



# AGRICULTURAL VALUE CHAINS AND TRANSFORMATION IN SOUTHERN AFRICA:

OPPORTUNITIES STEMMING  
FROM THE AFRICAN  
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TRADE AREA



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First printing November I 2022

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# Contents

<b>Acknowledgements</b>	<b>IV</b>
<b>Executive summary</b>	<b>V</b>
<b>Part I. The state of regional value chains</b>	<b>1</b>
1. Background and context	1
2. The state of the agricultural sector in Southern Africa	8
2.1.1. Contribution of agriculture to GDP	8
2.1.2. Agricultural employment	10
2.1.3. Natural resources	12
2.1.4. Agricultural value chains	14
2.1.5. Energy	15
2.1.6. Access to finance	16
3. International best practices for strengthening agricultural value chains	22
<b>PART II. Exploiting opportunities stemming from the establishment of the African Continental Free Trade Area</b>	<b>25</b>
4. The African Continental Free Trade Area: harnessing emerging opportunities	25
<b>PART III. Conclusions and recommendations</b>	<b>30</b>
5. Conclusions	30
<b>Recommendations</b>	<b>32</b>
<b>Annex 3</b>	<b>43</b>
List of participants	43
<b>References</b>	<b>45</b>

# Acknowledgements

The present report was prepared under the overall leadership of Eunice Kamwendo, Director of the Economic Commission for Africa (ECA) Subregional Office for Southern Africa, in close collaboration with Isatou Gaye, Chief of the Subregional Initiatives Section at the Subregional Office.

Mzwanele Mfunwa, Economic Affairs Officer at the Subregional Office, oversaw the drafting of the report, which was informed by the outcomes of a study conducted by Seth Akweshie. The drafting team is grateful for the input and feedback provided by Fanwell Bokosi, Binesware Bolaky, Lavender Degre, Ian Filakati, Henry Lubinda, Oliver Maponga and Katarzyna Rokosz. Dailes Matoka, Jackline Mutambo, Ronald Nkhoma, Bedson Nyoni and Annie Tembatemba are acknowledged for their invaluable administrative and technical assistance.

The drafting team also wishes to acknowledge the constructive comments and input provided by participants at the Ad hoc Expert Group Meeting on the theme of the present report, which was organized by the Subregional Office in Blantyre, Malawi on 12 October 2021 in hybrid format. Participants in the twenty-seventh session of the Intergovernmental Committee of Senior Officials and Experts for Southern Africa, which took place in Blantyre on 13 to 14 October 2021, deliberated on and endorsed the recommendations of the Ad hoc Expert Group Meeting. The participants in the Meeting are listed in annex 3 to the present report.

Ali Todaro, Chief of the Publications and Conference Management Section at ECA and his team, including Charles Ndungu and Teshome Yohannes are acknowledged for their efficient handling of the editing, text processing, proofreading, design and printing of the present report.

# Executive summary

## The state of agricultural value chains in Southern Africa

Agriculture is the backbone of the African economy, and a major source of income in African countries (African Development Bank (AfDB), 2016). Fifty-five per cent of jobs in Africa are in the agricultural sector, which generates more than 70 per cent of the income of those living in poverty. However, outdated agricultural practices, the agricultural sector's vulnerability to climate change and variability, and the continent's high levels of subsistence farming continue to undermine agricultural productivity. Boosting productivity, which could help address many of the continent's socioeconomic challenges, including unemployment, entrenched poverty and food insecurity, was therefore identified as a priority area in Agenda 2063: The Africa We Want, of the African Union.

The development of agricultural value chains in Southern Africa is constrained by limited technical capacity, inadequate transportation and agricultural infrastructure, widespread poverty and food insecurity, the predominance of subsistence farming over export-oriented agriculture and the agricultural sector's vulnerability to climate change.

Other challenges include poor market regulation, poor market infrastructure, "supermarketization", which hinders local producers' access to markets, the growth of informal markets, and a lack of real-time market information. Those challenges, which have yet to be fully addressed, have led to several decades of decline in sector output, making agriculture the weakest contributor to gross domestic product (GDP) growth in Southern Africa. Those challenges must be addressed comprehensively if economies in Southern Africa are to revive agricultural sector productivity and leverage the opportunities stemming from the establishment of the African Continental Free Trade Area.

## Anticipated benefits of regional agricultural value chain development in the context of the Comprehensive Africa Agriculture Development Programme and the African Continental Free Trade Area

Africa currently has a population of approximately 1.3 billion people, but that figure is expected to rise to 2.5 billion by 2050. The Agreement Establishing the African Continental Free Trade Area, which entered into force in 2019, was adopted with a view to driving growth and innovation in Africa and creating opportunities for sustainable development. As of July 2021, 54 member States of the African Union had signed and 37 had ratified the Agreement. Trading under the terms of the Agreement began on 1 January 2021. For countries in Southern Africa, the anticipated benefits stemming from the establishment of the Area include:

- Increased employment and household income, GDP growth, poverty reduction, increased food security and social stability, and an overall improvement in people's health;
- Increased government revenue stemming from the broadening of national tax bases;
- More favourable trade balances due to reduced imports of agricultural inputs and agro-industrial manufactured goods that can be produced at the national and subregional levels;
- Economic diversification and growth derived from an expanding agricultural sector, the mainstay of employment in Southern Africa, the expansion of the subregion's industrial base and increased exports to countries in Africa and beyond;
- The formalization of many jobs in the informal sector, enabling many workers to access market-related information. This is likely to prove particularly beneficial for those currently employed informally as cross-border traders;

- Reductions in the cost of living as a result of greater competition among the producers of consumer goods, including those from abroad, which will lead to reductions in the costs of goods available on national markets;
- Increased public and private sector investment in research, development and innovation, leading to strengthened partnerships at the subregional, continental and international levels, and facilitating the commercialization of innovative African products and services;
- Increased use of indigenous African knowledge, and the strengthening of intellectual property rights and enhanced protection for geographical indications;
- Inclusive and sustainable economic development.

### Leveraging the opportunities for economic transformation stemming from the establishment of the African Continental Free Trade Area

Southern African governments can leverage opportunities arising from the establishment of the Area by modernizing their agricultural sectors and promoting industrialization, including through agribusiness and agro-industry development. To achieve those objectives, countries in Southern Africa should:

- Enact legal reforms to improve access to agricultural land for farming, strengthen land ownership and tenure rights and facilitate access to finance for smallholder farmers;
- Upgrade critical infrastructure so as to improve farmers' access to water, reliable electricity supplies, cold storage facilities and stable Internet connections with a view to strengthening food security. Southern African countries should develop and implement programmes for sea- and brackish-water desalination, groundwater and freshwater pumping, water conservation and wastewater treatment and reuse in agricultural settings;
- Develop and strengthen food trade mechanisms and standards, enhance food safety and facilitate access to extension and business advisory services;
- Provide facilitated access to well-coordinated, reliable, and up-to-date real time market information so as to provide farmers with relevant and timely information on the weather, farm inputs and agricultural output prices and quality;
- Harmonize quality standards and make every effort to improve the quality of African agricultural goods;
- Ensure respect for the intellectual property rights of Southern African value chain stakeholders and enhance protections for geographical indications. To that end, every effort should be made to strengthen collaboration between the African Regional Intellectual Property Organization and l'Organisation Africaine de la Propriété Intellectuelle;
- Invest in research, development and innovation and provide strategic financing to value chain stakeholders with a view to enhancing the long term competitiveness of Southern African value chains;
- Ensure that women are actively involved in the development of subregional agricultural value chains. Special financing schemes should be developed to support women-led agricultural enterprises;

Take steps to encourage young people and members of marginalized communities to take up employment in agribusinesses.



# Part I. The state of regional value chains

## 1. Background and context

### 1.1. Introduction

Agriculture is the backbone of the African economy and a major source of income in the overwhelming majority of African countries (AfDB, 2016). In an agricultural value chain, a series of economic actors produce and deliver goods to consumers through a sequence of activities. Agricultural value chains are established to capture value for all actors, who carry out activities to meet the needs of consumers or of a particular retailer, processor or food service company supplying those consumers. Fifty-five per cent of jobs in Africa are in the agricultural sector, which generates more than 70 per cent of the income of those living in poverty (World Bank, 2020). However, outdated agricultural practices, the agricultural sector's vulnerability to climate change and variability, and the continent's high levels of subsistence farming continue to undermine agricultural productivity. Boosting productivity, which could help address many of the continent's socioeconomic challenges, including unemployment, entrenched poverty and food insecurity, was therefore identified as a priority area in Agenda 2063: The Africa We Want, of the African Union.

By focusing on agricultural value chains, policymakers can improve the agricultural sector's productivity, enhance its contribution to GDP, create jobs, ensure food security and generate foreign exchange earnings through the trade in African exports (Schaffnit-Chatterjee, 2014). The agricultural sector accounts for some 25 per cent of GDP in sub-Saharan Africa, where it is still by far the largest source of both formal and informal employment. The sector is also critical to narrowing the urban-rural divide in inequality and incomes. By strengthening the agricultural sector it will, moreover, be possible to boost intra-Africa trade and investment, accelerate industrialization and economic diversification; support gender equality and the empowerment of women and young people and encourage sound sustainable resource and environmental management.

To address the aforementioned challenges, the African Union is seeking to promote agricultural development as a way to create sustainable jobs, raise incomes, reduce poverty, strengthen food security, drive economic growth and improve livelihoods. To that end, the African Union endorsed the Comprehensive Africa Agriculture Development Programme (CAADP), an integral part of the New Partnership for Africa's Development, in 2003, and adopted the Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods in 2014.

Acknowledging the immense contribution that the agricultural sector can make to socioeconomic development, CAADP calls, inter alia, for African governments to allocate 10 per cent of public expenditure to support efforts to strengthen the agricultural sector. CAADP provides a set of principles and broadly defined strategies "to help countries critically review their own situations and identify investment opportunities with optimal impact and returns." It calls for cost-effective agricultural development plans, including plans for addressing technical hurdles in the context of limited human resources, corruption, political pressure, shifting priorities, and inadequate infrastructure. The Malabo Declaration underscores that agriculture should remain high on the development agenda of the continent and that initiatives in that area are crucial for African economic growth and poverty reduction. The Declaration further calls for the strengthening of "inclusive public-private partnerships for at least five (5) priority agricultural commodity value chains with strong linkage to smallholder agriculture" and "to create job opportunities for at least 30% of the youth in agricultural value chains." Additional support to agricultural productivity in general and to agricultural value chains in particular is provided by a number of development frameworks

adopted by the Southern Africa Development Community (SADC) and the Common Market for Eastern and Southern Africa (COMESA).

The successful implementation of agricultural policies depends, *inter alia*, on the type, quantity and quality of investment and financing made available for implementation, the state of countries' critical infrastructure, and the human resources available to drive forward desired policy actions.

The literature on economic development is replete with examples of agricultural development driving forward industrialization and economic transformation. By shifting from subsistence-oriented production systems towards more market-oriented and inclusive paradigms, African agriculture can contribute to economic transformation and development. That transformation can be achieved through improvements in farm-level productivity, agricultural inputs, mechanization and post-harvest management, driven by investment and technology within a coordinated and effectively executed framework (Food and Agriculture Organization of the United Nations (FAO), 2021).

Evidently, agriculture, industry and trade have a symbiotic relationship. The effective implementation of agricultural policies also depends on linkages with other policies such as those on industry and trade, finance and investment, labour, education, gender and youth, research, development and innovation, and the environment. The critical role of the private sector in the design and implementation of agricultural development and transformation strategies is also recognized. In the long term, the combination of those policies and their implementation modalities determine the extent of inclusive structural transformation as a path to economic diversification, growth and development.

Agricultural transformation will require inputs that are manufactured and supplied by the industrial sector and services provided by the services sector. To respond to the increasing demand for inputs and services, additional capacity for expansion will be required by manufacturers and other industrial stakeholders. Additional inputs such as land, labour, investment capital and services, including financing and investment, business development, transport and logistics, wholesaling and retailing services, will also be needed. The economic expansion triggered by the transformation of the agricultural sector will lead to the creation of additional jobs, increased household incomes and additional expenditure on goods and services. Thus, a well-designed and properly managed, agricultural transformation process will ultimately result in overall economic transformation and growth.

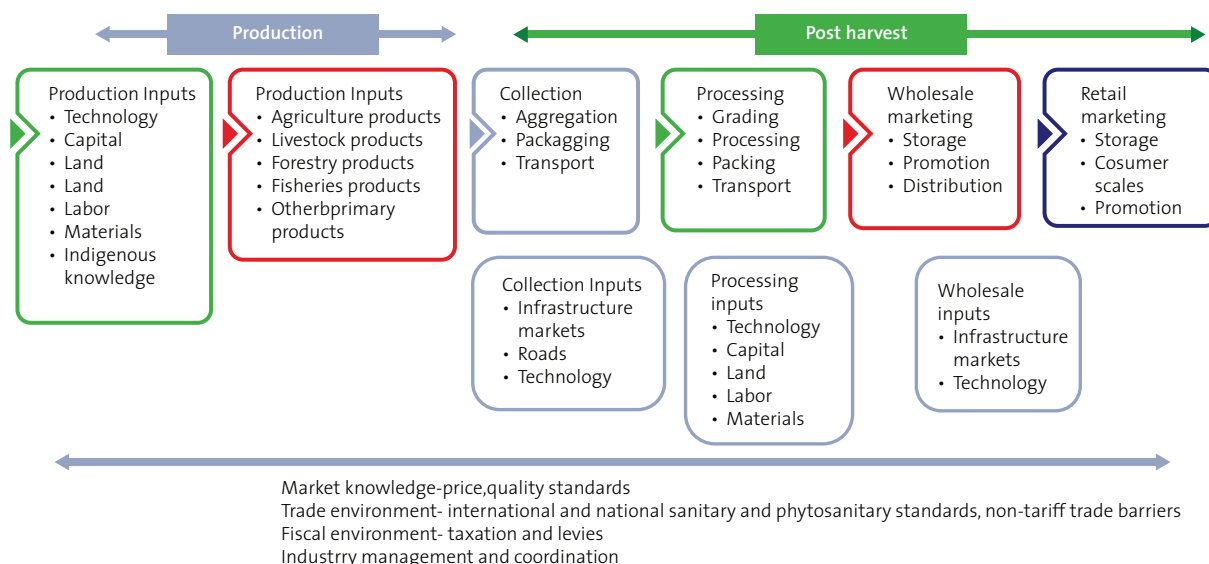
Economic transformation and growth can be effectively and sustainably achieved through the development of agricultural value chains, and value addition through agribusiness development. This will provide the basis for increased trade in agricultural and agro-related products.

### 1.2. Agricultural value chains

A value chain is a set of activities that are performed by an organization operating in a specific industry or supply chain to create and deliver value for its customers (Porter, 1985). Value creation provides competitive advantage and thus creates higher levels of profitability for the organization. An agriculture value chain identifies the set of actors and activities that bring a basic agricultural product from production in the field to final consumption, where at each stage value is added to the product. Each stage in the process is linked to each other to form a chain. A value chain can be a vertical linking or a network between various independent business organizations and can involve processing, packaging, storage, transport and distribution (FAO, 2010). Each segment of a chain has one or more backward and forward linkages. However, intra-chain linkages are usually of a two-way nature and influence each other (Kaplinsky and Morris, 2001).

Figure I depicts a typical agricultural value chain. The two main components of the agricultural value chain are production activities and post-harvest activities. Post-harvest activities include collection, processing, wholesale marketing and retail marketing. Each post-harvest activity requires collection inputs (infrastructure, roads and technology), processing inputs (technology, capital, land, labour and materials) and wholesale and retail marketing inputs (including infrastructure, and technology).

**Figure I** Agricultural value chain components and inputs



**Source:** Asian Development Bank.

Agricultural value chains remain underdeveloped in Southern Africa due to a number of constraints and challenges, including limited smallholder production capacity, inadequate processing equipment, weak business facilitation mechanisms and extension services and limited financial resources available for investment, which together result in low yields and unmet market demand (SADC, 2019). Furthermore, government policies and countries' legal and regulatory environments often impede agricultural value chain development. In addition, internal linkages within the value chains and external linkages with other economic sectors are often weak. For example, there are very few farmers' organizations and platforms to foster partnerships among farmers. Public-private-producer partnerships, which bring together a range of agricultural actors, including farmers, financial sector stakeholders and wholesalers, are also rare. (International Fund for Agricultural Development (IFAD), 2016)

### 1.3. The role of free trade agreements in boosting agriculture-related intra-African trade

The African continent's regional economic communities have already adopted a number of free trade agreements. Intra-African trade, including in agricultural and agriculture-related goods, could be further enhanced however, by facilitating the integration of regional economic community markets. The establishment of the African Continental Free Trade Area is likely to accelerate that process by further liberalizing trade, facilitating the cross-border movement of people, goods and services, reducing import and export tariffs on foodstuffs, incentivizing agricultural production and providing additional investment opportunities across the continent's subregions.

The adoption and implementation of the Agreement Establishing the African Continental Free Trade Area offer opportunities for integrated African production and trade that can accelerate economic transformation across the continent. Value chain promotion has been hailed as an opportunity to link up

African economies through cross-border production. Agricultural value chains facilitate the cross-border sourcing of raw materials and intermediate goods for further processing. This provides scope for more efficient and more competitive production and distribution of goods and services.

The entry into force of the Agreement establishing the African Continental Free Trade Area will foster the emergence of new and strengthened agricultural value chains and boost agroprocessing across the continent. The Agreement will help to boost agricultural productivity and manufacturing value added, and will facilitate marketing and distribution, within and among countries within the same subregion, including Southern Africa, and across Africa as a whole. Agroprocessing is a substantial contributor to the continent's broader industrialization strategy, while further investment in agriculture could have a significant impact on growth. In Morocco, for example, investments in the production of high-value crops, including citrus fruit and tomatoes, have accelerated GDP growth while raising income for smallholder farmers. In Ethiopia, investments in sesame and cut flowers for export and close collaboration between the government and the private sector have enabled strong year-on-year export growth in an otherwise stagnant agricultural sector.

### 1.4. Problem overview

Low levels of intra-African trade are due to several factors, including the following:

- The production by African countries of similar products;
- Inadequate trade infrastructure and logistics;
- The production of low-quality products that often fail to meet sanitary or phytosanitary standards;
- Poor physical infrastructure, including sub-optimal road networks within individual countries and across borders, which impedes the movement of people and traded goods within the continent;
- Limited efforts to promote trade and share market information;
- High tariff and non-tariff barriers;
- Inflexible rules of origin;
- High import and export prices for African goods compared with the prices of goods originating in other global regions;
- The failure of African countries to harmonize and align agricultural, industrial, trade, human resource, economic and other policies and standards;
- A lack of domestic and foreign investment.

To address those challenges, it is critical to strengthen cooperation and collaboration among African countries. Indeed, the successful implementation of the Agreement Establishing the African Continental Free Trade Area will, to a large extent, depend on the effective cooperation and collaboration of African States.

### 1.5. Objectives and scope of the study

As stated in its terms of reference, the main objective of the study that forms the basis of the present report was to identify ways to leverage the opportunities presented by the adoption of the Agreement Establishing the African Continental Free Trade Area in order to boost agricultural value chains and economic transformation in Southern Africa. The study therefore aimed to identify ways to address the challenges listed above with a view to developing robust agricultural value chains and facilitating intra-African trade in agriculture-related value added products under the terms of the Agreement and relevant COMESA and SADC trade instruments.

The study focused on key crop and livestock subsectors in the eleven countries supported by the ECA Subregional Office for Southern Africa<sup>1</sup> in order to:

- Identify opportunities presented by the establishment of the African Continental Free Trade Area;
- Identify and review the key challenges facing the agricultural sector, including challenges related to production, transforming agricultural outputs into value added products, marketing, and mobilizing financial resources for agricultural enterprises;
- Identify gaps between the steps currently being taken by Member States and the steps that must be taken in order to transform the agricultural sector and maximize benefits for countries and people in Southern Africa;
- Facilitate the formulation of solutions to those challenges so as to ensure that countries in Southern Africa fully exploit the opportunities stemming from the establishment of the African Continental Free Trade Area.

## 1.6. Methodology

The study was conducted by means of online research and looked at secondary sources of data. Relevant documentation and reports concerning the public and private sectors and national, African and global institutions was extensively reviewed. The study aimed to:

Identify opportunities stemming from the establishment of the African Continental Free Trade Area by reviewing published reports in the public domain and consulting with relevant experts;

Review the steps currently being taken by countries in Southern African to take advantage of those opportunities;

Identify gaps between the steps currently being taken by Member States to exploit those opportunities and the actions that should be taken to maximize the benefits stemming from the establishment of the African Continental Free Trade Area;

Identify potential interventions that could narrow those gaps;

Recommend solutions for closing identified gaps in order to maximize the benefits accruing to the agricultural and industrial sectors, governments and wider society.

A quantitative and qualitative analysis of relevant data was carried out. Data sources included the websites of subregional, regional and international organizations, including SADC, COMESA, the World Bank and the International Trade Centre. An analysis was carried out of relevant COMESA and SADC policies, strategies and plans, and of case studies from comparator countries in Africa, South-East Asia and Latin America. The above process led to conclusions that provided the basis for the recommendations contained in the present report.

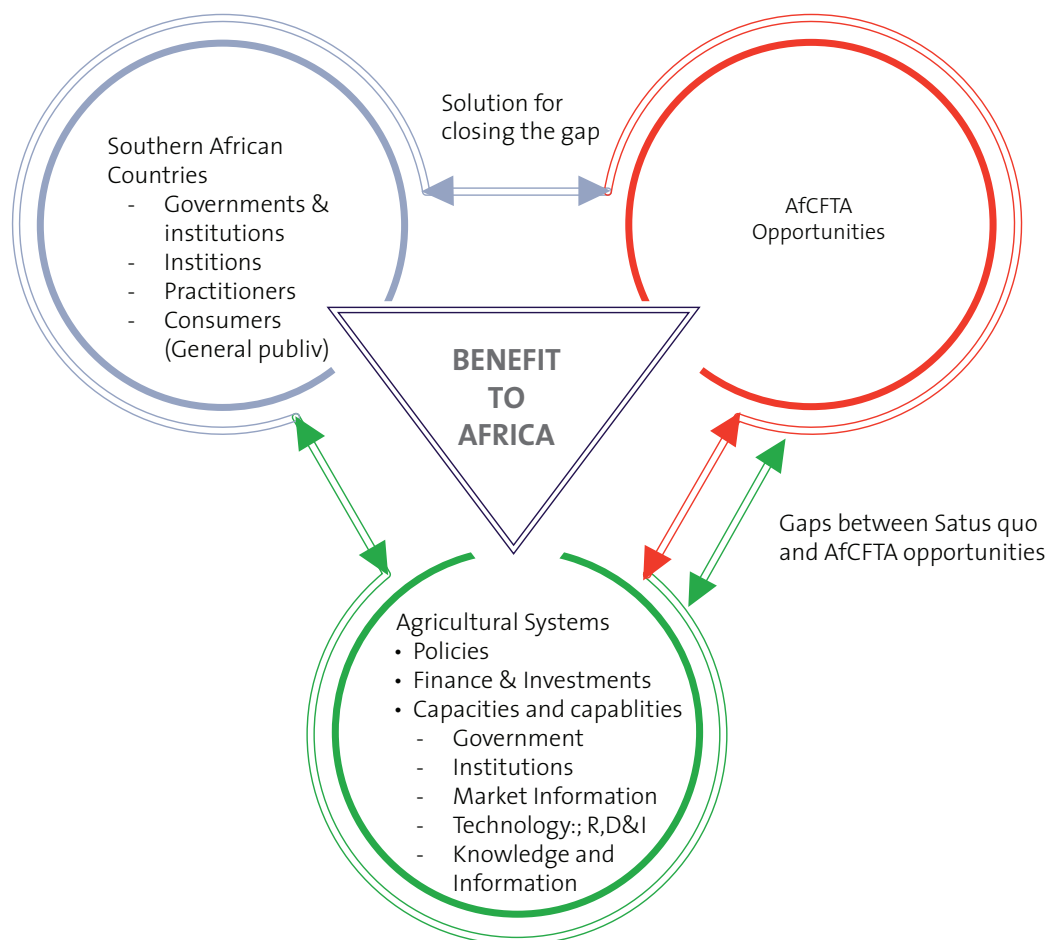
## 1.7. Conceptual framework

The study framework facilitated an analysis of three interrelated aspects of economic transformation through agricultural value chain development. The first aspect was the role of key stakeholders in agricultural and related activities, including governments and institutions involved in policy formulation, providers of technical, financial and business support services, frontline agricultural actors, including farmers, investors,

<sup>1</sup> The South African subregion comprises the following countries: Angola, Botswana, Eswatini, Lesotho, Malawi, Mauritius, Mozambique, Namibia, South Africa, Zambia and Zimbabwe.

input suppliers, processors, intermediaries, wholesalers, retailers, industrial manufacturers and external actors, in addition to consumers in broader society. Consideration was also given to interventions, tools and policies to promote agricultural and industrial sector development, economic transformation and intraregional and intra-Africa trade. The second aspect was the current state of agricultural systems in Southern Africa and their capacity to benefit from opportunities stemming from the establishment of the African Continental Free Trade Area. The third aspect is the capacity of African countries to develop and transform their agricultural and related sectors in the context of the Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods and CAADP with a view to boosting incomes and promoting broad-based economic development. A schematic overview of the interlinkages among those three aspects is shown in figure II.

**Figure II** Interrelated aspects of economic transformation through agricultural value chain development



**Source:** Author's elaboration.

Government policies shape and influence the agricultural sector, including agricultural investment decisions by private sector stakeholders. They can also facilitate or impede the adoption and deployment of technologies that support agricultural development. A government policy of allocating less than 10 per cent of government expenditure to supporting agricultural and agriculture-related initiatives, for example, leads to limited public sector investment in capacity-building, research, development and innovation. Government policies can also have a positive or negative impact on stakeholders' capacity to address agricultural sector challenges and constraints.

The policies that governments make that influence the development of the agricultural sector are also influenced by agricultural sector stakeholders through lobbying activities and their participation in consultations with relevant governmental departments. While domestic supplies of, and demand for, agricultural and agriculture-related goods and services has historically been influenced by national policies, the establishment of the African Continental Free Trade Area will undoubtedly have a further, significant impact, particularly as it will facilitate the creation of markets that extend beyond the regional economic communities within which African States have traditionally engaged in trade. The creation of the Area therefore offers opportunities for the expansion of trade in agricultural products, including processed intermediate goods and is likely to accelerate the integration of African economies. However, economic actors operating nationally or across their regional economic communities will require certain steps to be taken in order to facilitate their access to relevant markets. At present many of those steps have not yet been taken and those gaps must be addressed in order to develop efficient continent-wide trading systems.

The establishment of the African Continental Free Trade Area is expanding markets for all types of goods and services, particularly high-value goods and services. It is an instrument for boosting intra-African trade, enhancing economic transformation and accelerating the attainment of the Sustainable Development Goals and the aspirations, goals and targets of Agenda 2063: The Africa We Want, of the African Union.

In 2011, sub-Saharan Africa imported \$43 billion and exported \$34 billion worth of agricultural commodities and the economy is expanding rapidly. Sub-Saharan Africa is also a fast-growing consumer food market, with urban food markets set to quadruple and the food and beverage market to be worth as much as \$1 trillion by 2030 (Schaffnit-Chatterjee, 2014). Furthermore, ECA estimates that by 2040 the value of annual agricultural and food exports could increase by \$16.8 billion, while annual industrial exports could increase by \$43.3 billion. Industrial sectors that are expected to realize significant increases in intra-African exports include textiles and apparel, leather, wood and paper, vehicles and transport, and agrifoods such as milk and dairy products, sugar, beverages, vegetables, fruit, nuts and rice. The biofuel market in sub-Saharan Africa is also expected to experience significant growth.

Current government policies, investment levels and capacities and capabilities in Africa all fall short of what is required, hence the persistently low levels of intra-African trade which, in 2019, were estimated to account for only 15 percent of the continent's total trade. It is also observed that most intra-Africa trade is among countries that are members of the same regional economic community, particularly when they have adopted a regional economic community free trade agreement or are members of a regional economic community customs union. (Trade Law Centre, 2019) The establishment of the African Continental Free Trade Area therefore offers African countries an opportunity to increase international trade, including among members of different regional economic communities.

To achieve that objective, countries across Africa must, first and foremost, promote agricultural transformation, and must give priority consideration to value addition and value chain development. African stakeholders must, moreover, address a number of well-known and documented challenges and constraints, and must bear in mind that there is significant scope for agricultural specialization and value addition in Africa, particularly in the manufacture of processed goods.

## 2. The state of the agricultural sector in Southern Africa

### 2.1. Situational analysis

This section of the report contains an overview of the agricultural sector in Southern Africa. It describes the current situation and reviews the sector's contribution to the economies of the region. This provides a basis for an analysis of how current realities and policies are likely to affect agricultural sector value chains moving forward, particularly in the light of the adoption of the Agreement Establishing the African Continental Free Trade Area, and what steps should be taken to ensure that countries in Southern Africa take full advantage of the opportunities stemming from the establishment of the Area.

#### 2.1.1. Contribution of agriculture to GDP

Most countries in Southern Africa lie within the tropics. Agriculture in the subregion tends to be based on the rain-fed single cropping model of farming. There is, however, significant irrigation-based agriculture in a number of countries. Although agriculture already plays a significant role in the economies of the subregion, it has the potential to make an even greater contribution to economic growth, job creation, poverty reduction, food security and regional integration.

The importance of agriculture in the region is recognized in several regional, continental, and global development policy frameworks and instruments to which countries in Southern Africa are parties. These include the COMESA Treaty, the SADC Treaty, the SADC Revised Regional Indicative Strategic Development Plan 2015–2020, the 2004 Dar-es-Salaam Declaration on Agriculture and Food Security in the SADC Region, the SADC Free Trade Agreement and the Comprehensive Africa Agriculture Development Programme. In addition, a number of international protocols and agendas have been adopted with a view to promoting inclusive growth and sustainable development, including the 2030 Agenda for Sustainable Development (United Nations, 2015). It should be noted, however, that it is unlikely that the cultivation of agricultural staples alone can transform economies, and efforts are therefore needed to promote the processing of agricultural produce and to strengthen linkages with other sectors, as doing so could have a significant multiplier effect on economic growth.

Agricultural sector output, expressed as the ratio of gross value added to GDP, has steadily declined over the last four decades in most African countries including in the Southern African subregion. Figures in that regard for the 11 countries in Southern Africa between 1980 and 2020 are provided in Table 1.

**Table 1** Agricultural output in countries in Southern Africa, expressed as the ratio of gross value added to GDP, 1980–2020

Country	1980	1990	2000	2010	2020
Angola	no data	no data	5.66	6.18	9.43
Botswana	12.70	4.53	2.79	2.49	2.14
Eswatini	19.52	8.87	12.32	10.16	9.10
Lesotho	22.44	12.16	7.83	4.86	6.37
Malawi	39.23	38.48	35.66	29.61	21.09
Mozambique	no data	no data	19.10	26.85	no data
Mauritius	10.51	10.89	5.71	3.64	3.41
Namibia	8.02	9.06	10.73	8.46	9.03
South Africa	5.84	4.21	2.99	2.39	2.40
Zambia	13.98	18.20	16.15	9.42	2.73
Zimbabwe	15.08	14.83	15.67	9.61	no data

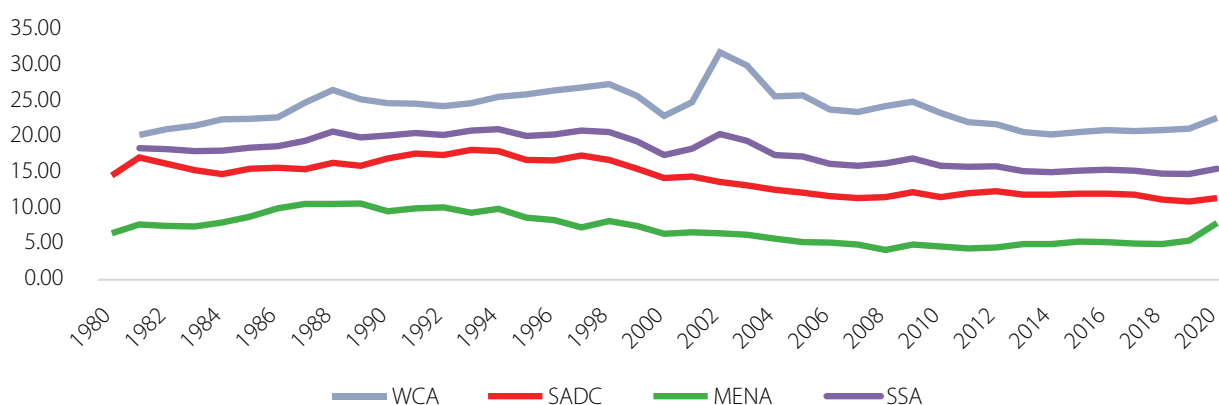
*Source:* World Bank – World Development Indicators database.



Agriculture contributed some 11.5 per cent of GDP in Southern Africa in 2020, down from 18.1 per cent in 1993. However, that decline may reflect the increased contribution of other sectors of the economy, and not necessarily a decline in agricultural productivity, and it may in fact reflect broader structural shifts in the economies of the subregion.

Figure III depicts trends in gross value added per sector in various subregions in 2019, the year in which implementation of phase 1 of the Agreement Establishing the African Continental Free Trade Area commenced.

**Figure III** Trends in agricultural, fisheries and forestry value added, expressed as a percentage of GDP, in Africa and the Middle East, 1980 to 2020

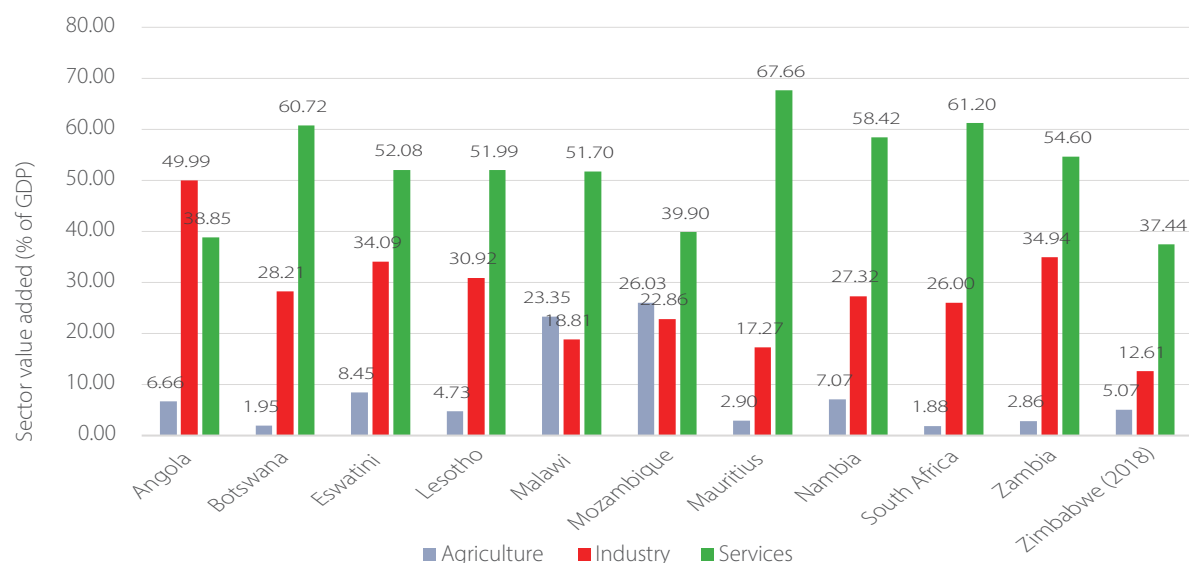


Source: World Bank – World Development Indicators database.

Note: WCA: West and Central Africa; SADC: Southern Africa Development Community; MENA: Middle East and North Africa; SSA: Sub-Saharan Africa.

As illustrated in figure IV, the agricultural sector now contributes less to GDP growth in sub-Saharan Africa than either services or industry, except in Malawi and Mozambique where the sector’s output still exceeds that of industry.

**Figure IV** Contribution of the agricultural, industrial and services sectors to GDP in SADC Member States in 2019, expressed as a percentage of total GDP

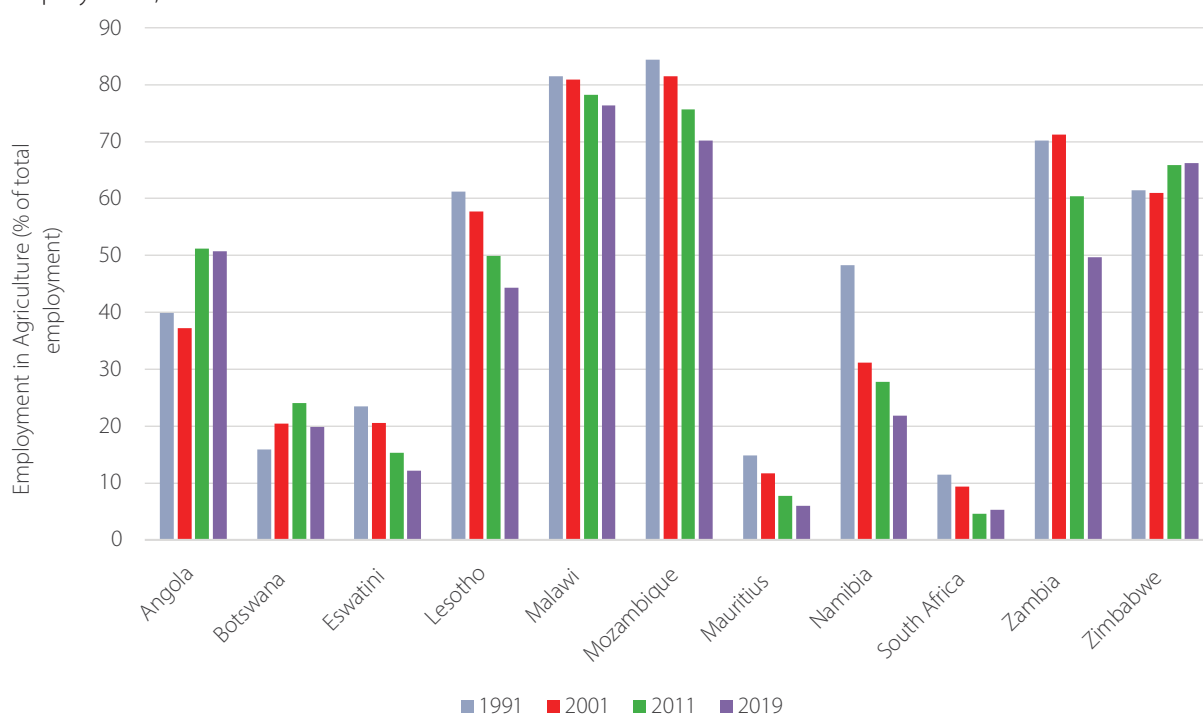


Source: World Bank – World Development Indicators database.

### 2.1.2. Agricultural employment

As illustrated in figure V, employment in the agricultural sector has declined in all Southern African countries with the exception of Angola and Zimbabwe. The sector remains unattractive for many young people, in part because much agriculture in the subregion is at the subsistence level and makes little or no use of innovative technology.

**Figure V** Agricultural employment in countries in Southern Africa, expressed as a percentage of total employment, 1991 to 2019



**Source:** World Bank – World Development Indicators database (estimates by the International Labour Organization).

Six countries in the region are characterized by very high agricultural employment. Indeed, in Angola, Lesotho, Malawi, Mozambique, Zambia and Zimbabwe, agricultural employment accounts for more than 40 per cent of all jobs. Despite the relatively small contribution of agriculture to employment in South Africa (5.3 per cent in 2019) and Mauritius (6.0 per cent in 2019), the agricultural sector continues to provide large numbers of jobs across the subregion and the agro-industry sector in particular provides attractive employment and income generation opportunities for rural populations. Those opportunities include both on-farm and off-farm activities, including in connection with agricultural input supply and product handling, agroprocessing, packaging, transportation, storage, marketing and distribution.

The decline in the contribution of agriculture to overall GDP in Southern Africa and beyond may be due to a number of factors, including the fact that agricultural production is primarily rain dependent and therefore vulnerable to the vagaries of the weather and the impact of climate change. For example, the subregion was severely affected by El Niño in 2016 and 2017, which caused intense droughts that devastated crop and livestock production for several years thereafter. Economic challenges, entrenched poverty and pest and disease outbreaks may also explain the sector’s underperformance. In addition, a lack of adequate post-harvest storage and processing infrastructure in much of Southern Africa results in significant post-harvest losses (Mwale, 2021) while post-harvest losses in Africa as a whole are estimated at approximately \$4 billion per year (World Economic Forum, 2016). It is therefore crucial that countries in Southern Africa establish effective mechanisms for minimizing post-harvest losses, which, as emphasized at the Third All Africa Post-harvest Congress and Exhibition, convened by the African Union in September

2021 under the theme: “Postharvest Loss Reduction for Sustainable Food Systems”, would strengthen their capacity to achieve food and nutritional security.

There has been a steady decline in the resources allocated by countries to agriculture in recent years, and particularly to agricultural research and development. Indeed, the resources allocated to agriculture declined from an average of 4.5 per cent of total government expenditure in 2001 to 2.5 per cent in 2012, despite the adoption in 2003 of the Maputo Declaration on Agriculture and Food Security in Africa, in which African countries pledged to earmark 10 per cent of government expenditure for projects to support the agricultural sector. Nonetheless, despite the limited financial support provided, agriculture still provides some 70 per cent of jobs in SADC Member States and the majority of those employed in the sector are women (World Economic Forum, 2016).

Other challenges affecting the sector include insecure land tenure for farmers and a lack of up-to-date land registries for the few countries that have sought to resolve land ownership and leasing challenges. Barriers to financial inclusion and underdeveloped or unsuitable financial instruments can undermine the performance of the agricultural sector, while limited access to markets and real-time price and weather information, inadequate extension services and weak disease control mechanisms also adversely affect agricultural output (AfDB, Organisation for Economic Co-operation and Development (OECD), and United Nations Development Programme (UNDP), 2014).

As of 2019, approximately 41.2 million people in Southern Africa were food insecure – a 28 per cent increase in food insecurity compared to the previous year, and a 7.4 per cent increase on the figure for 2016/2017. As illustrated in table 2, the overall production of staple foods declined between 2018 and 2020, with cereal production decreasing in all Southern African States between 2018 and 2019. Maize accounts for 80 per cent of cereal production, while sorghum, millet, wheat and rice make up the remaining 20 per cent. Most producers are smallholder farmers and only 7 per cent of cultivated land is irrigated. (AfDB, OECD and UNDP, 2014).

**Table 2** Cereal balance sheet and production in Southern African countries, 2018–2020

	2019/2020 marketing year cereal balance sheet			Production (harvest year)		
	Required ('000 tons)	Available ('000 tons)	Deficit/surplus ('000 tons)	2018 ('000 tons)	2019 ('000 tons)	% change (2019 compared with 2018)
	('000 tons)	('000 tons)	('000 tons)	('000 tons)	('000 tons)	
Angola	4,879	3,748	-1,132	3,609	3,570	-1.07
Botswana	300	37.756	-262	66	5.4	-91.83
Eswatini	167.88	96.77	-71	112	95.3	-14.99
Lesotho	375.07	87.83	-287	75	37.5	-50.27
Malawi				3,027	2,700	-10.81
Mozambique				3,174		
Namibia	351.2	200.5	-151	153	71.5	-53.24
South Africa	15,524	19,607	4,083	18,701	15,137	-19.06
Zambia	3,155	2,841	-314	2,598	2,217	-14.66
Zimbabwe	2,204	1,443	-761	1,994	1,443	-27.64
Total	35,710	37,069	1,359	42,895	37,485	

Source: SADC, 2019b.

Shortfalls, especially for staple foods, obliged many countries in the subregion to increase their food imports in the period in question. Food crops, which account for between 20 and 60 per cent of annual food production were severely affected by poor harvests, leading to shortages and price increases that were particularly hard on poor households. Poor harvests of vegetables, wheat, maize and cassava, a staple food across the subregion, were caused, primarily, by pests, low rainfall and inadequate irrigation systems. Angola and Zimbabwe, for example, faced significant shortfalls in terms of their domestic food production and were therefore faced with import needs of some 1,132,000 tons and 761,000 tons, respectively. Livestock production was also affected by droughts and climatic challenges in the region and by diseases, including a new strain of Foot and Mouth Disease that emerged in East Africa (SADC, 2019b).

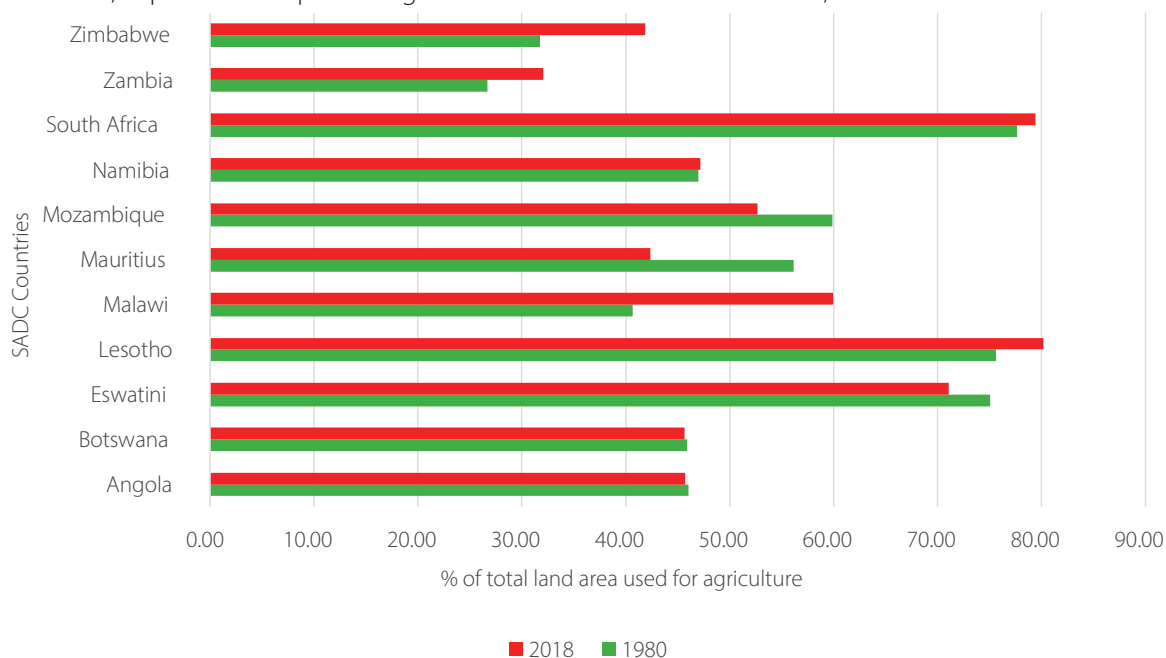
It should be noted, however, that the declining contribution of agriculture to GDP in States in Southern Africa may, paradoxically, be due to the improved performance of the agricultural sector in relation to the industrial and services sectors. This is because, although agricultural processing and value addition activities are making a larger contribution to GDP, that increase is classified as having been generated by the industrial sector and the agricultural sector's contribution to GDP will actually decline relative to that of the industrial sector. Counterintuitively, the declining contribution of agriculture may reflect the successful economic transformation of the economies of Southern Africa. In addition, that positive trajectory will also lead to industrial sector growth, increasing in trade and employment creation. Furthermore, evidence from a number of countries including Brazil and the Republic of Korea, suggests that agricultural and industrial productivity can improve simultaneously: in Brazil, for example, higher agricultural productivity resulted in increased employment in both the industrial and service sectors.

Southern African agricultural value added has remained below the sub-Saharan African average since 1980. It is also lower than the average for West and Central Africa, a subregion that is water sufficient, very fertile, and has experienced less climate variability than Southern Africa. Nonetheless, agricultural value added in Southern Africa is higher than in the Middle East and North Africa subregion. The situation in Southern Africa could therefore be improved by implementing interventions that could transform the agricultural sector, spur agro-industrial activities through value addition and increase intra-regional and intra-African trade by leveraging the opportunities presented by the establishment of the African Continental Free Trade Area.

### 2.1.3. Natural resources

Land is critical for agriculture. When it is coupled with water, it can be made very productive. Other inputs are required for this, but it is important to establish how much land in the subregion is devoted to agriculture. Figure VI illustrates how much land in countries in Southern African was being used for agricultural activities, expressed as a percentage of the total land area of each country, in 1980 and in 2018. Under normal circumstances, if more land is made available for agricultural activities, there is a potential increase in agricultural production.

**Figure VI** Land used for agricultural activities in selected Southern Africa Development Community countries, expressed as a percentage of those countries' total land area, 1980 and 2018



**Source:** World Bank – World Development Indicators database.

Figure VI shows that there was an increase in the amount of land available for agricultural production in six countries in the subregion, namely Lesotho, Malawi, Namibia, South Africa, Zambia and Zimbabwe. On the other hand, the area of land used for agriculture in Angola, Botswana, Eswatini, Mauritius, and Mozambique declined as a percentage of those countries' total land area between 1980 and 2018.

Land under cultivation can be made more productive by increasing the number of harvests through the application of irrigation and other technologies. Overall, Southern Africa is considered to be water-constrained, which undermines both crop and animal production. As illustrated in table 3, levels of water stress have increased sharply in the last two decades, especially in Eswatini and South Africa, although Mauritius and Zimbabwe have also experienced moderate increases in water stress. On the other hand, farmers in some countries, including Angola, Lesotho, Malawi, Mozambique, Namibia and Zambia, have tended to enjoy access to abundant water resources.

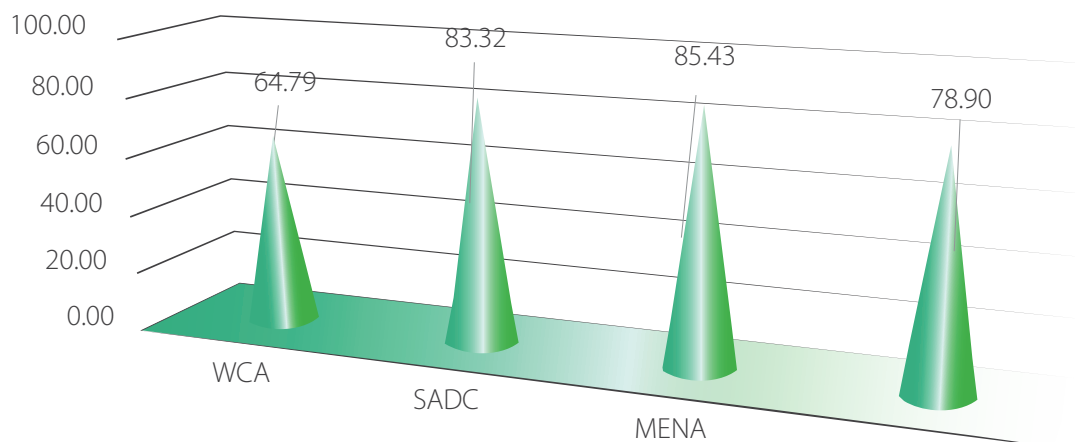
**Table 3** Levels of water stress: freshwater withdrawals as a proportion of available freshwater resources, 1987 to 2017

Country	1987	1992	1997	2002	2007	2012	2017
Angola	1.27	1.44	1.60	1.77	1.87	1.87	1.87
Botswana	1.01	1.18	1.71	2.03	2.05	2.03	2.02
Eswatini	57.50	64.49	71.48	76.43	77.56	77.56	77.56
Lesotho	2.93	2.74	2.56	2.57	2.57	2.57	2.57
Malawi	No data	No data	14.01	17.26	17.50	17.50	17.50
Mauritius	19.08	21.29	22.28	24.96	22.90	21.16	22.17
Mozambique	No data	0.78	0.94	1.13	1.39	1.61	1.75
Namibia	0.54	0.78	0.84	0.86	0.86	0.86	0.86
South Africa	No data	42.04	41.11	40.99	41.53	43.75	62.06
Zambia	No data	3.15	2.99	2.84	2.84	2.84	2.84
Zimbabwe	11.45	20.79	30.14	39.48	33.51	32.49	31.35

**Source:** World Bank – World Development Indicators database.

As a result of their increasing water stress, a number of countries are withdrawing ever larger quantities of fresh water to support their agricultural sectors. As illustrated in figure VII, which shows the percentage of freshwater resources withdrawn in selected subregions for agricultural purposes, as much as 83.32 per cent of freshwater resources are used in agricultural production in Southern Africa. As a subregion, Southern Africa is second only to the Middle East and North Africa subregion in terms of its freshwater withdrawals in support of agriculture, and it continues to withdraw more than the sub-Saharan African average. This shows clearly that Southern Africa is extremely dependent on its natural water resources, making it particularly vulnerable to climate change and variability.

**Figure VII** Annual freshwater withdrawals for agricultural purposes in selected subregions, expressed as a percentage of total freshwater withdrawals, 2017



**Source:** World Bank – World Development Indicators database.

**Note:** WCA: West and Central Africa; SADC: Southern Africa Development Community; MENA: Middle East and North Africa; SSA: Sub-Saharan Africa.

Given the scale of water challenges they face, many countries in Southern Africa will need to adopt climate smart, innovative irrigation approaches in order to increase the resilience of their agriculture production systems and spur the transformation of their agricultural sectors.

#### 2.1.4. Agricultural value chains

Agricultural productivity can be enhanced by robust trade-enabling logistics systems. Strong trade-related infrastructure fosters the emergence of and strengthens agricultural value chains by facilitating access to markets, ports and the movement of goods and services across borders in a timely manner. Table 4 provides an overview of the strength of logistics systems in Southern African countries, as reflected by the scores given for the “Timeliness” indicator of the World Bank Logistics Performance Index (World Bank, 2018). Countries are awarded a score between 1 and 5, depending on the timeliness of goods deliveries: countries in which a high proportion of goods are delivered on or prior to the scheduled delivery date are awarded a higher score than countries in which goods are often delivered late.

The table shows that only South Africa has established robust trade and transport-related infrastructure that facilitates the timely delivery of goods. Infrastructure in other countries in the subregion remains underdeveloped. The low scores achieved by Zimbabwe under the “Timeliness” indicator is a cause for concern. Low-quality infrastructure can significantly undermine the operation of agricultural value chains and the timeliness of deliveries. Urgent efforts are therefore needed to address infrastructure gaps.

**Table 4** Timeliness of goods deliveries in countries in Southern Africa (probability on a scale of 1 to 5 that goods will be delivered on or prior to the scheduled delivery date (1=low probability; 5=high probability), 2007–2018

Country	2007	2010	2012	2014	2016	2018
Angola	2.83	3.01	2.59	3.02	2.59	2.59
Botswana	No data	2.99	3.43	2.94	3.72	No data
Eswatini	No data	No data	No data	No data	No data	No data
Lesotho	2.83	No data	2.73	2.60	2.35	2.70
Malawi	3.00	No data	3.09	2.99	No data	2.97
Mauritius	2.33	2.91	3.52	2.875	No data	3.00
Mozambique	2.83	2.40	No data	2.74	No data	3.04
Namibia	3.00	2.38	2.52	3.15	3.19	No data
South Africa	3.78	3.57	4.03	3.88	4.02	3.74
Zambia	2.50	2.85	No data	2.91	2.74	3.05
Zimbabwe	1.87	No data	2.20	2.25	2.21	1.83

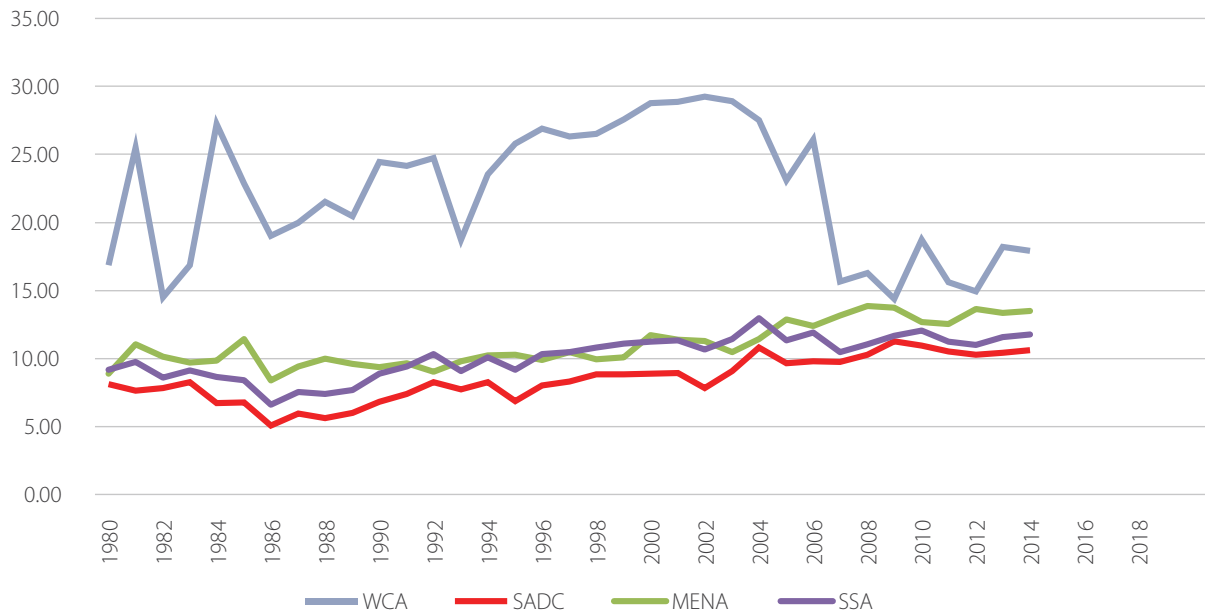
**Source:** World Bank (2018) Aggregated Logistics Performance Index 2012–2018.

### 2.1.5. Energy

Energy is a critical requirement for the transformation of agriculture through agroprocessing. The availability of efficient, reliable, cheap and sustainable energy is important for agricultural and agro-industrial transformation, development and growth. Sustainable energy is a form of energy that can be utilized repeatedly without its source being used up or depleted. In other words, sustainable energy comes from sources that can fulfil our energy needs without compromising the environment for future generations. Figure VIII compares the efficiency of energy supplies in Southern Africa with energy efficiency in other African regional economic communities, drawing attention to the percentage of energy output lost during transmission and distribution. As can be seen from the figure, Southern Africa is the most efficient region in terms of its energy supplies. Energy supplies in a number of economies in the subregion remain inadequate, however, and those countries experience frequent power outages, undermining the performance of manufacturing and agro-processing industries.

There has been a significant increase in the use of sustainable and environmentally friendly sources of energy, including solar, wind, wave and thermal sources. Exploiting those sources could help reduce the current high costs of energy in the subregion, with positive knock-on effects for industry and manufacturing, particularly if they are used in coordination with traditional power generation modalities. Combined with efficiency gains in other areas, lower energy costs could have a significant positive impact on the competitiveness of agro-based products from Southern Africa.

**Figure VIII** Efficiency of energy supplies, expressed as the percentage of energy output lost during transmission and distribution, selected regional economic communities



**Source:** World Bank – World Development Indicators database.

**Note:** WCA: West and Central Africa; SADC: Southern Africa Development Community; MENA: Middle East and North Africa; SSA: Sub-Saharan Africa.

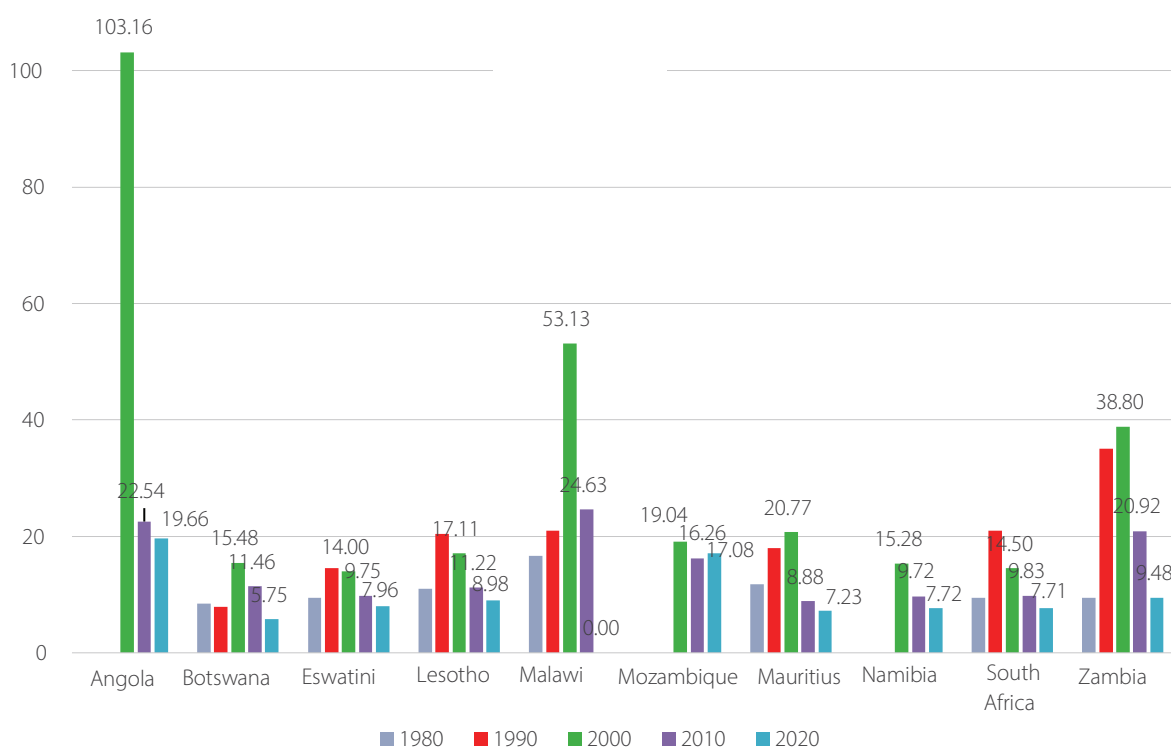
### 2.1.6. Access to finance

Affordable finance is critical for all business operations, including for smallholder farming operations. Limited access to credit is a formidable challenge and continues to impede agricultural and industrial development across sub-Saharan Africa. Fortunately, however, and as illustrated in figure IX, financial institution lending rates have declined significantly in recent decades in Southern Africa.




**Figure IX** Financial institution lending rates (per cent) in countries in Southern Africa, 1980 to 2020

120



**Source:** World Bank – World Development Indicators database.

A number of factors limit access to credit in Southern Africa. Most significantly, the majority of smallholder farmers have no registered security that they can use as collateral in order to obtain a loan. The absence of up-to-date land registries also prevents farmers from using their land as collateral. Insecure land tenure for farmers creates further problems while countries' underdeveloped financial sectors and systems mean that there is often a lack of suitable unsecured lending products and services for the agricultural sector. Furthermore, the absence of credit reference bureaus makes it difficult for people to build good credit histories that can facilitate the loan application process. Poor infrastructure in rural areas in Southern Africa also means that applicants may not be registered in a physical address system or meet other eligibility requirements, such as the so-called "know-your-customer" requirements that many financial institutions have adopted. Most agricultural sector workers and business enterprises are located in rural areas (AfDB, OECD and UNDP, 2014). Moreover, farmers and those wishing to establish or expand a business enterprise are often frustrated by what they perceive as the excessive red tape associated with government programmes designed to facilitate access to finance.

In the light of the aforementioned challenges impeding agricultural value chain development, it is important to find answers to the following questions:

- What tangible benefits can States derive from the establishment of the African Continental Free Trade Area?
- What can States do to reap those benefits?
- What are the steps that should be followed?

In the following section of the report, we will endeavour to provide answers to those questions.

## 2.2. Key agricultural outputs in Southern Africa

Particular focus should be placed on the development of value chains that provide opportunities for investment, income generation, exports, the creation of jobs, particularly for young people and women, linkages with other industries, economic proximity, and scalability across Southern Africa, and beyond. The section of the report outlines a number of further challenges constraining agricultural value chain development in the subregion and emphasizes the need to address those challenges at the earliest opportunity.

The present report provides an overview of six key agricultural outputs, namely maize, wheat, rice, soybeans, cotton and beef. The importance of establishing value chains for those six outputs is emphasized in the SADC Industrialization Strategy and Roadmap 2015–2063. Value chain development could accelerate regional integration by boosting intraregional trade and cross-border investment. Value chain development is also addressed in a report entitled “Profiling the Agro-processing Value Chains in the SADC Region” (SADC, 2019a).

Table 5 illustrates that, for all six agricultural outputs, regional demand far exceeds supply. Massive imports of those outputs supplement regional production and mitigate excess demand. Furthermore, the six outputs can be used as ingredients in a wide range of processed agricultural goods, the production of which could significantly enhance value chain linkages across Southern Africa and create significant job opportunities. Unfortunately, however, a number of constraints continue to inhibit the development of value chains for each of the six outputs. In the case of maize, for example, climatic challenges, poor storage facilities (often leading to large post-harvest losses), inadequate processing, poor trade-related transport infrastructure and barriers to cross-border trade are all of concern. In the case of rice, value chain development is impeded by challenges related to mechanization, technological innovation in seed quality, and the availability of fertiliser and crop protection chemicals. Wheat production requires an adequate supply of water and relatively cool temperatures, whereas much of Southern Africa enjoys a temperate climate and there is often insufficient water available for wheat cultivation. Countries with sufficient land and water include Malawi, Mozambique, the United Republic of Tanzania, Zambia and Zimbabwe, but wheat harvests in those countries are far below what is required to meet demand in the subregion. Soybean cultivation requires inputs that are usually imported from Asia, while there are inadequate financial resources available to enhance soybean production and processing, both of which are critical as soybeans are often used as animal feed for livestock and poultry.

**Table 5** Key agricultural outputs identified in the SADC Industrialization Strategy and Roadmap 2015–2063

Agricultural output	Reason for selection	Intra-SADC exports as a % of total SADC exports	Rest-of-world imports as a % of total SADC imports	Products offered	Value chain constraints
1. Maize	Most popular grain type and a staple food across much of Africa with many uses along value chains within the SADC subregion.	72%	50%	Yellow maize grain (used as animal feed for cattle), yellow maize meal and grit (used as animal feed for pigs and chickens), white maize meal and samp (for human consumption), yellow maize fractionated (used in breakfast cereals), white maize (used, inter alia, in starches, wood glues and paper sizing).	Post-harvest losses due to inadequate warehousing, poor pest control mechanisms, inadequate trade and transport infrastructure, inadequate extension services, climatic challenges, inadequate processing, barriers to cross-border trade.
2. Rice	Growing in popularity. Can be produced in the SADC subregion at relatively low cost, particularly with the adoption of innovative technologies.	91.2%	92.8%	Paddy or rough rice, husked or brown rice, broken rice, milled or semi-milled rice.	Lack of combine harvesters, inappropriate seed varieties and low seed quality, lack of fertiliser and pesticides.
3. Wheat	Growing in popularity as incomes rise.	95.9%	91.3%	Wheat or meslin flour, cereal flours, cereal groats, meals, pellets, bread, cakes and other bakery products, rusks, toasted bread and other toasted products, pasta.	Limited water resources available, except in Malawi, Mozambique, the United Republic of Tanzania, Zambia and Zimbabwe. Much of the subregion has a temperate rather than a cold climate.
4. Soybeans	Large and growing imports into the subregion. An important animal feed ingredient.	88.1%	69.9%	Soybeans, soybean oil and its fractions, flours and meals of oilseeds or oleaginous fruits, soybean oil cake.	Lack of inputs for the production of soybeans, limited investments in production and processing, especially with regard to the production of animal feeds for livestock and poultry. Growing imports of used clothes from Asia, limited investments in the sector in order to revive output and productivity.
5. Cotton	Popular cash crop. Large-scale production already underway; Low-cost ginneries available outside the subregion.	58.2%	75.4%	Cotton, cotton sewing thread, garments, linen, cotton seed oil, seed cakes used in animal feeds.	Lack of investments in meat processing infrastructure, limited capacity of animal health officials, public health and laboratory staff, meat inspectors and grading specialists. No testing laboratories, lack of vaccinations against specific diseases and parasites.
6. Beef	Large numbers of cattle present in the subregion.	26.6%	19.1%	Salted, brined and smoked meats, offal and blood, animal hides.	

**Source:** Author's elaboration on the basis of data contained in Profiling of the Agro-Processing Value Chains in the SADC Region (SADC, 2019a).

The production of cotton and cotton products, including textiles and clothing, have been greatly hampered by increased imports of used clothing from Asia. Investments to revive output and productivity have been limited. Although the meat industry can produce a wide range of meat products and foster the creation of extensive value chains, its development in Southern Africa is hampered by a lack of slaughterhouses and meat processing infrastructure, the low capacity of animal health officials, and insufficient numbers of public health and laboratory staff, meat inspectors and grading specialists. Furthermore, testing laboratories are often inadequate and few animals are vaccinated against common animal diseases and parasites.

The establishment of the African Continental Free Trade Area will undoubtedly facilitate efforts to address those challenges through regional value chain integration. The Area will provide opportunities for the extension of value chains backwards into input markets and forwards into finished goods markets beyond Southern Africa. Excess demand in the subregion for the six agricultural outputs and related products is currently being met through imports, and there is thus significant potential for expanding production of those outputs within the subregion. In turn, this is likely to foster job creation, enhancements to the subregion's technological, production and trade infrastructure, knowledge and technological transfer, and deeper regional integration.

The creation on the Area provides African countries with an opportunity to stem the losses incurred through the continent's significant exports of unprocessed minerals and agricultural commodities. Business enterprises will be able to enter into linkage arrangements that can reduce costs and create economies of scale, thereby boosting efficiency and competitiveness in agricultural value chains. Stronger linkage arrangements among businesses will strengthen the subregion's capacity to manufacture intermediate and finished goods. The key challenges that continue to impede the subregion's ambitions in that regard include its limited sustainable power generation capacity and the impact of climate change and variability.

### 2.3. Challenges impeding value chain development in Southern Africa

Agricultural value chains in Southern Africa face challenges, including limited capacity, poor road, rail and ports infrastructure, low levels of agricultural infrastructure development, poverty and food insecurity, the predominance of subsistence farming over export-oriented agriculture, and climate change (Matema and Prinsloo, 2021). Other challenges include the use of poor yielding seeds and fodder and inappropriate breeds of livestock animals.

**There are, moreover, a number of systemic challenges, including:**

- **Market failure challenges**

In some countries, current regulations and legislation on agriculture value chain activities hamper the cross-border trade in commodities. Taxes and fees imposed at border crossings discourage producers from establishing relationships with traders across the border. The continued imposition of those taxes and fees also suggests that subregional trade agreements are not working. Weak market infrastructure also means that countries with high agricultural potential sometimes import agricultural outputs that could be produced in sufficient quantities domestically. Indeed, very few cross-border agriculture value chains have been established.

In some cases, inadequate market infrastructure gives an unfair advantage to agricultural brokers and results in low prices being paid to farmers for their agricultural outputs. The inability of producer groups to establish functional governance structures to lobby for better conditions reduces farmers'

competitiveness. Following the establishment of producers' cooperatives, community sensitization campaigns are needed to encourage producers to join. Cooperatives can provide farmers with access to training courses, inputs and other support services. In some cases, attempts to address the failure of marketing systems have led to adoption of contract farming. Investors supporting farmers under contract arrangements support the development of efficient agriculture value chains. However, there can be challenges when farmers engage in side selling practices and choose not to sell their agricultural outputs under the arrangements stipulated in the contract.

Challenges impeding commodity upgrading hinder the growth of value chains, especially when farmers have developed good prototypes that they cannot then scale up. In some cases, problems occur when producers are unable to standardize their commodity/product (they may, for example be unable to standardize the colour, size or shape of the product in question). In order to scale up, production, smallholder farmers must take collective action to reach agreement on appropriate standards.

- **“Supermarketization”**

The increasing number of supermarkets in the region is another phenomenon that can reduce the importance of local informal markets. That development makes access to markets more difficult for local producers due to the technological, organizational and institutional changes adopted as part of supermarkets' product procurement systems (Reardon, Berdegue and Timmer, 2005). From a consumer's perspective, however, that development is often positive, as people can obtain their food from supermarkets rather than from small local stores or markets.

- **Poor coordination**

The operationalization of value chain interventions following an analysis of relevant obstacles and entry points is a challenging process, the success of which depends on effective system-wide collaboration. It is often the case that a number of organizations will work in an uncoordinated manner on the same or a similar idea. Beneficiaries often receive different advice from those organizations, which often propose a range of approaches and methodologies to address the same problem. From a technical perspective, information from end-of-chain (processing level) stakeholders is often overlooked, possibly due to low levels of social capital. Information gaps create a situation in which the various stakeholders in a value chain fail to understand how they contribute to each other's work.

- **National approaches to solving agricultural value chain challenges**

Although a national rather than an individual approach to value chain challenges can enhance the sustainability of interventions, the different priorities of value chain stakeholders, including non-governmental organizations and governmental and research institutions, impede collaboration. National governments have sometimes proved unable to coordinate different actors' work and, as a result, isolated efforts remain the norm.

- **Sociocultural challenges**

Many individuals and communities that could participate in and contribute to the development of agricultural value chains are excluded on grounds that they do not fully understand or share the values promoted as part of the development process. Pastoralists, for example, may be reluctant to sell their livestock in order to generate income due to sociocultural considerations associated with livestock ownership. Such sociocultural challenges can significantly hamper the development of value chains.

## 2.4. Agricultural transformation and agricultural value chain development in the subregion

Rapid population growth and urbanization in Africa, and the increasing disposable income of African consumers is expected to spur a significant increase in demand for agricultural products. This will act as a catalyst for the creation of economies of scale and private sector investment in the production and distribution of value added agricultural outputs. Agricultural transformation, namely a transition from a predominantly subsistence-based agricultural system to one that is commercially focused, is a key part of the continent's broader economic transition, particularly in countries where the majority of the population are employed in agriculture (Alliance for a Green Revolution in Africa, 2016). That transformation will entail an increase in agricultural productivity resulting from an increase in input use and the adoption of more intensive farming practices. Increasing net farming incomes are likely to stimulate the non-farm economy in rural areas. The development of value added activities associated with increased agricultural production, such as agroprocessing and retailing, will create further employment activities. For all those reasons, increasing agricultural productivity must remain a policy priority in sub-Saharan Africa.

# 3. International best practices for strengthening agricultural value chains

## 3.1. Introduction

As this report has been drafted with a view to developing guidelines to support agricultural transformation and value chain development, it is appropriate to review countries' successful experiences in that regard. Appendix II to the present report provides an overview of the following: (a) government support for agricultural value chain transformation in Brazil; (b) rice value chain development and transformation in the Republic of Korea; (c) support for banana value chain development in Ethiopia, and; (d) horticulture value chain transformation in Rwanda. A number of key lessons can be learned from the experiences of those four countries.

## 3.2. Summary of lessons learnt

The experience of the four countries mentioned above make clear that a range of approaches can be successfully adopted in order to develop and transform agricultural value chains. Agricultural production and productivity growth create opportunities for economic development and on-farm employment. Increased production can support the growth of agroprocessing industries, thus catalysing industrial development. Furthermore, increased opportunities for trade provide an impetus for both upstream and downstream linkages, the development of regional and subregional value chains and the deeper integration of value chains at the regional and global levels.

Most developing economies are characterized by dual agricultural systems, whereby smallholder subsistence farming and large scale commercial agriculture coexist and can both be successfully developed to deliver economic benefits for wider society.

### Critical factors identified include:

- **Government policy**

Government policy and the use of instruments such as tax regimes, skills training programmes and capacity building activities is extremely important in establishing frameworks for the development of resilient agricultural value chains. It should be emphasized that long-term planning is a very important aspect of agricultural value chain development and transformation, as it can facilitate the availability

of reliable supplies of agricultural outputs and related products. In addition, general government support and the creation of a conducive environment for trade is imperative for agricultural value chain development.

- **Research, technology, innovation and infrastructure**

The establishment of infrastructure for research, technology and innovation, including production-related infrastructure (such as irrigation), is an important driver of agricultural productivity growth and the development of agricultural value chains, and can facilitate the development of high-yield crop varieties or improved livestock breeds.

Trade-facilitating physical infrastructure, including roads, linking production areas with markets can also support the development of agricultural value chains. Poor handling, transport and logistics infrastructure can result in high post-harvest losses. A well-developed agro-logistics system is therefore a prerequisite for the smooth operation of agricultural value chains. Infrastructure gaps must be addressed to facilitate agricultural productivity and transformation. The successful implementation of infrastructural projects may, however, depend on the establishment of partnerships and effective collaboration among relevant stakeholders, including across borders.

- **High-quality infrastructure and testing facilities**

High-quality infrastructure and testing facilities including agricultural laboratories are an essential component of agricultural development initiatives. Expanding agricultural production can create large numbers of industrial and service sector jobs. Compliance with quality standards is critical if agricultural actors are to compete successfully in international markets.

- **Access to agricultural land**

Facilitating access to land for sustainable agriculture is crucial in promoting sociopolitical stability.

- **Access to affordable finance**

Many agricultural stakeholders require facilitated access to finance and strong technical assistance in order to increase production and boost incomes for their families. In the light of the experience of Brazil, Ethiopia, the Republic of Korea and Rwanda, it is clear that well-structured financing mechanisms are needed to foster sustainable agricultural value chain development. Any system that seeks growth and profitability must cater for and provide affordable finance. Governments also have a role to play in providing financial support, and government-backed financing arrangements are critical for the successful development of sustainable agricultural value chains.

- **Supply of high-quality agricultural inputs**

Governmental support for initiatives to ensure reliable deliveries of fertilizer and other critical agricultural inputs is often a prerequisite for success.

- **Functional and effective institutions and capacity-building initiatives**

Capacity-building among farmers is an essential prerequisite for the smooth operation of agricultural value chains.

- **Mainstreamed environmental policies in agricultural development projects**

To promote environmental sustainability, every effort must be made to ensure that environmental considerations are reflected in policies to boost agricultural production.

- **Technical assistance, collaboration and partnerships**

Well-managed cooperatives can minimize farmer-consumer price gaps. A cooperative can provide opportunities for capacity-building, information sharing, collaboration and networking. They can also promote transparency, support marketing initiatives and strengthen government-farmer engagement. Partnerships between local farmers, international non-governmental organizations, academic institutions and donors can facilitate long-term success in international markets. A platform that facilitates cooperation among exporters and farmers and provides accurate and up-to-date market information is vital if countries wish to foster international marketing and trade.



# PART II. Exploiting opportunities stemming from the establishment of the African Continental Free Trade Area

## 4. The African Continental Free Trade Area: harnessing emerging opportunities

### 4.1. Introduction

The experience of countries in other global regions can provide useful input for countries in Southern Africa as they seek to transform their agricultural sectors and promote agro-based industrialization. The establishment of the African Continental Free Trade Area will facilitate the growth of continental-wide markets and enhance market opportunities for all African subregions. Furthermore, increased trade in processed goods will create opportunities for those with the capacity to add value to the continent's agricultural commodities.

### 4.2. Recommendations

The following 14 recommendations are made to countries in Southern Africa as they strive to take advantage of the opportunities stemming from the creation of the African Continental Free Trade Area.

#### 1. Design and adopt effective government and subregional policies for agriculture and related sectors

Agricultural transformation can be supported through the adoption of a combination of national and subregional policies to facilitate a shift from subsistence farming to high-productivity agricultural practices. Effective policies must reflect the interrelationships between the agricultural sector and all related sectors. Policies that are developed through stakeholder participation in the policy process facilitate the successful implementation of those policies. In Southern Africa, a dual system of agriculture is practiced. The alignment of national policies with subregional policies is essential if States are to minimize discord and establish shared objectives. Alignment of policies will also facilitate coordination and regional integration. The regional economic communities are the building blocks for implementation of the Agreement Establishing the African Continental Free Trade Area and their roles must therefore be enhanced.

#### 2. Establish a business-enabling environment for agricultural development

The subregion requires an environment conducive to the development of agriculture production, processing and trade. To achieve that objective, it is critical to promote investment in rural public goods and it is important to formulate effective policies, establish sound regulatory and legal environments, and take all steps to fully exploit the untapped agricultural potential of sub-Saharan Africa. African States have pledged to take action to boost the trade among African countries in agricultural commodities, including through trade facilitation measures and measures to ensure domestic food price stability. A conducive business environment will facilitate domestic resource mobilization, including from the private sector.

#### 3. Promote peace and security

Peace and security are a prerequisite for development, particularly the development of agricultural value chains. Where there is instability, it is likely to affect rural activities. The absence of peace and the displacement of populations often undermine production and affect productivity. The African continent has had its fair share of political instability. It is important to restore peace and ensure the security of

communities. Instability can also affect supply and trade routes, thereby undermining the capacity of economies to sustain or increase agriculture production.

#### **4. Promote infrastructure development**

The poor state of agriculture-related infrastructure in Southern Africa is a major constraint on agricultural productivity and agribusiness development. The push to develop agriculture and agroprocessing value chains will require significant improvements to the subregion's infrastructure, water- and irrigation-related infrastructure, roads, railways, ports and airports, telecommunications infrastructure, and storage-related infrastructure, including silos and cold room facilities. States in the subregion should also endeavour to establish industrial parks. In particular, good rural roads should be built to facilitate the transportation of agricultural commodities to processing centres and consumer markets. In addition, the construction of efficient power generation infrastructure will be necessary to support processing industries. Certain agricultural products must reach markets in good time to avoid spoilage and air transport infrastructure is often important for those value chains. Effective and efficient logistics systems will also be needed, as will improvement to the subregion's railway network, which remains woefully inadequate, so that it can be used to transport fertilizers and other bulk inputs from ports to rural areas.

Infrastructure that supports cross-border trade will promote trade within the subregion and beyond. At present the subregion is characterized by poor road networks, which hinder the timely and efficient movement of goods. The handling and clearance of goods traded across borders requires high-quality communications facilities. The entities involved in cross-border trade, including customs and port authorities, customs brokers, insurance companies, freight forwarders, vendors and banks, must all improve the quality of the services they provide in order to facilitate both formal and informal cross-border trade. To that end, efforts should be made to strengthen the capacity of individuals involved in or responsible for managing cross-border trade. This will strengthen links between the producers of agricultural goods and agricultural markets, enhance the competitiveness of African goods and accelerate the integration of countries in Southern Africa with countries in other African subregions.

#### **5. Establish special economic zones and/or agro-industrial parks**

The development of special economic zones and/or agro-industrial parks can facilitate the successful transformation and growth of agro-industrial enterprises in the subregion. Those zones and parks can provide key infrastructure, well-managed support services, including information and communications technology (ICT) and international marketing services, and can help local small and medium-sized enterprises to access foreign direct investment and public sector financial support. The establishment of well-managed special economic zones or agro-industrial parks can thus partly close infrastructure gaps and facilitate the development of both national and regional agricultural value chains, enabling business enterprises to increase their production and effectively compete in target markets under the terms of the Agreement Establishing the African Continental Free Trade Area.

#### **6. Promote research, development and innovation**

The research, development and innovation aspects of agricultural value chain development, at both the national and subregional levels, ensure the long-term sustainability of value chains. It is therefore important to promote capacity-building in that area, in both the public and private spheres. Research, development and innovation are important drivers in the development of new products, and the adoption of innovative production and processing technologies could transform the agricultural sectors of countries in Southern Africa. Research can, for example, lead to the development of high-yield crop varieties that are suitable for local agricultural and livestock production conditions.

## 7. Promote the use and recognition of quality standards

Agricultural products should not pose a threat to human, plant or animal health. The countries of the subregion have thus adopted common quality and safety standards to guide the production and handling of agricultural value chain products. Both the Sanitary and Phytosanitary (SPS) Annex to the SADC Protocol on Trade, adopted in 2008, and the COMESA Sanitary and Phytosanitary Strategy 2016–2020 enshrine standards set out in the World Trade Organization Agreement on the Application of Sanitary and Phytosanitary Measures, adopted in 1994. It should be noted, however, that intra-Africa trade in agricultural products under the terms of the Agreement Establishing the African Continental Free Trade Area will be guided by agreements concluded among Member States in the context of the Sanitary and Phytosanitary (SPS) Policy Framework for Africa, adopted by the African Union in 2019. This is in line with the recently adopted COMESA Local Content Policy Framework on Industrialization. Compliance with subregional and regional standards will improve quality and accelerate value chain development. Furthermore, quality standards have been adopted by a number of private sector distribution and retail outlets. Urgent efforts should therefore be made to ensure compliance with and recognition of quality standards in order to bolster trade within the subregion and beyond.

The African Organization for Standardisation coordinates and facilitates the overall development and harmonization of quality standards across the continent. Countries in Southern Africa should collaborate in order to make optimal use of their scarce expertise in that area, and ensure that all countries, including those with limited capacity, can provide guidance on quality and safety standards to African value chain stakeholders.

## 8. Provide equitable access to land for all sectors of the population

Agricultural development policies must facilitate the equitable allocation of agricultural land to all sectors of the population, including women, young people and members of marginalized communities. The implementation of those policies must be monitored to ensure compliance. Legislation should, moreover, be adopted to combat discrimination against women and young people in the allocation of agricultural land and in terms of their access to development finance. The provision of technical, financial and extension services must also be reviewed and, if necessary, amended to ensure equitable access to those services.

## 9. Promote access to affordable finance and related services

Oberholster, Adendorff, and Jonker (2015) found that enhancing investment and facilitating access to finance can be a key driver of agricultural transformation. In the case studies outlined in Part I, agriculture value chain development benefitted from access to finance. It is therefore critical to provide stakeholders involved in production and processing with access to credit at favourable rates. Generally, however, agriculture and agribusinesses are perceived as high-risk, costly and with low returns on investment. As a result, private sector financial institutions tend to avoid extending loans to agriculture and agribusinesses, leaving a significant financing gap. Reducing risk and improving the affordability of finance can strengthen agriculture and agroprocessing value chains so that the subregion can fully exploit the opportunities stemming from the establishment of the African Continental Free Trade Area.

Consideration should be given to innovative financing modalities, including public-private partnerships, agricultural insurance and credit guarantee schemes, intermediary financing and lead firm approaches. Value chain integration, strategic partnering, risk management, supporting services, sustainable production, product range and external financing all have an impact on value chain competitiveness. Similarly, value chain competitiveness has an impact on the success of agricultural value chain financing (Oberholster, Adendorff, and Jonker, 2015).

### 10. Ensure the availability of high quality inputs

It is important to enhance the sustainability of value chains, inter alia by linking farmers to service providers, establishing and strengthening links among businesses, linking businesses with investment opportunities, identifying cross-border markets, mobilizing private sector investments and widening the market for related value chains.

### 11. Provide technical assistance, foster collaboration and encourage partnerships

Technical assistance, collaboration and partnerships can be sources of useful production, processing and market information. Given the fragmented nature of agricultural production and processing value chains, there is a need for the various actors to collaborate in order to enhance the natural linkages among operations both within and across value chains. Technical assistance tends to bring in a knowledgeable party to provide and guide development within a value chain. On the other hand, collaborators have significant roles to play and, when acting together, can deliver success. Partnerships can also result in successful agricultural production and transformation, enhancing value chain development. In Rwanda, for example, the development of a vegetable value chain relied on partnerships among the organizations leading the project and collaboration between producers and sellers on the one hand, and buyers in Europe on the other, with the latter supplying vital market information. Stronger relationships will foster additional partnerships, especially with private sector financial institutions, which often require business enterprises not only to put forward a convincing business case but to also make a commitment to upholding the principle of transparency.

### 12. Mainstream environmental policies into agricultural development initiatives

Agricultural development practices can be harmful and damaging to the environment. It is important that efforts to expand and intensify agricultural production are undertaken in tandem with efforts to protect the environment and promote sustainable agricultural practices. This can be achieved through compliance with international conventions and protocols. Environmental considerations should be mainstreamed into agricultural policies to ensure that production and agro-processing are in line with best practices in that area.

### 13. Establish effective institutions and support capacity-building

The experiences of Brazil, the Republic of Korea and Rwanda show that functional institutions with the capacity to deliver on their mandates are instrumental in the development of value chains. They can also be used to build and strengthen the capacity of the various stakeholders along the value chain and provide smallholder farmers and micro-, small and medium-sized enterprises with learning opportunities in their specific areas of operation. Capacity development can be in areas that include good agricultural practices, including sharing information on disease outbreaks, increasing the capacity of farmers and other value chain stakeholders to access and use market information, and using innovative tools and technologies to enhance production, product quality and distribution.

Effective institutions and capacity-building initiatives can facilitate the creation of technical networks and stakeholder platforms that address value chain process issues, technological issues, and regulatory and policy challenges. Those networks or platforms can facilitate collaboration among different stakeholders and geographical areas. It could also be useful to work with lead firms that can provide quality assurance guarantees so as to ensure that the most appropriate products reach the market. So-called "agricultural hubs" can be established as instruments for policy implementation and for enhancing regional cooperation and policy framework harmonization, building networks and partnerships at the national, subregional and continental levels, motivating governments to take appropriate action, providing technical, extension and business support services, and collating and managing flows of trade and market information.



#### 14. Establish backward and forward linkages in agriculture and agroprocessing value chains

Value chains draw their strength from both backward and forward linkages and it is critical to build and strengthen those linkages in order to align the actions of input producers, suppliers and processors with market needs. Fostering the creation of linkages will yield stronger and better-integrated value chains and bolster their competitiveness.

# PART III. Conclusions and recommendations

## 5. Conclusions

This report explores how countries in Southern Africa could transform their economies through the establishment of agricultural value chains and exploiting opportunities stemming from the establishment of the African Continental Free Trade Area. A review of relevant literature in the public domain and secondary data analysis makes clear that there is sufficient high-level political will to support the development of regional agricultural value chains in Southern Africa. Indeed, numerous commitments to do so have already been made by the subregion's governments and leaders and a number of policies in that area have already been launched, including the COMESA and SADC Regional Agricultural Policies and Investment Frameworks, which were designed to support subregional agriculture value chain development in line with CAADP and the Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods. Those instruments are also consistent with other related subregional policies, frameworks and programmes, including COMESA and SADC policies on industrialization and the development of micro-, small and medium-sized enterprises. Implementation of those policies has proved problematic, however. Implementation of the Malabo Declaration, for example, has been slow. A number of systemic challenges further impede the creation and strengthening of agricultural value chains and the capacity of the subregion to take advantage of African Continental Free Trade Area opportunities.

This report highlights the fact that poor physical and trade-related transport infrastructure in the subregion is a serious constraint to the development of competitive agricultural value chains. Poor storage and warehousing facilities aggravate post-harvest losses and very limited agricultural infrastructure has been established in rural areas. Infrastructure development is needed to facilitate the physical and electronic connections that can support regional agricultural development and transformation. Unreliable power generation capacity across the subregion continues to seriously undermine efforts to establish agroprocessing industries, through which Africa could realize its industrialization ambitions, while climate change and variability means that large parts of the subregion are water scarce. Inadequate pest control, extension services and veterinary services also adversely affect crop and livestock production in the subregion and the lack of refrigeration facilities in Southern Africa further impedes the cross-border trade in meat products. Furthermore, access to adverse weather-resistant seed varieties, fertilisers and pesticides remains limited in the countries of Southern Africa, while the agricultural sector in general is characterized by limited mechanization and technological innovation, making farming an unattractive profession for many young people.

The present report also presents four value chain development case studies from the African continent and beyond and identifies best practices that could be adopted with a view to transforming agricultural value chains in Southern Africa. Governments are responsible for creating an enabling environment for agriculture value chain development, including through their formulation of targeted policies that address identified bottlenecks and challenges, the establishment of a regulatory environment that facilitates access to arable land, especially by women and young people, and the provision of financial support for research and technological innovation. Government support can facilitate the production of fertiliser, the development of climate-resilient seed varieties and the adoption of climate-smart irrigation techniques, thereby reduce their countries' vulnerability to climate change and variability and enhancing food security. The Governments in the four case studies also improved the quality of agricultural and

trade-related infrastructure, particularly in rural areas, so as to facilitate the participation of farmers and other stakeholders in those areas in both domestic and cross-border trade.

Smallholder farmers in Southern Africa often find it difficult to access credit or obtain loans. Several factors impede their access to financial products and services, including stringent eligibility requirements and onerous documentation requirements. Borrowing costs are also prohibitively high for many farmers.

A review of international best practices in value chain development suggest that strategic institutional support and market linkages can help create synergies along the value chain. Countries in Southern Africa should therefore promote institutional capacity-building so that their institutions are able to provide the support required. Efforts should also be made to promote partnerships with industry in Southern Africa.

The capacity of the subregion to develop and operationalize agricultural value chains must be strengthened. Agricultural value chain development has been identified as a pathway to industrialization, inclusive growth, and sustainable development and can help to address a number of the serious challenges facing the subregion, including food and nutritional insecurity, high youth unemployment, and limited opportunities for agroprocessing business development. Action is sorely needed in that area, particularly as population growth and urbanization in Africa, and the increasing disposable income of African consumers, is expected to spur a significant increase in demand for agricultural products. This will act as a catalyst for the creation of economies of scale and private sector investment in the production and distribution of value added agricultural outputs.

Agricultural transformation, namely a transition from a predominantly subsistence-based agricultural system to one that is commercially focused, is a key part of the continent's broader economic transition, particularly in countries where the majority of the population are employed in agriculture (Alliance for a Green Revolution in Africa, 2016). That transformation will entail increase in agricultural productivity resulting from an increase in input use and the adoption of more intensive farming practices. Increasing net farming incomes are likely to stimulate the non-farm economy in rural areas. The development of value added activities associated with increased agricultural production, such as agroprocessing and retailing, will create further employment opportunities. For all those reasons, increasing agricultural productivity must remain a policy priority in sub-Saharan Africa.

Facilitating the movement of people, and establishing partnerships will facilitate the transfer of skills, technology and expertise within the subregion. The movement of capital across borders in Southern Africa will also facilitate investment in agriculture. To accelerate that process and simplify trade-related financial transactions, steps must be taken to streamline financial transaction mechanisms.

By adopting the best practices identified in the four country case studies, countries in Southern Africa can accelerate their efforts to create and strengthen agricultural value chains and will be better positioned to exploit the opportunities offered by the roll-out of the African Continental Free Trade Area. Regional industrialization and economic transformation will follow naturally. Leveraging those opportunities will, however, require closer cooperation and collaboration among Southern African countries.

# Recommendations

On the basis of the analysis conducted, the following recommendations are made:

- **Remove all unnecessary legal and institutional barriers impeding value chain development**

Access to land and land tenure are formidable challenges that continue to impede national and subregional agricultural value chain development. The Brazilian case study reveals that access to land, or the lack thereof, can either facilitate food security and improve livelihoods for smallholder farmers or condemn them to a life of poverty. Land reform by the Brazilian Government has improved the livelihoods of smallholder farmers without jeopardizing commercial farming operations. Southern African countries should therefore institute land reform to facilitate access to agricultural land, particularly for women, young people and members of marginalized communities. Indeed, land reform is a fundamental prerequisite for sustainable agricultural development in the subregion and may also facilitate access to finance.

- **Adopt and enforce appropriate regulations on cross-border trade and sanitary and phytosanitary standards**

Regulations on the cross-border movements of goods and people and on sanitary and phytosanitary standards are a prerequisite for cross-border and interregional trade in agro-based products. Those standards pertain to the safety of food and other traded products. Those regulations must be strictly enforced by countries in Southern Africa in order to facilitate the intra-SADC and intra-African trade in agricultural products.

- **Promote peace and security**

Peace and security are prerequisites for the development of agricultural value chains. Although Southern Africa is relatively peaceful and secure, other African subregions are more unstable. Southern African countries should continue to strive to maintain peace across the subregion and should continue to support efforts by the African Union to foster peace and improve security in other African subregions.

- **Upgrade critical trade-related infrastructure across the subregion**

The need for investment in infrastructure is widely acknowledged and efforts are being made to upgrade infrastructure throughout the subregion through the development of transport corridors, the upgrading of ports, and enhancing Internet connectivity and access to water resources. Further efforts are, however, needed in that regard, including by governments in partnership with private sector stakeholders. Financing mechanisms, including public-private partnerships could facilitate the development and management of new infrastructure projects.

- **Support capacity-building**

It is important to support capacity-building for all stakeholders involved in agricultural development and transformation in the subregion. Policymakers, farmers, managers of farmers' cooperatives, extension service providers, staff from technical and financial institutions and business enterprises and external consultants should all be provided with appropriate training. The limited capacity and skills of many stakeholders continues to impede agricultural value chain development and transformation, with implications for intra-African trade. It is also important to enhance the availability and quality of relevant data with a view to facilitating evidence-based policymaking.

- **Enhance the provision of market information**

Every business enterprise requires accurate and timely market information to facilitate decision-making. The more accurate and up-to-date the information, the higher the quality of the decisions that can be made. The opposite is also true. Access to market-sensitive information, and particularly to export market



data, is vital if agricultural sector businesses are to survive and participate effectively in African markets under the terms of the Agreement Establishing the African Continental Free Trade Area. Going forward, the paucity of market-related data should be addressed by governments in collaboration with private sector actors to support decision-making by businesses.

- **Set and promote compliance with quality standards**

It is vital that agricultural value chain stakeholders comply with international quality standards. Compliance with food safety standards is paramount if agroprocessing businesses are to gain and retain market share. In collaboration with the African Organization for Standardisation, COMESA and SADC have developed standards and launched two initiatives in that area, namely the COMESA Strategic Plan for Standardisation and Quality Assurance and the SADC Standardisation, Quality Assurance, Accreditation and Metrology Programme. With a view to harmonizing standards and facilitate trade within the subregion and with other African subregions, efforts should be made to align those two initiatives with other African quality programmes, including the West African Quality Programme.

- **Ensure respect for intellectual property rights and geographical indications**

It is important to uphold the intellectual property rights of Southern African value chain stakeholders and to enhance protections for geographical indications. To that end, countries in Southern Africa should strengthen their collaboration with relevant African and global institutions active in that area.

- **Facilitate access by agricultural stakeholders to financial support**

Comparator countries and regions have successfully developed and benefited from agricultural value chain strategic financing and investment programmes in support of all aspects of their operations, particularly in research, development and innovation. Successful initiatives have required the active involvement of the State. In Southern Africa, investment in agriculture falls well-short of the 10 per cent of public expenditure called for in the Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods. Countries in South Africa should accelerate implementation of the COMESA and SADC Regional Agriculture Investment Plans, in addition to the SADC Protocol on Finance and Investment. Implementation of those instruments will facilitate access to finance for businesses and farmers.

- **Promote partnerships, collaboration and networking**

Agricultural sector actors in Southern Africa tend to act as individuals rather than in a coordinated manner. As the result, peer-to-peer learning and information sharing is very limited. This impedes efforts by agricultural value chain stakeholders to increase their production and productivity, reduce costs and boost profits. A failure to share information could lead to increased food insecurity and reduced incomes for the smallholder farmers and other marginalized groups. All agricultural stakeholders should therefore cooperate and collaborate to establish effective partnerships and networking platforms for learning and experience sharing.

- **Review the process by which financial incentives are offered for agricultural value chain development**

The financial incentives currently offered to support agricultural value chain development and their linkages with other related value chains in the subregion are inadequate and are insufficiently targeted towards smallholder farmers, women, young people and other marginalized groups. To apply for one of the financial incentives offered is a long and onerous process. Governments should therefore review their incentive schemes and make them less time consuming and more user-friendly for farmers. Application processes could be digitalized and enhanced through the use of ICT but care should be taken to facilitate access by smallholder farmers to ICT platforms.

- **Promote digitalization in agricultural value chains**

The recent COVID-19 pandemic and other shocks have drawn attention for the need to digitalize agricultural value chains within the subregion. Some countries in Southern Africa are already using digital technologies in agriculture but it is important to accelerate that trend, which could, inter alia, foster collaboration among agricultural sector stakeholders across national borders. All agriculture value chain actors could play a significant role in that process.

- **Promote agroecological practices**

Agroecological practices are rare in Southern Africa. This exacerbates food insecurity and reduces the incomes of smallholder farmers and marginalized members of agricultural communities. Agroecological practices can provide smallholder family-owned operations, which are often women-led, with diversified sources of income and can help them meet their food needs in a sustainable and environmentally-friendly manner. Indeed, resilient and climate-smart agricultural practices can accelerate sustainable agricultural development and transformation across the subregion. Governments should therefore encourage agroecological practices in their respective countries.

- **Promote inclusiveness and strengthen women's participation in agricultural value chains**

Although women comprise a very large proportion of those working in agriculture in Southern Africa, they often perform work at the bottom of the value chain, including as farm workers. Given that women often play a key role in ensuring food security, are very adept at managing their operations and are repositories of indigenous knowledge regarding irrigation and crop storage, their empowerment as critical stakeholders in agricultural value chains will reflect the objectives set out in the Malabo Declaration and accelerate CAADP implementation. Women should also be granted a voice in policymaking, especially when the policies being formulated are likely to have an impact on their well-being. Furthermore, some cultures in Southern Africa restrict or prohibit the ownership of land, animals and agricultural tools by women. Access to finance by women is also challenging. As a result, most women in rural areas lack the appropriate tools and inputs to practice agriculture. Nonetheless, women create jobs, including through informal sector self-employment, and they have the potential to play a transformative role in agriculture (International Food Policy Research Institute, 2012).

The Women's Empowerment in Agriculture Index, launched in 2012 by the International Food Policy Research Institute, the Oxford Poverty and Human Development Initiative, and the United States Agency for International Development Feed the Future initiative, measures the empowerment, agency and inclusion of women in agriculture with the aim of identifying key policy challenges. It comprises two main subindices: one subindex captures five measures of women's empowerment, namely production, access to resources, control of income, leadership and time allocated to productive and domestic tasks, while the other subindex captures gender parity between men and women in the same household along those five parameters of empowerment (International Food Policy Research Institute, 2012). The index shows that women are less empowered than men in all categories in most countries studied. Research by FAO reveals, however, that when access to land, credit and essential services is equalized between men and women, agricultural productivity can increase by between 20 and 30 per cent, with a positive impact on food security and well-being. Steps must therefore be taken by governments in Southern Africa to empower women and promote gender equality in agricultural practices.

- **Foster the participation of young people in agricultural value chains**

The farming population in Southern Africa is gradually ageing and the continued marginalization of young people in agriculture could, potentially, undermine future food security. Many young people are reluctant to take up employment in agriculture, which they view as an unexciting area of employment, inter alia because little has been done to raise the profile of the agribusiness sector as a potential career

choice. It is therefore crucial to raise the profile of agricultural value chains as attractive and rewarding areas in which to work, particularly among young people and members of other marginalized communities. To that end, concerted and coordinated efforts by governments will be necessary to address the following challenges facing those groups: (a) access to knowledge, information and education; (b) access to land; (c) access to financial services; (d) access to green jobs; (e) access to markets; and (f) engagement in policy dialogue (FAO, 2014). The extent to which young people take up employment in agriculture, and particularly in agribusinesses, will determine the future trajectory of the agricultural sector, the development path of agro-related industries and the speed with which economic transformation takes place within the subregion.

- **Promote job creation.**

Agricultural productivity growth can be a powerful engine for job creation. In particular, intensive agricultural practices can lead to increases in farm labour employment. Agricultural productivity growth, accompanied by significant increases in the volume and value of production, will result in the creation of new jobs in the agribusiness and agro-industry sectors. Furthermore, by increasing agricultural volumes and value added, additional jobs will be created through backward and forward linkages in the industries that supply inputs to the agricultural sector, and by services sector operators that transport, store, process and distribute agricultural commodities. Those sectors that are linked to and support agricultural growth and transformation processes will become important employers in urban areas. In other words, by facilitating agricultural growth and development in rural areas, governments will be addressing the urban unemployment crisis currently plaguing the subregion.

- **Ensure the effective implementation of climate change mitigation measures**

Climate change is seriously undermining the production and productivity of those operating in the agricultural sector, with knock-on effects on other agriculture-related sectors, including agribusiness and input suppliers. Although climate mitigation measures have been adopted at the subregional level, the effective implementation of those measures by countries in Southern Africa will prove critical if those countries are to alleviate the financial, emotional, social and physical effects of that global phenomenon.

- **Mainstream sustainability practices into agricultural value chains**

As stated above, ecologically-sustainable practices, many of which are based on traditional indigenous knowledge, can help provide stable incomes for smallholder farmers. Those practices should therefore be mainstreamed into all aspects of agricultural value chain development in Southern Africa.

- **Develop and utilize effective monitoring, reporting and evaluation tools**

Insufficient attention has been given to the monitoring, reporting and evaluation of agricultural value chain development initiatives, which can help to identify areas where progress is being made towards policy goals, motivate further action and draw attention to weaknesses in policy implementation. The development and implementation of inclusive and institutionalized peer-to-peer review mechanisms provide useful platforms for monitoring, reporting and evaluation and can facilitate experience sharing. Monitoring, reporting and evaluation is necessary even when initiatives are being implemented successfully because any complacency by value chain actors can provide competitors with opportunities to gain market share. Only three countries in the subregion, namely Malawi, Mauritius and Zambia, are developing effective monitoring, reporting and evaluation tools: the other countries in the subregion should do so without further delay.

## Annex 1 Selected subregional agricultural value chains and their associated benefits

Benefits														
#	Value chain	COMESA Priority	SADC Priority	Food security and nutritional potential	Linkages with other value chains	Imported	Employment creation	Income generation potential	Export potential	Inclusiveness potential	Subregional production potential	Subregional value chain potential	Rest-of-Africa export potential	Global value chain potential
1.	Maize	✓	✓	Food security, nutrition	Animal feeds, ethanol, bioplastics, starch	Yes, depending on rainfall	High	High	High	Yes	Yes	High	High	High
2.	Rice	✓	✓	Food security, nutrition	Multiple linkages including with animal feeds	Largest food crop imported to the subregion	High	High	High	Yes	Yes	High	High	High
3.	Wheat	✓	✓	Food security	Pharmaceuticals, industrial products	Second largest food crop imported to the subregion	High	High	High	Yes	Yes	High	High	High
4.	Soybean, oils and oil cake	✓	✓	Food security, nutrition	Animal feeds, pharmaceuticals, industrial products	Soybean oils, oil cake	High	High	High	Yes	Several MS	High	High	High
5.	Cotton	✓	✓		Textiles and clothing, pharmaceuticals	Woven cotton fabrics, other cotton products	High	High	High	Yes	Several MS	High	High	High
6.	Cattle (Beef)	✓	✓	Food security, nutrition	Cereals, soybeans, textiles and apparel		High	High	High	Yes	Several MS	High	High	High, particularly with stakeholders in Europe and the Middle East

Source: Author's elaboration.

## Annex 2

## Selected international best practices in agricultural value chain development

## Brazil: Agricultural value chain transformation

Brazil pursued two sets of liberal and market-oriented policies that benefited the agricultural sector far more than other sectors. Those policies focused on (a) investments in innovation, and (b) trade liberalization. New agricultural trade policies were formulated in order to attract foreign investment and know-how in order to drive the productivity growth needed for Brazil to remain competitive in global markets. Agricultural exports increased as a result of increased demand, linkages to global supply chains, the use of innovative technologies and product diversification.

Those policies transformed Brazilian agriculture, enhanced the agrifood system and facilitated a transition from traditional agricultural practices, with an emphasis on food security and self-sufficiency (pre-1985), to an increasingly global and industrial model. Attracted by rising incomes, urbanization, economic liberalization and access to competitive raw materials, a number of multinational food processing companies and retailers entered or increased their investments in the Brazilian market.

Structural changes were made to agrifood value chains in Brazil through the expansion of commercial agriculture operations characterized by economies of scale and capital intensity. The spread of commercial agriculture occurred even in sectors that had traditionally been dominated by small-scale farms, including the dairy and maize sectors. The structural changes attracted increased foreign direct investment by large, private sector agribusinesses. The market share of those multinational corporations also increased in the domestic food market.

The aforementioned policies and structural changes resulted in significant export-led growth, but also led to the marginalization of smallholder farmers, displaced domestic competitors, increased industry concentration, and eliminated many small and medium-sized companies.

## Solutions to the problem

After significant political and social pressure from organizations representing landless workers, the Catholic Church, and numerous non-governmental organizations, Brazil implemented a series of land reform policies. The Government addressed persistent income inequality, and the marginalization of smallholder farmers within the expanding agricultural sector, including through a shift in public expenditure.

Brazil has established a national agriculture innovation system that facilitates agriculture research and the provision of extension and educational services to achieve further technological change in agriculture. The agriculture innovation system comprises private sector enterprises and public sector institutions, including Embrapa, (the Brazilian Agricultural Research Corporation), a State-owned research corporation affiliated with the Brazilian Ministry of Agriculture. Furthermore, ANTER, the National Agency for Technical Assistance and Rural Extension, was created in 2013 to ensure the efficient and effective use of public sector investments in technology transfer by leveraging private sector resources. Several agricultural research institutions are involved in technology transfer and extension activities. As a result, agricultural production has advanced and become increasingly capital intensive and integrated with upstream and downstream supply chain participants. Tightly coordinated agrifood supply chains have been developed by the private sector, particularly by large multinational food processors, fast-food restaurant chains and retailers, to cater to increasingly differentiated domestic and export markets. Consequently, farmers in Brazil have become increasingly exposed to market trends that are much more demanding in terms of food quality and safety, more concentrated and vertically coordinated, and more open to international competition.

While other sectors of the economy faced difficulties accessing international markets and technologies, the agricultural sector has been able to learn lessons from domestic research and development activities and has become increasingly connected to international markets and foreign agriculture technologies and inputs. Through innovation, new agricultural products are manufactured to the required specifications of consumers in global markets. This has entailed the manufacturing of new products through partnerships with international players. In turn, this has reduced imports and increased foreign exchange earnings.

Embrapa has developed several projects and signed technical cooperation agreements with private institutions, non-governmental organizations, and universities. OECD has, however, highlighted that Brazilian legislation makes it difficult for public organizations to enter into relationships and contracts with the private sector.

## Technical cooperation

Infrastructure development and provision	<p>The Government of Brazil has invested in agricultural research, public infrastructure, animal and plant health, and measures to protect the environment. It has not, however, provided support to smallholder farmers. The Government has also made substantial investments in infrastructure, and especially in the construction and upgrading of rural roads connecting production areas with major highways and markets. Those and other interventions have reduced transport costs for producers and along the supply chain. The Government has also implemented policies and provided incentives to encourage the expansion of storage capacity at the farm level and in strategic locations. Those interventions have reduced post-harvest losses, ensured product quality and improved product commercialization and logistics.</p>
Access to credit	<p>Brazil has increased the availability of short-term agriculture credit through public and private banks and put in place a system of rules and subsidies to ensure that agriculture credit is available at reasonable cost to Brazilian farmers. The subsidies have ensured that the move towards a market-based agricultural credit system has proceeded smoothly. The public policy direction adopted by Brazil has been crucial in that it has encouraged competition among financial institutions and reduced the dependency of credit programmes on public resources.</p>
Environmental mainstreaming	<p>Brazil's agriculture policies have already resulted in significant progress in terms of mainstreaming environmental considerations into agricultural policies. The environmental framework remains flexible, however, in order to respond to emerging trends. Policies designed to discourage deforestation for example, take into account location-specific contexts. Deforestation and the enforcement of environmental regulations is monitored closely in all five biomes, particularly the Cerrado, a vast tropical savanna ecoregion. Environmental regulations are also enforced on private properties as one third of the forests in Brazilian are located on private land.</p>
Final outcome	<p>The actions of the Brazilian Government have transformed the country's agricultural value chains and increased market share for Brazilian agricultural outputs. Those successes have been supported by effective monitoring and evaluation activities, attention to quality, and cutting-edge global logistics systems.</p> <p>Policies aimed at poorer farmers did not lead to a reduction in investments in public goods that can contribute to productivity gains and improve market access for farmers. Neither did those policies undermine the country's agrifood competitiveness. In fact, the Government of Brazil has continued to provide financial support for agricultural research, public infrastructure development, animal and plant health, and environmental protection measures. The Government has also continued to support the activities of smallholder farmers.</p>
Republic of Korea: Rice value chain development	
Background	<p>In the 1960s, the agricultural sector in the Republic of Korea was characterised by low productivity and extensive subsistence agriculture. The sector was dominated by smallholder farmers, little agricultural infrastructure had been installed and only very limited financial resources were available for agricultural value chain development.</p>
Problem	<p>The Republic of Korea was heavily dependent on food imports and food aid.</p>
Solutions to the problem	<p>The Government established agricultural transformation and the development of the agricultural sector as a national priority in order to improve people's livelihoods and improve the country's balance of payments.</p>
Government policy and strategic responses	<p>To address the agricultural challenges faced by the country, the Government strengthened its cooperation with the Philippines and launched a series of agricultural initiatives. A breakthrough came in 1964 with the development of the Tong-il rice variety by a group of Korean researchers at the International Rice Research Institute. The Tong-il variety yielded 30 per cent more rice per hectare than the rice varieties commonly cultivated and consumed at that time.</p>
International cooperation and national approaches	<p>The Government supervised the production of the improved rice seeds and handled distribution of the seeds in the Philippines. After the initial distribution of Tong-il rice seeds in 1971, rice yields increased to 5.13 metric tons per hectare (t/ha) in 1972, up from 3.98 t/ha in 1962. By 1977, total rice production had increased to 6 million tons, up from 3.2 million tons in 1968 (AfDB, 2019).</p>

Institutions	<p>The Government established the Rural Development Administration in 1962 to oversee research and development, training and extension services with a view to increasing agricultural productivity. The Administration's trainers provided guidance on the most appropriate agricultural practices in rice and cereal cultivation, including for rural women and young people. The Administration thus played a critical role in educating people on how to cultivate the Tong-il rice variety.</p> <p>The Government established two other institutions around that time, namely: the National Agricultural Cooperative Federation and the Saemaul Undong (New Community Movement). The first was a multi-purpose cooperative with responsibility for purchasing, distributing and storing fertilisers and harvesting crops on behalf of the Government. The Saemaul Un-dong was a social movement that endeavoured to promote the values of diligence, self-help and cooperation, provided material incentives and compensation for the voluntary mobilization of villagers, and ensured that all villagers, including women and young people, participated in development efforts.</p>
Agricultural finance	<p>The National Agricultural Cooperative Federation also had authority over agricultural finance, managed the Government's Agriculture Development Fund, a special fund for rural development, and received handling fees and charges as well as tax breaks for its services. Through its financial functions, the Federation introduced mutual credits in order to stamp out the practice of informal lending at exorbitant interest rates. As a commercial bank, the Federation was able to secure loans on international capital markets, with the sums raised then provided to rural farmers in the form of low-interest loans. The Fund provided a wide range of services related to agricultural development, including production, extension, marketing, distribution, financial, and import-export services.</p>
Subsidized inputs	<p>The Government established the domestic production of fertilizers to (a) improve productivity and promote intensive farming; (b) meet the heavier fertilizer usage requirements associated with the Tong-il rice variety; (c) reduce the amount of foreign exchange spent on fertilizer imports and (d) ensure self-sufficiency in fertilizers. Fertilizers were subsidised and distributed to farmers. With subsidized fertilizers and credit facilities, farmers were able to purchase fertilizers, which they used to increase rice output. This led to an increase in rural household incomes.</p>
Infrastructure and product quality	<p>After achieving food security, the Government focused on improving the cost efficiency and quality of agricultural products, developing and strengthening value chains and improving the country's institutional and physical infrastructure, including its roads and irrigation systems. This was accompanied by efforts to promote the mechanization of agriculture and the adoption of best practices and quality standards, including Good Agricultural Practices, Agricultural Product Origin Verification and agricultural product standardization. The agricultural product distribution system and market support mechanism was also strengthened through supporting schemes and the adoption of appropriate laws and regulations. Access to agricultural finance was also enhanced.</p>
Final outcomes	<p>The aforementioned actions launched a Government-led agricultural transformation and economic development process. That process was driven forward, <i>inter alia</i>, through partnerships among public and private sectors, including technological, research and development and financial institutions.</p> <p>The process also led to the transformation of the rice value chain, the development of rice-based manufacturing industries, including a rice-based distilled liquor industry, and the emergence of a significant services sector.</p> <p>Urbanization and the decreasing size of households triggered the development of the home meal replacement market in which sales of pre-cooked rice increased by 733 per cent between 2008 and 2014. The home meal replacement market has grown at an annual rate of 14.5 per cent since 2010 (AfDB, 2019).</p> <p>With financial support provided by the Government, small and medium-sized agricultural business enterprises are increasingly involved in research and development activities and exports of agricultural products have been rising.</p>
Ethiopia: Development of a sustainable banana value chain	

Background	<p>Bananas are a crop of global economic importance and, according to FAO, the fourth most important food crop behind rice, wheat, and maize. The crop is particularly important for smallholder farmers in Arba Minch district in southern Ethiopia. Those directly involved in the banana value chain in Arba Minch include farmers, marketing cooperatives, the Arba Minch Agriculture Office, the Arba Minch Cooperative and Marketing Office, and wholesalers, travelling traders and retailers.</p>
Problem	<p>A loss of market share in export markets. The main reason for this was the inability of smallholder banana producers to supply the required quality of bananas for markets in Europe and the Middle East because of challenges related to production management, post-harvest handling and a lack of cold storage and refrigerated trucks.</p>
Solutions to the problem	<p>Gebre, Rik and Kijne (2020) analysed the constraints impeding banana value chain development in Arba Minch and made a number of recommendations as to how those constraints could be addressed. The banana product flow, which starts with the farmer and ends with the consumer, has three market channels, which link farmers with rural retailers, traveling traders and farmer cooperatives. The largest volume is sold through the traveling traders channel while the smallest volume is sold through the rural retailers channel. The banana payment flow begins from consumers and ends with input suppliers. Market information flows both vertically and horizontally within the banana value chain. Banana traders had established networks across all regions of the country and were able to obtain in-depth information about banana prices and available supply, while producers and cooperatives had limited information. As a result, traders had disproportionate influence over banana value chain governance.</p>
Final outcome	<p>Sustainability was improved in the banana value chain in Arba Minch. Capacity-building, effective marketing, access to credit, and support from non-governmental organizations and other stakeholders has a very positive effect throughout the banana value chain.</p> <p>Banana production in Ethiopia increased sharply from 539,443 tonnes in 2019 to 898,355 tonnes in 2020 (Knoema DataHub, n.d)</p>
Rwanda – Development of a horticulture value chain	
Background	<p>Rising global demand for high-value fruits and vegetables and rising interest from European traders offered valuable opportunities for Rwandese horticulture exporters and farmers.</p>
Problem	<p>The inability of horticulture exporters and farmers to provide a sustainable supply of goods of a consistent quality that met international health and safety standards, as required by international markets.</p>
Solutions to the problem	



Collaboration between multiple partners	The development of the horticulture value chain was championed by stakeholders in the HortInvest Project, <sup>2</sup> which aimed to improve the production, quality and processing of Rwandan fruits and vegetables and provide a sustainable supply of goods of a consistent quality that met international health and safety standards, as required by international markets. The Project sought to formalize domestic, regional and international trade relationships with a view to improving the livelihoods of smallholder farmers and dependent communities.
Project components	The HortInvest Project launched initiatives in six areas in north-west Rwanda to improve the quality and production of passion fruit, avocado and vegetables. The Project focused, in particular, on: (a) the development of domestic markets; (b) improving nutrition and food security; (c) developing export value chains, and; (d) fostering an enabling environment for business.
Technical support	HortInvest supports the development of export companies by providing them with technical assistance to improve production and streamline their operations.
International market access	The Project fostered close collaboration with European importers to help Rwandan horticultural exporters develop expertise in global fresh produce value chains. It also facilitated the creation of an extensive network of Rwandan producers, a key prerequisite for attracting buyers and investors.
Production aspects	The Project adopted a four-step approach in order to establish a resilient and stable farm system capable of producing goods of the consistent quality and in the quantities required by international markets. The first step was the stabilization of production and the identification of reliable and professional growers with the capacity to deliver in line with the demands of European companies.
Infrastructure and logistics	Investment was made in packing facilities, transport logistics and cold chain management at airports in order to enhance product consistency and accessibility.
Production guarantees	The second step focused on predicting quality, volumes and identifying possible constraints limiting production. Long-term planning provided production guarantees, which enhanced the attractiveness of the market for importers and investors from within the country, subregion and beyond.
Innovation and Investment Fund	In the third step, an innovation and investment fund was established to support the development of the Rwandan horticulture sector. The primary purpose of the fund was to reduce risks for private sector investors by facilitating access to affordable finance and enhancing the skills of exporters.
Marketing Rwandan horticulture	The final step was to market Rwanda as an emerging horticulture producer, attract interest from international markets and create expansion opportunities. Expanding the network of buyers and sellers of Rwandan horticulture products will lead to the emergence of a resilient and diverse market

<sup>2</sup> The SNV Netherlands Development Organisation, in partnership with Agriterro, Holland Greentech, IDH – the Sustainable Trade Initiative, and the Wageningen Centre for Development Innovation, implemented the HortInvest Project between 2017 and 2021. Funding for the project was provided by the Netherlands Embassy in Kigali. The Project budget was €6.2 million, with an additional minimum of €5.0 million co-funding provided by private sector partners. The Project was launched with the aim of reaching at least 44,000 farmer households in six districts in north-west Rwanda. The project was aligned with the Economic Development and Poverty Reduction Strategy of Rwanda (2013–2018) and the development cooperation policy objectives of the Government of the Netherlands.

By 2019, Agriterria, one of the partners in the Project, had recruited 10 cooperatives in “category 1” and 15 coops in “category 2”, thereby meeting their target for 2018. The cooperatives were assisted in their efforts to attract new members, increase their social capital and the area under cultivation, and expand market presence.

Using the MyCoop training package, 150 representatives and staff from the cooperatives were trained in the basics of cooperative governance and the provision of services to members. Training was also provided to farmers who had joined one of the 15 cooperatives on good agricultural practices. The cooperatives were supported in their efforts to develop business plans and improve their accounting practices. Exchange visits and the development of market linkages among cooperatives were also encouraged. As a result of those efforts, five cooperatives formed relationships with new buyers and financial institutions.

#### Final outcome

Agriterria set a number of goals for 2020, included reaching 1 million farmers, mobilizing loans, and increasing the number of paying members affiliated with the Project. Assistance was provided to one cooperative that enabled it to secure a matching grant of €50,000 (Agriterria, 2019).

The Project was also successful in that it was able to change mindsets and agricultural practices within many cooperatives. As a result, those cooperatives improved the varieties, quality and quantity of seeds grown so as to produce agricultural goods for which there was particular market demand. The cooperatives also improved their governance and management practices and increased the range of services offered to their members. By 2020, more than 131 cooperatives had established relationships with financial institutions and were able to mobilize more than €60 million in loans for working capital and investments. A total of 1.15 million smallholder farmers were beneficiaries of the Project.

**Source:** Author’s elaboration.

# Annex 3

## List of participants

Ad hoc Expert Group Meeting on Agriculture value chains, linkages, and transformations in Southern Africa: Opportunities from the African Continental Free Trade Area, held virtually and in Blantyre, Malawi on 12 October 2021

1. Jollam Banda, Director, Ministry of Economic Planning, Malawi.
2. Williams Banda, Public Relations Office, Ministry of Finance, Malawi.
3. Lewis Bangwe, AfDB, Zambia.
4. Komla Bissi, African Continental Free Trade Area Secretariat, Ghana.
5. Fanwell Bokosi, Economic Affairs Officer, ECA Subregional Office for Southern Africa, Zambia.
6. Hope Chavula, Senior Development Planning Specialist, National Planning Commission, Malawi.
7. Yvonne Chibiya, Country Representative, Oxfam Zambia.
8. Lavender Degre, Communications Officer, ECA Subregional Office for Southern Africa, Zambia.
9. Jean Baptiste Eken, Administrative and Finance Officer, ECA Subregional Office for Southern Africa, Zambia.
10. Medhat El-Helepi, Economic Affairs Officer, ECA, Ethiopia.
11. Isatou Gaye, Chief, Subregional Initiatives Section, ECA Subregional Office for Southern Africa, Zambia.
12. Sera Gondwe, Lilongwe University of Agriculture and Natural Resources, Malawi.
13. Morton Gunsalu, Director, Malawi Investment Promotion Agency.
14. Eunice Kamwendo, Director, ECA Subregional Office for Southern Africa, Zambia.
15. Brian Kapotwe, Country Programme Officer, International Fund for Agriculture Development, Zambia.
16. Chimwemwe Kaunda, Chief Economist, Ministry of Finance, Malawi.
17. Suffyan Koroma, FAO Subregional Coordinator for Eastern Africa and Representative to the African Union and the ECA Subregional Office for Eastern Africa, Ethiopia.
18. Myranda Lutempo, Senior Policy Officer, African Union Southern Africa Regional Office, Malawi.
19. Rethabile Maluke, Deputy Principal Secretary, Ministry of Finance of Lesotho and Chair of the twenty-sixth session of the Intergovernmental Committee of Senior Officials and Experts for Southern Africa.
20. Dailes Matoka, Senior Staff Assistant, ECA Subregional Office for Southern Africa, Zambia.
21. Lucius Mawanga, Chief Energy Officer, Malawi.
22. Amir Mbonde, FAO Regional Office for Africa, Ghana.
23. Nalishebo Meebelo, Senior Programme Coordinator, Regional Network of Agricultural Policy Research Institutes Secretariat.
24. David Mfote, FAO Country Office, Zimbabwe.
25. Mzwanele Mfunwa, Economic Affairs Officer, ECA Subregional Office for Southern Africa, Zambia.
26. Thomas Munthali, Director General, National Planning Commission, Malawi.
27. Gabriel Musentekwa, Director, Enterprise Development, Zambia Development Agency.

28. Brighton Mvumi, University of Zimbabwe.
29. Francis Mwamadi, Director, Small and Medium Enterprises Development Institute, Malawi.
30. Rodwell Mzonde, Director, Ministry of Agriculture, Malawi.
31. Mamello Nchake, Stellenbosch University, South Africa.
32. Hetherwick Njati, Principal Secretary, Ministry of Finance, Malawi.
33. Ronald Nkhoma, Information Technology Systems Assistant, ECA Subregional Office for Southern Africa, Zambia.
34. Hermogene Nsengimana, President and Managing Director, African Organization for Standardisation, Ghana.
35. Bedson Nyoni, Senior Information Management Assistant. ECA Subregional Office for Southern Africa, Zambia.
36. Joel Okwir, Agricultural Economist, COMESA Secretariat, Zambia.
37. Emmanuel Owusu-Sekyere, South Africa.
38. Duncan Samikwa, Senior Programme Officer, Food Security and Agriculture Directorate of Food Agriculture and Natural Resources, SADC Secretariat, Botswana.
39. Chikondi Wengawenga, Special Assistant to the Secretary to Treasurer, Ministry of Finance, Malawi.
40. Max John Wengawenga, Deputy Director, Ministry of Forestry and Natural Resources, Malawi.
41. Chimbala Yoyo, Just Economies Policy and Programme Manager, Oxfam-Southern Africa, Zambia.

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