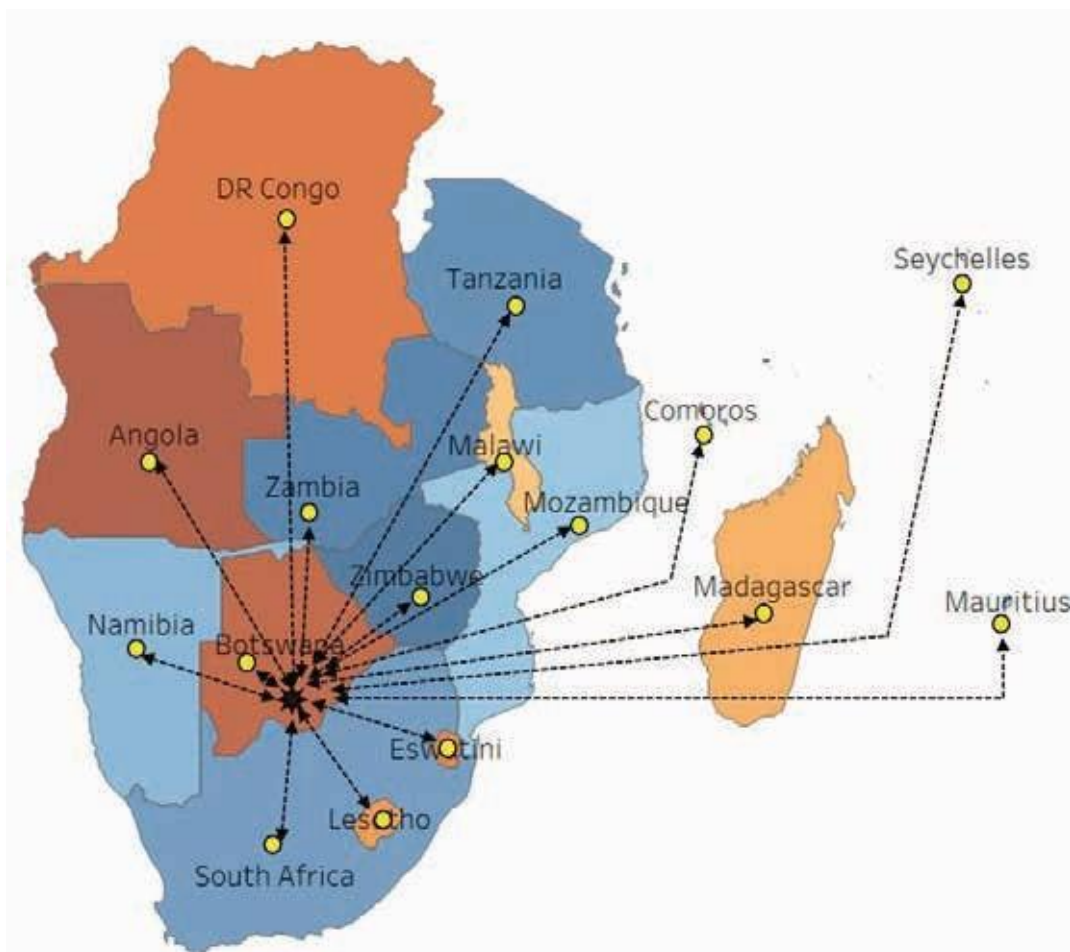
### 3. SADC AGRICULTURAL INFORMATION MANAGEMENT SYSTEM STRATEGY

*The SADC AIMS Strategy was developed with the view of providing guidelines to facilitate the flow and dissemination of official agricultural information between the SADC Secretariat and its Member States in order to inform evidence-based decision-making at national and regional levels. It intends to contribute in setting up a web-based Agricultural Information Management System and strengthening national as well as regional capacities in the production of a wide range of agricultural information. The plan is anchored on the vision and mission statements, strategy goals and operational strategies.*

#### 3.1 Vision

The vision of the SADC AIMS Strategy is to revamp, make concrete and functional an “Integrated System for dissemination of quality, standardized and harmonized Statistical Information” which will serve as a data repository disseminating accurate and reliable data and statistical information to assist the SADC Secretariat, Member States, decision-makers, planners and researchers in an objective, timely and cost-effective manner.

Figure 7: AIMS flow-of-information vision



\* SADC Headquarters  
Source: FAO/SADC

## 3.2 Mission

The Strategy envisions to:

- build a common and freely accessible information system at national and regional levels in the generation, collection, processing, storing and dissemination of statistical information, notably agricultural information that will provide quality and timely data for evidence-based policy- and decision-making;
- build an effective and efficient network for harnessing information for a transformed and sustainable agricultural sector that is modernized, productive, profitable and competitive nationally, regionally and internationally;
- improve the capacities and capabilities of human resources by providing the necessary knowledge, skills and competencies to deliver an innovative and web-based system for production and dissemination of agricultural information;
- promote the collection and utilization of quality agricultural information through collaboration, coordination and synergies, for enhanced user satisfaction;
- develop partnerships with public and private sector actors in the region and within countries to provide accurate, consistent, accessible and comprehensive agricultural information for government and the public;
- provide official agricultural information that meets both national and international requirements; and
- offer the users easy access to official agricultural statistics and information through a streamlined and robust dissemination system.

## 3.3 Core values

This Strategy is underpinned by a set of values and principles that will guide its implementation. These guiding principles confirm the key levels of the SADC Secretariat's commitment to the development of sustainable actions in responding to the needs of availability of agricultural information to inform policies, track progress made and performance of programmes and projects implemented at regional as well as national levels.

To ensure its effective implementation, all stakeholders within the Regional Statistical System shall adopt and cultivate the following sets of values and principles:

### • **User focus**

All activities of the SADC Regional Statistical System (SRSS) constitute the main basis for its existence and must be focused on meeting data needs and expectations of users and producers for a wide variety of purposes.

### • **Credibility and integrity**

To create and maintain public trust in official agricultural information by proactively promoting professionalism and maintaining ethics and transparency in data production, dissemination and archiving.

### • **Quality**

For the SRSS to be respected and relied upon for providing quality service, its statistical products must pass the tests when subjected to the dimensions of quality, timeliness, consistency, completeness, coherence, reliability and relevance.

### • **Efficiency**

Resources should be used effectively, in conformity with the principles of good governance. Since efficiency is a guarantee for success, the SRSS shall promote efficiency by encouraging teamwork, networking, cooperation, motivation, innovation and cost-effectiveness within the system.

### • **Sustainability**

The SRSS must focus on achieving sustainability of its services by ensuring stability of staff and funding processes of its operations.

- **Professionalism**

High-level professionalism must be brought into the production of agricultural information using internationally acceptable methods, procedures and practices to retain stakeholders’ trust in official statistics.

- **Confidentiality**

In order to retain the trust and confidence of the suppliers of data, data submitted by individual respondents, whether they are natural or legal entities, shall be treated as confidential throughout the process of compilation and presentation and must be used exclusively for statistical purposes as required by the statistics law.

- **Regulatory framework**

The SRSS shall, at all times, respect the laws, regulations and measures underpinning the production processes and should ensure that the provisions of the Act are made public in line with the principles of the African Charter on Statistics and Fundamental Principles of Official Statistics of the United Nations.

- **Effective coordination**

It is a critical value that must be upheld in statistical production, management and dissemination by the SRSS in order to achieve synergy and efficiency of the system.

- **Accountability and transparency**

The SRSS shall strive to promote accountability to the public through the provision of reliable and relevant data and to ensure transparency in the data-production processes.

- **Standardization of processes**

The process of generating statistics should follow established standards as already developed internationally, such as the Fundamental Principles of Official Statistics and the African Charter on Statistics to mention only a few; and the choice of sources of data (surveys, censuses and administrative records) should be based on quality, timeliness and cost.

### 3.4 Strategic goals and operational strategies

Six strategic goals have been elaborated to meet the identified challenges. The purpose of each goal and the operational strategies for each are presented in Table 4.

The framework includes the strategic goals, purposes and operational strategies. The strategic goals and operational strategies are as follows:

- SG1: Improve coordination and strengthen institutional arrangements;
- SG2: Strengthen human capacity and enhance statistical operations across the NSSs;
- SG3: Modernize physical and virtual infrastructures;
- SG4: Upgrade data-collection tools;
- SG5: Address agricultural statistics data gaps and enhance data quality and use; and
- SG6: Improve the institutional frameworks and ensure sustainable financial resources for agricultural statistical activities.

**Table 4: Strategic goals and operational strategies**

Strategic goal (SG)	Purpose (P)	Operational strategies (OS)
SG1: Improve coordination and strengthen institutional arrangements	P1: To ensure the production of agricultural statistics is coordinated and harmonized	OS1.1: Improve coordination, collaboration and networking within SRSS
		OS1.2: Improve coordination, collaboration and networking within NASSs
		OS1.3: Improve technical coordination among agricultural data producers
SG2: Strengthen human capacity and enhance statistical operations across	P2: To ensure statistical personnel acquire the necessary skills	OS2.1: Improve skills of agricultural statistics personnel
		OS2.2: Promote adoption of best practices, methods and standards in all agricultural statistical activities
		OS2.3: Establish training programmes to develop the capacity of



Strategic goal (SG)	Purpose (P)	Operational strategies (OS)
SG3: Modernize physical and virtual infrastructures	P3: To establish a functional Agricultural Information Management System	OS3.1: Acquire appropriate physical infrastructure
		OS3.2: Strengthen use and application of ICT in statistical operations
		OS3.3: Develop a web-based system and improve ICT capacity for data connectivity, storage, processing and analysis in statistical units
SG4: Upgrade data-collection tools	P4: To ensure efficient statistical operations within a conducive work environment	OS4.1: Promote the use of new technologies for data collection
		OS4.2: Exploit technological advances to collect, process and present available data more effectively and efficiently
SG5: Address agricultural statistics data gaps and enhance data quality and use	P5: To ensure user needs are increasingly met	OS5.1: Adopt use of integrating agriculture modules into related surveys for regular data collection
		OS5.2: Expand the compilation and use of data from administrative records
		OS5.3: Encourage systematic reporting with regard to international frameworks such as CAADP, GSARS and SDG
		OS5.4: Advance awareness of the importance of agricultural statistics and information
SG6: Improve the institutional frameworks and ensure sustainable financial resources for agricultural statistical activities	P6: To ensure availability of funds leads to timely implementation of planned statistical activities	OS6.1: Promote any statistical legislation reflecting agricultural statistics policies
		OS6.2: Advocate for institutionalization of resources allocated to statistical activities
		OS6.3: Strengthen collaborations to support sustainable funding and mobilize adequate funds to subsidize agricultural statistics activities

**Table 5: AIMS Strategy activities**

SG	P	OS	Activities
SG1	P1	OS1.1	Revitalize the regional committee and present the STOSAR project to the SRSS, especially the AIMS component.
			Draft annual detailed work plan activities needed to be undertaken for the successful rollout of the AIMS at regional levels.
			Establish the Regional AIMS Committee to address issues ranging from collection to the dissemination of the agricultural information.
		OS1.2	Revitalize national agricultural statistical systems.
			Draft annual detailed work plan activities needed to be undertaken for the successful set-up of the AIMS at national level.
			Establish the National AIMS Committee to address issues ranging from collection to the dissemination of the agricultural information.
			Oversee the implementation of the work plan by the National AIMS Technical Committee.
		OS1.3	Create a coordination framework among producers of the agricultural information.
			Organize consultations within working group and working groups by subsector.
			Organize validation meetings for agricultural statistical products.
SG2	P2	OS2.1	Undertake training needs assessments for staff working in the field of agricultural data and statistics.
			Provide training to agricultural statistics personnel on basic statistics and computing, data processing, data mapping, etc.
			Strengthen capacities of agricultural statistics personal on the use of specific software such as Stata, Spss, R and QGIS.
		OS2.2	Develop and disseminate the compendium of agricultural statistical methods and definitions.
			Promote adoption and domestication of international agricultural statistics standards (CPC, ISIC, HS, COICOP, SITC, HS, etc.).

Identify minimum set of core data for each subsector of agricultural statistics.

		OS2.3	Get in touch with existing statistical training centres, and together develop training curriculum/manuals in the field of agriculture statistics.
			Develop a user manual which will guide the SADC ICT and others administer on how to use and upgrade the system. Provide training to personnel from the NASS on data management and analysis.
			Develop training manuals on how to manage agricultural data and information uploaded on the AIMS.
SG3	P3	OS3.1	Procure computers, servers and relevant ICT infrastructures, software/applications for statistical work.
			Identify the information gap and the best methodology to provide the missing data.
			Hold national agriculture statistics conferences or meetings.
			Build local capacity for sustainability and ownership.
		OS3.2	Invest in new equipment and software.
			Develop and implement data-access and confidentiality policies.
			Identify set of data and information outputs, coverage and periodicity.
		OS3.3	Design and roll out the AIMS in the SADC region.
			Establish and maintain data centres and web portal.
Develop and implement data-access and confidentiality policies.			
SG4	P4	OS4.1	Diagnose the type of information needs to inform and track agricultural policies.
			Integrate modern technology (use of PDAs, tablets, android phones, etc.) in data collection and transmission.
			Establishment of GIS-based agriculture databases.
		OS4.2	Use API technologies to connect and ease data exchange among the AIMS and other national systems.
			Integrate procedures enabling data-quality control on the system.
			Collect, analyse and disseminate relevant agricultural data and information through the AIMS.
SG5	P5	OS5.1	Strengthen and support routine data-collection activities.
			Monitor producer, farm gate and market prices of agricultural commodities.
			Integrate agriculture activities into the NSDS to ease data collection and integration as modules into other surveys conducted regularly.
		OS5.2	Organize seminars with users on the importance of administrative records related to agriculture.
			Enhance the analysis of data including updating the food balance sheet.
			Apply the codes, classifications, concepts and definitions of agricultural statistics.
		OS5.3	Design AIMS indicators covering a list of key indicators for the country in addition to the minimum set of core indicators adopted at regional level.
			Map AIMS indicators with the indicators produced under the CAADP, GSARS and SDG frameworks.
			Develop a reporting dashboard providing key information enabling monitoring of the main framework, such as RAP, CAADP and SDG.
		OS5.4	Create statistics awareness and sensitization.
			Organize advocacy meetings to lobby for funds for agricultural statistical activities.
			Hold sensitization events for stakeholders and policy-makers.
SG6	P6	OS6.1	Develop communication materials.
			Conduct advocacy and communication campaigns aimed at top policy-makers (national and county), the private sector and development partners.
			Assess existing statistical legislation and laws, identify any gaps hindering data collection and dissemination of agricultural information.
		OS6.2	Draft an action plan, budget and list of available resources.
			Take stock of existing initiatives.
			Consult with relevant governmental organizations.
		OS6.3	Lobby for specific budget lines for agricultural statistics activities.
			Solicit funding from governments (national and county) and development partners.
			Set agricultural statistics national priorities.



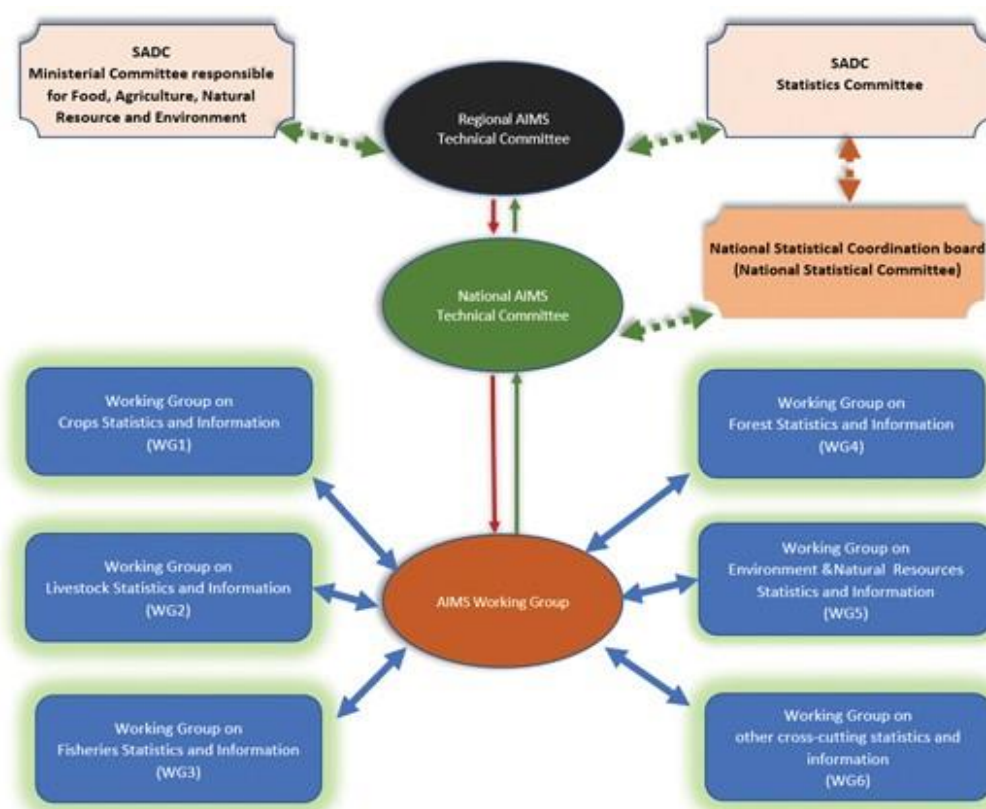
## 4. GOVERNANCE, COORDINATION, IMPLEMENTATION AND MONITORING

*This chapter presents the governance and proposes a coordination mechanism to ensure sustainability and effective implementation of the Strategy. It provides an overview of how monitoring of this Strategy against its objectives might be conducted in order to measure progress. It discusses how the Strategy will be implemented during the reference period based on the institutional arrangement, monitoring and evaluation, possible risks, advocacy approach and funding options.*

### 4.1 Governance structure

The establishment of a governance structure is essential to ensure effective coordination and cooperation among all relevant stakeholders, including the SADC Secretariat, different government departments and non-governmental actors, at all and between all levels. In that regard, the coordination will follow two governance structures working together in synergy, namely one at regional level and another at national level.

**Figure 8: AIMS coordination structure**



At national level, the governance structure consists of the National Statistical Committee or National Statistical Coordination Board, National AIMS Technical Committee, AIMS Working Group and six specialized working groups. The first five groups cover the main identified subsectors, namely crops, livestock, fisheries, forestry and natural resources, while the sixth working group will deal with cross-cutting data and statistics. Each working group will be led by a focal person.

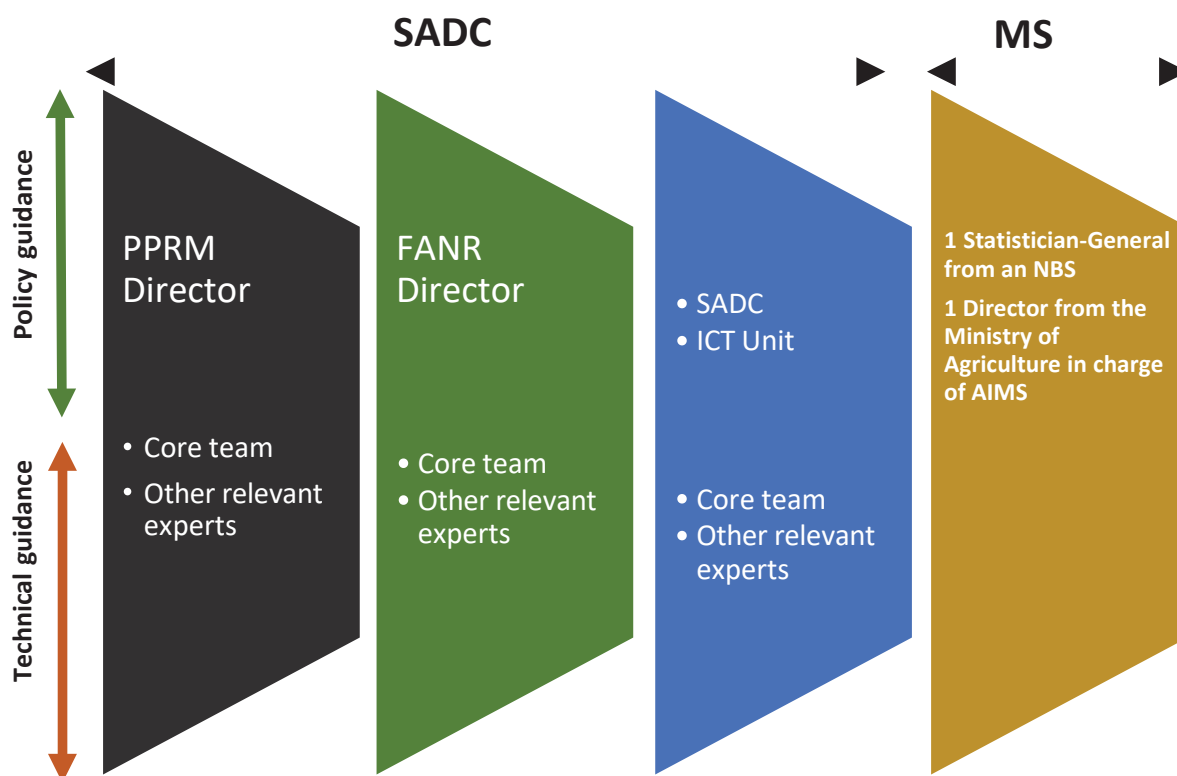
At regional level, the governance structure consists exclusively of the Regional AIMS Technical Committee headed by the SADC Secretariat with the support of some representatives from Member States. All the committees and working groups listed above and part of the governance structure will be governed by specific guidelines and terms of reference.

## 4.2 Terms of reference for AIMS technical committees and working groups

### 4.2.1 Regional AIMS Technical Committee

The Regional AIMS Technical Committee reports to both the SADC Ministerial Committee responsible for Food, Agricultural, Natural Resource and Environment (FANRE) and the SADC Statistics Committee (SC). When the Director of Food, Agriculture and Natural Resources (FANR) will be reporting on behalf of the Regional AIMS Technical Committee to the SADC Ministerial Committee responsible for FANRE, the Director of the Policy Planning and Resources Mobilisation (PPRM) will be reporting on behalf of the AIMS Technical Committee to the SADC SC. The Regional AIMS Technical Committee is composed of representatives of the SADC Secretariat and Member States. The SADC Secretariat will be participating in the committee with representatives from the FANR Directorate, the PPRM Directorate and the Information and ICT Unit.

Figure 9: Regional AIMS Technical Committee



Member States will be providing their support to the SADC staff and will be participating in the committee through a representative from the country chairing the SADC Secretariat.

At regional level, for policy guidance, the AIMS Technical Committee will be chaired by the SADC Secretariat, especially by the FANR Director with the support of the PPRM Director and ICT Unit. However, for technical guidance, the AIMS Technical Committee will be chaired by the PPRM Directorate with the support of the FANR Directorate and the ICT Unit. The latter constitute the core group which will oversee the implementation of the Strategy within SADC and will benefit from the support of SADC Member States.

**Table 7: Guidelines for the Regional AIMS Technical Committee**

To better ensure successful implementation of the Strategy at national and regional levels, it is important to have coordinating bodies and mechanisms in place with clear roles and responsibilities established.

The Regional AIMS Technical Committee is responsible for the policy framework and strategic guidance for the implementation of the overall Strategy. While the policy guidance is provided at Director level, the technical guidance is provided at Senior and Officer levels.

The technical implementation aspects of the Strategy are administered by a core team linked to the three departments/divisions of the SADC Secretariat, namely FANR, PPRM and the ICT Unit.

The Committee at Director level would meet twice a year, in particular in the first quarter and fourth quarter of the year, to discuss issues (e.g. budget, workplan, etc.) pertaining to the implementation of the Strategy and to provide guidance for its effective implementation. However, the Committee could still hold an extraordinary meeting if any needs arise or they deem it useful.

Within the core team, the PPRM Directorate, especially the Statistics and Research Unit, will lead and coordinate the work of the technical working group for the collection, harmonization, checking of data quality and uploading of data to the system. They would be on hand to work with countries on any issues related to implementing the standards, working on the classification of commodities, the imputation of missing data and to ensure that metadata are available to support the reliability of the data.

While the members of the core group from FANR will provide their support in checking the consistency and quality of information provided by the Member States, the members of the core group from the ICT Unit will update, maintain and assist Member States in running the system. The latter would be on hand to ensure that the data exchange system between the national and regional systems is functional, the tools are upgraded and technical assistance is provided.

Furthermore, they could also solicit technical support and expertise from other international organizations, such as FAO, AUC, the Centre for Coordination of Agricultural Research and Development for Southern Africa (CCARDESA), the Regional Strategic Analysis and Knowledge Support System (ReSAKSS), the International Food Policy Research Institute (IFPRI) and the International Livestock Research Institute (ILRI).

The Regional AIMS Technical Committee would oversee the management of the regional system and liaise with Member States with regard to regional data requirements. It will advocate building delivery capacities and strengthening the ability of the National AIMS Technical Committee to identify and deliver agricultural information based on the needs of national and regional development programmes.

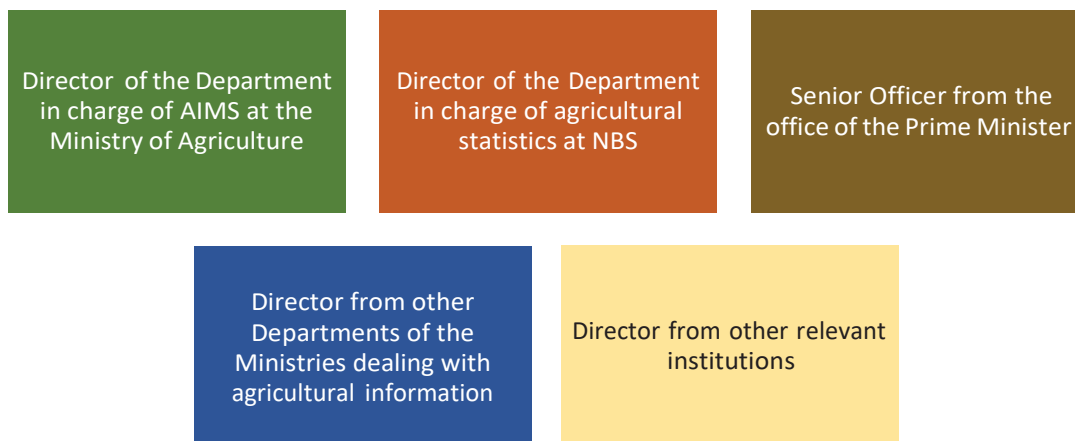
In addition, the guidelines outlined for the regional AIMS Technical Committee could be adjusted to cater for emerging needs, changes in Member States' priorities or inadequacy against resources needed and resources effectively allocated for its implementation.

#### **4.2.2 National AIMS Technical Committee**

The National AIMS Technical Committee reports to the National Statistical Committee or National Statistical Coordination Board. In turn the latter will provide guidance to the National AIMS Technical Committee and will work closely with the SADC Statistic Committee. The national AIMS Technical Committee is composed of representatives of relevant government institutions and other stakeholders and is responsible for coordinating, facilitating and monitoring the Strategy policy implementation at national level. Key players in the national AIMS are the director of the department in charge of AIMS at the Ministry of Agriculture, director of the department in charge of agricultural statistics at NBS, senior officer from the office of the Prime Minister, directors from other departments of the Ministries dealing with agriculture information and directors from other relevant institutions.

Although, in many SADC Member States, the National Bureau of Statistics is a legal entity coordinating and facilitating the efficient and effective production and dissemination of statistics across the National Statistical System and National Agricultural Statistical System, the coordination of the National AIMS Technical Committee will be assumed by the Ministry hosting the STOSAR project.

**Figure 10: National AIMS Technical Committee**



The latter will chair the National AIMS Technical committee, assisted in this assignment by a vice-chair from the National Bureau of Statistics with the support of other relevant institutions. Considering realities on the ground and specificities that may vary from one country to another, and to avoid any duplication of efforts and build on existing endeavours, the proposed structure could be reviewed and extended or restricted by each country.

**Table 8: Guidelines for the National AIMS Technical Committee**

The National AIMS Technical Committee is key to the involvement of all national institutions that have the responsibility to produce data and statistics related to agriculture and food insecurity.

The Committee will be chaired by the director of the Ministry of Agriculture hosting the STOSAR project, seconded by the director of the National Bureau of Statistics. Together with other directors from relevant institutions they will manage the Committee, coordinate activities strategically and professionally and identify any intersectoral work seen to add value to the work of individual institutions.

The Committee will assess institutional mandates and interinstitutional linkages to reveal gaps and/or duplication in roles and activities. It identifies all institutions that have the mandate to produce official agricultural information.

In the implementation of the Strategy, the Committee needs to identify focal points in each institution that will be working in the specialized working groups, composed of national experts from the main data-producing institutions.

The technical activities are driven by the Technical Working Group, which is led by the core group composed of the AIMS focal point (mostly within the Ministry of Agriculture) and an expert statistician from the National Bureau of Statistics or from the statistics department of the Ministry of Agriculture. These are the two main national bodies that work together in the implementation of the Strategy at national level.

The core group will drive the multi-stakeholder process with the support of the working group and under the guidance of the AIMS Technical Committee.

The National AIMS Committee might be supported in the implementation of the main activities by an AIMS Secretariat. The Secretariat is under the leadership of a national coordinator which is nominated by the Government and comes from the institution hosting the STOSAR project.

The national AIMS technical committee overseeing the implementation of activities becomes effective at country level, where at least two administrative appointments have been made by the respective institutions from the National Agricultural Statistical System to serve on the committee.

The National AIMS Technical Committee will provide guidance as well as monitor and ensure effective implementation of the Strategy. It will investigate whether agricultural data are channelled upwards for processing and analysis at the national level.

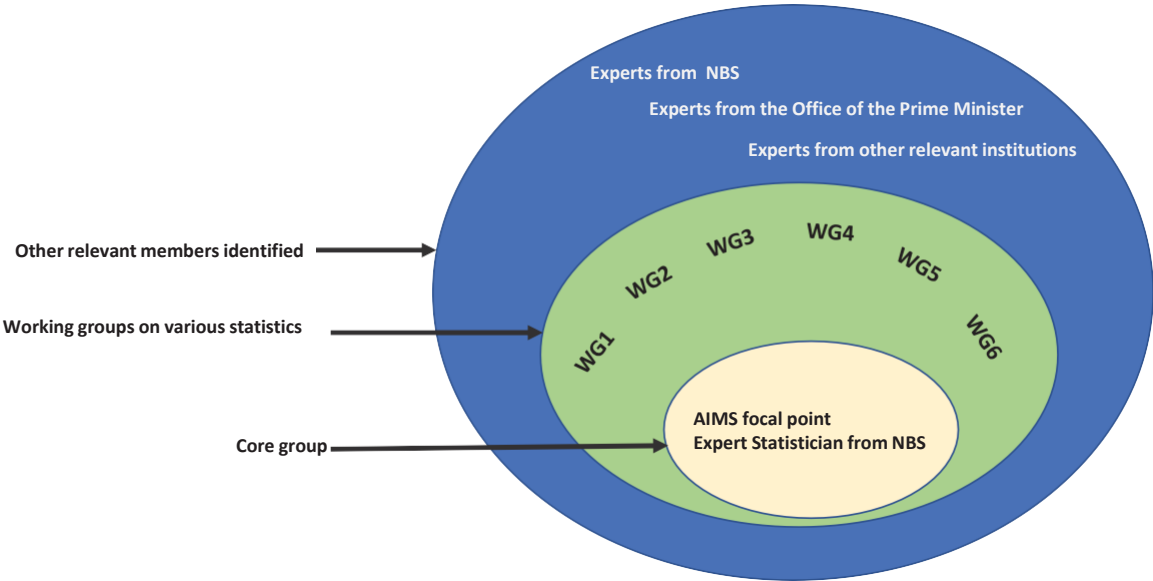
The National AIMS Technical Committee will benefit from the leadership and guidance of the SADC Secretariat in a coordinated manner with all relevant institutions within the SADC Statistical System in line with their respective annual work plans.

**4.23 AIMS Working Group**

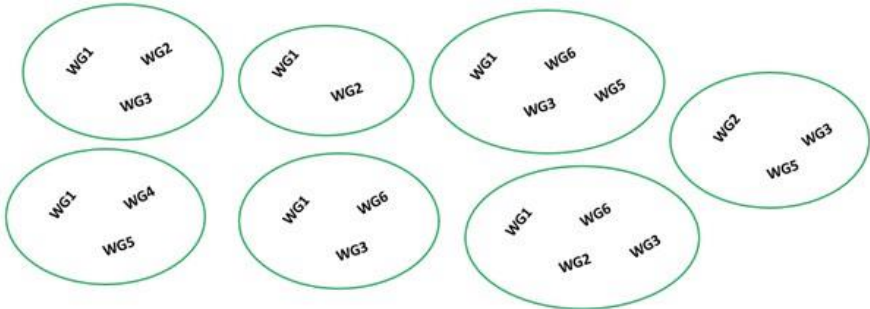
The AIMS Working Group will be composed of a core group, six working groups and other relevant stakeholders. The core group is chaired by the AIMS national focal point, assisted by a vice-chair from the National Bureau of Statistics or the Statistics Department of the Ministry of Agriculture with the support of working groups, each specialized in a specific area of agricultural and related statistics. The first task of the focal persons is to define key activities and schedules for the implementation of the Strategy, identify relevant stakeholders of the subgroup and ensure collection of data from the key stakeholders. Following the collection of information, the focal person analyses the information and provides the analysis for consideration and approval to the National AIMS Technical Committee before the information is uploaded into the system and submitted to the SADC Secretariat.

The six working groups form the subteams which deal with specific agricultural information. Representatives of the ministries mandated with these issues need to be included in the subteams or working groups.

**Figure 11: Technical AIMS Working Group composition**



Existing arrangements can help to put the principles for the establishment of an institutional set-up into practice. Nevertheless, instead of having six working groups based on the existing structures' realities on the ground and the specifics of each Member State, there could be two, three, four or five working groups.



The establishment of focal points in all relevant institutions is essential. These focal points will not only ease the work of the core team in the collection and uploading of agricultural information into the AIMS portal, they will also serve as internal and external links for coordination and communication in matters of agricultural information and will represent the institution in the specialized working group.

**Table 9: Guidelines for the AIMS Working Group**

This working group intends to improve the sharing of the data collected by relevant Government departments and different line ministries. This approach is to avoid duplication of data collection, keeps costs to a minimum and strengthens existing institutional responsibilities (rather than establishing a parallel system).

The AIMS Strategy advocates for full integration of the various datasets (along with the metadata) within a single database or server, and formal agreement protocols for their interoperability in the long term.

The working group would also work on the creation of a register which contains the metadata about the different resources.

The Technical AIMS Working Group could also be supported by a Secretariat, focusing on the implementation of the STOSAR project at national level.

The sub-working groups provide validated (harmonized and standardized) data to the core team.

The core group, under the leadership of a national coordinator, is responsible for overseeing, guiding and implementing all STOSAR project activities at national and subnational levels.

The AIMS working group is composed of six specialized working groups in addition to the core group, which consists of two experts - one from the National Bureau of Statistics and one from the Ministry of Agriculture hosting the STOSAR project. IT specialists should be included in the composition of the Technical AIMS working group team.

The Technical AIMS Working Group works closely with the SADC Secretariat-based team in order to coordinate all national activities. It organizes the collection of information needed to monitor relevant national policy as well as the national agricultural policy, and updates AIMS accordingly.

The specialized working groups are the driving force behind data collection, validation, standardization and harmonization of official data uploaded to the system. Representation should include all institutions producing data related to agricultural information.

In the data-collection process, the specialized working group should consider as their primary sources of information and statistics, information coming from the population and housing census, agricultural censuses/surveys and statistical yearbooks. The secondary sources will be the administrative sources and records coming from the relevant institutions.

International standards are applied to ensure global comparability of data and metadata to support the reliability and official status of the data.

National focal points are the main point of contact within the national government and are often based at the Ministry hosting the STOSAR project (often at the Ministry of Agriculture).

The effectiveness and strength of the country team depends on the ability to form an effective coalition, and to coordinate and facilitate various tasks to advance the STOSAR project agenda.

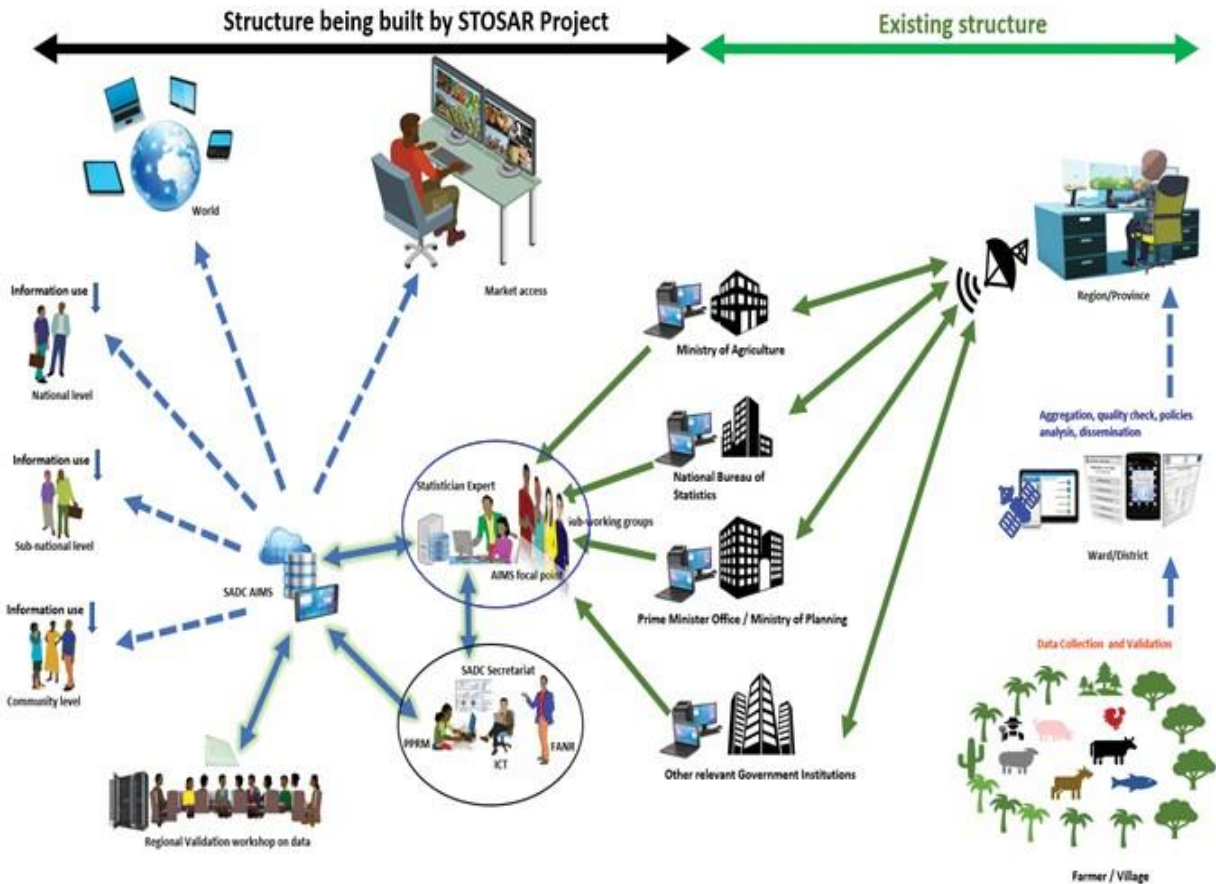
Furthermore, the AIMS Working Group could be supported by existing committees working on agricultural information, such as CAADP committees, CountrySTAT teams and GSARS teams.

### 4.3 Data-collection scheme at national and regional levels

By assessing the current situation in terms of information generated and shared, and institutional mandates, it has transpired that there are no common procedures for the sharing of data and statistics. However, it has revealed the importance of having a formal structure complying with international standards on the exchange of information. Outlined in Figure 11 are some of the technical and organizational requirements

that need to be put in place to implement the goals and objectives identified. At country level, systematic tracking and monitoring of the set of minimum core indicators will ease the process fuelling the SADC AIMS in data, statistics and agricultural information.

Figure 12: SADC AIMS data-collection, reporting and dissemination structure

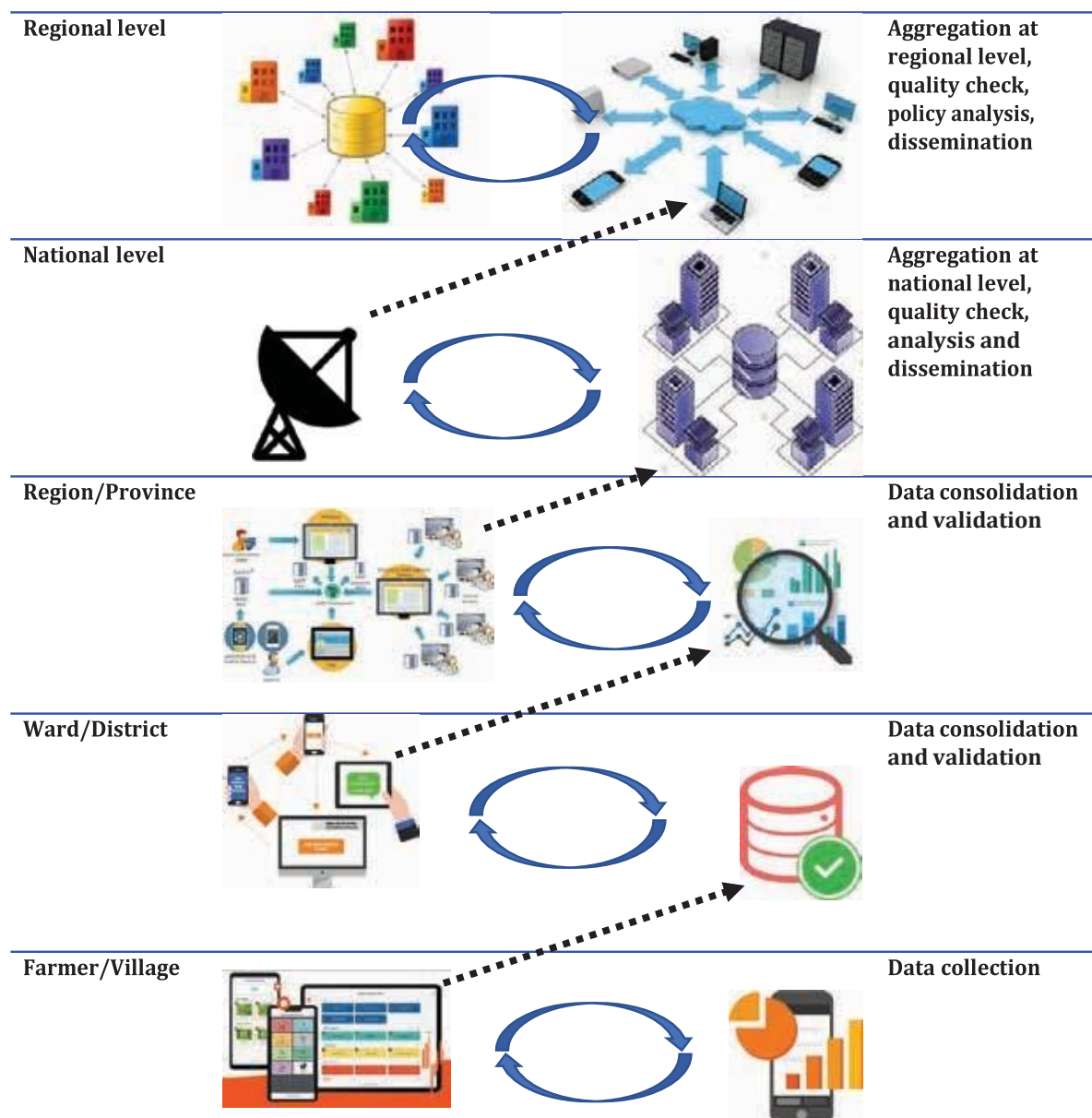


At the regional level, this information will guide in tracking progress and the performance of regional policies and generate a wide range of reports to guide decision-making.

The ultimate objective of the scheme is to provide an overview of how to channel agricultural statistics and aggregated information from villages and farmers up to national and regional levels. The proposed flow of information for AIMS will enable meeting the demand for information that comes from a diverse group of stakeholders, namely policy-makers and their advisers in government, government officials, parliamentarians and their technical staff at the national/subnational level, local government authorities, civil society, the donor community, mass media, researchers, training institutions and the private sector.

It was noticed in SADC that there is no standardized institutional arrangement in place to collect data from lower levels and channel these up to national level. The Strategy lays down the foundation of how that could be done to ensure statistics are consistent, reliable, relevant and comparable. It is advisable to follow or accommodate the structure proposed in Figure 12 for the proper management of the flow of agricultural statistics and information from collection to dissemination.

Figure 13: Flow of agricultural information from national level down to regional level



Within the national statistical systems, the main national entities or agencies producing agricultural statistics and information are the Central Statistics Office, Ministry of Agriculture, Agricultural Statistics and Early Warning, Ministry of Fisheries and Livestock, Lands, National Resources and Environment, stakeholders with other research, academic and international institutions, the National Farmers Union and affiliated organizations.

#### 4.4 Risk and uncertainties

During the implementation phase of this Strategy, there are possible risks expected to be encountered. These risks might hinder the smooth implementation of the Strategy and result in failure to achieve the expected goals of the plan on time. These risks and uncertainties include:

- i) insufficient funding dedicated to the implementation of the SADC AIMS Strategy (the success of the implementation depends on the timely availability of adequate funds allocated to implement the Strategy at regional and national levels);
- ii) availability of human resources within the SRSS to support the agricultural statistics activities; and

- iii) unforeseen external factors such as the coronavirus outbreak, the lockdown generated by the coronavirus, political turmoil, etc.

Other risks might include the inability to successfully identify, after planning and costing activities by the regional and national AIMS committees, the required amounts from Government and other development partners, as well as unexpected events (as seen lately with the coronavirus) causing Member States to shift their priorities. However, it is evident that the risks involved in not moving forward outweigh the risks of moving forward.

## 4.5 Advocacy and communication

Steps taken to improve the range, timeliness, quality and accessibility of agricultural statistics and information should by themselves lead to a greater awareness of the statistics and better use of the data. The Strategy approach in developing the agricultural information management system reinforces the links between the National Bureau of Statistics and Ministry of Agriculture on the one hand, and the relevance of statistics to key policy issues and need for evidence-based planning and policy-making on the other hand. The inclusive approach used in the strategy-development process has already helped to promote the need for the Strategy and the importance of improving the quality of agricultural statistics and information.

In order to create awareness of the importance of the Strategy among the key players, including decision-makers and development partners, there is a need to embark on different measures of sensitization. The measures will focus on the use of statistics for evidence-based policy- and decision- making, prioritization of resources towards agricultural statistics activities and soliciting funds from different sources. The advocacy of the Strategy at the political and policy levels needs to be emphasized for the sake of its sustainability. Lack of awareness of the important role played by agricultural statistics and information in policy development may lead to poor policy design, uninformed decisions and inability to monitor as well as to evaluate the implementation of policies and development programmes in the agricultural and other related sectors.

Statistical advocacy communication is an important element in the effective implementation of the Strategy. The objectives of the advocacy communication plan are to:

- raise awareness among planners and policy-makers of the importance of statistics for decision-making in the agricultural sector;
- raise awareness among data producers and users of the need for sound statistical methodologies for collecting and compiling statistics;
- promote public confidence in the agricultural information statistics system and provide assurances about the quality and objectivity of the data provided; and
- help in obtaining high-level commitment for the allocation of sufficient national resources to implement the Strategy.

Specific advocacy communication-related activities in the Strategy action plan are:

- Participation in the Sector Working Group on Agriculture Statistics and Information. This will help to raise awareness of the Strategy initiative among experts.
- Formation of experts from NASS. This will provide high-level support for the Strategy implementation and help in securing funding for the Strategy activities.
- Consultation at national level with provincial, district and village officials. Local officials will be actively involved in improving the administrative reporting system. These are the key people needed for improving data quality and a strong message will be provided on the need for sound and objective statistical practices.
- Development of the AIMS. Apart from data dissemination, the portal will also be useful for Strategy advocacy purposes. Materials such as Strategy information bulletins will be displayed on the web pages to help make users aware of statistical developments and results.
- Improved analysis of data in statistical releases. This will make it easier for users to understand and interpret the data.

- Holding dissemination workshops for all major statistical releases. This will provide the opportunity to work with users to ensure data are fully utilized. Policy analysis workshops will also be held.

## 4.6 Resource mobilization and funding arrangement

Two approaches could be adopted to fund the Strategy. The first approach is to identify resources at regional level to fund the Strategy and the second is to identify those resources at national level. Both approaches could also be run concurrently or sequentially.

At regional level, the SADC Secretariat under the leadership of the FANR Directorate could mobilize resources from SADC partners, the private sector or through the organization of donor roundtables. The SADC Secretariat could also set up funds dedicated to the AIMS Strategy and invite donors such as the EU, Department for International Development (DFID), World Bank, African Development Bank (AfDB) and Paris21 to contribute. The Secretariat could also design or seek support to design a mobilization strategy from the departments in charge of statistical information of continental bodies, such as AfDB, the African Union Commission (AUC), New Partnership for Africa's Development (NEPAD) and the United Nations Economic Commission for Africa (UNECA), or synergize with those organizations heading statistical projects or programmes at continental level. Another way is to put forward the current Strategy and use it as an advocacy tool to mobilize funds from bilateral or multilateral donors.

All the aforementioned guidelines at regional level could be contextualized and applied at national level. In addition to this, Member States could allocate resources or identify existing budget lines to fund the implementation of some activities under the STOSAR project. They could identify projects or programmes running in their respective countries and aiming to achieve the same objectives set out in the Strategy, then use those programmes or projects to implement activities matching and set out in the Strategy.

Areas in which the governments and development partners are expected to fund activities include, but are not limited to:

- incentives for the staff in charge of implementing the project;
- provision of conducive office space for the statistical operations to be effectively conducted;
- provision of ICT infrastructure and their maintenance;
- support of short- and long-term trainings;
- participation in funding of censuses, surveys, studies and routine data-collection activities; and
- other operational costs, e.g. data for internet.

Further, in funding the Strategy at both national and regional levels, innovative approaches could be adopted, such as identifying the needs of the private sector regarding agriculture and market information and setting up win-win partnerships with private sector companies meeting their demand and providing the information they require. Moreover, advocacy missions could be conducted to Member States that have a statistical fund to convince them to allocate some resources to the successful implementation of the AIMS Strategy.

All the resources made available would enable the Regional AIMS Technical Committee and the National AIMS Committee to run the day-to-day regional as well as national activities required for the successful implementation of the Strategy.

## 4.7 Implementation and monitoring

### 4.7.1 Implementation phase

The Strategy is a five-year plan (envisaged to run from 2020 to 2025) to be implemented on an annual basis. This means that for each year an annual work plan detailing activities that need to be implemented will be prepared in collaboration with the SADC AIMS Technical Committee and national AIMS committees, which should include training plans. In preparing the plans, inputs will be drawn from the SADC Secretariat, implementing Ministries and relevant institutions within the National Agricultural Statistical System. The plans will constitute the basics to design tangible and measurable performance indicators, targets, activities

timelines and persons responsible. It will also ensure that respective annual plans in countries are incorporated and aligned with the available budget.

At national level, the implementation plan considers the legal and policy framework for official statistics and management of the NSS. It also considers strengthening the capacity of the NSS, in particular the NASS, and its production and dissemination of statistics. The National Bureau of Statistics and the Department of Statistics of the Ministry of Agriculture will be taking the lead in the overall implementation of the Strategy. However, all other NSS partners will be responsible in parallel for the successful implementation of activities in the areas for which they have responsibility. The implementation plans and activities will be incorporated into the Annual Performance Agreement of the respective NSS partners.

The implementation of the above will be in line with other ongoing regional and national strategies intending to improve the production and dissemination of agricultural statistics and information. The AIMS regional and national committees will provide guidelines and enhance the activities, which will be aligned with Government and regional priorities as well.

#### **4.7.2 Monitoring and evaluation phases**

Monitoring and evaluation (M&E) ensures control and provides information needed for decision-making. Monitoring involves a continuous assessment of the progress made in the implementation of the Strategy, while evaluation deals with the gathering of data and information to establish the value and impact of the Strategy implementation.

Monitoring needs to be carried out throughout the implementation phase to assess the most significant constraints, most successful activities and how well the Strategy has achieved its goals and targets. The quarterly reviews of the progress made in the implementation of the Strategy will be followed by annual reviews. It is to be noted that monitoring is rendered ineffective unless action is taken in response to what has been measured and reported upon.

Monitoring will be carried out as per the established protocols of the SADC Secretariat and its Member States. The progress towards goals and implementation objectives should be assessed against the corresponding desired Strategy goals. Depending on this evaluation, strategic direction may be adjusted, or a new action plan may be called for. The main objectives of the M&E system are to ensure that the goals of the Strategy are achieved and to track the implementation of activities and resulting outputs. In this way, stakeholders will be able to assess whether the Strategy implementation is on course, and the AIMS national and regional committees will be able to take corrective action to ensure that performance targets are met.

Taking into account that the SADC AIMS Strategy was developed under the framework of the STOSAR project, which already has a detailed M&E plan, its implementation up to August 2021 will be governed by the existing STOSAR project's M&E plan. Following that period, and up to 2025, its implementation will run as a standalone project.

An effective M&E mechanism is critical for the successful implementation of the Strategy. In that regard, a new M&E plan will be drafted for February 2021. The latter is intended to supersede the M&E plan of the overall STOSAR project in September 2021. The M&E system will be developed at national and regional levels and will be used to ensure that the Strategy is being efficiently implemented, is reaching the intended target groups and is achieving the intended objectives. In addition, the M&E system should provide adequate data and information for the evaluation of the outcomes and impacts of the Strategy. This information will provide strategic direction. The M&E system could be linked to the existing M&E Framework of the Ministries, especially of the Office of the Prime Minister, Ministry of Agriculture and Ministry of Planning, and subsequently to the National Integrated Monitoring and Evaluation Systems. In this way it will be integrated to avoid duplication of efforts.



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# ANNEXES

## Annex 1: Calendar of the STOSAR launch in each country

Country		Launch in 2019
1	Angola	14-15 November
2	Botswana	12-13 November
3	Comoros	To be advised
4	DRC	24-25 September
5	Eswatini	24-27 August
6	Lesotho	20-21 November
7	Madagascar	20-21 November
8	Malawi	17 October
9	Mauritius	25-26 November
10	Mozambique	2-3 October
11	Namibia	21 October
12	Seychelles	28-29 November
13	South Africa	25-26 July
14	Tanzania	25-26 September
15	Zambia	18 July
16	Zimbabwe	21 October



Annex 2: Quick Assessment AIMS Questionnaire



**“Support towards operationalization of the SADC Regional Agricultural Policy (STOSAR)”**

**QUICK AIMS NATIONAL ASSESSMENT**

Country Name :		Date :	
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	Name :	Email :
AIMS focal point (AIMS)		
Expert Statistician (STAT)		

	AIMS	STAT
CountrySTAT 1=Yes 2=No		
NSDS 1=Yes 2=No		
SPARS 1=Yes 2=No		
Ratification of the African Charter on Statistics 1=Ratified 2=Signed 3=No action undertaken		
Existence of an AIMS 1=Yes 2=No		
AIMS Integrated or Non-Integrated System 1= Integrated System 2=Non-Integrated System		
National Statistical System 1=Centralized 2=Decentralized with solid coordination 3=Decentralized with little coordination		
Availability of ICT Infrastructures, such as Desktops/Laptops, routers for internet 1=Sufficient 2=No Sufficient		

	AIMS	STAT
Use of tablet, mobile or other PDA to collect 1=Yes 2=No		
Still use paper questionnaires to collect data 1=Yes 2=No		
Existence of a statistical fund 1=Yes 2=No		
Type of software used for data management 1=SPSS 4= Others 2=STATA 3=R		
Existence of a Server to store data 1=Yes 2=No		
Coordination of the NSS 1=Well coordinated 2=Partially coordinated 3=No well-coordinated		
Coordination of the NASS 1=MA 2=NBS 3=Other Institution		
Staff dedicated to the PDSA 1=Sufficient 2=No Sufficient		

**NSDS:** National Strategy for the Development of Statistics | **SPARS :** Strategic Plan for Agriculture and Rural Statistics  
**AIMS:** Agricultural Information Management System | **NSS :** National Statistical System |  
**NASS:** National Agricultural Statistical System | **MA:** Ministry of Agriculture | **NBS :** National Bureau of Statistics  
**PDA:** Personal Digital Assistant | **PDSA:** Production and Dissemination of Agricultural Information

Send back the completed questionnaire to : [gildas.nzingoula@fao.org](mailto:gildas.nzingoula@fao.org) ; [Aboubacar.Daman@fao.org](mailto:Aboubacar.Daman@fao.org)

Please don't hesitate to contact us in case you need further information on how to complete this questionnaire

# GLOSSARY

## **Agriculture**

Agriculture (also called farming or husbandry) is an economic activity mainly involved in cultivation of crops, rearing of livestock, aquaculture, fishing and forestry activities to sustain and enhance human life.

## **Data**

Data is defined as the collection of facts and details like text, figures, observations, symbols or simply the description of things, events or entities gathered with a view to drawing inferences. It is also defined as a collection of facts in the form of words, numbers or even pictures. There are two types of data, namely primary data and secondary data.

## **Statistics**

Refers to the science of collecting, organizing, analysing and presenting numerical data. In other words, statistics refers to a numerical set of data, collected in a systematic manner with a definite purpose in any field of study.

## **Information**

Information is described as that form of data which is processed, organized, specific and structured, which is presented in the given setting. It assigns meaning and improves the reliability of the data, thus ensuring understandability and reducing uncertainty. When data are transformed into information, it is free from unnecessary details or immaterial things.

## **Agricultural statistics**

It is the aggregate of numerical information on different fields of agriculture and its economy. These include information on crops, livestock, fisheries and forestry activities.

## **Data producers**

Data producers include all institutions involved in the production of official statistics, including entities from the private sector producing statistical information certified as official at the national level by the respective government.

## **Data users**

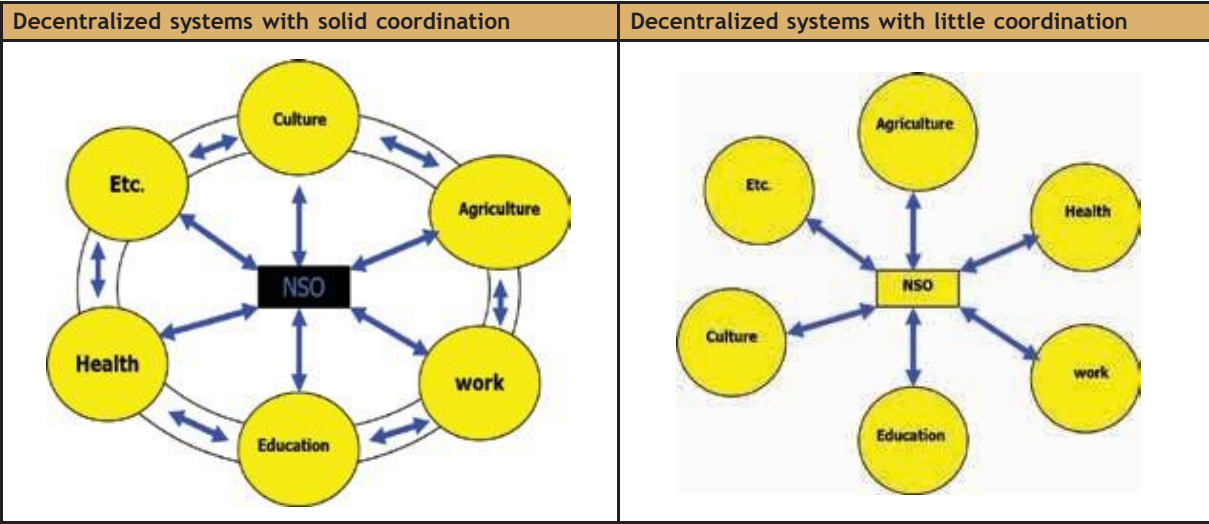
Data users include officials from central and local government, politicians, researchers, NGOs working on agricultural and rural issues, the media and representatives of international agencies and development partners.

## **National Statistical System**

The National Statistical System (NSS) is the combination of statistical organizations and units within a country that jointly collect, process and disseminate official statistics on behalf of a national government. It comprises data producers, data users, data suppliers, mass media as well as research and training institutions.

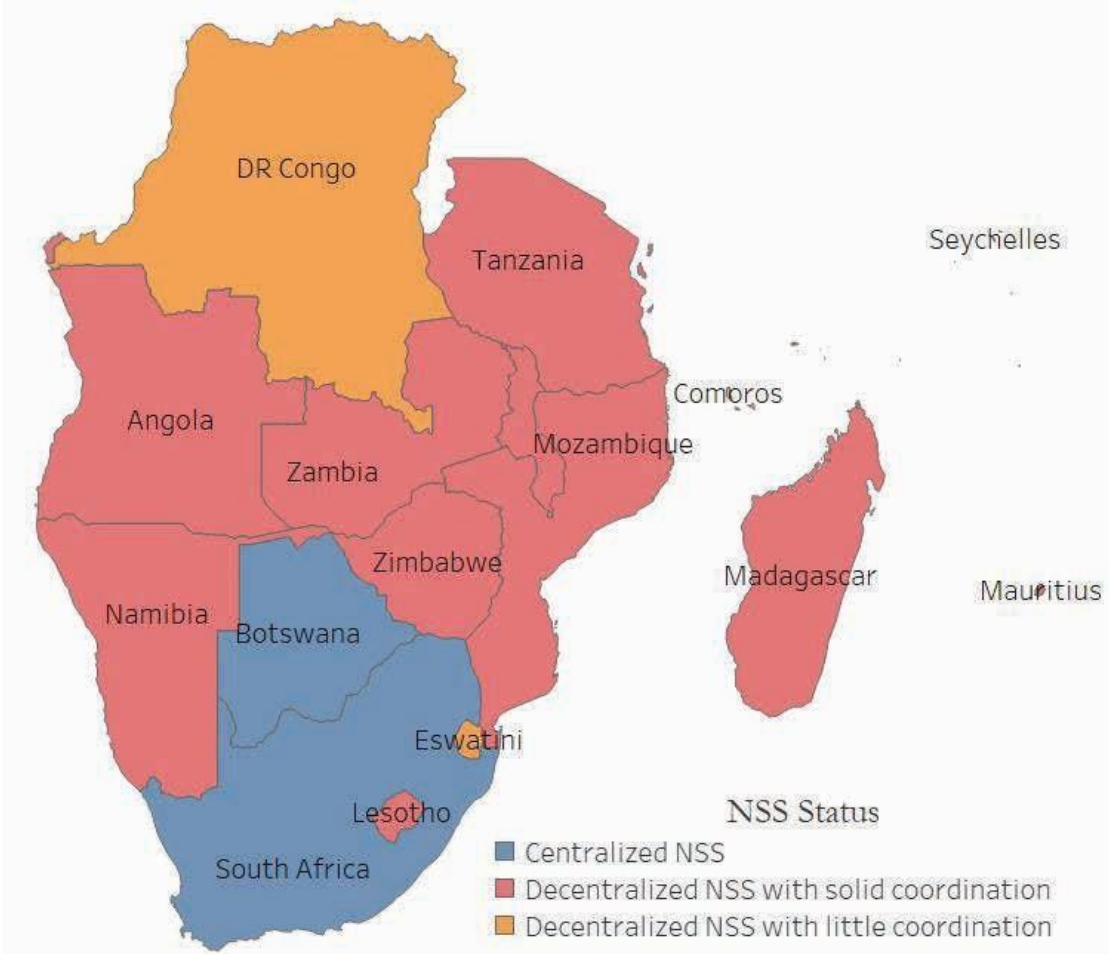
The system is coordinated by a central hub, which in SADC is mostly the National Bureau of Statistics. The NSS can be centralized, decentralized with solid coordination or decentralized with little coordination.

Figure 14: Example of the types of national statistical systems



Within SADC, all three groupings classifying national statistical systems are represented. While some countries have a centralized NSS, others are decentralized with solid coordination or decentralized with little coordination.

Figure 15: National Statistical System status



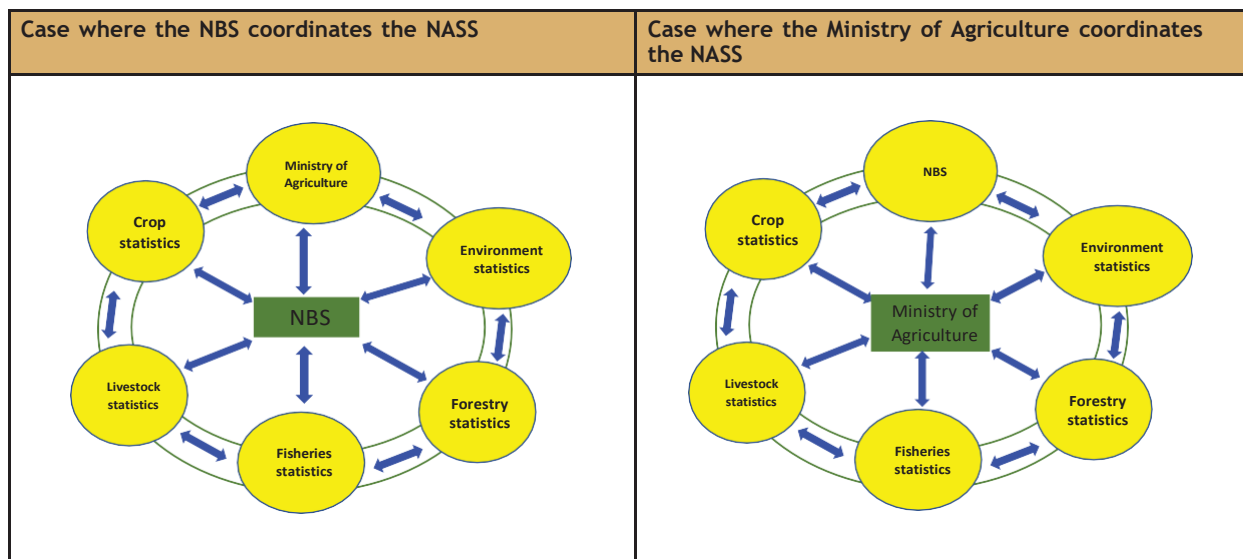
Source: FAO/SADC



## National Agricultural Statistical System

The National Agricultural Statistical System (NASS) is a subset of the National Statistical System. The main players of the NASS are the producers and users of the agricultural information, among others the National Bureau of Statistics, the statistics directorates of the Ministry of Agriculture or other government agencies responsible for crop, livestock, fisheries and forestry statistics.

Figure 16: Coordination of the NASS



## SADC Regional Statistical System (SRSS)

The SADC Regional Statistical System (SRSS) is broader than the National Statistical System. The SRSS embraces all government agencies and official bodies involved in the production and dissemination of official statistics within SADC.

### Primary data

Primary data is data collected by a researcher from first-hand sources, using methods like surveys, censuses, interviews or experiments. It is collected with the research project in mind, directly from primary sources.

### Secondary data

Secondary data is data gathered from studies, surveys or experiments that have been run by other people or for other research.

### Working group (WG)

WG1 refers to a working group on crop statistics.

WG2 refers to a working group on livestock statistics.

WG3 refers to a working group on aquaculture and fisheries statistics.

WG4 refers to a working group on forestry and natural resources statistics.

WG5 refers to a working group on environment statistics.

WG6 refers to a working group on cross-cutting statistics.





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FAO EDF 11 Project GCP/SFS/004/EC

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Agricultural information & market access for all

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#### Project Objective

The overall objective of this action is to accelerate progress towards implementation of SADC regional integration, which focuses on: i. enhancing information on agricultural production, sustainability and competitiveness for evidence-based decision-making; and, ii. improving access to markets through implementation of plant and animal pest and disease control strategies at the regional level.

#### Beneficiaries

Member States of the Southern African Development Community (SADC), namely: Angola, Botswana, Comoros, Democratic Republic of Congo, Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, United Republic of Tanzania, Zambia, Zimbabwe.

**STO  
SAR** Support towards  
the operationalization  
of the SADC Regional  
Agricultural Policy Project



Funded by the  
European Union

ISBN 978-99968-952-4-1

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