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PANEL

TRADING UP:

Policy innovations to expand food and agriculture trade in Africa

A Malabo Montpellier Panel Report 2020

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Foreword

Two years ago, in 2018, African governments signed an agreement establishing the African Continental Free Trade Area (AfCFTA), which is regarded as a turning point for African regional and international trade. Implementation of the – delayed by the COVID-19 pandemic – is set to restart in January 2021. When it comes into effect, the AfCFTA will be one of the largest free trade areas established since the World Trade Organization (WTO), covering a market of more than 1.2 billion people and up to US$3 trillion in combined GDP, with the potential of increasing intra-African trade by over 50 percent and adding an estimated US$76 billion to global income.[1,2]

Taking advantage of their proximity and brought together by shared cultures, needs, values, languages and preferences, African nations have already made determined efforts to increase trade among themselves, including through the eight regional economic communities (RECs) that are officially recognized by the African Union (AU), and a plethora of additional regional trade agreements. In this context, intraregional food and agricultural trade – within Africa's RECs – has played an important role in boosting economic growth, improving incomes and livelihoods, and strengthening the resilience of smallholder farmers, rural and urban populations, and thus economies against the next shock or prolonged crisis. The RECs have provided the framework within which neighboring countries have rapidly developed and implemented interventions at scale to minimize the impacts of the COVID-19 pandemic. By keeping trade flowing and ensuring that the food supply is not disrupted, RECs have delivered much needed resilience and social protection against the potentially disastrous impacts of the COVID-19 pandemic. Countries across Africa now have the opportunity to harness the benefits of intraregional trade and scale the successes across the continent. Three leading RECs – COMESA, ECOWAS, and SADC – have adopted unique and contextualized approaches in the design and operationalization of their institutions, as well as in the formulation and implementation of policies and programs within their respective regions. Important lessons can be learned from them, not only for the remaining RECs, but also for the implementation of the AfCFTA.

This report **– Trading Up: Policy innovations to expand food and agricultural trade in Africa** – provides options for sustainably, yet rapidly, increasing intraregional agricultural trade in Africa, drawing on the experience of COMESA, ECOWAS and SADC in terms of institutional and policy innovation as well as programmatic interventions. The report highlights several key recommendations, including a focus on information across borders, digital opportunities for trading, learning from the experiences of the RECs and of market integration in other parts of the world, including Europe. It is also critical to have systems in place for technical and institutional innovations in the sector and regulations to spur intraregional trade while safeguarding the environment, maintaining quality standards, and ensuring that smallholder farmers are included in opportunities. To fully harness the opportunities of increased intraregional trade, within a coherent rules-based policy framework, support must be given to information sharing, trade financing and small and medium-sized enterprises.

The Malabo Montpellier Panel convenes 17 leading experts in agriculture, engineering, ecology, nutrition, and food security to facilitate policy choices by African governments to accelerate progress toward food security and improved nutrition. The Panel identifies areas of progress and positive change across the continent and assesses what successful countries have done differently. It identifies the most important institutional and policy innovations and program interventions that can be replicated and scaled by other countries. The related Malabo Montpellier Forum provides a platform to promote policy innovation by using the evidence produced by the Panel to facilitate dialogue among high-level decision-makers on African agriculture, nutrition, and food security.

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THE MALABO MONTPELLIER PANEL

The core mission of the Malabo Montpellier Panel, a group of leading African and international experts from the fields of agriculture, ecology, food security, nutrition, public policy and global development, is to support evidence-based dialogue among policy makers at the highest level. The Panel's reports seek to inform and guide policy choices to accelerate progress toward the ambitious goals of the African Union Commission's Agenda 2063, the Malabo Declaration and the global development agenda. The Panel works with African governments and civil society organizations to provide support and evidence-based research that facilitate the identification and implementation of policies that enhance agriculture, food security and nutrition.

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1. Introduction

Agricultural trade is a connector and a key avenue for addressing global challenges. It offers opportunities for actors to integrate into international markets through global value chains, creates new employment opportunities, catalyses backward and forward investments along various value chains and reduces the cost of goods and services, including food. In this respect, trade is a critical enabler of socioeconomic activity, resulting in positive impacts on income, livelihoods and welfare along the agrifood value chain. Hence, trade is considered a magnet as well as an engine for poverty reduction and economic development and crucial during times of crisis – such as the ongoing COVID-19 pandemic – to ensure a stable supply of nutritious food to rural and urban populations.[3] Beyond these direct impacts, trade also releases important resources through tax revenues, private investments, and foreign direct investments, all of which can be deployed for other social and environmental development targets.

Strengthening intraregional trade can foster economic growth through productivity increases, while generating new and much-needed employment opportunities; for smallholder farmers, it can reduce entry barriers to regional value chains and markets, while potentially improving food security and nutrition by facilitating access to more affordable, diverse and nutritious foods. More indirectly, through the benefits outlined above, intraregional trade can increase resilience to shocks at micro and macro levels and serve as an important risk management tool when shocks hit. However, the adjustment costs associated with increased trade, particularly in value chains that may not be able to compete against incoming imports, need to be factored in and managed carefully when designing and implementing new trade policies for the agriculture and food sector.

Currently, about 80 to 90 percent of African exports are destined for global markets. Although agricultural exports from Africa rose over the last two decades and found new markets in the Near East and Southeast Asia, they are eclipsed by the large value and volume of exports of minerals and other precious commodities, as well as petroleum and petroleum products. Moreover, processed products account for 50 percent of recorded intra-African agricultural exports, while primary commodities and semi-processed products account for 90 percent of recorded extracontinental exports.[4,5] In comparison, intra-African trade remains at under 20 percent, composed also primarily of minerals and petroleum products, and dominated by a small number of countries. However, there is also a growing share of agricultural products – both, raw and semi-processed. Given the continent's growing population, rapid urbanization, and the potential to tap into high-value markets, raising the competitiveness of Africa's rapidly growing agro-processing sector has become an urgent priority. Although over half of the labor force is engaged along the agriculture value chain, Africa continues to import approximately US$72 billion in food and agricultural products a year, and imports are growing by 3.6 percent annually.

At the time of writing this report, the largest share of intra-African agricultural trade is channeled through the RECs, which have expanded trade liberalization programs. The RECs also benefit from geographic proximity, cultural similarities, a shared destiny and complementarity, historical trading relationships, and preferential trade agreements. Indeed, for every REC, the share of intraregional agricultural exports is significantly larger than the share of non-African agricultural exports to the REC.

The first part of this report begins with an overview of the benefits of increasing intraregional agricultural trade in Africa, including productivity gains, easier access to inputs, business opportunities, better nutrition outcomes, increased resilience, and empowerment of women. The chapter also addresses the costs and challenges of trade and offers suggestions on how to mitigate those. The next chapter analyzes trade patterns and trends, including primary trading partners as well as the significant role of informal cross-border trade and trading during times of crises, such as the COVID-19 pandemic. Next, the report discusses what is required at national levels to strengthen participation in intraregional trade, including transport infrastructure and financing thereof, productive infrastructure such as energy, water and telecommunications, trade logistics, and capacity strengthening through improved technical, business and management skills, as well as removal of barriers to informal cross-border trade. This is follows by a presentation of existing policy agendas as the continental and global level that can function as frameworks within which African countries could develop or strengthen their trading relationships. In particular, the role of the AfCFTA is explored.

The second part of the report highlights the experiences of three RECs – COMESA, ECOWAS and SADC – that are considered the most successful and active in terms of intraregional agricultural trade and that offer some important lessons and experiences for implementation of the AfCFTA and spurring trade in other RECs. The report closes by drawing some key lessons and offering recommendations for action by African governments, in co-operation with the private sector and development partners.

2. Action Agenda

Important lessons can be learned from the governance systems, institutional policy innovations, and programmatic interventions implemented by Africa's leading RECs: SADC, COMESA and ECOWAS to strengthen intraregional agricultural trade in Africa. By adapting these lessons to scale, African governments can accelerate their progress toward the targets set under the African Union Agenda 2063, in particular the AfCFTA, and the Sustainable Development Goals and can ensure that their economies are better equipped to deal with future shocks and crises. Drawing on the findings of the three case studies presented in this report, the Malabo Montpellier Panel makes six recommendations for action by national governments and the RECs.

1 - IMPROVING INFORMATION AND DATA FOR TRADING PARTNERS ACROSS BORDERS

Information is critical for efficient price formation in markets that cut across borders. For trading partners and governments to make informed decisions on informal trade – including informal cross-border trade – data on its scale, quality of products, and patterns of trade flows need to be collected on a regular basis so as to devise policies that provide adequate support systems to traders. In addition, simplifying regulations, providing training on food hygiene, enhancing access to finance, and addressing entrepreneurship skills can enable better integration of informal food traders into agriculture value chains. Specific interventions are needed to ensure the safety and security of women traders, including improved design and maintenance of border infrastructure, gender-sensitivity training to address discrimination against women, and capacity building for women cross-border traders and support for their collective voice.

2 - ADDRESSING TARIFF AND NONTARIFF BARRIERS

Digital innovations will be game changers of intra-African trade. In order to achieve that, standard setting of products and trading platforms require attention. A set of nontariff trade barriers (NTBs) including quotas, cumbersome customs procedures, roadblocks, subsidies, and technical barriers such as sanitary and phytosanitary (SPS) rules continue to hamper smooth intraregional and intercontinental trade. Fast-tracking trade facilitation arrangements at REC level – by lowering tariff and NTBs, harmonizing quality and SPS standards, and developing regional and continental information systems and disseminating them among transport service providers and along key transport corridors, as well as activating and resourcing online and phone-based helplines – would greatly expedite the elimination of NTBs and hence facilitate trade and greater integration. Finally, adopting the use of coordinated ICT systems within regional partners would also greatly reduce the bureaucratic blockages at border posts, and meet the aims of the African Union's Free Movement Protocol.

3 - EXPANSION AND OPTIMIZATION OF EXISTING INFRASTRUCTURE

Good quality, accessible trade infrastructure is at the heart of flourishing agricultural trade. This includes physical transport infrastructure, such as roads, rail, air and seaports, as well as productive infrastructure such as energy, irrigation and telecommunications. Infrastructure programs must therefore be designed to address the specific needs of the agriculture sector and rural areas. Moreover, to ensure that the agriculture sector optimizes its use of existing infrastructure and maximizes the benefits accrued from improved "hard" infrastructure, "soft" infrastructure such as regulations and institutions must also be strengthened to ensure that the supporting logistics systems are efficient and effective and that people have the capacity to successfully exploit the opportunities created. While the private sector can be an important source of financial resources for hard infrastructure, it can also be deployed to enhance workforce training and education, promote higher product standards, advance regional integration programs by leveraging its regional distribution networks, and harness digital technologies to develop solutions in trade logistics and facilitation.

4 - SUPPORTING THE IMPLEMENTATION OF THE INTEGRATION AGENDA

Africa's RECs have a wide array of tools and policies to deepen regional integration and increase the intensity of (agricultural) trade. The execution of intraregional agricultural trade and integration agendas can be accelerated through greater emphasis on aligning national and regional priorities – reflected in the National Agriculture Investment Plans (NAIPs) and the Regional Agricultural Investment Plans (RAIPs). In addition, financial incentives need to be set that accelerate their delivery while technical capacity at the national level needs to be enhanced.

5 – ENHANCING VALUE CHAIN COMPETITIVENESS

To meet the African Union's goals on trade, it is essential that supply side constraints are also addressed. In addition to increased productivity in farming, regional food processing capacities and overall value chain competitiveness also need to be strengthened. In particular, emphasis should be placed on those food products that are of high value and contribute to improved nutrition at the same time. This calls for investments into the design and development of technologies that improve both the quantity and quality of food. Furthermore, the provision of training facilities needs to be enhanced to expand access to opportunities for skill development and innovation capacity along the value chain. Moreover, in value chains fairness needs appropriate attention, such as the prevention of exploitation of workers.

6 – STRENGTHENING CRISIS PREPAREDNESS AND RESILIENCE

To maximize the benefits of intraregional trade for countries' resilience against crises and shocks, coordinated policy responses within RECs and at the continental level are crucial. Dedicated coordinating centers and taskforces at regional and country levels can improve the level of preparedness, response capacity, and provision of human and financial resources to maintain intraregional trade and to ensure that trade corridors remain open even in times of crisis. The REC secretariats and the AfCFTA need to play a leading role in the formulation of such joint policy responses. Moreover, the adjustment costs of trade need to be carefully considered when designing and implementing new regional trade policies for the agriculture and food sector. In particular, attention must be paid to ensuring that all actors along the agriculture value chain – especially smallholder farmers – benefit from increased intraregional trade.

What works at the REC level?

African countries have made significant efforts and progress to eliminate trade barriers and increase agricultural trade through the RECs and numerous other regional and bilateral trade agreements. Currently, the largest share of agricultural trade across Africa is channeled through the RECs. The experiences of three leading RECs that have been at the forefront of intraregional agricultural trade through dedicated and effective actions at the policy, institutional and programmatic levels hence offer a wealth of lessons. The specific policy and institutional innovations as well as programmatic interventions by COMESA, ECOWAS and SADC are discussed in depth in section 7. The table below offers a summary of some of the key actions:

COMESA	COMESA has developed a sound institutional framework that supports agricultural development as well as agricultural trade. The REC has adopted a pragmatic approach to addressing key barriers to agricultural trade. Focusing on unlocking finance for trade through robust banking and insurance institutions is a unique and innovative approach. Similarly, developing sector-focused interventions have significantly improved the productivity of the leather and staples sectors, especially of cassava. Finally, complementing these with a wide range of solutions to ease transit across and between countries has further strengthened intraregional trade.
ECOWAS	ECOWAS is financially self-sufficient. This provides immense capacity to lead and implement policies and programs that benefit intraregional agricultural trade. Supported by an evolving institutional framework, the REC has created an enabling environment for intraregional trade that facilitates access to finance, attracts investment, and ensures fair competition, in tandem with a judiciary to settle investor–government disputes. Dedicated efforts to harmonize quality standards and a reduction in transit time along key trade corridors are strong signals for expanding agricultural trade and regional integration.
SADC	Intraregional trade in SADC is the highest within the eight RECs officially recognized by the African Union. SADC's institutional framework includes both, a top-down approach for smooth co-ordination, and an inclusive approach that empowers stakeholders within member countries to engage in the formulation of regional policies and strategies. Moreover, the REC has invested significant efforts and resources in strengthening the effectiveness of its institutions. By actively aligning national and regional priorities reflected in the National Agriculture Investment Plans (NAIPs) and the Regional Agricultural Investment Plans (RAIPs), respectively, the REC ensures that trade and other agricultural sector interventions are optimized.

3. The case for strengthening intraregional agricultural trade in Africa

If organized and managed carefully, intraregional agricultural trade in Africa can improve socioeconomic development and livelihoods across the continent, benefitting all actors along the value chain as well as consumers in rural and urban areas. Strengthening intraregional trade can foster economic growth through productivity increases, while generating new and much-needed employment opportunities; for smallholder farmers, it can reduce entry barriers to regional value chains and markets, while potentially improving food security and nutrition by facilitating access to more affordable, diverse and nutritious foods. More indirectly, through the benefits outlined above, intraregional trade can increase resilience to shocks at micro and macro levels and serve as an important risk management tool. However, the risks associated with increased trade, including environmental degradation, automation, and dependencies on trading partners may undermine the benefits of trade and increase exposure to new and unexpected shocks. These risks need to be factored in when designing and implementing new trade policies for the agriculture and food sector.

Box 1: *The impact of trade on productivity, employment and economic growth*

The positive link between trade and economic growth is generally well recognized. A 2012 study by the World Bank assessed the links between overall trade (that is considering both agricultural and nonagricultural trade) and economic growth in Africa south of the Sahara (SSA) and found that **a one percentage point increase in trade openness, calculated as the ratio of trade over gross domestic product (GDP), is associated with an annual increase in economic growth of 0.5 percent over the first 10 years and up to 0.8 percent per year after 10 years**.[6] Trade can incentivize countries to specialize in the production of agricultural goods and services where they have a comparative advantage, thereby leading to production efficiencies. Moreover, the economies of scale achieved under intraregional trade – that is the reduction of costs with output increases – can significantly boost agricultural production levels.[7]

Recent studies have also found that participation in trade activities within Africa's RECs (RECs) positively affect the economic growth and development of member states. A 2018 study shows that intraregional trade within the Economic Community of West African States (ECOWAS) is positively associated with both per capita income growth and overall economic growth, with an exponential impact when intraregional trade takes place through regional value chains.[8] **And a 2019 study highlighted that membership in a REC – including the Community of Sahel-Saharan States (CENSAD), the Common Market for Eastern and Southern Africa (COMESA), the East African Community (EAC), the Economic Community of Central African States (ECCAS), the Southern African Development Community (SADC), and ECOWAS – could increase individual country's exports by up to 175 percent and imports by up to 200 percent**.[9] For example, SADC member states traded 94 percent more maize among themselves than they traded with the rest of the world, while South African maize exports to Zimbabwe in 2009 alone reached US$309 million.[10]

Country analyses also show the positive effect of intraregional trade on the productivity of individual businesses in Malawi, Rwanda, Senegal and South Africa. Businesses trading regionally show a higher propensity to innovate and stay in business, a faster growth in labor productivity, and a higher level of total factor productivity, that is, the productivity of all inputs. For example, in Senegal, between 2003 and 2007, the total factor productivity of regional exporters was 60 percent higher than that of those who did not export.[11]

Moreover, a 2020 ex ante evaluation of the AfCFTA's impact on employment shows that its effective implementation could increase the number of workers in energy-intensive manufacturing by 2.4 million, public services by 4.6 million, recreational and other services by 0.28 million, and trade services by 0.13 million. In addition, although the share of employment in the agriculture sector as a percentage of total employment in Africa would decrease, its output volume would increase in 15 of 24 countries considered in the simulations.[12]

It is therefore not surprising that a simulation (involving 24 countries) on the potential impact of the AfCFTA shows an increase in overall African economic output of US$211 billion by 2035. In particular, by 2035, the services and manufacturing sectors would grow by US$147 billion and US$56 billion, respectively. Although agricultural production would decline by 0.5 percent, the study also found that in 14 of the 24 countries analyzed, the relative importance of the agriculture sector is set to increase. For instance, several East African economies would specialize in agricultural production and services, with a reallocation of productive factors such as labor and capital.[13]

3.1 Access to inputs and technologies

In order to increase agricultural productivity and incomes, farmers require easier access to affordable and high-quality inputs – such as improved seeds and fertilizer – as well as new technologies that can enable them to make more informed decisions about when and where to sell their produce and at what prices. In fact, **limited access to modern means of farming has been identified as one of the main constraints preventing smallholder farmers from effectively participating in regional value chains**.[14] **Evidence shows that trade barriers can delay the dissemination of new seed varieties and hence their adoption by two to three years**.[15]

In addition, prices of modern inputs and production technologies in Africa, particularly in landlocked countries, are significantly higher than in other developing regions and countries that are able to produce these inputs at an economically efficient scale.[16] For example, because fertilizer production and blending by individual countries at small scale is not profitable, African countries are heavily dependent fertilizer imports. Facilitating intraregional trade of inputs through quality infrastructure and standards harmonization, such as fertilizer blend specifications, would ease their movement between countries and allow for economies of scale.[17]

Intraregional trade can thus make new technologies more readily available in local markets and at affordable prices by lowering the cost of imports, with positive impacts on smallholder farmer productivity levels.[18] Evidence from Ethiopia, for example, shows that the use of improved hybrid maize traded within COMESA has the potential to quadruple productivity. **Models predict that if improved hybrid maize were adopted by half of Ethiopia's farmers, the resulting increase in domestic maize production could reduce Ethiopian maize imports to zero**.[19] Moreover, improved access to modern inputs can facilitate the integration of smallholder farmers and other actors into regional value chains with greater income opportunities, at times more than global markets.[20]

3.2 The economics of agricultural trade

The potential of intraregional trade to generate economic growth is greater when agricultural products are *processed* as opposed to trading raw materials. The export of processed products – for example cocoa butter or chocolate instead of cocoa beans – is generally more profitable.[21] The food-processing sector can drive value addition in a way few other sectors can. In Tanzania, for example, a study found that investment in agro-processing had a more sizable impact on the total economy than investment in any other industry.[22] In 2019, an analysis of the contribution of processed and unprocessed agricultural exports to economic growth in South Africa found a positive effect of processed agricultural exports on economic growth compared to unprocessed agricultural exports - often negatively associated to economic growth.[23] In addition, in 2020, a study covering SSA found that trade of manufactured products, including processed agricultural products, increases economic growth while trade in primary goods slows growth. A doubling of the manufacturing trade share in GDP would increase economic growth by 1.9 per year, while a doubling of the primary product trade share would increase growth by only 1 percent per year.[24] Intraregional trade can therefore act as a catalyst to increase countries' efforts in developing processing industries that could tap into regional, continental and global markets and significantly reduce African countries' import bills for processed food.

According to one estimate, half of the food purchased in southern and eastern Africa will be processed by the year 2040 (up from 36 percent in 2017).[25] This shift is linked to both the growth of urban populations and changes in dietary habits. For agricultural products, processing means that a product goes through different stages of value addition, with each stage adding additional value to the product, and with each stage demanding different skill sets s and expertise, thus creating new and additional employment opportunities.[26] The growing demand for processed food therefore presents an enormous opportunity for African countries to support the development of a competitive food-processing sector, driving demand for the produce of smallholder farmers, creating formal jobs,[27,28] and increasing incomes as well as the availability of affordable, safe and nutritious food.

3.3 Food security and nutrition

Africa's middle class is growing rapidly, having more than doubled between 1990 and 2010, and is driving a rapid change in dietary habits, demanding not only more food but also more varied food, including meat, eggs and dairy products.[29] However, **a 2020 study analyzing 45 African countries found that ineffective trade facilitation increases the prevalence of undernourishment and widens the food deficit gap**.[30] Increased trade has the potential to improve rural households' access to more diverse and nutritious foods. Furthermore, trade lowers prices for consumers by linking food-deficit areas with food-surplus areas and improves the diversity and quality of products available.[31] For example, as pointed out in the Malabo Montpellier Panel's 2020 report on livestock, livestock resources are unevenly distributed across the continent – with over half of Africa's livestock located in East Africa.[32,33] This presents great potential for increasing intraregional and intra-African trade of animal-sourced products and live animals to improve food security and nutrition.

Removing nontariff trade barriers boosts the availability of diverse and nutritious foods. It is

estimated that about 40 percent of food produced in Africa is lost or wasted each year. When appropriate trade infrastructure, facilitation and logistics are in place, postharvest losses would fall and the availability of perishable food products would increase in urban areas. Intraregional trade can also increase the consumption of fruits and vegetables throughout the year as seasonal complementarities among countries enhance the variety of agricultural products available in both rural and urban markets. Furthermore, a greater number of trading partners can enhance the diversity of food. For instance, as Ghana increased the number of its global trading partners, it increased the number of different food products imported from 310 in 1998 to 491 in 2013.[34]

3.4 Intraregional trade as a resilience and risk management tool

African countries have several independent bilateral trade agreements with states and regions beyond continental borders. These agreements provide access to high value markets, for example in Europe and the United States (see Box 6) and allow goods to enter African markets. Although several benefits accrue from these agreements, bilateral agreements can complicate the process of intensifying intraregional trade and integration. Overcoming this challenge requires regional policy innovation and cooperation to ensure that spill overs are large, and domestic losses are minimized.[35]

As agricultural trade intensifies, food systems benefit from more robust supply chains and lower price volatility. Uninterrupted intraregional trade therefore also functions as a critical risk management and resilience tool during times of crisis or shock.[36] Evidence shows that the 2007/08 food crisis was exacerbated in Africa by export bans and trade restrictions, which limited the extent to which intraregional trade could stabilize food markets and reduce food price volatility.[37,38] Learning from that experience, some countries across Africa have rapidly developed and implemented interventions at scale to minimize disruptions to food trade during the current COVID-19 pandemic. However, and as discussed in detail in chapter 5, the smooth and reliable movement of goods requires solid regional transport and trade infrastructure.

In 2014, a study comparing the variability of cereal production in individual countries with the average regional production volatility in COMESA, ECOWAS and SADC showed the potential of intraregional trade in stabilizing food supplies through greater market integration. The study found that national production variability was considerably higher than regional-level variability for the majority of countries in the three RECs.[39] The Democratic Republic of Congo (DRC) and Côte d'Ivoire were the only countries experiencing lower variability in cereal production than the regional variability in SADC and ECOWAS[40]. Moreover, in Guinea-Bissau, yearly domestic supply of cereals is 70 times more volatile than the consolidated African supply, while in Nigeria, local supply is 60 percent more volatile.[41] This suggests that both small and larger economies can gain from regional trade.

Trading is also an effective risk management mechanism in the face of climatic, health and socioeconomic shocks, as well as sudden policy changes. Rising global temperatures, changing rainfall patterns, and more extreme weather events sparking more frequent and intense floods and droughts will continue to disrupt food production. Estimates show that, without substantial additional investment in irrigation, climate change could increase the share of people at risk of hunger in Africa could increase by 5 percent by 2030 and by 12 percent by 2050.[42] The reliance of African farmers on rainfed agriculture makes them particularly vulnerable and susceptible to extreme weather events.[43] In addition, interannual rainfall variation means that the size of local harvests can vary from year to year.[44] Because there is considerable heterogeneity in the impacts of climate change across countries, farmers in countries that are less severely affected by particular weather outcomes may be able to sell excess supply to meet the excess demand from consumers in the more severely affected regions.[45] Trade can thus serve as an important risk management strategy by mitigating the impact of negative shocks on domestics markets.[46]

Moreover, there is evidence that the more regional trade agreements that are in place, the more beneficial they become, providing a form of insurance for trade liberalization. As regional groups of countries form alliances, they promote peace and stability. If countries become increasingly reliant upon each other, the likelihood of conflict decreases. Furthermore, alliances among African countries will help them in multilateral negotiations: by increasing communication and co-operation among countries with similar interests, the mutual interests of members can be more easily voiced in the World Trade Organization (WTO). This could be particularly useful for African countries as they set out to increase their share of international agricultural and food product trade.[47]

3.5 Women's empowerment through trade

Increased intraregional trade can be a powerful tool to empower women farmers and women along entire agriculture value chains across the continent. As discussed above, intraregional trade is an opportunity to generate new employment opportunities along agriculture value chains and thus can be an opportunity to significantly reduce gender inequalities in labor market participation. In the short run, export-oriented firms and industries in the textile and agriculture sectors tend to increase the share of

female labor to take advantage of the large gender wage gap.[48] However, a 2020 ex ante evaluation of the implementation of the AfCFTA found that its implementation would increase wages, in particular the remuneration of unskilled labor, which would grow at a faster rate than that of skilled labor in East, West, and Central Africa. Furthermore, women would benefit more, particularly in unskilled professions. It is estimated that, by 2035, wages for skilled and unskilled female labor would increase by 4 percent and 3.7 percent respectively, while men's wages would increase by only 3.2 percent. In some countries, this translates to approximately two weeks' additional pay per year for women.[49] Specifically, in Côte d'Ivoire, the wages of unskilled women would grow by 0.89 percent per year and wages of unskilled men by 0.86 percent, compared to 0.68 percent and 0.62 percent for skilled men and women, respectively.[50] Likewise, nonfarm agrifood system jobs are often more easily accessible for women and poor workers leaving the farm, given their proximity and low entry requirements in terms of capital and skills.[51] In fact, a 2018 study identified agri-manufacturing, transport, and trade as the most poverty-reducing subsectors outside of agriculture, although none of these dominates across the different countries studied in terms of their contribution to GDP.[52]

In some African countries, women contribute 60 to 80 percent of food production. Yet, women are most likely to face major constraints in access to productive resources, which seriously limits their capacity to take advantage of opportunities in the sector.[53] This gender gap ultimately undermines the continent's productivity and inhibits women's equitable and profitable participation in intra-African agricultural trade as well as regional and global agricultural value chains. Thus, while women make up a significant share of Africa's agricultural labor force, they are primarily involved in informal trade activities, which are often dangerous, time-consuming, and poorly renumerated. For instance, trade between the DRC and its Great Lakes neighbors is dominated by women, and for most of them it represents their main source of income. Estimates show that women represent between 60 to 70 percent of informal cross-border traders in the SADC region.[54] However, a 2012 study revealed that 85 percent of female cross-border traders between the DRC and Rwanda, with an average age of 32, have to pay a bribe to cross the border, and that more than half reported being subjected to some form of physical harassment. A baseline study of women cross-border traders in Liberia revealed that 37 percent of women had experienced sexual violence at border crossings, and 15 percent had been raped.[55] Greater support and protection for women traders, including at border posts, would bolster their ability to trade and contribute more equally to economic development.

3.6 Adjustment costs and risks of greater trade liberalization

While greater trade liberalization offers a wide range of benefits, economies may incur costs in adjusting to new trading relationships – in turn contributing to an overall reduction in net gains. For example, as countries eliminate tariffs and border taxes, their revenue generation from these sources falls. In addition, trade liberalization requires a reallocation of production factors (labor and capital) within and between sectors, creating both opportunities and potential hazards for actors.

For example, a 2020 ex ante evaluation of the AfCFTA's impact on employment in 24 countries shows that its effective implementation could increase the number of workers in energy-intensive manufacturing by 2.4 million, public services by 4.6 million, recreational and other services by 0.28 million, and trade services by 0.13 million. Although the share of employment in the agriculture sector as a percentage of total employment in Africa would decrease, its output volume would increase in 15 of 24 countries considered in the simulations.[56]

The study proceeds to reveal that the potential impact of the AfCFTA shows an increase in overall African economic output of US$211 billion by 2035. In particular, by 2035, the services and manufacturing sectors would grow by US$147 billion and US$56 billion, respectively. However, while agricultural production would decline by 0.5 percent, the study also found that in 14 of the 24 countries analyzed, the relative importance of the agriculture sector is set to increase. For instance, several East African economies would specialize in agricultural production and services, with a reallocation of productive factors such as labor and capital.[57]

Other factors may exacerbate the negative impacts of these transitions. The drive for efficiency, combined with access to, and adoption of, new technologies can lead to an increase in greenhouse gas emissions as well as a reduction in demand for labor. The share of workers in Africa at high risk of losing their jobs to automation is 40 percent among those with a lower-secondary education and above 50 percent for those with primary or less education.[58] However, greater demand for processed and prepared foods may open up new employment opportunities off the farm, in food processing, marketing, logistics, food retail, and food services. Lower prices for agricultural automation, including harvesting robots in developed countries, could also lead to a "re-shoring" of agricultural production from developing to developed countries and a fall in wages.[59] Therefore, while some jobs may become redundant over time, new employment opportunities will emerge. Upskilling (see section 5.4), greater access to modern production inputs, technologies and methods, innovative sustainable supply chain models[60] and the development of complementary activities and productivity-enhancing investment in agriculture must accelerate in the lower-income countries and proceed at least in tandem with the movement of workers off the farm elsewhere.

It is critical that policy and programmatic interventions are designed to take full advantage of the new trading opportunities and ease the burden of adjusting to reforms, particularly for disadvantaged groups. In principle, the gains from trade generate the resources that can be used by governments to do so. But additional resources are also available to compensate for the losses incurred. For example, development partners and regional trading bodies offer direct payments to amplify the positive outcomes of trade liberalization. The WTO-led Aid for Trade initiative mobilizes resources from development partners to mitigate the costs associated with tariff reductions, preference erosion, or declining terms of trade as well as build trade capacity and infrastructure that would enable countries to harness the benefits of opening trade.[61,62] Similarly, COMESA has implemented a Regional Integration Support Mechanism (RISM) to help countries joining the REC and the East African Commission (EAC) Customs Union Common Markets to deal with significant direct and indirect costs resulting from the adjustment to new trade structures and procedures (see case study below).

The benefits of intraregional trade for economic growth can be substantial for African countries, provided the associated costs outlined above are carefully considered when devising and implementing intraregional trade policies and interventions. In particular, and as the next chapter will show, the contribution of RECs to intraregional trade and development can be significant.

4. African agricultural trade patterns and trends

4.1 Africa's primary trading partners

About 80 to 90 percent of African exports are destined for global markets.[63] A large share of these are minerals and other precious commodities, petroleum, and petroleum products. Exports of agricultural products to the rest of the world also rose over the last two decades and entered new markets in the Near East (Saudi Arabia, United Arab Emirates, Turkey) and Southeast Asia (Malaysia, Viet Nam). For countries in eastern Africa, food products such as coffee, grains, livestock, and soft drink concentrates are the primary exports. Morocco, Tunisia and Lesotho rely heavily on exports of clothing, shoes and textiles, while cotton is vital to the economies of Mali, Togo and Benin.[64]

Box 2: *Trade patterns with Europe, the United States, China, and Latin America*

About 80 percent of Africa's agricultural exports are destined for one of four regions: Western Europe (around 45 percent), South and East Asia (20 percent), the Middle East (10 percent), and North America (5 percent).[65] Of these, the Netherlands, France, the United States, Germany, and China are the top five partners, together accounting for 30 percent of Africa's agricultural *exports* in 2016–2018.[66] The top products exported to these regions were fruits, vegetables and nuts; cocoa; fish, seafood and meat; coffee and tea; oil seeds and grains; and sugar and flowers – together valued at US$35–40 billion.[67] Remarkably, of the EUR 12 billion (US$14.2 billion) worth of agrifood exports that went to the European Union (EU) in 2019 from SSA, EUR 5 billion (US$6 billion) alone was for the purchase of cocoa beans, paste and powder.[68]

On the other hand, SSA *imported* over US$11 billion worth of agrifood products from the EU in 2019, 15 percent of which was accounted for by wheat imports, and nearly 11 percent by infant food and other cereals, flour, starch or milk preparations. Poultry meat accounted for a further 6 percent of imports to Africa, representing nearly a quarter of all meat products in the African market. Furthermore, EU spirits and liqueurs have seen the greatest growth in exports to Africa, increasing over 32 percent between 2015 and 2019.[69] Although the balance of payments on agrifood products between the two regions currently leans in favor of Africa, it is important to note that EU exports to Africa grew faster than imports from Africa between 2009 and 2019. This growth is explained in part by the EU Common Agricultural Policy (CAP), which continues to promote food exports with subsidy payments, and direct market interventions. The CAP is particularly disruptive for dairy production and exports from the EU which, in some cases, supplies more milk to African countries than they produce domestically.[70] Moreover, while African countries can export primary commodities to the EU, processed products must meet the "rule of origin" (RoO) principle to be exempt of duties, which involves demonstrating proof of production stages and ingredients. This requirement is exceptionally punitive for small farmers who lack the technologies and capacities to meet it. Yet, the EU remains a key market and source of agricultural products for Africa, although it is likely that this relationship will change significantly following two key developments: a reform of the CAP in 2020, and the exit of the United Kingdom from the EU at the end of 2020. Several independent negotiations and interventions are already underway in Ghana (for ECOWAS)[71] and Kenya[72] to maintain preferential access and a smooth transition for African agricultural products to the UK market.

In comparison, agricultural exports to the United States under its African Growth and Opportunity Act (AGOA) were valued at US$2.5 billion in 2019. AGOA provides access for 28 beneficiary countries, of which the largest exporters in 2016 were Côte d'Ivoire, South Africa, Ghana, Madagascar, Ethiopia and Kenya. The primary products exported were citrus fruit (mainly oranges and mandarins), grapes, nuts (including macadamia), fresh vegetables, cassava and peppers.[73] In October 2018, Prosper Africa was established as a US government initiative to substantially increase two-way trade and investment between the United States and Africa. Once fully operational, Prosper Africa will be a one-stop shop to facilitate increased trade and investment between US and African businesses. Between June 2019 and October 2020, the initiative has directly supported around 270 deals across more than 30 African countries for a total value of over US$22 billion.[74,75] This includes at least 28 deals in the agribusiness sector, which comes second after energy-related trade deals. The initiative has linkages with the AfCFTA, which if implemented fully and embraced, could generate important benefits.

Following the creation of the Forum on China-Africa Cooperation (FOCAC) in 2000, China–Africa trade rose from US$2 billion to US$170 billion in 2017.[76] Trade is concentrated around the export of minerals from Africa to

China, while Chinese imports to the continent are primarily manufactured products. For agricultural products, the pattern is similar, with Africa exporting meat, vegetables, and skins and hides while importing processed food and leather. Among the top 20 products exported from SADC, COMESA and EAC to China between 2005 and 2014 were tobacco, oil seeds, cotton, and raw hides, skins and unfinished leather. The EAC also supplied raw vegetable fibers (coconut and hemp) as well as coffee and animal products.[77] In addition, Africa imports agricultural inputs, including agrochemicals, and farm equipment from China.[78] Despite deepening trade relations between Africa and China, accurate data on the intensity of agricultural trade is not available.

Within Latin America, Africa has strong trade links with Brazil. In 2019, Brazil's agricultural exports to Africa were valued at over US$4.2 billion and were composed of sugar (US$2 billion), maize (US$860 million), beef (US$623 million), and poultry meat (US$489 million), as well as soya, coffee beans, live animals, and spices. In return, Brazil imported chemical fertilizers from Africa, valued at US$1.35 billion and unprocessed fertilizers worth US$89 million. Nearly a quarter of Brazil's exports arrived in Egypt, followed by South Africa (15 percent), while the largest exporters to Brazil were Morocco (30 percent) and Algeria (21 percent).[79]

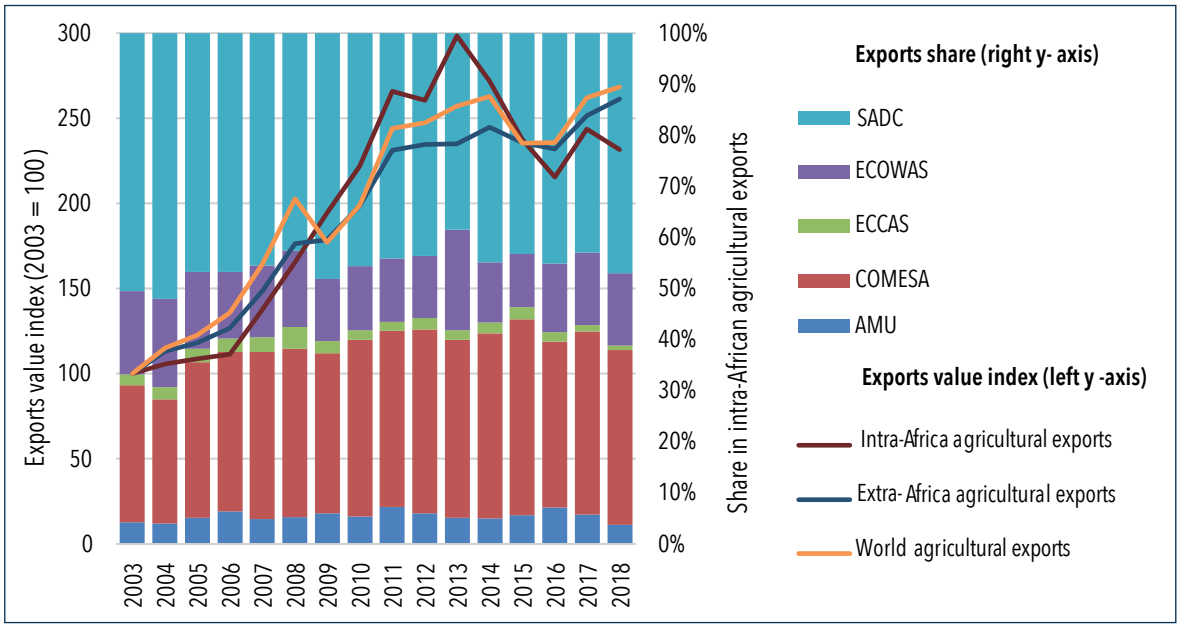
Overall intra-African trade is less than Africa's trade with the rest of the world. In 2017, intra-African exports were 16.6 percent of total exports, while the average of intra-African exports and imports hovered around 15.2 percent over 2015–2017.[80] However, as outlined below, these figures may not capture the exact intensity of trade on the continent, given that a large share of trade is informal.

Intra-African trade is composed largely of agricultural products. At the time of writing this report, the largest share of *agricultural* trade across Africa is channeled through the RECs, driven by trade liberalization programs. RECs also benefit from geographic proximity, cultural similarities, historical trading relationships, and preferential trade agreements. In fact, for every REC, the share of intraregional agricultural exports is significantly larger than the share of world agricultural exports to that REC.[81]

The most active of the AU-recognized RECs are SADC, ECOWAS and COMESA, which respectively trade 84, 79 and 66 percent of their agricultural exports within the REC. At 60 percent, AMU's intraregional exports are slightly lower than those of COMESA, while ECCAS only exports 46 percent of its traded agricultural products within the REC.[82] Improving trade complementarity would allow intraregional and intercontinental agricultural trade to increase. This requires building regional value chains based on a regional competitive advantage, rather than nations specializing in the same individual products.

Although the level of trade within Africa varies greatly among RECs, their respective contributions to intra-African trade have remained largely stable during the past two decades, as shown in Figure 1. Between 2003 and 2018, SADC and COMESA accounted, respectively, for nearly 46 percent and 31 percent of intracontinental agricultural exports, while the share of ECOWAS was estimated at 14 percent, that of AMU at 6 percent, and that of ECCAS at a meager 1 percent.[83]

Figure 1: Intra-African agricultural exports by region of origin, 2003–2018



Source: 2020 AATM Report database and authors' computations.

Note: SADC: Southern African Development Community; ECOWAS: Economic Community of West African States; ECCAS: Economic Community of Central African States; COMESA: Common Market for Eastern and Southern Africa; AMU: Arab Maghreb Union. With these five RECs, all countries across the entire continent are covered in this analysis.

Table 1 displays the ranking of the top 10 intra-African exporters and importers of agricultural products in 2005–2007 and 2016–2018.[84] About 70 percent of intra-African agricultural exports in 2016–2018 originated from only 10 countries. Intra-African imports are also concentrated among a few countries, with half of total intracontinental imports arriving in just 10 countries. Within this context, South Africa is responsible for nearly a third of all intra-African exports and receives about a tenth of all agricultural goods sold within Africa. Overall, countries in eastern and southern Africa as well as in the Maghreb are leading intra-African agricultural trade. As Table 1 shows, the market shares of imports and exports in countries across Africa have varied between 2005–2007 and 2016–2018, although South Africa continues to rank highest.[85]

Table 1a: Top 10 intra-African exporters of agricultural products, 2005–2007 and 2016–2018

	2005–2007		2016–2018	
	Export share (%)	**Rank**	**Export share (%)**	**Rank**
South Africa	29.8	1	32.2	1
Egypt	5.6	4	8.7	2
Uganda	3.6	8	6.4	3
Kenya	5.3	5	6.2	4
Côte d'Ivoire	6.3	3	4.6	5
Zambia	4.1	7	3.8	6
Tanzania	2.2	10	3.1	7
Namibia	6.5	2	2.8	8
Tunisia	4.4	6	2.6	9
Ethiopia	2.8	9	0.5	10
Total	**70.6**		**71.0**	

Table 1b: Top 10 intra-African importers of agricultural products, 2005–2007 and 2016–2018

	Import share (%)	**Rank**	**Import share (%)**	**Rank**
South Africa	11.5	1	8.3	1
Kenya	4.3	5	6.7	2
Namibia	6.7	3	5.7	3
Egypt	2.0	10	5.4	4
Botswana	6.9	2	5.3	5
Zimbabwe	4.2	6	4.8	6
Mozambique	2.6	9	4.3	7
Libya	4.6	4	3.6	8
Dem. Rep. Congo	3.3	7	3.6	9
Nigeria	2.6	8	2.3	10
Total	**48.7**		**50.2**	

Source: *Adapted from Bouet et al., 2020b. Africa Agriculture Trade Monitor, p46.*

4.2 Key products traded

About 38 to 39 percent of all intercontinental agricultural trade is made up of only 20 products. Of these, the most exported products include sugar and sugar products, tobacco (cigarettes), tea, maize, and palm oil, as shown in Table 2. Between 2005 and 2018, the proportionate values of sucrose and sugars, black tea, wheat, flour, maize seed, soups and broths, food preparations, and vegetables in intra-African trade increased. Conversely, the shares of maize (other than seed), tobacco products, rice, beer, coffee, and cotton, by value, all decreased.[86] A comparison of the shares of the top 20 exported agricultural products in Africa with their corresponding share in the South Asia region shows that intra-African agricultural trade is more diversified than South Asia's intraregional trade. In South Asia, the top 20 agricultural products represent 65.4 percent of total regional exports. Although these statistics do not necessarily capture the full extent of trade in staples and livestock, which are often traded informally, there is clearly a gradual transition underway toward increased trade in semi-processed and processed foods to satisfy changing demand structures. Intra-African exports are dominated by processed products with a 50 percent share compared to extracontinental exports, which are largely composed of primary commodities or semi-processed products, making up 90 percent of exports.[87]

Table 2. Top 20 HS6-level products traded between African countries, 2005–2007 and 2016–2018

		2005–2007		2016–2018	
HS6 Code	Short description	Export Share (%)	Rank	Export Share (%)	Rank
170199	Sucrose, no flavoring or coloring matted added	3.06	4	5.00	1
240220	Cigarettes, containing tobacco	4.24	1	3.42	2
090240	Tea, black and (partly) fermented	1.80	11	3.34	3
100590	Maize (corn), other than seed	3.03	5	2.65	4
151190	Palm oil, other than crude	2.26	8	2.62	5
110100	Wheat or meslin flour	2.03	9	2.49	6
210690	Food preparations	1.96	10	2.20	7
090111	Coffee, not roasted or decaffeinated	3.17	3	2.03	8
210410	Soups and broths and preparations therefor	1.34	13	1.73	9
220300	Beer, made from malt	2.50	6	1.68	10
170113	Cane sugar, raw	1.31	14	1.66	11
240120	Tobacco, stemmed or stripped	2.34	7	1.63	12
520100	Cotton, not carded or combed	3.94	2	1.34	13
100510	Maize (corn), seed	0.80	17	1.20	14
010229	Cattle, live	0.84	16	1.20	15
170490	Sugar confectionery	1.19	15	1.16	16
080810	Apples, fresh	0.68	19	1.11	17
151219	Sunflower seed or safflower oil	0.73	18	0.75	18
100630	Rice, semi-milled or wholly milled	1.43	12	0.66	19
070999	Vegetables, edible	0.04	20	0.17	20
	Total	38.7		38.0	

Recent data on the composition of African exports also shows that most of Africa's RECs increased specialization in the agriculture sector between 2005 and 2017. In addition, evidence shows that Africa has a comparative advantage in sesame seeds, legumes and pulses. Its comparative advantage has been stable for cashew nuts, cocoa, cotton, and tea between 2005 and 2017, while it has been low but increasing for sugar and tomatoes, steady for grapes, and declining for coffee.[88]

Box 3: *Barriers to African agricultural trade: tariff and nontariff barriers*

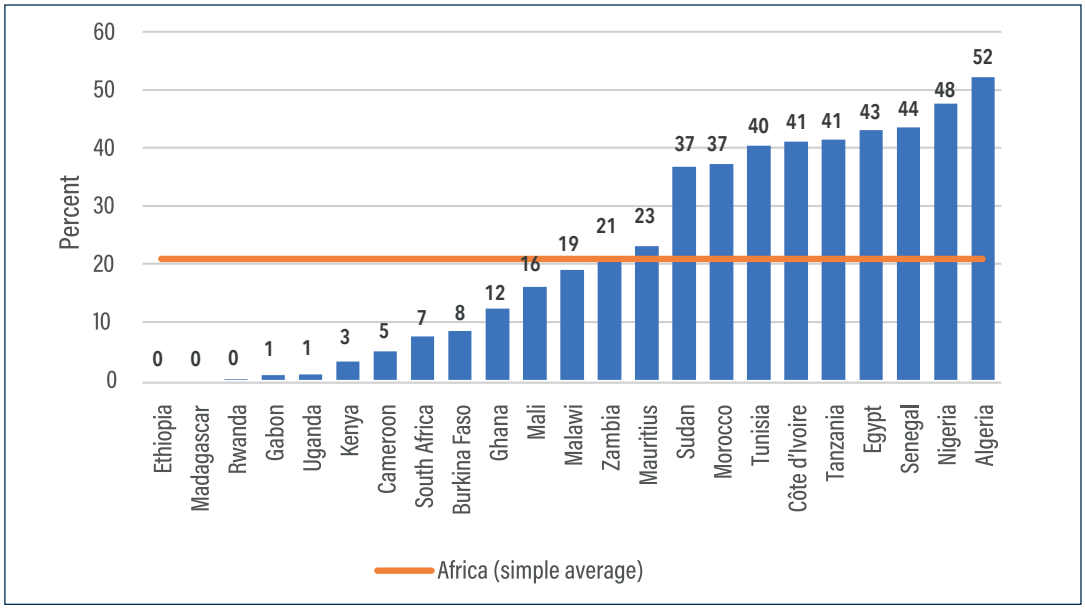
One key challenge in increasing intracontinental and intraregional trade in Africa is the high prevalence of tariff and nontariff barriers. Although significant efforts have been made to reduce tariffs within the RECs, **by 2019 no REC had met the requirements of the Abuja Treaty to establish a common external tariff within customs unions and fully functional free trade agreements by the end of 2017. In 2016, tariffs on intraregional agricultural exports within the eight AU-recognized RECs ranged between 0.1 percent in EAC and 16.6 percent in AMU. Tariffs on extra-REC exports are even higher. For example, imports from AMU** into IGAD and EAC are charged tariffs of as high as 44.3 and 41.9 percent, respectively.[89]

Furthermore, nontariff measures such as quotas, subsidies, and phytosanitary regulations continue to hamper smooth intraregional and intracontinental trade with potentially more prohibitive and distorting impacts than tariffs measures. One study estimates that **nontariff barriers to trade may increase the cost of trade in Africa by as much as 283 percent**.[90] For example, importing a 20-foot container of goods into Africa nontariff measures impost US$700 in costs for administrative fees, customs clearance, technical controls, terminal handling charges, and inland transport costs. Similarly, for African exports, nontariff measures add approximately US$600 to the cost of exporting one container.[91] Specifically for agricultural products, ad valorem costs of nontariff measures are estimated at over 19.2 percent on vegetables, 18.3 percent on livestock, and nearly 12 percent on fats and oils.[92]

In fact, most African countries impose nontariff measures, albeit to a varying degree. In Algeria, Cabo Verde, Ethiopia, Morocco and Tunisia, more than 60 percent of agricultural products imported from other African countries face nontariff measures. In Botswana, Burkina Faso, Guinea and Zimbabwe, on the other hand, less than 30 percent of products are affected. A study of 23 countries estimates that nontariff measures add on average 21 percent to the cost of goods, as shown in Figure 2. When disaggregated, these nontariff costs were as high as 52 percent in Algeria – almost three times the continental average and almost double the average of other AMU countries like Morocco and Tunisia – 48 percent in Nigeria, and 44 percent in Senegal.[93]

The combination of tariff and nontariff measures represents exorbitant costs for trade in Africa. For instance, in COMESA and SADC, total ad valorem import duties on agricultural products can be as high as 25.5 and 13.56 percent, respectively. In comparison, in the Association of Southeast Asian Nations (ASEAN) and the European Union, these costs are estimated at just 8.54 percent and 10.63 percent, respectively.[94]

Figure 2: Average ad valorem equivalent of nontariff measures affecting agricultural products, selected African countries, 2009 (percent)



Source: AATM 2020 Report. Authors, based on Bouët, Cosnard, and Laborde (2017, Tables 2.5 and 2.6, pp. 14-15).

4.3 The role of informal cross-border trade

Much of Africa's intraregional trade takes place at border towns or border posts, often by unregistered (informal) traders. The nature of informal cross-border trade (ICBT) complicates the process of capturing adequate data on its magnitude. Nevertheless, ICBT represents an important share of intraregional trade, sometimes higher than official registered trade. For instance, in Benin, informal trade represented 40 percent of total trade with all its neighbors in 2010. With Nigeria, Benin's main trading partner, ICBT represented more than 50 percent of export flows and 57 percent of import flows.[95] Furthermore, in 2011, Rwanda's informal exports to four neighbors across 53 border posts were 51 percent greater than formal exports.[96] Similarly, Uganda's informal exports to its five neighbors were equal to 86 percent of the value of official exports, while a quarter of trade flows between Kenya and Ethiopia in 2011 took place through informal channels.[97,98] In 2012, ICBT accounted for 30 to 40 percent of total intra-SADC trade, with this informal trade valued by some studies at US$17.6 billion per year.[99]

ICBT is also an important source of employment and income generation.[100] In 2010, ICBT in West Africa was estimated to contribute from 20 percent of GDP in Nigeria to 75 percent of GDP in Benin.[101] At a smaller scale, a majority of informal cross-border traders in Rwanda live on more than US$2 per day – an amount that is higher than they would earn through formal employment.[102] Since women – often poor and without formal education – make up a large share of informal cross-border traders, this activity is an important tool for their empowerment and productive engagement in society.

A vast range of merchandise is exchanged through ICBT, including unprocessed goods, manufactured goods, and re-exported goods. Staples such as beans, rice and maize, as well as livestock, are particularly popular items for exchange, and add substantially to the volume of intraregional agricultural trade. Between 2005 and 2012, total annual ICBT across 29 borders in 10 SADC countries averaged nearly 118,000 tons of maize, and 12,000 tons each of rice and beans.[103] Furthermore, about 3 million tons of staples were traded in 2013 in East Africa.[104] Across the Kenya–Somalia border, informal traders earn

nearly US$12 million per year from informal livestock sales. In eastern Ethiopia, this value reaches US$25 million.[105] More recently, over the period 2008–2019, 21 to 50 percent of Uganda's total informal exports were staples, such as maize and beans, and fish products. In 2014, 59 percent of Rwanda's informal exports to its four neighboring countries were largely of maize and livestock.[106] In Zambia, approximately 40 percent of trade at three border crossings – Mwami/Mchinji (Malawi), Chirundu (Zimbabwe), and Livingstone/Victoria Falls (Zimbabwe) – is informal, valued at over US$3 million.[107,108]

There is significant evidence that ICBT plays an important role in alleviating poverty, generating employment and income, and empowering women, despite the fact that governments may not be able to collect revenues from this trade. But the impacts may vary. For example, on the one hand, consumers may benefit from access to goods at lower prices. On the other hand, not having been subjected to customs clearances or sanitary and phytosanitary (SPS) measures, informally traded goods might pose health, safety and environmental risks. From the perspective of producers, ICBT can develop markets that would otherwise be inaccessible due to onerous regulatory requirements. However, imports of cheaply produced and contraband goods through informal channels might make local products uncompetitive. While some risks and disadvantages do exist, especially for women the in general the prevalence of ICBT has a positive impact on economic growth. Several African countries are acting to recognize the importance of ICBT and to provide appropriate services to support its growth, as described in section 6.5.

4.4 Trade in times of crisis

Over the short to medium term, the current positive trends in intraregional trade across Africa are likely to be adversely impacted by the COVID-19 pandemic. As shown in chapter 3, intraregional trade can increase the resilience of countries to crises or shocks. However, crises can also disrupt trade. **As a result of COVID-19, Africa's trade volumes are projected to decrease by 8 percent for exports and about 16 percent for imports in 2020**.[109] Measures taken by governments to combat the pandemic – including border closures and curfews – have significantly disrupted intraregional trade, with an especially strong impact on ICBT. These COVID-related measures forced many small traders to give up trading over several months.[110] Although trade of goods by road was not halted, disruptions were caused by sanitary controls at borders and by curfews, which caused delays in the delivery of products, with losses of fruits and vegetables and other perishable products. Moreover, the disruption of trade and hence the food supply led to increased prices for many main staples in East Africa. For instance, the average price of maize in Nairobi rose from US$312 per ton in April 2019 to US$343 in April 2020 – a 10 percent increase.[111]

The Ebola outbreak in Guinea, Liberia and Sierra Leone in 2014 likewise highlighted the disruptive effect of such crises on intraregional trade. An analysis of seven value chains – rice, potato, cassava, palm oil, domestic animal-sourced products, bushmeat and cocoa – showed that the Ebola outbreak negatively impacted the collection of agricultural produce and transport to consumption areas. Due to reluctance to travel to contaminated zones, the number of traders decreased by 20 percent at the peak of the outbreak. In addition, the delivery times for products increased because of additional checkpoints, quarantine zones, and border closures, leading to delays in reaching consumers and produce losses.[112]

Moreover, uncoordinated policy responses within RECs during crises can negatively impact intraregional trade. For instance, in August 2019, when Rwanda closed its border with the DRC after a second death linked to Ebola, the price of fruit and vegetables surged in border towns.[113] RECs can play an important role in mitigating regional crises and hence the impacts of shocks on intraregional trade. During the Ebola crisis, the established outbreak-coordination center under ECOWAS enhanced the level of preparedness, response capacity, and provision of human and financial resources within the region to facilitate intraregional trade. Similarly, the EAC's 2007–2012 and 2015–2020 strategies to contain the spread of HIV/AIDS along its transport corridors is another example of REC intervention during a crisis.[114] Furthermore, during the current COVID-19 crisis, EAC and ECOWAS are assessing the option of jointly opening all land borders and port services to enable free movement of agricultural inputs, including fertilizers and pesticides.[115]

Crucially, agricultural trade patterns and trends at the continental and regional levels, as outlined in this chapter, are guided and shaped by continental and global policy frameworks that govern trade partnerships. In particular, the establishment of the African Continental Free Trade Area (AfCFTA) will be a determining factor in efforts to bolster regional and continental economic integration and accelerate Africa's economic growth and development, and will likely play an important role in protecting the continent against future shocks.

> "As a result of COVID-19, Africa's trade volumes are projected to decrease by 8 percent for exports and about 16 percent for imports in 2020."

5. Strengthening national-level participation in intraregional trade

For agricultural trade to flourish, buyers and suppliers must be well connected, either in person or virtually. For producers, connection with their input suppliers is just as important as having access to service providers, such as extension agents, and to markets. Similarly, intermediaries and processors also benefit from rapid, affordable, efficient and seamless access to suppliers and off-takers so that their operations – whether in goods or services – can thrive. Traditionally, these connections relied on physical transport infrastructure such as roads, rail, air and seaports. Increasingly, these connections are made through telephony and digital services, often through the Internet, and via mobile phones. Whether physical or digital, (good quality) infrastructure remains at the heart of booming trade. Conversely, inadequate infrastructure can cost Africa about 2 percent of GDP growth per year.[116] To maximize the benefits accrued from improved "hard" infrastructure, "soft" infrastructure such as regulations and institutions must also be strengthened to ensure that the supporting logistics systems are efficient and effective and that people have the knowledge and capacity to successfully exploit the opportunities created.

5.1 Transport: ports, roads, rail and air

Transport connectivity is a critical element in achieving sustained and inclusive growth. Access to transport infrastructure improves market access, increases agricultural productivity, and contributes toward inclusion, poverty reduction, and growth.[117,118] Since food (and livestock) products tend to be heavy, bulky and often perishable, moving them from rural areas to urban and international markets requires overcoming significant logistical challenges. Similarly, the import of inputs and food relies on robust and efficient distribution infrastructure. Simplifying this logistical process in a way that increases efficiency and reduces costs can improve the supply and demand of food, enhance returns on investment, promote diversification, and provide greater livelihood options for rural communities.

Ports provide an important gateway for African trade. They are a vital link in global supply chains, so their location and efficiency play an important role in ensuring that both inbound and outbound goods flow seamlessly. In Africa south of the Sahara (SSA), there are only 10 ports that handle more than 500,000 TEUs (20-foot equivalent unit)* per year, and only two of those (Durban and Mombasa) handle more than 1 million TEUs per year.[119] In comparison, 7 of the top 10 largest ports in the world are in China, with the largest one in Shanghai processing over 42 million TEUs in 2018.[120]

Ports provide access for Africa's exports to high-value and international markets. At the same time, they are critical access points for domestic markets and vast hinterlands beyond, including Africa's 16 landlocked countries. Their viability is linked to overall transport infrastructure capacity, which determines how efficiently goods can be imported and exported. Robust transport corridors are especially important for the landlocked countries, for which road and rail connections are a vital lifeline, allowing participation in international and high-value markets as well as imports of inputs and food. In East Africa, investments in improving port access and efficiency would be beneficial for export crops such as coffee, tea, tobacco and cotton, particularly those originating from regional landlocked countries such as Rwanda, Burundi and Uganda. For example, a 10 percent reduction of transport costs to Mombasa or Dar es Salaam could boost the export of coffee from Burundi, Rwanda, and Uganda by over 10 percent. In addition, improving rural accessibility in Kenya and Tanzania would benefit specific crops such as cassava in Tanzania's Mbeya Region and coffee in both Kenya and Tanzania.[121] Similarly, in the ECOWAS region, a 1 percent increase in the quality of roads in trade-originating countries is rewarded with average growth in intraregional exports of US$0.91 million. More specifically, if the average road quality along the Lagos–Dakar corridor (Trans–West African Coastal Highway) were raised to match the average road quality in South Africa – that is, a 391 percent increase in quality – intraregional trade could increase by US$356 million, equivalent to a 4.79 percent increase over 2012 levels.[122]

* A 20-foot equivalent unit (TEU) is an inexact unit of cargo capacity based on the volume of a 20-foot-long (6.1-meter-long) intermodal container. TEUs are used to describe the capacity of container ships and container terminals.

Box 4: *Trade, transport and growth corridors*

Transport corridors are a collection of routes that link seaports to major inland markets within countries and with neighboring countries, including those of landlocked countries. They include both physical infrastructure (such as roads, railways, warehouses, border posts, seaports, and intermodal facilities) and "soft" infrastructure such as institutional agreements on transit and border procedures.[123] Corridors provide an opportunity for governments to cluster public and private investments around logistics, service provision, and market integration. Where combined with processing, packaging, and storage infrastructure suitable for agricultural inputs and outputs – as well as policy and fiscal interventions – these agricultural growth corridors can fast-track the transition of farmers to commercially oriented producers in global supply chains, hence driving the transformation of agricultural value chains.[124]

Several logistics and agricultural growth corridors have been constructed in Africa, including the Southern Agricultural Growth Corridor of Tanzania (SAGCOT); the Beira Agricultural Growth Corridor (BAGC) and the Nacala Development Corridor in Mozambique; and the Lamu Port, South Sudan, Ethiopia Transport Corridor (LAPSSET) based in Kenya. Agriculture was more central to the original design of SAGCOT and BAGC than the Nacala and LAPSSET corridors. However, there is little evaluation or evidence of their impact, especially on agriculture. Despite being scaled down in scope, BAGC was more inclusive of smallholder farmers by providing irrigation infrastructure for medium- and small-scale rice cultivation and horticulture. It also distributed funds to 675 horticulture farmers and 250 rice farmers for the purchase of seeds, fertilizers, tractors, plows and animal traction. The Maputo Development Corridor was more successful. It includes a toll road from Pretoria to the port at Maputo (see section on financing below), the port, and a railway line from Ressano Garcia – all of which were upgraded and rehabilitated over 10 years. The corridor is one of the most successful regional integration programs in southern Africa.[125] The overall renovation program for the Maputo Development Corridor stimulated trade, allowing Mozambican producers to access South African markets and the region's producers to access global markets through the port. The volume of goods crossing between the two countries grew exponentially from 29,000 tons in 1997 to 2.25 million tons in 2007 – creating new employment opportunities. The main products being hauled to the port include sugar, maize and fruit. Trade also shifted to higher value-added sectors, such as chemicals and machinery.[126,127,128]

It is essential when formulating corridors – particularly those that bundle logistics and agricultural production – that efforts be made to identify mutually acceptable compromises, that strong planning and governance frameworks be in place, and financial models designed for long-term returns (i.e., "patient" capital), particularly for the first-mile infrastructure such as farm roads and irrigation connections.[129,130] Moreover, to ensure that smallhholder farmers benefit equally from corridors, additional opportunities and support – such as upgrading feeder-roads and storage facilities – must be provided alongside large infrastructure developments.

The development of rail and rural roads expedites the adoption of productivity-enhancing technologies (fertilizers, seeds, irrigation, and mechanization),[131,132] facilitates greater crop diversification[133] and a transition from subsistence to commercial agriculture,[134] and facilitates access to services such as finance and extension. Lower rural transport costs can raise farmgate prices, reduce postharvest losses, increase farmer incomes, and help reduce the price of food in urban areas.[135] However, a lack of rural feeder roads can add as much as US$2 per ton-kilometer to the cost of produce.[136] In Kenya, for example, where the transport of onions by foot, motorcycle, or animal cart costs 16 to 30 times more per ton-km than transport by truck, low quality "first mile" road infrastructure – impassable during the rainy season – means that trucks are unable to access farms.[137] However, access for trucks may only be necessary and financially viable from aggregation points or for high-value products travelling a relatively long distance, rather than directly from the farmgate of smallholder farms that produce only small amounts of staples. Good transport connectivity, especially of roads, can also encourage greater diversification of livelihoods into non-agricultural sectors,[138] create further opportunities for employment along food and livestock value chains, and lead to a growth in local GDP.[139]

Despite significant progress in the provision of rural roads over the past 10 years, only one in three rural Africans has access to an all-season road, severely hindering agricultural production and further isolating remote communities.[140] Distance from roads also has a negative impact on the quality of diets, particularly among remote and isolated communities. A study in Ethiopia showed that households in remote areas were more likely to have less diverse diets. Worse, children in those communities consumed less diversified diets than adults, exacerbating potential long-term health impacts.[141]

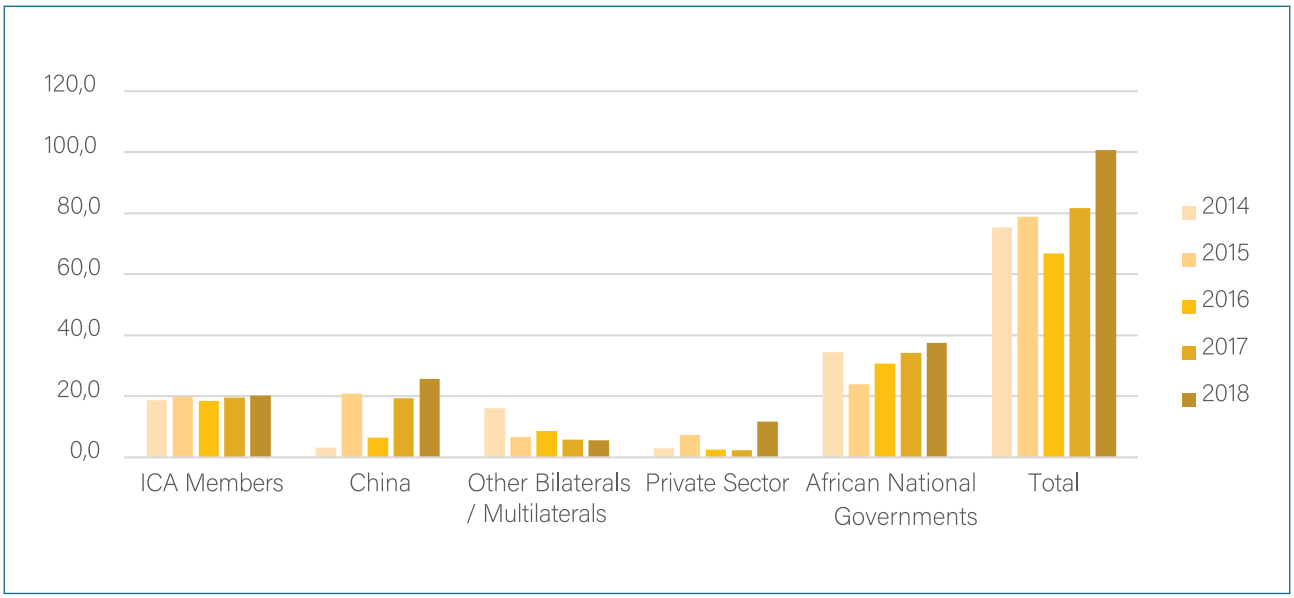
While roads offer more flexibility than railways, some African transit corridors are conducive to freight transport. Railways provide high-capacity freight corridors and have contributed toward the development of rural areas in several African countries, including Ethiopia, Kenya, Mozambique, Nigeria, and Tanzania.[142,143] Railways are also indispensable tools to foster economic development and take full advantage of the continent's natural wealth. Rail transport often offers a more cost-efficient transport option for bulky and agricultural products.[144] For example, the cost of transporting freight on the Ethio-Djibouti railway ranged from US$0.03–0.04 per ton-km, whereas the cost of road transport ranged from US$0.08–0.10 per ton-km.[145] Consequently, agricultural inputs and outputs constituted about 40 percent of rail freight traffic in Ethiopia. This included about 50,000 tons of coffee and vegetables in exports and imports of about 5,000 tons of fertilizer.[146] Equally, the Tanzania-Zambia Railway (TAZARA) is a key conduit for all kinds of bulk imports from all over the world, including fertilizers and other critical inputs for the agricultural farmlands of the DRC, Malawi, Tanzania, and Zambia.[147]

Although Africa's aviation sector remains severely underdeveloped and utilized, especially for regional trade, some promising developments demonstrate its potential in increasing trade, and in driving greater integration with global value chains. These include rising cargo capacity (South Africa, Ethiopia and Kenya), greater participation by regional low-cost operators, and the implementation of e-freight and paperless cargo systems to fast-track the transfer and movement of cargo through airports. The most advantageous characteristic of air transport in the context of agriculture is speed. When transporting perishable products such as horticulture and cut flowers, moving them rapidly from producer to consumer is vital. Africa is the second largest supplier of cut flowers to Europe, after European producers. All African flowers – from Ethiopia, Kenya, South Africa, Tanzania and Uganda – are shipped by air, often via Nairobi.[148] Strengthening these air links has enabled UK-based retailers to bypass Dutch flower auction houses and establish their own supply chain networks with producers in Africa.[149] Nevertheless, there are still significant gaps in institutional and regulatory frameworks, as well as physical infrastructure, that must be addressed in order to optimize the use of aviation for regional agricultural trade in Africa. It is expected that the signing of an agreement among 23 states to co-operate in a Single African Air Transport Market (SAATM) in January 2018 and the establishment of the AfCFTA will significantly improve the continent's aviation supply chains.[150]

5.1.1 Financing transport infrastructure

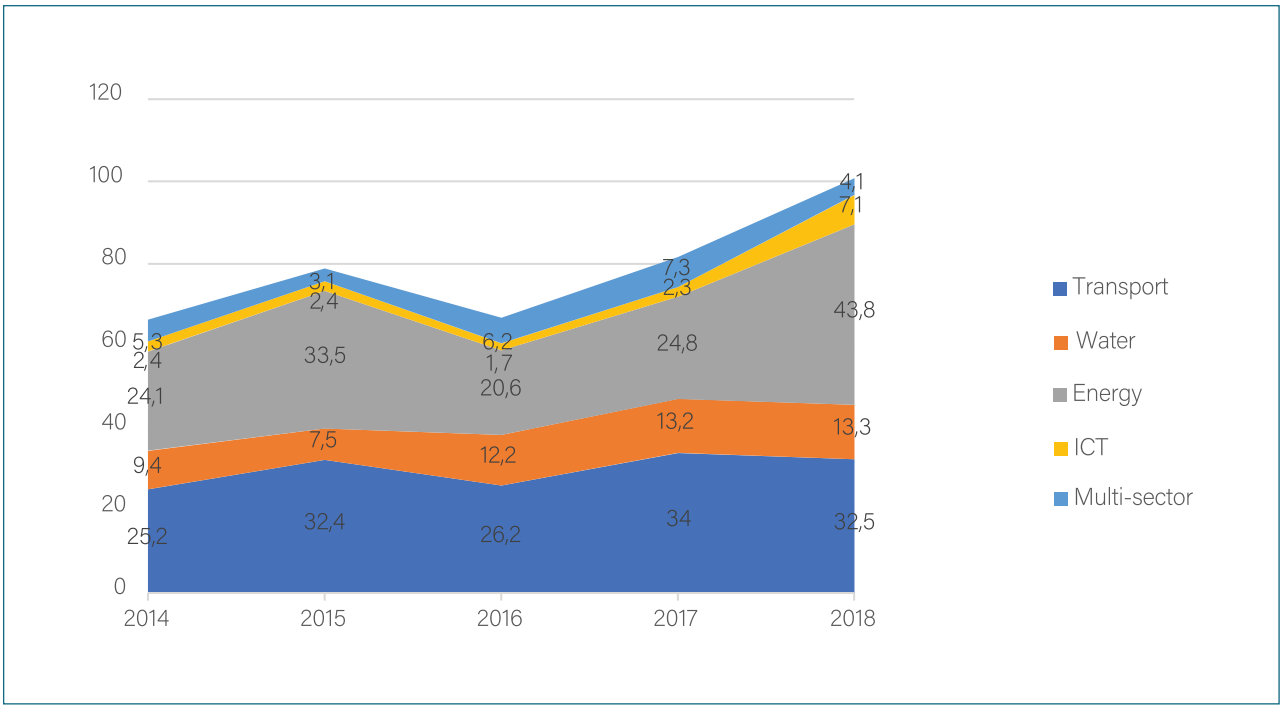
Despite the importance of infrastructure to realizing key development goals, Africa continues to suffer from a large infrastructure gap that threatens the achievement of social and economic development goals. According to the African Development Bank (AfDB), an annual deficit of US$108 billion undermines the roll-out of infrastructure projects across the continent.[151] Yet, following a hiatus, investment in infrastructure development in Africa has taken off again over the last decade, breaching the US$100 billion mark for the first time in 2018.[152] This investment is underpinned by new sources and innovative models of financing, designed to enhance returns on investment and reduce the risks involved. As development funding and international investments in African infrastructure projects tend to be proportional to domestic GDP, it is likely that this source will shrink, at least temporarily, as a result of COVID-19-induced economic downturns.

Figure 3: Infrastructure Commitment Trends in Africa by Source ($bn), 2014-2018



Source: Created by authors using data from The Infrastructure Consortium of Africa (2018), p4.

Figure 4: Commitment Trends by Sector ($bn), 2014-2018



Source : Adapted from The Infrastructure Consortium of Africa (2018), p10.

National commitments were the largest source of financing for infrastructure development in 2018. Debt financing through state-owned banks, equity stakes in projects, and upfront capital grants saw national government spending (of 48 countries) rise from US$24 billion in 2014 to US$37.5 billion in 2018. Over half of these commitments were directed to the transport sector. Commitments from China (US$25.7 billion) and members of the Infrastructure Consortium of Africa† further boosted investments in SSA's infrastructure. These included nearly US$8 billion in commitments from the World Bank Group, and over US$4.5 billion from AfDB. Moreover, between 2005 and 2015, OECD-DAC commitments also rose to more than US$4 billion per year.[153] Of these, in 2018, the AfDB approved funds of US$27 million (approximately 61 percent of total cost) for the tarring of over 200 kilometers of the "cotton road," building two toll/weighing stations, and developing over 150 kilometers of feeder roads – all of which

† Members of the ICA include the G20 countries, World Bank Group, African Development Bank, European Commission, European Investment Bank, and Development Bank of South Africa.

serve Benin's three main cotton producing regions.[154] In 2018, stand-alone private sector financing was also at the highest level since 2014, amounting to US$11.8 billion. At the same time, in the decade preceding 2015, private investments in SSA's infrastructure grew by 9.5 percent on average – almost twice the 4.5 percent growth rate of GDP.[155]

Despite the need for large-scale investments in transport infrastructure, commitments to this sector have tapered off over the last few years. In contrast, investments in energy have risen significantly, driven by commitments to large a hydropower project in Nigeria funded by a loan from China, and a coal project in Egypt. Although still small, commitments to the telecommunications sector have also grown, more than half of which came from the private sector.[156]

Public-private partnerships (PPPs) are increasingly deployed to finance infrastructure projects in developing countries. PPPs leverage resources, skills and efficiencies from the private sector, multilateral development institutions, banks, and development finance institutions, while government participation reduces risk. PPPs offer an effective way to design, build, finance, operate and maintain (new) infrastructure.[157] For example, in Mozambique, a PPP was successfully deployed in 1997 to upgrade, rehabilitate and operate, for a period of 30 years, a toll road from Maputo to Pretoria. The PPP allowed commercial risk to be shared among a wide range of investors, raised as 20 percent equity (of which three companies provided ZAR 331 million [US$70 million]) and 80 percent debt from, among others, South Africa's four major banks and the Development Bank of Southern Africa. Finally, the debt and some equity were guaranteed jointly by the governments of Mozambique and South Africa – resulting in the biggest project finance deal in southern Africa at the time.[158] **The use of PPPs as a means of financing cross-border and intra regional trade infrastructure, for example through a (regional) trade facilitation fund, would therefore expedite the progress in removing physical barriers to trade**.

In Uganda, the AfDB has partnered with the private sector to finance the renovation of the Kampala–Jinja highway. The financing model is innovative, composed of 50 percent "viability gap funding" and 50 percent private capital. Although it will operate as a limited-access toll expressway, the project is expected to benefit both imports and exports to and from the country – 90 percent of which are carried on this single route.[159]

Although countries like Morocco and Botswana have opted for a public approach to their railway sectors, founded on robust technical capacities and attractive business environments, PPPs can also play a role in the expansion and operation of rail projects in Africa. For rail PPPs to thrive, the financial and contractual responsibilities on rail infrastructure, rolling stock, and operations must be split such that they harness the capacity of each investor appropriately, and ensure that users benefit from private sector participation. For example, outsourcing of non-core activities such as maintenance and ticketing to private partners, exploiting the commercial property value of stations, and leasing rolling stock all provide alternative models for maximizing returns on investments. These in turn require a strong institutional environment. In addition, sophisticated financial markets would allow greater diversity in investors and products. For example, international financial institutions and multilateral banks can offer a wide spectrum of products, such as risk management products, project bonds, loans, multilateral guarantees, and political risk insurance, that can support railway development.[160]

Additional sources of financing for transport can include pension funds and specific asset classes dedicated to impact investors and sovereign wealth funds. Given the long-term commitment required for infrastructure development, pension funds can – with suitable governance, regulation, and instruments to manage the risks – take on a greater role in transforming Africa's infrastructure landscape.[161] It is also critical that projects be bankable in order to attract the desired upfront investment and ensure long-term sustainability. Bankability requires both the skills and knowledge to develop and present well-rounded projects, and must also be founded upon a holistic policy environment that offers comprehensive long-term guidance on related policy priorities. In other words, the bankability of projects relies both on the immediate project, and on linked and indirect policy interventions such as irrigation, energy provision, and telecommunications (see below).

5.2 Productive infrastructure: energy, irrigation and telecommunications

In conjunction with investments in transport infrastructure, the provision of productive infrastructure for energy, irrigation and telecommunications will enable farmers and countries to maximize the benefits from enhanced agricultural trade. Access to energy, water (through irrigation), and digital technologies can transform productivity and outputs across all segments of food value chains to meet growing demand created by vibrant trade.[162] At the same time, energy, water and telecommunications have a more direct role to play in facilitating trade, as discussed below.

5.2.1 Energy for agricultural trade

One of the largest energy costs in the food system is associated with the transport and distribution of agricultural products. The so-called "first mile" (the distance from farm to the collection point) often represents only 0.4 to 10 percent of the logistics chain length, but 20 to 37 percent of the transport cost for

high-value crops such as French beans, bananas, and potatoes.[163] Ensuring that producing regions are well-connected to market hubs and that transport service providers operate unhindered by bureaucratic and exploitative barriers (see Box 14) would generate greater profits for producers and foster greater trade overall.

The use of energy in agricultural trade is not limited to transport. Most businesses in SSA cite the lack of energy access as a major obstacle to their growth and development, particularly in the food sector. About 29 percent of food-sector firms considered the lack of electricity a constraint to investment, compared to just 15 percent of businesses in other economic sectors.[164] The lack of reliable and affordable energy greatly reduces the ability of agriculture value chain actors to trade at their optimum. For instance, without continuous refrigeration, fresh produce – including meat and dairy – loses value and spoils. This is particularly challenging for small, informal and mobile traders who are unable to access or afford grid electricity regularly. In addition, regular blackouts and brownouts disrupt value addition activities such as milling and processing or force operators to opt for more expensive and polluting generators. The high cost of energy in Senegal, equivalent to up to 60 percent of operational costs, severely impacts the profitability of mini-dairies, which use diesel for generators or butane for pasteurizing.[165] Street food sellers in Rwanda, Senegal and South Africa find that the use of modern appliances (matched with modern energy services) increases the attractiveness of their business as they improve the sanitary conditions under which food is cooked, thereby drawing more customers. In other words, access to modern energy services is directly correlated to the level of formalization.[166] Finally, for women traders at border posts, simply adding lighting infrastructure provides much-needed safety and enables them to continue trading for longer hours. Therefore, to facilitate trade among all food value chain actors, regardless of their size or mode of trading, the availability of reliable and affordable energy is critical. But, when designing energy solutions for traders along the whole agricultural value chain, it is essential that these actors be consulted and involved as much as possible to ensure that the solutions serve their needs appropriately.

5.2.2 Water infrastructure for trade and irrigation

Africa is seeing a surge of interest in irrigation among small-scale farmers as climate change brings more erratic weather. At the same time, a growing population across the continent demands a more reliable and continuous supply of food. Investments in the distribution networks for irrigation equipment and in maintenance facilities are urgently needed for smallholder farmers in remote areas to be able to harness the opportunities provided by greater agricultural trade.[167]

Apart from water's importance in production, it also plays a huge role in value addition activities such as food processing and transformation. While production of food and livestock consumes greater amounts of water, water required for processing during the operation of equipment such as boilers and cooling towers, and for cleaning purposes, must be of higher quality so that it does not pose any health risks. It is important to note that water demand for processing varies by product. For instance, a study in Rwanda showed that the production of maize flour consumes 1.7–2.0 m^3 of water per ton of output, meat production at abattoirs consumes 5.0 m^3 per ton, and breweries require 4.0 to 4.5 m^3 per ton of final product. Although water use for these products is below global benchmarks, sugar production in Rwanda consumes as much as 29 m^3 of water for 1 m^3 of output, significantly higher than the recommended best practice of 25 m^3 for 1 m^3 of output.[168] As food value chains advance toward greater value addition and processing to satisfy urban and trade-enhanced demand, it is essential that the relevant water infrastructure be in place, efficiency measures be introduced and maintained, and polluting impacts minimized. Safeguarding the quality of water used in processing strengthens the marketability of products.

In addition to providing water for agricultural production and processing, Africa's rivers are sources of food and energy and provide transport routes. For example, the Gambia River is the primary transport route for Gambia's main cash crop, groundnuts.[169] The Nile River, which sustains millions of farmers along its banks, is also a trading route, albeit of declining importance. For South Sudan, the Nile was a vital route to transport 4,500 tons of locally sourced humanitarian food aid in a cost-effective manner.[170] Similarly, the Congo River provides livelihoods for millions and is sometimes the only navigable link to major cities to ferry iron rods, cement, and food products.[171] But despite the vast networks of rivers and waterways that crisscross the continent, they are used very little for trade. In comparison, around 60 percent of US agricultural exports reach their port destinations via 12,000 miles of major rivers and their tributaries.[172] On the Senegal River for example, although large irrigation projects have transformed rice production, the use of the river for navigation and trade among the three countries in its watershed – Senegal, Mauritania and Mali – is minimal. Yet, when a cost-benefit analysis was conducted for construction of the Manantali and Diama reservoirs on the Senegal river, more than half of the economic benefits were estimated to be from navigation. Bearing in mind that the Senegal River is almost entirely navigable, investments in the appropriate infrastructure, technology and institutions to harness

this potential would release significant returns.[173] In Nigeria too, river ports could yield significant benefits for economic growth, especially if the institutional and business operating framework is aligned.[174] Importantly, coordinating the roles of various authorities and ministries that supervise inland waterways across Africa, such as the Ministries of Transport, Agriculture, Irrigation and Water, and Tourism, could transform the use of Africa's rivers for agricultural trade.

5.2.3 Telecommunications and technology adoption for greater agricultural trade

New digital technologies and services are already having considerable impact on how food is being produced, processed, marketed, traded and consumed across the continent. How African countries position themselves to harness and deploy digital technologies will also determine the future competitiveness of African agriculture and its contribution to African economies. Central to this will be the availability of the foundational infrastructure, such as access to electricity, network coverage, and connectivity. Forty percent of the population in SSA did not have access to the internet at all in 2018, and only 21 percent actively used the internet.[175] Furthermore, the type and speed of internet connection available in SSA is lagging behind. In 2018, 60 percent of coverage was on 2G, 36 percent on 3G, and just a small fraction – 4 percent – was covered by 4G. In comparison, Latin America's coverage is 43 percent 3G coverage and 23 percent 4G, while coverage in the Asia-Pacific region is 25 percent 3G and 34 percent 4G.[176] Slow internet speed can hamper productivity and business growth and limits the ability of users to access particular internet-based services and websites. Moreover, mobile phone ownership in SSA was 75 percent in 2017, while smartphone ownership was just 34 percent, albeit up from 20 percent in 2014.[177] And although the rate of smartphone adoption is likely to double by 2025, affordability of handsets is a major limitation for smartphone ownership, especially in rural areas.[178] There are, however, signs of progress across the continent: countries like Kenya have moved toward creating services to facilitate more inclusive infrastructure for the population. Senegal has set a target of generating 10 percent of its GDP from the digital economy by 2025. Rwanda has rolled out 4G and fiber connectivity to deliver online e-government and other services across the country.[179]

Technologies and modern information and communications technologies (ICTs) increasingly play an important role in trade facilitation. In their simplest use, ICTs enable the adoption and use of electronic data and documents rather than paper-based transactions. As the volume and diversity of shipments grow, ICTs become increasingly critical to maintain trade competitiveness and reduce costs while addressing relevant control and logistical challenges.[180] In Nigeria, AFEX Commodities Exchange Limited has designed an electronic warehousing system that is both tradeable on the Exchange as well as used by farmers as collateral to access finance. Established through a public-private partnership with the Federal Ministry of Agriculture and Rural Development (FMARD), AFEX Commodities Exchange had traded 48 billion tons of grain by 2016, of which 85 percent was maize, reflecting approximately 0.5 percent of Nigerian production. Other products traded included sorghum, millet, soybeans, peanuts, cowpeas, ginger and chili.[181,182]

In addition, digital technologies instantly reduce the cost of transport and logistics in obtaining market information and provide access to new buyers and markets. ICTs are also being deployed to improve traceability and compliance with quality and safety standards.

Box 5: *Livestock identification and traceability systems*

Livestock identification and traceability systems (LITS) can enhance livestock production and trade through improved surveillance, management of infectious diseases, and control of livestock movement. Animal identification and traceability can further increase animal health and food safety. While traditional methods use hot-iron livestock branding, digital technologies use radio frequency identification (RFID) or microchips to track animals. RFID technology, which is inserted into each animal's ear or rumen, can be scanned by handheld readers. A unique identification number on each tag records a full history of the meat's production, distribution, processing and sale, as well as the health of the animal. While there are recent trials on the northern Tanzania–Narok–Nairobi trade route, only a few African countries (Botswana, Namibia, and South Africa) already use the new LITS technology successfully and export chilled and frozen beef to the European Union. The Namibian Livestock Identification and Traceability System (NamLITS) also helped to minimize the impact of a severe outbreak of foot-and-mouth disease in 2015/16. Using digital technologies, animal technicians were able to accurately track the movement of cattle and detect the exact radius of contamination and possible contamination points to prevent further spread. Strict monitoring and controls minimized the impact of the outbreak, and previously quarantined areas were allowed to export again.[183]

Over 2014–2016, the Revenue Authorities of Kenya, Uganda and Rwanda together introduced an electronic cargo tracking system to enable real-time monitoring of cargo from the point of loading to that of discharge. The system uses a combination of GPS, GPRS and RFiD (radio frequency identity) tags, monitored by a central system, to prevent theft and dumping of goods in transit between the partner countries. Importantly, this technology also expedites clearance of cargo as it passes through checkpoints and optimizes trucking services. There are also fewer opportunities for bribery and corruption to take place. Additional benefits include higher tax revenues collected from goods that were previously stolen or diverted, and greater clarity on the status of trade as data collection and processing improves.[184,185]

In Senegal too, a digital platform (GANIDE) has handled customs clearance since 2010. The system is integrated with an electronic payment system as well as a "risk analysis and treatment of goods system," which processes the transit of goods based on the nature of the product, its origin, the identity of the importer, and other criteria. The introduction of GANIDE has facilitated the transition to paperless procedures, speeding up the clearance process from 8 to 2 days.[186]

5.2.4 Bundled solutions and financing

The provision of advanced telecommunication infrastructure is essential for developing countries to achieve trade integration within the global economy. Rural communities need to be better connected to electricity, reliable telecommunications, and internet services, including fiber optic, to bridge the digital divide. Energy and telecommunications connectivity and equal access to digital solutions, including the Internet of Things (IoT), can help farmers to boost their productivity, mitigate risks such as changing and extreme weather, and reach new, larger and wealthier markets.[187] Combining small-scale bottom-up power generation and supply with Africa's mushrooming digital market, small-scale, micro, and nano solutions offer tailored services for the specific needs of farmers.[188] Considering complementarity among several types of infrastructure, for instance transport and communication or telecommunications and energy, jointly developed (macro and micro) infrastructure can have a greater impact.[189] For example, solar-powered charging points with WiFi connectivity are becoming more common across Africa. Examples include the Shiriki Hubs[190] in Rwanda and Microsoft's Mawingu project in Kenya.[191]

Several unique models are being applied in providing this infrastructure to cater to local contexts. Traditional grid extension programs have successfully connected millions of citizens in countries such as Côte d'Ivoire and Tunisia as a result of sustained government commitments, effective prioritization and planning, lower construction and operation costs, sustainable financing, and maintaining a customer focus.[192] On the other hand, Ghana took a more bottom-up approach, responding to grid extensions based on demand from local communities.[193] A hybrid model adopted by Ethiopia and Zambia allows for a combination of centralized and off-grid and mini-grid initiatives to connect remote communities. For digital technologies, Kenya has focused on creating an enabling environment for the private sector to thrive, while Ghana's interventions focused on ensuring gender inclusivity, and Rwanda has invested in the creation of ICT centers to provide farmers with relevant information. While Mali and Kenya have focused on developing large-scale irrigation schemes, Niger and Ethiopia have prioritized small- and medium-scale systems; Morocco is noted for promoting efficiency in water use.

5.2.5 Shared infrastructure for regional integration

Productive infrastructure can also contribute toward greater regional integration. For instance, irrigation from transboundary watersheds such as the Zambezi, benefits from collaborative governance and joint infrastructure development, thereby bolstering regional co-operation.[194] This approach can be applied to other large watersheds too, for example the Congo and Niger, which are shared by 11 countries each, and the Nile, which is shared by 10 countries. Similarly, regional power pools – aggregated markets for energy generation and distribution – enable sharing of power across national boundaries. Power pools foster a diversification of energy sources, collaborative innovation, and greater efficiency and stability, making systems more robust overall. They also allow governments to achieve economies of scale in meeting domestic energy needs. Studies have found that by increasing regional energy integration in SSA, countries could reduce capital spending by more than US$40 billion and save nearly US$10 billion in costs for consumers per year by 2040.[195] Several power pools have already been established on the continent, including the East Africa Power Pool, Southern Africa Power Pool, Central Africa Power Pool, and Electricity Committee of the Maghreb (COMELEC) and the West Africa Power Pool (WAPP). Yet none is actively trading significant amounts of energy: even within the most active power pool, the South African Power Pool, only 7.5 percent of power crosses borders, while the Central and East African Power Pools trade less than 1 percent each.[196] Finally, ensuring digital safety has driven the development of regional regulations for data privacy and use, including the Southern African Development Community (SADC) Model Law on Data Protection; Supplementary Act A/SA.1/01/10 on Personal Data Protection Within ECOWAS; and the East African Community's Framework for Cyberlaws.[197]

With appropriate national and shared regional infrastructure in place, trade within Africa's RECs can be further strengthened by upgrading and streamlining systems, processes and policies.

5.3 Trade logistics and facilitation

To maximize the benefits accrued from investments in hard infrastructure, it is critical that the supporting logistics systems be efficient and effective. This in turn expedites the movement of goods across and within borders and ensures that food is delivered on time and in a cost-effective manner. The combination of a sound infrastructure network and better trade facilitation can contribute to food security through a reductionin transaction costs, lower relative prices of imported foods, the availability of consistent, efficient, and timely food supplies and, for exporters from African countries, higher income and profits. Furthermore, improved trade logistics can also increase the diversity of food products available in markets.

However, the use of nontariff barriers (NTBs) continues to constrain the smooth flow of goods and services. Fundamentally, NTBs reflect legal, regulatory, and institutional frameworks governing trade in each country. NTBs manifest in various forms, including cumbersome customs procedures, roadblocks, import quotas, subsidies, customs delays, and technical barriers such as sanitary and phytosanitary (SPS) rules. Studies have shown that SPS measures raise the price of African foodstuffs by 14 percent. Rice and other cereals, poultry meat, and edible oils are particularly vulnerable to high ad valorem charges. When disaggregated, SPS measures have been shown to raise the cost of living by 9 percent for poor households in Kenya.[198]

Thus, NTBs add both a financial and a time cost to trade and welfare:

- Moving an export container to the closest port takes an average of 116 days from Bangui, 75 days from Chad, and 71 days from Ouagadougou, compared with 16 days from Port Louis, Mauritius. Each 10 percent increase in export time reduces exports of time-sensitive agricultural products by about 3.5 percent.[199,200]
- At the border between Kenya and Uganda, roadblocks and other unforeseen circumstances can add over 20 hours to transit times. In addition, a lack of capacity and procedural clarity at weighbridges (truck scales) increases the overall transit time between Mombasa and Kampala by just over 7 hours – adding approximately 0.16 to 0.86 percent to the price of the product. Bribes can cost a further US$35 per trip.[201]
- In East Africa, NTBs added US$0.09–0.15 per ton-km to the cost of maize and US$0.17–0.31 per ton-km to the cost of beef in Kenya, Uganda and Tanzania, largely as a result of the time and financial costs incurred at roadblocks.[202]
- In West Africa, it is reported that there were 50 checkpoints along the 1,000-km trade corridor between Ouagadougou and Accra in 2015, with average illegal payments at these checkpoints amounting to around US$141 per every 100 kilometers in Burkina Faso and US$30 in Ghana.[203] For the livestock being transported on these routes, these delays and costs not only make them more expensive for the end consumer, they also cause stress and mortality, thus reducing the overall quality of the meat.

While processed food and other bulk products are less time sensitive, fresh fruits and vegetables as well as cut flowers require prompt transit as they are subject to rapid deterioration. This problem is further intensified where products are a part of large, specialized global value chains.[204] At the Kazungula border between Zambia and Botswana, refrigerated trucks ferrying frozen fish, poultry and other food products to the DRC were often delayed for up to five days, forcing them to re-route via Namibia, adding to the overall cost of transit, and losing potential income for Botswana.[205] Hence, NTBs prevent cost-effective and timely delivery of diverse and nutritious food items from both regional and global markets. On the other hand, for every day inland travel time is reduced, exports grow by 7 percent.[206]

> "Studies have shown that for each extra day that an import consignment is delayed due to NTBs, there is a corresponding increase in the population facing undernourishment of 0.013 percent, the food deficit gap widens by 0.014 percent, and dietary energy supply adequacy declines by 0.003 percent."

Box 6: *ePhyto*

Sanitary and phytosanitary (SPS) measures are essential to safeguard human, animal, and plant health and biodiversity by certifying that food products travelling across borders are free of pests and diseases and safe to import.[207] SPS measures can be imposed in a variety of formats, such as traceability, compliance and alignment with regulations in the importing country, registration, and labelling. For example, Botswana's beef industry has invested heavily in tracking technology, infrastructure, and institutions to meet the disease prevention and detection standards required by its most valuable trading partner, Europe. While SPS measures cannot be used to overtly block trade, countries are allowed to adopt regulations provided there is a scientific justification. This loophole is persistently exploited, unjustly impacting smallholder producers, causing food waste, and creating significant costs for African countries in compliance systems.[208] To reduce these costs, systematic inspections can be replaced with risk profiling, bureaucracy can be simplified and consolidated, and licensed private sector labs can be deployed when testing is unavoidable.[209] In July 2019, the International Plant Protection Convention introduced a digital solution known as ePhyto to streamline the storage and exchange of phytosanitary certificates. The ePhyto system creates uniform certificates that can be stored centrally and transmitted quickly, accurately and among multiple countries, eliminating the use of nonstandardized paper certificates. This solution prevents fraud, increases transparency, and improves border processes as certificates can be shared well in advance of a commodity's arrival at the post. It also eliminates the need for bilateral agreements for countries to trade their products.[210] In March 2020, Morocco became the first African country to utilize the ePhyto system in an exchange between its Office National de Sécurité Sanitaire des Produits Alimentaires (ONSSA) and the United States' Department of Agriculture. To support this, ONSSA has developed a new online portal through which companies can apply for phytosanitary certificates, making the process faster and simpler.[211]

Not only do NTBs affect trade, they also impact production, welfare – including nutrition and health – and GDP. In Tanzania, a single unit increase in transaction costs associated with NTBs such as roadblocks, weighbridges, police checkpoints, custom procedures and council permits reduced the production of maize by 16 percent. These impacts are more acute in surplus regions such as Songwe, where NTBs caused smallholder farmers to incur losses in taking their produce to market. Moreover, these additional costs lead to a reduction in income and profitability for farmers and depress further investments in the crop.[212] Further downstream, Tanzania's rice exporters can lose up to 20 percent of gross profit due to NTBs, while those selling within Tanzania lose up to 5 percent of gross profit.[213] **Studies have shown that for each extra day that an *import* consignment is delayed due to NTBs, there is a corresponding increase in the population facing undernourishment of 0.013 percent, the food deficit gap widens by 0.014 percent, and dietary energy supply adequacy declines by 0.003 percent.** Consequently, poor trade facilitation can significantly exacerbate food insecurity in Africa, whereby a 1 percent increase in the trade "disfacilitation" index can cause a 1.6 percent increase in the prevalence of undernourishment, a 0.36 percent decline in the adequacy of dietary energy supply, and a 1.8 percent increase in the food deficit.[214]

On the other hand, appropriate use of SPS and other quality standards can unlock access to new markets, upgrade production processes, and create jobs. According to the World Bank (2003), "by participating in international standards, and implementing acceptable international rules, it is estimated that Africa could gain up to US$1 billion a year from higher exports of nuts, dried fruits and other agricultural commodities."[215]

Box 7: *Unlocking trucking services*

Reliable and affordable trucking services are essential for the agriculture sector to maximize the benefits from well-developed road infrastructure. However, Africa's trucking sector is riddled with regulatory and operational complexities that can limit its competitiveness or diversity. While regulations are necessary to reduce pollution and traffic congestion and to increase safety, measures such as excessive licensing and limits on the number of trucks per company can unduly restrict competition, degrade the quality of service provided, and increase costs. Yet, competition is a critical precondition for the development of transport services and accessibility for the poorest.[216] Smart regulations balance licensing and safety requirements with quality and cost to ensure that the transport of agricultural products can be optimized and completed in a time- and cost-friendly manner. Importantly, ensuring that regulations across borders are aligned is essential to support seamless regional trade.[217] In East Africa, the cost of trucking on the Mombasa–Kampala route dropped by 30 to 40 percent between 2013 and 2017, due to increased competition in the sector combined with a fall in oil prices.[218]

In sum, the intranational transfer of goods and resources within many African countries incurs exceptionally high trade costs due to the prevalence of extensive NTBs. Hence, reducing the burden of NTBs on production and trade would require broader reforms of these tools. In addition, as the World Bank (2012) outlines, short-term measures would include, "simplifying and harmonizing laws and regulations, rationalizing clearance and inspection regimes through the adoption of risk-based approaches, reducing administrative barriers, making broader use of information and communication technology to support transparency and fewer human interactions."[219, 220]

In 2015, the East African Community adopted the EAC Elimination of NTBs Act to facilitate and enhance the trade of goods within the region. It is estimated that transport-related NTBs reduce the region's trade potential and cost the EAC economies between 1.7 percent (Rwanda) and 2.8 percent (Kenya) of GDP. The Act aimed to support removal of the conditions and restrictions that complicate or limit trade and the creation of an enabling environment to support the movement of goods. Since implementation of the Actin 2017 in tandem with the Customs Union and Common Market regulations, the region has made progress in eradicating obstacles along key trade corridors. For example, Burundi abolished the entry fee for vehicles from partner states; the ports of Mombasa and Dar es Salaam implemented national single window systems; and a mutual recognition of quality marks by partner states were all implemented through the EAC systems. There has also been a reduction in the number of weighbridges in Kenya, Uganda and Tanzania, although problems with calibration persist.[221]

Box 8: *One stop border posts*

The success of cross-border trade depends on efficient logistical systems as well as competent customs and other border agencies. In Africa, administrative failures and ensuing corruption pose major obstacles across all modes of transport.[222] To overcome the challenges presented by inefficient systems at borders, several countries are fast-tracking the creation of one stop border posts (OSBPs). OSBPs streamline the legal and institutional framework, facilities, and associated administrative procedures to ease the crossing of goods, people and vehicles from one country to its neighbor. Rather than enforcing checks and bureaucracy on both sides of a border, an OSBP offers a single facility – usually at the point of entry – where goods undergo necessary controls. Africa's first OSBP, the Chirundu Border Post, was created at the Zambia–Zimbabwe border in 2009. Since its establishment, crossing time has fallen from 4–5 days to as little as a few hours up to 3 days.[223] In addition, the number of trucks crossing increased from 260 per day in 2010 to 470 in 2011. Faster processing has also resulted in a reduction of administration costs and in the potential for illicit activities while transport operators wait to complete the procedures.[224] More OSBPs have since been created across East and West Africa, connecting Kenya and Tanzania (Namanga), Benin and Niger (Malanville), Rwanda and Tanzania (Rusumo), and Togo and Burkina Faso (Cinkansé). Furthermore, the EAC adopted an OSBP Bill in May 2010, setting the legal framework to establish 15 OSBPs within its (five) member states. It is estimated that by 2014/15, trucks plying the Mombasa–Kampala route were able to complete a return journey in 4 days down from 18 days previously, while the time taken for commodities to clear customs fell from 3 days to 12 hours.[225] Although OSBPs have eased trade across several borders in Africa, their design and operationalization require infrastructural, institutional, administrative and political changes between the two neighboring countries and among the staff, communities, and users. As a result, their implementation and impact has been inconsistent.[226]

5.4 Human capital: technical, business management and enterprise skills development

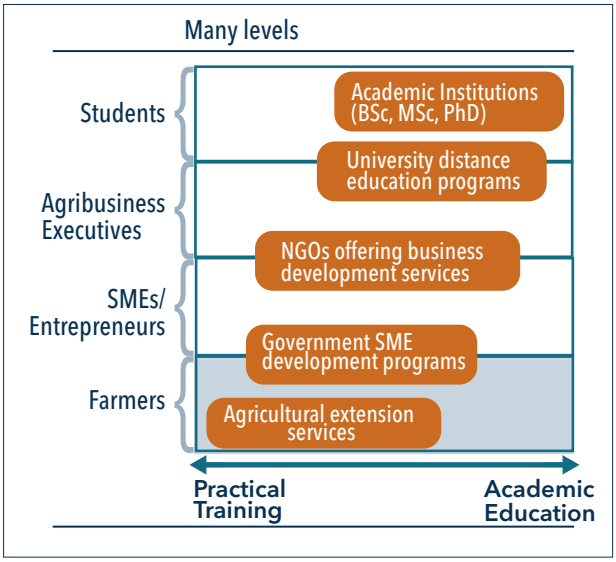
Every year, between 10 to 12 million young Africans enter the job market, vying for one of only about 3.1 million jobs created.[227] Although agriculture and informal sectors are already the largest employers on the continent, employment creation in these sectors is likely to accelerate as demand for food across the continent rises.[228] In addition, as mechanization and digitalization expand across food systems, there are new opportunities for agriculture-related job creation beyond the farm. At the same time, increased trade intensifies agriculture value chains and stakeholders maximize returns as actors move along the segments of value chains.[229]

The future of food systems will almost certainly be knowledge and technology intensive and will require a wider range of professional, technical and artisanal skills. For example, both crop and livestock sectors will necessitate more agribusiness and farm management skills, as well as financial literacy. In addition, as processes are increasingly mechanized, engineers, electricians, plumbers, operators and technicians will also see greater demand. For food transformation, food technology, quality management, and greater attention to nourishment will be combined with greater innovation and R&D skills and knowledge to meet the demand from growing urban middle classes for more nutritious and varied food. Finally, harnessing the potential of greater regional and international trade opportunities will require professionals trained in marketing strategies,

including packaging, labelling, communications, and compliance.[230] Importantly, policymakers and senior trade specialists will require advanced negotiation and legal skills to ensure effective participation in international fora and agreements.

African governments will therefore need to invest in education and skills development in order to build a workforce that can successfully enter the labor market, innovate, enhance productivity and seize trade opportunities in more sophisticated products and markets. As digital technologies and data applications proliferate across the food system, accelerated in part by the COVID-19 crisis, digital skills and data analytics will form the core of future employment in Africa's agriculture sector. There is an urgent need to equip people with the skills necessary to gain meaningful employment in the short term, as well as empower them to develop the skills and competencies that are essential for jobs in the medium and longer term.

Figure 5 Agribusiness training requirements at different levels



Source: Adapted from Mabaya, Christy and Bandama, 2010. Mabaya, E.T., Christy, R.D., Bandama, M., 2010. The Current State of Agribusiness Education and Training in Africa. Presented at the Joint 3rd African Association of Agricultural Economists (AAAE) and 48th Agricultural Economists Association of South Africa (AEASA) Conference, AgEcon Search, Cape Town, pp. 1–21. https://doi.org/10.22004/ag.econ.96433

Addressing the skills gap must be a priority across government policy, with close collaboration and input from business and educational institutions. Continued investment in quality rural education will ensure that the future farm workforce is prepared for changing approaches. Agricultural extension programs (in person and digital) are essential to build capacity where traditional education systems have been less successful. In addition, carefully designed and well-compensated farmer-to-farmer programs can also expand the reach of traditional public-sector extension approaches.[231]

While tailor-made "up-skilling" programs, enterprise-based training, and apprenticeships will address short-term gaps, earnest efforts will be required to update and upgrade higher learning programs and institutions.[232] In an effort to facilitate employment for young Africans in agriculture and agribusinesses, several governments and development partners have introduced innovative training programs on the continent. These programs often combine capacity enhancement with financial support for startups and mentorship to steer successful youth-run agribusiness projects.[233]

For example, in Morocco, strengthening technical education and vocational training in agriculture is a key element of the Plan Maroc Vert (PMV). A network of 52 institutions with 24 different curricula has been set up across the country to improve the uptake and efficiency of agribusinesses. Eight secondary schools prepare young people for the baccalaureate degree in agricultural sciences, and 30 middle schools in rural areas are dedicated to training young people in agricultural technology. The trainings seek to improve the overall understanding of the various employment and business opportunities within the agriculture sector in Morocco and to encourage young people to pursue studies or training in this area. All agricultural vocational training institutions provide apprenticeships to improve the employability of rural youth who are not in school but have basic literacy skills. Each year, 10,000 young people receive training in 20 professions.[234]

In Ethiopia and Uganda, Danish experts partnered with African academic institutions to provide short-term training on greenhouse management, fertigation (fertilization and irrigation), postharvest handling, and pest control for employees in floriculture industries. During this process, obsolete curricula had to be replaced by new processes and problem-solving approaches, especially using digital technologies.[235]

"African governments will therefore need to invest in education and skills development in order to build a workforce that can successfully enter the labor market, innovate, enhance productivity and seize trade opportunities in more sophisticated products and markets."

The Universities, Research and Business in Agricultural Innovation (UniBRAIN) initiative links universities, research institutions, the private sector, farmer organizations, and agricultural extension services to conceive and scale-up innovations in sustainable agriculture. UniBRAIN is a pan-African initiative developed by the Forum for Agricultural Research in Africa (FARA) in partnership with the African Technology Policy Studies Network (ATPS), African Network for Agriculture, Agroforestry and Natural Resources Education (ANAFE), and the Pan African Agribusiness and Agro Industry Consortium (PanAAC). Among other activities, the initiative works to improve tertiary education and graduate training in entrepreneurial and business skills in five African countries (Ghana, Kenya, Mali, Uganda and Zambia) to produce solutions-oriented graduates, strong decision-makers and successful entrepreneurs. In Zambia, the initiative has matched jobs with the required skills, established strong partnerships among universities and private sector actors, championed business startups, and scaled up agribusiness activities in Zambia.[236]

At the Songhai Centers in West Africa, farmers, young people and women receive training on crop production, animal husbandry, food processing, machinery design, or renewable energy production to facilitate their participation in sustainable agribusinesses. In addition, they are also trained in managerial and organizational skills, innovation, and financial management to become self-reliant entrepreneurs engaged in meaningful careers. First established in 1985, there are now 6 Songhai centers in Benin, 11 in Nigeria, and one each in the Republic of Congo, Liberia, and Sierra Leone. The Centers are themselves productive enterprises, growing and transforming their own food (crops and animal-sourced foods), generating their own fertilizers and energy, and recycling water where possible. Therefore, they provide practical, hands-on training in establishing sustainable agribusinesses. In Benin alone, the Centers employ over 1,500 people and train 500 individuals every year.[237] Out of 300 graduates annually, 70 percent had succeeded in engaging in agribusiness activities when assessed after five years.[238]

5.5 Exploiting the untapped potential of informal trade

In Africa's cities, informal food trade offers a vital lifeline to maintain food security, especially for the urban poor. Not only does informal trade offer employment and income opportunities, it is also a key avenue to provide access to relatively cheap food. Despite supermarket expansion and the preference for imported and processed foods among the growing urban middle class, the urban poor continue to depend very heavily on informal markets and street vendors for their daily food.

5.5.1 The significance of informal agricultural trade

Most of the dairy products, fish and meat bought by the urban poor are from informal markets. In Kenya, Mali and Uganda, for example, 80 to 90 percent of raw milk is purchased from vendors or small-scale retailers, and a recent study has shown that 70 percent of urban households regularly buy their food from street vendors.[239] Informal food traders are more directly connected to local farmers, bars and shops, and hence contribute to the growth of the local communities.[240] **The informal market is also one of the biggest employers, accounting for 72 percent of non-agricultural employment in Africa.** It is therefore an important source of income for many and enables financial independence, especially for women.[241] In South Africa alone, the informal food sector is worth approximately R 360 billion (US$20 billion) a year.[242]

Despite the importance of informal markets, many African governments have had a difficult relationship with the sector. Many vendors and marketers operate in settings without access to electricity, clean water, or appropriate sanitation practices. This increases the risk of foodborne diseases and in turn contributes to micronutrient deficiencies. However, crackdowns and harassment of street vendors, as seen in some countries, do not necessarily improve or change those conditions.[243] As the COVID-19 pandemic has unfolded, informal food trade has been a salvation for those who have lost their sources of income elsewhere. But informal market vendors and traders have also borne the brunt of lockdowns instituted as a response to COVID-19, raising the risk of growing malnutrition as cities and countries emerge from the pandemic.[244]

Not all informal trade is illegal, however. It is simply trade that takes place without a formal record in official trade statistics or procedures. Indeed, it can be argued that its pervasiveness is justified by the persistence of punitive tax rates inefficient tax administration, and complicated business registration, licensing and inspection requirements. Furthermore, limited access to finance and technology combined with low skill and education levels as well as inadequate infrastructure all contribute to the continued prevalence of informal trade in Africa.[245]

With appropriate support systems, including institutions, planning and infrastructure, informal food traders can thrive and transition into formality over the long term. In addition, simplifying regulations, providing training on food hygiene, enhancing access to finance, and addressing entrepreneurship skills can enable a more beneficial integration of informal food traders into value chains.[246] For example, in Durban, South Africa, a central transport hub, Warwick Junction, was renovated and transformed by the local municipality in close consultation with local informal and street traders. The resulting market space is carefully designed to create a safe,

less congested, and healthy environment for the traders, about 60 percent of whom are women. Providing sheltered spaces reduces spoilage for fruit and vegetable sellers, while well-designed cooking spaces alongside a food court ensure that meat products can be consumed fast and safely.[247] In Kenya, informal traders received training on the basics of milk hygiene and simple quality tests, thereby qualifying them for milk vending licenses.[248] Similarly, in Nigeria, butchers associations received training from the International Livestock Research Institute to improve hygiene, earning them a certificate for public display.[249] Moreover, the role of engaging local governments and authorities in overseeing the sector is central to market siting, building trust and transparency among vendors and the regulatory system, collecting revenue, and providing the necessary frameworks for ensuring that the informal food trade system is inclusive and profitable.[250,251,252] For example, in Zambia, the 2007 Markets and Bus Station Act forms the basis for representatives of local authorities, vendors, and consumers to jointly manage the operations at markets and bus stations. The resulting improvement in transparency and accountability can lead to greater earnings from stall fees and other taxes, which can be directed toward the improvement of infrastructure in those spaces.[253]

5.5.2 Informal cross-border trade

Informal cross-border trade (ICBT) is trade that takes place at border posts or markets close to the border but does not go through formal processes such as customs. ICBT is a key avenue for imports and exports, particularly in staples such as beans, rice and maize, as well as livestock. If properly harnessed, ICBT can contribute to economic growth, job creation, and poverty alleviation across SSA. ICBT is also a concrete step toward integration of economies, even if considered "invisible."

For traders at border posts, processing and clearance fees pose as an expensive barrier, affecting small traders most intensely. The World Bank estimates that small informal traders pay around 62 percent more per ton to transfer goods across borders than large traders. However, if they switched to small formal trading, they would pay double the current informal rate.[254] Several countries are working toward the elimination of discriminatory practices that affect informal cross-border traders.

Simplified trade regimes (STR) established in the ECOWAS region have streamlined the rules and procedures for small traders and provide tax incentives for trading within the formal sector. For example, STRs allow vehicles to move freely between countries by mutually recognizing insurance across the region. Other countries like Ghana, Liberia, Rwanda, and Uganda are more progressive: they provide small traders with market information, promote direct engagement with informal cross-border trader representatives, link traders directly with international markets, and include their needs in policy and legislative design.[255]

In 2014, the governments of Malawi and Zambia along with the World Bank, borders agencies, trader associations and civil society organizations piloted the Charter for Cross-Border Traders to address the challenges of ICBT, including high duties, burdensome bureaucracy, corruption, harassment and discrimination. The Charter outlines a basic set of rights and obligations for traders and border officials to improve the treatment of traders at the borders and introduce mechanisms for reporting abuses, all toward gradual formalization of this trade. In addition to intense training and awareness raising, the Charter promotes the use of modern technology, including a mobile-based SMS mechanism to report abuses and enhance transparency.[256,257]

Box 9: *Informal cross-border trade, nontariff barriers, and women*

ICBT offers a vital source of employment and livelihoods for the poor, especially for low-income and low-skilled women, and plays an important role in women's empowerment. Women account for about 60 percent of informal traders at border checkpoints in West and Central Africa, and 70 percent in SADC.[258] Between Malawi and Zambia, three in four informal cross-border traders are women, while in the Great Lakes region, women can account for 80 percent of traders.[259, 260]

The prevalence of NTBs at border posts therefore puts a heavier burden on women than men. In addition, women experience NTBs differently than men. Women face discrimination, harassment and extortion in order to continue trading across border posts. Lengthy and complicated procedures and documentation (in foreign languages) provide easy avenues for unfair and illegal practices to persist, including sexual harassment, violence, imprisonment, and confiscation of goods. This often affects illiterate women more intensely. With a gender-based specialization in the goods that women trade in, such as rice, wheat flour and beverages, they are often faced with higher taxes, unclear rules of origin or misinterpretation of rules of origin, and non-uniform SPS standards.[261]

The elimination of NTBs is therefore likely to generate several benefits for female informal cross-border traders as it would minimize the conditions that can be manipulated against women. For instance, the provision of ID cards can improve both safety and access to markets and services, as has been done for 8,000 women in EAC.[262] In COMESA and EAC, product lists are displayed at border posts and available at the offices of the cross-border traders' associations and customs both at the border and in the main towns nearby.[263] In Zimbabwe, associations were established to increase 960 women traders' knowledge on safe border crossing, strengthen their financial capacity and economic security, and provide health services related to reproductive health and HIV/AIDS.[264] In Rwanda, border management and the design and maintenance of border infrastructure were improved and customs officials were provided with gender-sensitivity training to address discrimination against women. Several other interventions have been trialled, including awareness-raising and information sharing with women cross-border traders as well as building the capacity of these traders and supporting their collective voice.[265]

For African countries, agriculture continues to play a central role in employment and income generation, as well as achieving food security and nutrition goals. Agricultural trade is a key element to ensure that the sector is profitable and delivers widespread socioeconomic benefits for African economies. There are several opportunities for countries to facilitate trade across borders in Africa, thereby contributing toward greater regional integration. Three key pillars form the foundation upon which trade on the African continent can flourish: physical ("hard") infrastructure, "'soft infrastructure" such as robust systems, institutions and policies, and human capital to harness the opportunities. While investments in all three pillars are critical, in a post-COVID-19 regime, more effort will be required to leverage new sources of funding – whether (patient) private capital, pension funds, or sovereign wealth funds – and in developing innovative instruments to do so. Projects will have to be scaled up, bundled, and simultaneously disaggregated where possible to ensure that multiple benefits can be accrued concurrently and to involve a diverse range of stakeholders. This in turn will require appropriate technical capacity to design and deliver "investible" projects.

However, the potential role of the private sector in growing regional trade is not limited to providing financial resources. Creative approaches would also engage the private sector in workforce training and education, promoting higher product standards, and leveraging its regional distribution networks to advance regional integration programs. Moreover, harnessing the skills of the entrepreneurial digital technology sector – most of which is in the private sector – could fast-track the development of solutions in trade logistics and facilitation. Hence, it is essential that the private sector be comprehensively and credibly engaged throughout the processes of trade facilitation and regional integration, and that a safe and supportive environment allow the sector to reach its potential.[266]

Fundamentally, however, the overarching framework for investments in infrastructure and human capital requires a clear vision, sustained by strong political will and translated through strong policy signals, and an appropriate enabling environment. Regulatory oversight is also key to ensuring that those on the margins of agricultural trade ecosystems, such as women, informal workers and informal cross-border traders, are protected and receive the services they require to continue trading.

6. Continental and global policy frameworks

There are a variety of policy frameworks in place at both continental and global levels that govern trade agreements and relationships in order to facilitate intraregional, intra-African, and international agricultural trade. The importance of trade in meeting countries' growth and development targets is anchored within the Sustainable Development Goals (SDGs) and, crucially, the agreement establishing the AfCFTA.

6.1 The African Continental Free Trade Area

The most significant development in continental frameworks for trade in Africa has the been the establishment of the AfCFTA in 2019. The AfCFTA is a flagship program of the First Ten Year Implementation Plan of the African Union Agenda 2063 to bolster regional and continental economic integration and accelerate Africa's economic growth and development. The AfCFTA envisages a 52 percent boost in intra-African trade simply by eliminating import duties. Moreover, if NTBs are eliminated too, this trade could be doubled.[267] Most importantly, the AfCFTA will strengthen Africa's common voice and claim to policy space in global trade negotiations.

The idea of the AfCFTA was first conceived in 2012 to achieve Aspiration 2 of the African Union Agenda 2063: *An integrated continent, politically united and based on the ideals of Pan-Africanism and the vision of Africa's Renaissance*, which aims to achieve a threefold increase of intra-African trade, especially in agricultural value-added products, by 2023. Phase 1 of negotiations began in 2015 and culminated with the presentation of the Agreement Establishing the African Continental Free Trade Area in 2018 in Kigali. The Agreement was signed by 44 of 55 Member States,[268] with a further 10 Member States signing it in the following 24 months. The Agreement entered into force on May 30, 2019. As of December 2020, Eritrea is the only Member State that has not signed the Agreement. Phase 2 of the negotiations, expected to be completed by January 2021, cover investment, competition policy, and intellectual property rights. Trading under the AfCFTA Agreement was due to commence on July 1, 2020, but this was postponed to January 1, 2021, due to the COVID-19 pandemic.

Box 10: *Action Plan for Boosting Intra-African Trade*

The Action Plan for Boosting Intra-African Trade (BIAT) is a sister initiative to the AfCFTA, and a precursor to the creation of a pan-African free trade area. Endorsed in 2012, BIAT is a continental framework formulated to address the development of key sectors such as agriculture, trade, transport, energy and mining. The BIAT Action Plan aims to deepen Africa's market integration and significantly increase the volume of trade among African countries, "from the current levels of about 10–13% to 25% or more"[269] by 2022. It addresses seven priority areas (both supply-side and demand-side), also known as clusters, to kick-start intra-African trade to drive regional integration, structural transformation, and economic development. These are: trade policy, trade facilitation, productive capacity, trade-related infrastructure, trade finance, trade information, and factor market integration.[270] Each cluster details an indicative list of programs and activities that need to be implemented in the short to long term at the national, regional and continental levels.[271] BIAT was reaffirmed within the Malabo Declaration in June 2014: Heads of State and Government of the AU committed to tripling intra-African trade in agricultural commodities and services by 2025 by fast-tracking the establishment of a Continental Free Trade Area; facilitating greater investments in markets and trade infrastructure; and strengthening platforms for multi-actor interactions.[272]

The AfCFTA goes beyond the remit of conventional free trade agreements. The main objectives of the AfCFTA are to create a single continental market for goods and services, with free movement of people and investments. The Agreement is thus more akin to a comprehensive partnership agreement and provides a prelude to the establishment of a continental customs union. When fully implemented, the AfCFTA will unite 1.3 billion people and have an estimated combined GDP of US$2.5 trillion. The 54-country trading forms one of the largest free trade areas established since the WTO.[273]

An autonomous secretariat – funded by the African Union (AU) and based in Ghana – is responsible for the administration and coordination of the Agreement's implementation. The Secretariat is selected by the Assembly, which is the highest decision-making authority in the AU. The Assembly will also provide strategic guidance to the AfCFTA. A Council of Ministers, comprised of ministerial-level representation nominated by Member States, will ensure effective implementation and enforcement of the Agreement, and make recommendations to the Assembly for authoritative adoption of the Agreement. It reports to the Assembly through the Executive Council of the AU. A Committee of Senior Trade Officials will implement the decisions of the Council of Ministers, with technical support from relevant committees.[274]

The success of the AfCFTA will be founded on overcoming the challenges to improving Africa's trade and investment environment, including removal of nontariff barriers, standards harmonization, customs co-operation, and trade facilitation.[275] Specifically, the Agreement outlines a pathway to progressively eliminate tariffs on 90 percent of tariff lines within five years. Tariffs on 7 percent of the remaining lines can be removed over the long term (up to 10 years), while the remaining 3 percent of tariff lines can be maintained, provided that the value of trade under these does not exceed 10 percent of a country's total trade with Africa.[276]

Implementation of the AfCFTA is expected to result in several positive outcomes. Over the long run, GDP is expected to grow by 0.66 to 0.97 percent and employment by 0.82 to 1.17 percent. Real wages are also projected to increase by 0.54 to 0.8 percent.[277] Simply removing tariffs on goods is expected to increase the value of intra-African trade in 2040 by 15 to 20 percent, equivalent to US$50–70 billion.[278] Intra-African trade in agricultural products, especially sugar, vegetables, fruits, nuts, beverages and dairy products is expected to benefit from improvements in customs procedures and logistics, and projected to rise by 20 to 30 percent by 2040.[279] Beyond agriculture, access to a larger market will boost productivity and efficiency gains, and create jobs for the continent's youth. At the same time, the AfCFTA will also promote more sustainable and inclusive trade, as countries diversify away from extractive commodities toward more value-added products, which are less vulnerable to external price fluctuations. Hence, the establishment of the AfCFTA will help to meet the SDG targets by 2030 and consolidate progress toward the African Union's Agenda 2063.

To maximize the opportunities and mitigate the potential challenges arising from the establishment of the AfCFTA, Member States are advised to develop an AfCFTA Strategy to complement their broader trade policies. In turn, countries will also have to update domestic policies to ensure that their citizens can actively take advantage of the AfCFTA. For example, citizens will require appropriate skills and capacity building to engage in skill-intensive manufacturing industries.[280] In addition, participation in economic diversification will be underpinned by innovation, so policies to encourage and protect innovation (intellectual property rights) will need to be updated and implemented.[281]

Implementation of the AfCFTA will also be supported by two complementary initiatives: the African Trade Observatory (ATO) and an online mechanism for reporting and monitoring, of elimination of nontrade

barriers (NTBs). The ATO, launched in July 2019, will provide up-to-date and reliable data and information on trade and trade-related measures to inform decision-making and to monitor the impact of implementation of the AfCFTA.[282] The online mechanism (https://tradebarriers.africa/), established in January 2019, allows traders and businesses moving goods across the continent to instantly report the challenges they encounter, such as quotas, excessive import documents, or unjustified packaging requirements.[283]

6.2 Sustainable Development Goals

The importance of trade in achieving the UN 2030 Development Agenda is evident in the widespread application of trade-related targets in the SDGs; trade-related indicators appear both as "outcome" targets and as "means of implementation" targets, which support the delivery of outcome targets. In the context of agriculture, food security, and nutrition, trade is at the heart of SDG 17 "Strengthen the means of implementation and revitalize the global partnership for sustainable development," which endorses an equitable and transparent multilateral trading system and an increase in exports and calls for greater access to markets for all least-developed countries. Similarly, SDGs 2b and 2c also advocate for reduced barriers and distortions in world agricultural markets and call for interventions in food commodity markets that would limit extreme food price volatility. In addition, SDG 14 on Life Below Water denounces the misuse of subsidies that lead to illegal, unreported and unregulated fishing. Trade-related targets are also included in SDG 3: Good Health and Wellbeing, SDG 8: Decent Work and Economic Growth, SDG 10: Reduced Inequalities, and SDG 15: Life on Land.

To achieve the ambitions and vision of the SDGs and the AfCFTA, governments will have to craft appropriate national-level interventions to facilitate trade, for example by eliminating barriers and investing (in partnership with the private sector) in the necessary infrastructure – both "hard," such as transport, energy and telecommunications, and "soft," such as skills development and access to finance.

7. Findings from the REC-level analysis

As shown in the previous chapters, improving intraregional agricultural trade is crucial for African economic growth and development, and has been recognized by the African Union (AU) through the establishment of the African Continental Free Trade Area (AfCFTA). RECs in particular play a decisive role in driving Africa's regional and continental integration process forward by facilitating regional economic integration among their member states. As such, RECs are the pillars of a successful AfCFTA. By investing in them and strengthening their performance, RECs offer immense opportunities for African producers and consumers beyond their own borders. Eight RECs are officially recognized by the AU:

- Arab Maghreb Union (UMA)
- Common Market for Eastern and Southern Africa (COMESA)
- Community of Sahel–Saharan States (CEN-SAD)
- East African Community (EAC)
- Economic Community of Central African States (ECCAS)
- Economic Community of West African States (ECOWAS)
- Intergovernmental Authority on Development (IGAD)
- Southern African Development Community (SADC)

The largest share of agricultural trade across Africa is channeled through the RECs. Several among them have shown strong commitment to improving the flow of agricultural trade within their regions. Their experience in terms of regional policy and institutional innovations and programmatic interventions provide important lessons for other RECs, countries, and the AfCFTA as they seek to increase agricultural trade and progress toward continental and international development goals. Three RECs were chosen for case studies – SADC, ECOWAS and COMESA – based on their high levels of intraregional agricultural exports – at 84, 79 and 66 percent‡ respectively. These three RECs also play an important coordinating role for Comprehensive Africa Agriculture Development Programme (CAADP) implementation and NEPAD. The RECs are the operational arms of the AU in the regions, and within the CAADP framework are mandated to facilitate the country and regional processes at an early stage. Several RECs have stood center stage in designing the CAADP country roundtable processes and have been instrumental in moving the CAADP agenda forward. The capacity of the RECs for CAADP facilitation varies from region to region. While some RECs have developed specialized knowledge and are driving the CAADP agenda, others have put less emphasis on CAADP. Developing the capacity of the RECs to be effective facilitators is an ongoing process.[284]

Box 11: *The Tripartite Free Trade Area (TFTA) Agreement*

The Tripartite Free Trade Area (TFTA) Agreement, which was signed in Sharm El Sheikh, Egypt, in 2015 – just five days before the African Union launched negotiations for the AfCFTA – has been regarded as a major milestone in Africa's efforts to overcome the challenges of small and fragmented markets and overlapping REC memberships. The TFTA consolidates the markets of three RECs – COMESA, EAC and SADC – into a free trade area. At the time of writing, 22 countries have signed the TFTA Agreement, while 8 have both signed and ratified it. When fully implemented, it would create Africa's largest free trade area. In 2016, the TFTA area had a total population of 683 million people and a combined GDP of US$1.2 trillion (in 2015 US$). This represents more than half (54.3 percent) of Africa's total GDP, and 58 percent of Africa's population.[285, 286] The TFTA thus constitutes a very significant market and collectively places the bloc as the 14th largest economy in the world. The TFTA also aims to tackle nontariff barriers to trade and foresees a diversification of agricultural production as well as increased processing capacities among member states. However, GDP within the bloc is not evenly distributed – indeed, the two largest economies (Egypt and South Africa) together account for more than half of the TFTA's total GDP. The seven largest economies (South Africa, Egypt, Angola, Sudan, Ethiopia, Kenya and Tanzania) together account for more than 80 percent of the GDP of the total area, the remaining 19 countries accounting for just 20 percent.[287]

While some studies suggest that the TFTA will play a catalyzing role in the implementation of the AfCFTA, there have also been calls for a roadmap for the phasing-out regional FTAs, such as the TFTA, consolidation of the AfCFTA, and clarifying the relationship between AfCFTA and customs unions at the REC level as well as the pathway for AfCFTA itself to evolve into a continental customs union.[288] However, it is yet to be seen how future trade relationships, at both intraregional and intra-African levels, will be governed and regulated.

‡ The figures are from the 2020 Africa Agriculture Trade Monitor report, which considered a number of RECs for its analysis.

CASE STUDY

Common Market for Eastern and Southern Africa (COMESA)

The Common Market for Eastern and Southern Africa (COMESA) is the largest regional economic community (REC) in Africa by membership, land area, and population. It encompasses 21 member states,§ stretching the full length of the continent, covering over 11.8 million km^2, and including at least 583 million people. It is the second largest player in intracontinental agricultural trade, after the Southern African Development Community (SADC), contributing on average 34 percent of total intra-African agricultural exports by value in 2016–2018, compared with SADC's 45 percent. COMESA was initially established as the Preferential Trade Area for Eastern and Southern Africa (PTA) in 1981. Fourteen of the 21 countries form a free trade area (since 2000), working toward the elimination of tariffs and other barriers to trade. This has led, in part, to an increase in intra-COMESA trade, which rose from US$3.1 billion in 2000 to US$19.3 billion by the end of 2015.[289]

Unlike SADC and ECOWAS, COMESA's trade is not dominated by a single anchor member state, but rather two countries lead trade in COMESA, presenting a more balanced relationship. Egypt and Kenya are the primary regional agricultural exporters and importers, together totaling 44 percent of intraregional export supply and 37 percent of import demand in 2016–2018. Uganda, Zambia and Ethiopia follow closely behind as the next top exporters.

Table 3. Top 5 intra-COMESA exporters and importers of agricultural products in 2016–2018

	Exporters			Importers	
Country	Contribution (%)	Rank	Country	Contribution (%)	Rank
Egypt	23.5	1	Kenya	19.0	1
Kenya	21.0	2	Egypt	18.0	2
Uganda	18.7	3	DR Congo	9.5	3
Zambia	11.5	4	Sudan	7.0	4
Ethiopia	1.7	5	Somalia	4.5	5
Total	76.4		Total	58.0	

Source: Authors' calculations based on 2020 AATM database.

Remarkably, intra-COMESA agricultural exports almost tripled between 2003 and 2018, growing at 7.3 percent per year on average, compared to intra-African agricultural exports that grew at 5.8 percent per year. Intraregional exports account for up to 66 percent of COMESA's intracontinental agricultural exports. Rising from US$1 billion in 2003, intra-COMESA agricultural trade peaked at nearly US$4.7 billion in 2013, falling to US$3.1 billion in 2018.[290] The three largest items of agricultural trade are black tea, sucrose and live animals – which together account for over 20 percent of intraregional trade.[291] The predominance of intraregional trade over extraregional trade reflects the relatively easy access that agricultural exporters have to their regional markets. This can be attributed to COMESA's achievements in setting up institutions and regional integration arrangements for trade facilitation.

Institutional innovations

COMESA has developed a comprehensive, intergovernmental institutional structure designed to drive its integration agenda forward and overcome specific challenges that face a region of such diversity. The highest authority for decision-making is the Authority of the Heads of State and Government (the Authority), whose decisions are by consensus and binding. A Council of Ministers (the Council) comprised of ministers assigned by the member states reports directly to the Authority. The Council is responsible for policymaking, monitoring and reviewing the functioning of the REC. It has the power to pass binding regulations, directives and decisions, by consensus (or in some cases by two-thirds majority). A Secretariat advances policy and programmatic implementation with input from five technical divisions: trade and customs, information and networking, infrastructure and logistics, agriculture and industry, and gender and social affairs.

Agricultural trade addressed at cross-institutional levels

Stimulating agricultural trade in COMESA is a cross-institutional endeavor. While the trade and customs division is responsible for expediting economic integration by reducing trade barriers, the infrastructure and logistics division aims to expand physical connectivity, reduce the cost of doing business, and enhance competitiveness by improving the quality of ICT, energy and transport infrastructure across the region.

The agriculture and industry division within the Secretariat focuses specifically on the productivity and marketing of agricultural products in the region to drive inclusive industrialization, private sector development, and agricultural growth and transformation. To boost trade, the division supports harmonization and compliance with regional and international quality standards, as well as the sanitary and phytosanitary (SPS) requirements of trading partners through training programs across public

§ Member states include Burundi, Comoros, Democratic Republic of Congo, Djibouti, Eswatini, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Mauritius, Malawi, Rwanda, Sudan, Somalia, Seychelles, Tunisia, Uganda, Zambia, and Zimbabwe.

Common Market for Eastern and Southern Africa (COMESA)

and private sectors, resulting in a network of skilled plant and animal health professionals. In addition, the division seeks to address supply-side constraints by attracting investments to raise productivity and increase processing and value addition in both crop and livestock value chains, as well as promoting diversified industrial development.

Within the agriculture and industry division of the Secretariat, the Alliance for Commodity Trade in Eastern and Southern Africa (ACTESA) is a specialized agency focused on increasing COMESA's trade in commodities. ACTESA leads COMESA's efforts to increase staple food production and marketing by facilitating the availability of inputs, improving marketing for outputs, and increasing access to financial markets for smallholder farmers. In order to integrate smallholder farmers into domestic, regional and international markets, ACTESA advances harmonization of standards for inputs such as seeds and fertilizers, as well as quality outputs (primarily maize, beans, cassava, rice and livestock products[292]). ACTESA also expands market access for agricultural products by strengthening market services and facilities and stimulating private sector investments in knowledge, technology and capacity transfers to support farmers and suppliers. Finally, the Agency channels policies between the public and private sectors, acting as an information hub and facilitating and coordinating activities by partners at the national and regional levels, including mobilization of resources for staple food development.

Unlocking access to finance

To support the integration program, COMESA has established financial institutions to provide not just much-needed credit (the Trade and Development Bank), but also insurance for noncommercial risks (the African Trade Insurance Agency), re-insurance, to facilitate international payments (the Regional Payment and Settlement System), and to underpin competition in the region (the COMESA Competition Commission) – all of which have received very positive assessments from international ratings agencies.

The Eastern and Southern Africa Trade and Development Bank

Established in 1985 as the PTA Bank, the Eastern and Southern Africa Trade and Development Bank (TDB) is a multilateral, treaty-based development finance institution that aims to advance regional integration and sustainable development by providing trade finance and business advisory services, and investing in infrastructure. Over the years, the number and diversity of investors in the bank has grown, as has its portfolio of projects. Sovereign members from within the COMESA region, nonregional members including the People's Bank of China, and other institutional members (such as the African Development Bank) all contribute to the TDB and support the delivery of its overall goals. In 2018, TDB held assets worth over US$5.6 billion, and 25 percent of its loan disbursements went to the agribusiness sector and 14 percent to infrastructure. The remaining priority sectors include manufacturing and energy.[293] Since 2008, TDB has extended nearly US$12 million to the Tanganda Tea Company in Zimbabwe to finance mechanization, upgrading and crop diversification. [294] In addition, Consolidated Farming – a sugar mill in Zambia – has received over US$20 million since 2001, allowing for an expansion in production from 1,500 tons per day to 2,500 tons per day.[295]

African Trade Insurance Agency

Launched in 2001, the African Trade Insurance Agency (ATI) provides risk insurance for investors specifically to facilitate trade, investment, and other productive activities in Africa. Within its first decade of operations, ATI had supported over US$2.5 billion worth of trade and investments across the continent and secured an investment grade rating of "A" from Standard & Poor's. The comprehensive risk management tools made available by ATI reduce the costs of borrowing and boost investor confidence. Specifically, ATI offers trade credit insurance to protect against payment default risks, investment insurance to protect against political risk including trade embargoes, and political violence insurance to cover risks from conflict and terrorism. Among its beneficiaries are smallholder farmers seeking to export their produce,[296] as well as an international agribusiness that insured its rice supply to Côte d'Ivoire for US$8 million.[297] An MoU between India's Export Credit Guarantee Corporation (ECGC) and ATI in 2013 has contributed to a better enabling environment for Indian exports and investments in Africa's agriculture, agro-processing, and other sectors.[298]

COMESA Clearing House and the Regional Payment and Settlement System

The COMESA Clearing House (CCH) was established in 1993 through the COMESA Treaty to facilitate the settlement of trade and services payments using local currencies among member states. It was subsequently restructured to offer new services applicable to more liberalized financial markets. One of these services is the Regional Payment and Settlement System (REPSS). REPSS is a unique and innovative approach to expediting payments between regional members securely and in a cost- and time-efficient manner. Launched in 2009, the System directly links all the participating central banks so that they can send or

receive financial transactions on behalf of commercial banks in their respective countries. This results in greater competition among the banks, better financial services, and lower costs – all of which contribute to the expansion of trade among member countries. [299] Not only does REPSS facilitate the transfer and receipt of funds among member states, it also provides the same access for retail customers. For example, for individual A to make a payment to individual B in another COMESA member state, individual A presents a request for the cross-border payment to their local commercial bank. The local commercial bank then submits the equivalent payment to the country's central bank which, with COMESA-REPSS acting as a clearing house, processes and sends the funds to individual B's central bank. Individual B receives the payment as soon it has been transferred from the central bank to their commercial bank. In some instances, this process can be completed in one day.[300] Over the five years ending in January 2020, REPSS had recorded over US$138 million and nearly EUR 1 million (US$902,000) in transactions through the nine¶ participating central banks.[301] Although this is a fraction of the value of COMESA's intraregional trade, REPSS has the potential to play a vital role in stimulating agricultural trade in COMESA. If overlaid with digital and mobile-phone access, this tool can connect producers and traders across the region.

Regulating trade and implementation

The COMESA Competition Commission (CCC) is the first regional competition authority in Africa and the second in the world, after the European Competition Authority. Operationalized in 2013, the CCC is charged with enforcement of the COMESA Competition Regulations to ensure efficient operation of markets, prevent restrictive business practices, and enhance consumer welfare. For instance, in 2018, following a listeria outbreak caused by processed meat imported from South Africa, the CCC banned further imports from the company involved until it had resolved its quality and safety issues.[302] To meet its objectives, the CCC is established as an autonomous body with an international legal personality. Through the COMESA Treaty, the CCC has the legal capacity to operate within the territory of each member state, although its interventions are effectively restricted to cross-border trade between member states. However, since 2013, the competition regulations require that all cross-border transactions be notified to the Commission for approval. Thirteen commissioners nominated by member states report to the director of the CCC. While this may appear to create an additional layer of bureaucracy, the intended impact is rather to provide a "one-stop shop" for cross-border transactions, thereby easing the cost of doing business in REC. The COMESA regime also provides the only and most extensive network of national competition authorities in Africa.[303] Moreover, the Commission plays an advocacy role in handling complaints relating to anticompetitive business practices and other unfair business practices; and it has established a "fast-track" platform to deal with day-to-day complaints. Finally, the CCC also oversees mergers and acquisitions (M&A) within the region. Mergers represent one the most favored methods for investing in Africa. Hence, the rate of M&As taking place in all the COMESA member states is an indication of the attractiveness of investing in the Common Market. Over the period 2013–2019, over 20 agriculture sector M&As took place in the region, in addition to over 15 in food and beverages, and 5 in retail.[304,305]

Established in 1994, the COMESA Court of Justice (CCJ) is in charge of enforcing compliance with regional trade and economic commitments by the member states. In the case of a dispute between member states – for example, due to infringement of a regional agreement or failure to implement regional regulations – the matter is referred to the Court, which may impose sanctions. As yet, the CCJ has not ruled on any compliance or competition-related disputes or appeals, and infringements have not been sanctioned.

Leather and Leather Products Institute

Livestock and livestock products are key contributors to the economies of eastern and southern Africa.[306] However, few countries have a sophisticated leather industry, relying instead on exports of unprocessed skins and hides. To advance the region's leather value chain and industry, COMESA formed a specialized Leather and Leather Products Institute in 1990, rebranded as the Africa Leather and Leather Products Institute (ALLPI) in 2018. ALLPI's mission is to enhance the value addition, sustainability and competitiveness of leather producers through knowledge-sharing and innovation. In addition to offering training programs and environmental, health and safety advice, ALLPI also supports the development of clusters and service centers to build a downstream market for finished leather and stimulate intraregional trade. By 2015, LLPI contributed toward greater intraregional trade in leather products by supporting the formulation of leather industry strategies in nine member states, developing a curriculum for vocational training in Burundi, Kenya and Sudan, conducting training programs on leather footwear technology and pattern-making for SMEs, and training over 150 artisanal producers.[307] LLPI also partnered with the International Trade Center and COMESA to pilot

¶ DRC, Egypt, Kenya, Malawi, Mauritius, Rwanda, Eswatini, Uganda and Zambia.

Common Market for Eastern and Southern Africa (COMESA)

a comprehensive reform of Zimbabwe's leather sector. A participatory multistakeholder process in Zimbabwe led to the creation of a national sector strategy, a public–private platform to define priorities and identify potential challenges, and local SME clusters through which more established value chain actors could support SME growth. The success of this approach is being scaled out and can be adapted for other priority sectors that share a common interest among member states (see policy innovations section below).

Gender inclusivity

Women in business play an important role in advancing the regional integration agenda in COMESA. The Treaty recognizes women as key players in agriculture, industry and trade. Gender mainstreaming across COMESA's member states has therefore been commended, having set and surpassed targets higher than those outlined in the Millennium Development Goals (MDGs).[308] Created in 2009, the Gender and Social Affairs Division in the COMESA Secretariat champions COMESA's gender policy, gender mainstreaming, advocacy, and capacity building to achieve regional, continental and global commitments.

In addition, an institution connected to the COMESA governance system — the Federation of National Associations of Women in Business (FEMCOM) (previously the Federation of National Associations of Women in Business in Eastern and Southern Africa) — aspires to integrate women into trade and development activities in eastern and southern Africa.[309] FEMCOM is piloting cassava cluster programs in 10 COMESA countries to enhance the competitiveness of cassava micro, small, and medium-sized enterprises by building their capacity for integration in intraregional trade. The clusters offer training, resource mobilization, and investments in trading centers and additional facilities to foster women's involvement in cassava value-chain development. Of these, the Tangakona Commercial Village Cassava Cluster in Kenya's Busia County successfully scaled up production and quality of output with support from FEMCOM, COMESA and Farm Concern International. Between 2015 and 2019, the cluster's farmers registered their value-added products with the Kenya Bureau of Standards, thus meeting the required quality standards for national and regional markets. They also began supplying 10,000 tons of cassava per month to a processing company in Nairobi.[310]

Policy innovations

Agriculture is one of the main economic activities in COMESA, employing nearly 60 percent of its total workforce and contributing over 20 percent of total GDP.[311] As one of the AU's strategic RECs, COMESA is playing an increasingly important role in coordinating and facilitating support for member states' national implementation of CAADP. From 2008–2010, the COMESA Secretariat partnered with the Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN) to design a regional compact following a multistakeholder consultation process. The draft regional compact identified three priority areas for intervention: productivity along value chains, infrastructure and trade development corridors, and human capacity enhancement for all actors involved in food systems.[312]

A regional compact for COMESA

Since 2010, COMESA has been working with other development partners, including the International Food Policy Research Institute (IFPRI), to move the CAADP agenda from a simple framework document to an on-the-ground operation guided by high-quality, locally based research and evidence.[313] Notwithstanding a brief a halt in progress and a down-scaling of ambitions, COMESA signed a regional CAADP compact in November 2014. Its overarching goal is to contribute to regional food security and integration through better policy co-ordination, effective policy implementation, and budget support. The regional compact leverages the potential of COMESA to co-ordinate and facilitate strategic interventions that individual member countries cannot achieve on their own. For example, it enables COMESA to initiate programs that are transboundary in nature, such as enhancement of production and productivity of commodity value chains along the transport corridors that enable free flow of staples from surplus to deficit areas. In addition, the regional compact aims to boost agricultural trade by addressing nontariff barriers to agricultural trade, such as SPS measures, and to link smallholder farmers to regional markets.[314]

Driving CAADP implementation

COMESA has also been fundamental in driving forward the implementation of CAADP within member states, while coordinating regionwide investments through the regional CAADP compact. For instance, Kenya's ascension to the CAADP process in July 2010 was influenced greatly by COMESA. This in turn provided additional credibility to the launch of Kenya's own national agriculture policy.[315] In addition, COMESA mobilized technical, financial

Common Market for Eastern and Southern Africa (COMESA)

and organizational support to successfully establish the Strategic Analysis and Knowledge Support System (SAKSS) platform in Zimbabwe. The platform strengthens statistical, data and monitoring capacity for the country's agricultural sector.[316]

A solid Regional Agricultural Investment Plan

Finally, this process has culminated in the formulation of a Regional Agricultural Investment Plan (RAIP) covering the period 2018–2022. Formulated in partnership with the Food and Agriculture Organization of the United Nations (FAO), the RAIP is a pragmatic, instrument-based investment plan that identifies specific, targeted and costed interventions – the implementation of which is likely to have a concrete and constructive impact.[317]

Aligned with the priorities set out in the regional compact as outlined above, the RAIP also has three regional investment program areas (RIPAs):

- Production and productivity of commodity value chains within selected agricultural corridors
- Agricultural trade and markets
- Resilience, food and nutrition security

A fourth RIPA captures six cross-cutting issues for improving co-ordination and efficient implementation, including: gender and age, institutional capacity development, information and knowledge management, resource (financial and technical) mobilization, and effective sector co-ordination.

Each priority area is further disaggregated to investment/intervention areas, and specific tools and measures are identified to achieve defined outcomes. Within RIPA 2 on agricultural trade and markets, the RAIP presents five key intervention area, namely private sector participation, market information systems, infrastructure in corridors, regulatory environment, and capacity at SPS laboratories. These interventions are expected to contribute toward reducing barriers to agricultural trade and improving farmers' linkages to markets, particularly near corridors.

The Council and relevant technical committees are responsible for fiduciary oversight of the RAIP, while the day-to-day co-ordination of RAIP implementation resides within the Secretariat's Agriculture and Industry Division. Of a total budget of US$19 million for implementation of the RAIP at COMESA level, 30 percent is allocated to RIPA 2 (US$5.5 million plus a 5 percent contingency allowance), demonstrating the importance of agricultural trade in achieving regional food security and integration.[318]

A systemic approach to regional agricultural integration through MTSPs

In parallel to the CAADP processes, COMESA also publishes Medium Term Strategic Plans (MTSP) to drive its regional integration process, with a focus on diversifying and enhancing the competitiveness of agricultural production, industry (including agro-processing) and service sectors. Bolstering the systemic approach adopted by the REC, each MTSP presents key actions (programs) and targets for the three priority areas in the regional compact and the RAIP: increasing production and productivity along corridors and supporting agricultural trade by harmonizing technical, quality and SPS standards. For example, the MTSP covering the period 2011–2015 reinforced efforts to harmonize technical standards and SPS measures by setting targets for 14 member states to adopt and implement regional SPS measures by 2015, and for 19 countries to implement mutually recognized SPS certificates. It also aspires to implement regional programs to attract investment in R&D on agro-processing.[319]

Similarly, the MTSP covering 2016–2020 highlights SPS measures in order to maintain momentum in achieving trade-related objectives, with focus on supporting the implementation of regulatory reforms to advance mutual recognition and equivalence agreements for specific SPS measures and standards. In addition, the MTSP 2016–2020 calls for advancing the implementation of initiatives such as Yellow Card, One Stop Border Post (OSBP), and single customs transit bonds for COMESA (see programmatic interventions below) to facilitate greater regional agricultural trade. Agricultural productivity and agro-processing are also featured as key intervention areas in the 2016–2020 MTSP to enhance supply-side capacity and meet its industrialization objectives. Building on the four pillars in the COMESA Industrial Policy adopted in 2015 (see below), the MTSP emphasizes the importance of increasing investment in agriculture and agribusiness, as well as fostering public–private partnerships, to support value addition and cluster-led development.[320]

Emphasis on value addition

The COMESA Industrial Policy (2017–2026) aims to support the structural transformation of regional economies through sustainable and inclusive industrialization. Its specific targets are: increase value-added products and exports from 9 percent of GDP in 2015 to 29 percent by 2026; increase the share of manufacturing in GDP to at least 20 percent by 2026; and increase intraregional manufactured exports relative to total manufactured imports to

Common Market for Eastern and Southern Africa (COMESA)

the region from the current 7 percent to 20 percent by 2026.[321] To achieve these, the policy's approach has four pillars: value addition and value chains, growth poles, small and medium-sized enterprises (SMEs), and industrial linkages and industrial support services — all of which could enable firms to exploit economies of scale from markets accessible through the REC. The policy also targets eight priority sectors, including agro-processing, leather and leather products, and chemicals and agro-chemicals.[322]

Industrialization, especially within several of the priority sectors such as agro-processing and leather, has a broad appeal among COMESA member states, and aligns with their national goals. Providing financial and technical-capacity enhancement for sectors that are already prioritized at a national level offers a clear entry point for implementation of the regional policy. The success of targeted interventions within the leather value chain are a case in point. Moreover, growth and capacity building of SMEs and their integration into formal value chains is also a common objective of COMESA member states' industrial development strategies, creating potential for swift and effective implementation of the COMESA Industrial Policy.[323]

Studies have shown that as intra-COMESA trade increases, so does the likelihood of industrialization within those countries, unlike trade between COMESA member states and nonmembers. The relationship between trade and industrialization is mutually reinforcing. While industrialization is essential to supply growing agricultural trade within COMESA, industrialization also contributes to greater trade. Although slow, COMESA's programs to advance industrialization are bearing fruit and should continue. Drawing on external assistance through technology transfer would expedite the rate of industrialization and the transition into intermediate or high-value production. However, this requires a robust business environment for investments, as well as improved transport and corridor infrastructure.[324]

Private sector engagement

Another key institution of regional integration is the COMESA Business Council (CBC), which represents the interests of the private sector at a regional level. The CBC operates as a membership-based organization to actively promote business participation in regional integration, investment and global trade. CBC was established in 2005 to provide business support services and linkages, influence policy, and share market information and intelligence. It convenes sectoral and multisectoral dialogues to engage the public and private sectors on key constraints and challenges faced by businesses in the region.[325] Recommendations from these discussions and other engagement with the private sector is collated via 11 technical workgroups,** and then conveyed to the COMESA Council for adoption.

In addition to the services provided above, CBC has also implemented several projects to address trade-related challenges in the region. For example, with support from the African Development Bank, it has compiled a mapping and assessment report on potential agri-business and other industry partnerships along the transport corridors of eastern and southern Africa. The report demonstrates the potential of transport corridors to generate economies of scale within the agriculture sector. A key output of the project titled Towards Fostering Business and Trade within the Supply Chain Networks along the Transport Corridors in COMESA: An Agro-Industry Corridor is a business guide to facilitate the development of sustainable supply chains within the region.[326] In addition, since 2015, the CBC has been implementing the CBC Local Sourcing for Partnerships Project in Ethiopia, Kenya, Malawi, Rwanda, Uganda and Zambia. The project aims to build the technical capacity of agrifood SMEs on quality standards and to promote business linkages into the supply chains of larger businesses, specifically in the tourism and food and beverage sectors.[327] Within the first year of its implementation, 824 SMEs were trained on food-safety standards, 10 companies were negotiating supplier contracts with buying partners; and 3 companies had their products sold by regional companies.[328]

Programmatic interventions

Supporting trade policy implementation

Regional Integration Support Mechanism

COMESA has implemented a Regional Integration Support Mechanism (RISM) to help countries joining the REC and the East African Commission (EAC) Customs Union Common Markets to deal with significant direct and indirect costs resulting from the adjustment to new trade structures and procedures. The RISM program constitutes the operationalization of the COMESA Adjustment Facility (CAF), the second window of the COMESA Fund. The program was funded through a Contribution Agreement between COMESA and the European Union (EU) in 2007 with €78 million (US$94.7 million). RISM is designed to address tariff revenue losses resulting from the implementation of the COMESA Free Trade

** SM-Enterprises; Manufacturers Work Group; Agriculture-Seed, Horticulture; Agro Industry - Tobacco; Tourism; Transporters and Logistics Services; Financial Services; Digital Services Industry; Professional Services Industry; Trade Facilitation and Non-Tariff Barriers; and Coalition of Services Industries.

Common Market for Eastern and Southern Africa (COMESA)

Area and the COMESA and EAC Customs Unions. It also supports policy reforms for greater efficiency of domestic markets and assists firms in complying with new obligations and addressing the social and economic costs of liberalization. In addition, RISM seeks to improve the global competitiveness and resilience of economies and industries, in order to allow them to benefit from new market opportunities, by supporting improvement of productive infrastructure and investment in new product development.[329] Countries implementing the tariff reforms were thus provided budget support. However, as only revenue losses during the implementation of the reforms were compensated, the majority of member states, which had already carried out the reforms when RISM was established, did not benefit. Only Burundi and Rwanda, which joined the EAC Customs Union more recently, benefited from RISM. However, in 2012, a RISM rider was signed to enable RISM to serve as an ex post compensation mechanism to support member states that aligned their national trade structures and procedures with regional ones. Countries were also incentivized through RISM to better report and monitor the implementation of COMESA commitments. In fact, to benefit from RISM support, COMESA member states have to report annually on the implementation of regional commitments. An evaluation of RISM in 2014 showed that the program has incentivized countries to quickly adopt regional trade structures and procedures that would otherwise be implemented at a slower pace. Between 2008 and 2016 the RISM program has supported the implementation of 11 projects in 10 countries on capacity building for domestication of regional provisions, and on developing corresponding national policies and regulations on transport, investment, trade and industrialization.[330] Finally, RISM has provided member states with a platform to improve their own monitoring of and reporting on national implementation progress.[331]

Facilitating the movement of goods and people

Transport insurance

COMESA has significantly improved its transport system by adopting a regional transport insurance mechanism, which encourages and facilitates the transport of traded agricultural products across borders. In 1985, drawing on the successful experience in Europe and other parts of the world, COMESA member states agreed within the Protocol on Transport and Communications to adopt a regional third-party motor vehicle insurance scheme for goods and vehicles. In 1986, the third-party motor vehicle insurance scheme, implemented as a Yellow Card Scheme, was signed by 14 countries in Addis Ababa, Ethiopia. This scheme was then expanded to the Preferential Trade Area for Eastern and Southern African (PTA). The Yellow Card is designed to overcome challenges arising from intraregional traffic by providing liability insurance for foreign motor vehicles within the region. It also compensates for medical expenses related to traffic accidents caused by foreign motorists. The COMESA Yellow Card Scheme is currently operational in 12 COMESA member states, recognized as valid insurance coverage, and supplied by around 180 insurance companies across the region. Its success in facilitating interstate traffic has incentivized over 147,000 non-COMESA motorists, particularly from SADC countries, to adopt it when visiting or transiting through the COMESA member countries.[332]

The Regional Customs Transit Guarantee Scheme

In pursuing its trade facilitation efforts, COMESA designed and implemented the Regional Customs Guarantee Scheme (RCTG) in 2012 to facilitate the movement of transit goods under customs seal within the COMESA region, including agriculture and food products. Under the RCTG, customs bonds are developed and are used as guarantees to ensure that countries recover duties and taxes from the guarantors, for example if goods in transit are illegally disposed of, such as for consumption in the country of transit. Therefore, the RCTG Scheme serves as a tool to ensure that transport operators, freight forwarders, and clearing agents safely and reliably deliver goods. In addition, it provides customs administrations with a secure regional system protecting the revenue of each country through which goods transit. The RCTG is part of the operationalization of the COMESA Protocol on Transport, Trade and Transit Facilitation, which requires that all member states implement transit and customs measures to remove barriers to trade and transport in the region. By December 2020, 12 COMESA member and nonmember states had signed and ratified the RCTG Agreement, including Burundi, Djibouti, DRC, Ethiopia, Madagascar, Malawi, Kenya, Rwanda, Sudan, Tanzania, Uganda and Zimbabwe.[333]

COMESA Virtual Trade Facilitation System

COMESA has also emphasized the use of digital services and tools to improve the movement of goods within the region. The COMESA Virtual Trade Facilitation System (CVTFS) is an electronic trade facilitation tool and platform that was developed to monitor consignments along different transport corridors across the region. The system is important for agricultural trade, in particular of perishable products, as it considerably reduces delays in transport

Common Market for Eastern and Southern Africa (COMESA)

and hence food loss. CVTFS is an online platform that integrates COMESA instruments relevant to transport and trade including: Yellow Card, RCTG, Transit Data Transfer Module, Carrier License for road freight operators, COMESA Certificate of Overload Control, and the Customs Declaration Document. The CVTFS allows trade actors to monitor all information on goods in transit anywhere in the region, thereby significantly reducing the cost of doing business. All trade actors can access the system, including customs authorities, freight forwarders, insurance companies, banks, port authorities, container freight stations, and traders themselves. CVTFS therefore improves the tracking of goods by providing full visibility in real time of all tagged consignments from source to destination. The system is currently operational in Djibouti, Ethiopia, Malawi, Tanzania, Zambia and the Northern Corridor states of DRC, Kenya, Rwanda, and Uganda.[334]

Improving small-scale cross-border trade

Through several programmatic interventions, COMESA has committed member states to improving small-scale cross-border trade (SSCBT), which is often dominated by women and the trade of agricultural products. In its efforts to address the difficulties often faced by female cross-border traders, COMESA implemented the Simplified Trade Regime (STR) in 2010 applicable to trade valued at US$2,000 or less. Under the STR, traders are required to complete a simplified customs document; in return, they receive a certificate of origin signed and stamped by a customs official of the exporting country. However, traded goods should also comply with the normal food safety, plant and animal health regulations, including environmental protection.[335]

In addition, the traded goods must be on the official list of products considered under the STR arrangement at the customs offices. STR benefits include fast clearance at border posts, reduced clearance costs, and reduction of informal and illicit trade and its related risks for traders, such as loss of goods and harassment. STR also improves the collection of data on imports and exports, which can inform planning and policy design. STR is currently operational at the borders of Burundi, DRC, Kenya, Malawi, Rwanda, Uganda, Zambia, and Zimbabwe.[336]

Improving access to inputs

COMESA implemented the COMESA Regional Agro-Inputs Programme (COMRAP) in 2010–2011, through the Alliance for Commodity Trade in Eastern and Southern Africa (ACTESA). The program was funded by the European Commission with the aim of improving food security and livelihoods in the COMESA region through capacity building for civil servants in all member states and targeted training activities for regional input providers. The program was piloted in eight countries, including Burundi, Eswatini, Ethiopia, Malawi, Rwanda, Uganda, Zambia and Zimbabwe. COMRAP sought to improve their access to inputs and services, while agro-dealers were trained on needs assessment and delivering inputs in a timely manner. To scale up seed production and distribution rapidly across all COMESA member states, COMRAP provided seed multiplication and laboratory equipment. The program also sought to strengthen the capacity of financial and insurance market actors to deliver credit to smallholders and supply weather-index-based insurance against drought and other weather extremes. Furthermore, COMRAP introduced seed regulations and

Common Market for Eastern and Southern Africa (COMESA)

harmonization frameworks at the regional level, drawing on the experience of other RECs. Over the duration of COMRAP, 755 agents were trained on delivering credit to smallholders, and over 1,700 insurance and bank personnel received training on weather-index-based insurance. In addition, about 25,000 tons of seed were produced, and more than 7,500 people received training, of whom 5,686 were agro-dealers.[337]

Conclusion

COMESA has a sound institutional framework that supports agricultural development as well as agricultural trade. The REC has adopted a pragmatic approach to addressing key barriers to agricultural trade by developing targeted institutional responses as well as solid programmatic interventions. Focusing on unlocking finance for trade through robust banking and insurance institutions is a unique and innovative approach. It can have a transformational outcome if combined with digital technologies, which can make solutions more accessible to smallholder farmers and enable data collection on usage and reach. Similarly, instituting a competition commission, which provides a one-stop shop for implementing regulations and protecting consumer welfare, could further facilitate agricultural trade. Complementing this with a wide range of solutions to ease transit across and between countries (such as Yellow Card, RTCG and CVTFS) has further strengthened intraregional trade. In addition, sector-focused interventions, such as those for leather and cassava, have resulted in robust solutions, tailored for local contexts. Moreover, working across governments nurtures the motivation for regional integration.

Despite these innovations and successes, there is a clear need to frame interventions in long-term policies that are subsequently evaluated. While using a programmatic approach may work on specific, targeted trade barriers, crafting comprehensive policies with clear targets and support mechanisms can provide a wider vision for the region and its member states to work toward. Importantly, independent evaluations of progress would compel implementation and accountability.

CASE STUDY

Economic Community of West African States (ECOWAS)

Created by the Treaty of Lagos in 1975, the Economic Community of West African States (ECOWAS) is the oldest regional economic community (REC) in Africa. Covering over 5.1 million km^2, ECOWAS unites 15 West African countries.†† It represents a combined GDP of US$689 billion and a population of over 397 million people in 2020, about 43 percent of whom are employed in the agriculture sector.[338] The Treaty of Lagos was revised in 1993 to expand the remit of ECOWAS beyond pure economic co-operation to include social, security and political aspects. Under the revised treaty, ECOWAS "aims… to promote co-operation and integration, leading to the establishment of an Economic Union of West Africa."[339] The revised treaty aspires to improve the living conditions of West Africa's population, build a resilient economy, increase co-operation between Member States, and contribute to development of the African continent.[340]

To achieve these objectives, trade and market integration are key instruments under ECOWAS action plans. Through the revised treaty, ECOWAS plans to remove trade barriers and harmonize trade policies to successively establish a free trade area, a customs union, a common market, and finally a monetary and economic union in West Africa.[341] Therefore, since its formation, ECOWAS has been committed to increasing trade volumes and developing economic activities within the region to improve the welfare of its citizens.[342]

There are strong complementarities in agricultural production among the ECOWAS countries, due to the difference in agroclimatic conditions among and within these countries. Consequently, important agricultural trade flows are created, connecting for example, the coastal areas in the south with the northern Sahel regions.[343] According to the 2019 Biennial Review by the African Union, 14 out of the 15 ECOWAS countries are currently on-track to meet the Malabo commitment on Intra-African Trade in Agricultural Commodities and Services.[344] The main traded agricultural commodities within the region are cereals, roots and tubers, and livestock products, while coffee, cocoa, cotton, rubber, fruits, and vegetables are mostly exported outside the region.[345] The contribution of ECOWAS exports to total intracontinental agricultural exports is estimated at 14 percent on average between 2003 and 2018. In addition, 79 percent of ECOWAS intracontinental agricultural exports are within the REC itself, demonstrating a strong level integration.[346]

†† Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo.

Progress across ECOWAS can be attributed to a set of institutional reforms, trade policy innovations, and programmatic interventions, designed and implemented at the regional level to increase the trade intensity of agricultural products.

Institutional innovations

Institutional arrangements have evolved over time to allow the REC to achieve its ambitious goals, including trade development within the region. At the start, the main institutions in ECOWAS were the Authority of Heads of State and Government (the Authority), the Council of Ministers (the Council), the Tribunal of the Community, the Executive Secretariat, and Specialized Technical Commissions (STCs). Following the revision of the ECOWAS treaty in 1993, four new institutions were added – the Community Parliament, the Economic and Social Council (which is yet to be set up), the Community Court of Justice replacing the Community Tribunal, and the Fund for Co-operation, Compensation and Development. In addition, the STCs were expanded to cover eight themes:

- Food and Agriculture
- Industry, Science and Technology, and Energy
- Environment and Natural Resources
- Transport, Communications and Tourism
- Trade, Customs, Taxation, Statistics, Money and Payments
- Political, Judicial and Legal Affairs, Regional Security and Immigration
- Human Resources, Information, Social and Cultural Affairs
- Administration and Finances

The STCs prepare ECOWAS-wide projects and programs, which are submitted to the Council through the Executive Secretary. In addition, they ensure the harmonization and coordination of projects and programs within ECOWAS. The STCs also monitor and facilitate the application of the provisions of the Treaty and related protocols under its responsibility. Like the other STCs, the trade STC is composed of representatives from each member state. It submits regular reports and recommendations through the Executive Secretary to the Council of Ministers, either on its own initiative or upon the request of the Council or the Executive Secretary.[347]

Furthermore, the Executive Secretariat was elevated to a Commission in 2007 (see below). The Parliament, the representative organ of the citizens of the Community, pays great attention to the various activities of the Commission, including the free movement of people and goods, the implementation of the single currency, and the standardization of export products.[348] The evolution of these institutions

Economic Community of West African States (ECOWAS)

has supported consolidation of the integration process and the community spirit in their respective areas of action.[349]

Greater responsibility for the Executive Secretariat (the Commission)

In 2007, the Authority restructured the Executive Secretariat into a Commission, with increased responsibilities to move the integration process forward. Rather than playing a secretarial role for decision-making institutions, the Commission became responsible for more strategic activities, including coordinating the activities of ECOWAS institutions, driving implementation of the Treaty, and closer collaboration with the African Union. The Commission, headed by a president assisted by a vice-president, has seven departments each headed by a commissioner. Since policy documents and legal instruments are all channeled through the Commission to arrive at the Council, the office of the President of the Commission gained substantial importance with the restructuring.

A subsequent restructuring in 2013 converted the operational departments to sector-focused departments, and increased in the number of commissioners to 15 in order to have a representative from each member state. There are 13 sectors of activity that are managed by commissioners other than the president and the vice-president of the Commission namely:

- Agriculture, Environment and Water Resources
- Education, Science and Culture
- Energy and Mines
- Finance
- General Administration and Conference
- Human Resources Management
- Industry and Private Sector Promotion
- Infrastructure
- Political Affairs, Peace and Security
- Macro-Economic Policy and Economic Research
- Social Affairs and Gender
- Telecommunication and Information Technology
- Trade, Customs and Free Movement

Dispute settlement

The ECOWAS Community Court of Justice (ECCJ) is mandated to ensure the observance of law and the principles of equity and the interpretation and application of the provisions of the Revised Treaty and all other subsidiary legal instruments adopted by Community.[350] While the court was initially composed of nominated individuals, a subsequent amendment introduced a selection and interview process to reduce political influence. The ECCJ has jurisdiction over investor–State disputes under a Supplementary Act on Investments, which gives the usual range of protections to intra-ECOWAS investors.[351] Through this Act, investors can bring their case to the ECCJ to protect their investments against actions of their host States. Decisions made at the ECCJ are final and binding on all parties involved. In addition, evidence shows that the ECCJ has considerable advantages over national courts in investment dispute settlement.[352]

Funding ECOWAS

ECOWAS operations are almost entirely self-sufficient. Shifting away from member state contributions and donations from development partners, a new ECOWAS Community Levy introduced in 2003 requires that member states deduct and pay 0.5 percent on all imports from non-ECOWAS countries to the ECOWAS Community Fund, which is used to finance the activities of the Commission and other institutions. This change has transformed the financial sustainability of REC, with 95 percent of its 2014 budget coming directly from the community levy. The balance was funded by development partners including the AU, the African Development Bank, the World Bank, and some bilateral partners.[353]

Access to finance and attracting investment

The Fund for Co-operation, Compensation and Development was created under the initial Treaty, elevated to the status of a Community Institution in 1993, and then restructured in 1999, as an international financial institution, the ECOWAS Bank for Investment and Development (EBID), located in Togo. EBID has two subsidiaries: the ECOWAS Regional Investment Bank to promote private sector businesses, and the ECOWAS Regional Development Fund to support development of the public sector.[354] Funded projects and programs are related to infrastructure, industry, poverty alleviation, environment and natural resources. EBID is also committed in increasing regional trade in ECOWAS by financing trade sector activities. It also finances agriculture to achieve food self-sufficiency.[355] For example, in 2012, EBID extended a loan worth US$ 3 million to a Nigerian company to purchase, renovate and upgrade a flour mill in Niger.[356]

In 2009, to boost production factor movement for trade and investment uptake, ECOWAS launched a vision to create a Common Investment Market (CIM) by harmonizing investment codes across all ECOWAS member states. CIM provides the legal framework for treatment and operation of investment

Economic Community of West African States (ECOWAS)

in the ECOWAS Common Investment Market (ECIM) and for implementation of the policy.[357] However, although the code can promote greater trade, its implementation is still lagging as national laws on trade and investment in some member states are not aligned to CIM. For instance, in Ghana all foreign investors in the country's retail sector (including small and informal food trade), including ECOWAS nationals, are required to finance their businesses with a minimum of US$1 million, while Côte d'Ivoire's national investment laws exclude foreign investors, including ECOWAS nationals, in some sectors.[358]

Special focus on agriculture

In 2013, ECOWAS set up the Regional Agency for Agriculture and Food (RAAF), a specialized agency tasked with implementing the ECOWAS Agricultural Policy (ECOWAP). Under its mission, RAAF strengthens the technical capacity of the ECOWAS Commission, including the Department of Agriculture, Environment and Water Resources (AEWR), to implement the Regional Agricultural Investment Programme (RAIP). Its capacity-strengthening activities focus on providing strategic direction, training on trade law and regulation, monitoring and evaluation, and strategic intelligence. It also supports the capacity strengthening of various stakeholders and actors in member states in the preparation of records, and the implementation and monitoring of activities.[359]

Competition

ECOWAS has also strengthened its institutional frameworks by developing codes and rules to guide reforms in the region to improve the regional investment climate and the region's competitiveness. In 2008, during the Summit of Heads of State and Government, the ECOWAS Regional Competition Rules were adopted. These were designed under the ECOWAS Regional Competition Policy Framework, adopted in 2007, to promote, maintain, and encourage competition and enhance economic efficiency in production, trade, and commerce at the regional level. The laws were based on recommendations from a Ministerial Monitoring Committee regarding the harmonization of policies through a community regulatory framework on competition. In 2019, the Competition Rules were institutionalized with the establishment of the ECOWAS Regional Competition Authority (ERCA) headquartered in Gambia. ERCA aims to implement the Regional Competition Rules adopted in 2008. A Consultative Committee on Competition (CCC) composed of national experts in charge of trade and competition was created as a technical body to help direct the affairs of ERCA.[360]

Policy innovations

Removal of tariff and nontariff barriers to trade

Achieving trade liberalization has been a goal of ECOWAS since its inception in 1975. The process of establishing a free trade area (FTA) began in 1979, aiming to remove tariff barriers that were limiting the trade of locally produced goods. Taxes and other duties on intraregional trade were set to be eliminated over a 10-year period. Because of significant delays in implementation, a new trade liberalization scheme was adopted at the ECOWAS Summit of January 2003. As part of the scheme, a new compensation mechanism was developed to offset the loss of customs revenue caused by the removal of tariffs on intraregional trade over a period of four years. However, as the compensation mechanism relied entirely on contributions by member states, it has not been as effective. Under the trade liberalization scheme, products exempted from custom duties also have to comply with the ECOWAS rule of origin (RoO) – with agriculture and animal-sourced products exempted from the RoO requirement. A procedure to regulate the settlement of disputes arising from the implementation of the liberalization plan was subsequently put in place in the form of the ECOWAS Community Court of Justice, which has the right to make a final decision without the possibility of an appeal.[361,362] ECOWAS also initiated the formation of a customs union to achieve greater economic integration, setting a common external tariff (CET) in 2013, and thereby greatly facilitating intraregional trade of more goods and products.[363]

Boosting agricultural productivity in line with CAADP

In addition to removing tariff and nontariff barriers to trade, ECOWAS also committed to increasing agricultural production across the region. In 2005, its first regional agricultural policy (ECOWAP) was developed as an instrument for CAADP implementation. ECOWAP specifically aims to improve livelihoods and reduce food insecurity and malnutrition as well as import dependencies by strengthening the agriculture sector. ECOWAP also sought to sustainably intensify production systems and reduce the vulnerability of West African economies by limiting factors of instability and regional insecurity. An evaluation of the progress and the impact after 10 years of implementation found that the food supply had increased, largely due to a productivity increase in cereal production estimated at 21 percent between 2005 and 2014, compared with an increase of 15 percent in cereal production in the 10 years (1995–2004) preceding ECOWAP implementation. The increase in cereal production

Economic Community of West African States (ECOWAS)

was mainly driven by changes in rice and maize production, which increased by 96 and 68 percent, respectively, over the same period. However, the livestock sector saw only a 20 percent increase in total meat production between 2005 and 2013, lower than the 35 percent production increase between 1995 and 2004.[364]

In 2010, the West Africa Common Industrial Policy (WACIP) was developed and adopted. The WACIP vision is to "maintain a solid industrial structure, which is globally competitive, environment-friendly and capable of significantly improving the living standards of the people by 2030."[365] The policy aims to diversify and broaden the region's industrial production base, and to increase the share of processed local raw materials from 15–20 percent to an average of 30 percent by 2030. It also seeks to promote quality standards across the region. To meet these targets, new large-scale production capacities are set to be built, while expanding and upgrading existing ones. Through the interventions under WACIP, it is expected that intraregional trade will grow from less than 12 percent to 40 percent by 2030. To ensure that the region's exports globally continue to increase, WACIP foresees an emphasis on skill development and industrial competitiveness enhancement through standardization, accreditation, and certification, while supporting the development of quality ICT infrastructure and transport.[366] In 2013, the Standards Harmonization Model (ECOSHAM) was implemented to define quality standards for a range of products, including enriched oils, tomato puree, natural mineral water, frozen fish fillets, smoked fish, and shea butter, as well as a Code of Good Practices on the fortification of fish and meat, mangoes, raw cashew nuts, and Irish potatoes.[367]

Regulating fertilizer blends and seed quality

To develop a fully functional and strong regional market for seeds and fertilizer, ECOWAS has made provisions for trade of inputs within the region. An ECOWAS regulation on seed outlines harmonized procedures for the release of new varieties and certification and provides for mandatory licensing of all operators in the seed supply chain. Regulations on the trade of fertilizer set out harmonized quality control standards and labeling requirements across the REC.[368]

In 2010, the ECOWAS and West African Economic and Monetary Union (UEMOA) Commissions embarked on a program to develop a regional regulatory and policy framework to harmonize national regulations and quality control standards among the region's countries. Specifically, the program aimed to combat problems with fertilizers including poor quality of fertilizers, adulteration, and poor bag weight compliance in the region, which were resulting in reduced availability and use of fertilizers. The fertilizer quality control regulation (C/REG.13/12/12) was adopted in 2012 by ECOWAS and then mandated by the Commission to be implemented in national fertilizer regulations in 2013. Furthermore, four implementing regulations were adopted in 2016, including rules on labeling, inspection, analysis, and the role of a West Africa Committee for Fertilizer Control. By 2018, with support from the International Fertilizer Development Center (IDFC), 12 member states published the main ECOWAS regulation in their national gazettes and began the process of harmonization, and 6 countries formed technical committees to advise respective ministries of agriculture on fertilizer manufacture, inspection, sampling, analysis, and marketing.[369] With a common regulation on fertilizer blends within the region, private companies can now trade fertilizers in the region unhampered.

Programmatic interventions

Agricultural trade in ECOWAS plays a central role in regional integration. As outlined above, the agroecological complementarities of the region drive the exchange of agricultural produce between the northern Sahelian countries – Burkina Faso, Mali, and Niger – and the southern, coastal countries – Benin, Côte d'Ivoire, Ghana, Nigeria, and Togo. Moreover, ECOWAS and development partners have initiated several programs to drive infrastructure development and ease the business of agricultural trade.

Building a comprehensive regional quality system

Since the turn of the century, ECOWAS has embarked on an ambitious program to design and implement a quality system for the region, to manage the quality of outputs and goods traded using standards, regulations, policies, infrastructure, and technical skills. The West Africa Quality System Programme (WAQSP) is a major program of the ECOWAS Commission, created to support the implementation of the Quality Policy of ECOWAS (ECOQUAL) and the West African Common Industrial Policy (WACIP).[370] ECOQUAL was adopted in 2013 to facilitate greater intraregional and international trade while protecting consumers and the environment. To do so, ECOQUAL offers guidance on the development and operation of adequate and relevant infrastructure to oversee the quality of products and services being traded (referred to as "quality infrastructure").[371] This aligns with the ambitions of WACIP, adopted in 2010, to accelerate the industrialization of West Africa with greater transformation of local raw materials; and

Economic Community of West African States (ECOWAS)

with the Harmonization Procedures of the ECOWAS Standards (ECOSHAM).

The first two phases of the West Africa Quality Programme (WAQP) spanning 2001–2005 and 2007–2012 achieved significant progress to facilitate compliance with international trade rules and technical regulations. Successes included the formulation of a regional quality policy (ECOQUAL), accreditation of 21 testing/calibration laboratories meeting international standards, and capacity building for over 4,000 technicians on metrology and inspection.[372] These successes provided the impetus for continued efforts in developing and implementing regional quality infrastructure.

The current phase of WAQSP, implemented since 2014, is supported financially by the European Union (EUR 12 million/US$14.3 million), and in terms of technical capacity by UNIDO's Trade Capacity Building Branch. In line with previous ambitions, WAQSP aims to drive forward the establishment of suitable quality infrastructure and national quality policies to protect consumer health and the environment, as well as improve private sector competitiveness and foster greater access to foreign markets.[373] WAQSP also advances gender mainstreaming – more than 30 percent of program beneficiaries are women.[374]

WAQSP has five key elements, one of which is supporting the harmonization of standards initiated through ECOSHAM in 2013. Six technical committees have been set up within the ECOSHAM framework to advance the harmonization process, including one on agricultural products and one on food products. By 2017, 94 standards had been formulated through ECOSHAM,[375] including several on enriched oils, tomato puree, natural mineral water, frozen fish fillets, smoked fish, and shea butter. In addition, a code of good practices on fish and meat, mangoes, raw cashew nuts, and Irish potatoes has also been outlined.[376] Furthermore, two resolutions on the industrial development of cocoa and cashew nuts were adopted in 2017 through WAQSP.[377]

Over 2016–2017, WAQSP achieved several additional key ambitions on an accelerated pace, including:

- Finalization of the National Quality Policies in Ghana and Guinea, in addition to 10 other countries, including Burkina Faso, Cabo Verde, Gambia, Mali, Mauritania, and Senegal, where national quality policies were already adopted.
- Establishment of the ECOWAS Agency for Quality (ECOWAQ) in 2017.
- Design of the Quality Infrastructure Scheme.
- Training of 105 participants, including 40 women, across 15 countries in food safety management systems, and the application of 26 regional food standards on rice, cassava, meat, milk, groundnuts, and sugar among others.[378]

In addition, WAQP also facilitated the establishment of the West African Accreditation System (SOAC) in 2010. SOAC is the sole multicountry accreditation body serving eight West African countries: Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal, and Togo. By 2019, six food quality control laboratories were accredited, five of which were directly supported by the WAQSP. Furthermore, 1,000 experts were trained on quality management in the region and eight National Accreditation Focal Points (NAFPs) were appointed by their respective ministries.[379]

Easing transit and trade across borders

A regional Economic Partnership Agreement (EPA) between the 15 member states of ECOWAS and Mauritania, UEMOA, and the EU was concluded in 2014. To support countries in maximizing the benefits from this EPA, Côte d'Ivoire, with assistance from the EU, implemented an ambitious trade and regional integration support program, Programme d'Appui au Commerce et à l'Intégration Régionale (PACIR). [380‡‡] One of the goals of PACIR was to improve regional transit. To achieve this, Côte D'Ivoire, Burkina Faso, and Mali initiated the Customs Interconnection Project (ALISA) in 2015 to trace operations, streamline procedures, reduce red tape, and coordinate data collection and sharing across their borders. Specifically, the project sought to connect the IT systems used at borders so that they could communicate with each other over a secure system.[381, 382] Following the design of functional and technical specifications, ECOWAS entered into a project agreement with UNCTAD in 2017 to adapt the ASYCUDA (Automated System for Customs Data) World regional transit module for the three countries involved. The ASYCUDA system is a digital solution that oversees the whole customs process, from the dispatch of goods for transit through arrival at border posts, warehousing, and subsequent release for delivery upon payment of duties and taxes.[383] Not only does it reduce the prevalence of smuggling and fraud, thereby improving the overall business environment, ASYCUDA also expedites customs clearance and reduces costs at border crossings.[384] The new module was piloted in 2019 along the Abidjan–Ouagadougou

‡‡ PACIR was renamed to SIGMAT (Regional Customs Network for Transit Trade) in March 2019. https://www.ecowas.int/32318/

Economic Community of West African States (ECOWAS)

corridor with support from the World Bank, and then extended to two more transit corridors connecting Burkina Faso and Togo, and Benin and Niger. Within a month of implementation, average transit time between Burkina Faso and Côte d'Ivoire fell from 1.37 days (about 33 hours) to 0.95 days (about 23 hours), and revenue collection at the Benin–Niger borders increased by 16 percent. Discussions are currently underway to extend the system to Senegal too.[385] In addition, training elements included within the program have resulted in the training of five developers with in-depth knowledge of the design of the computerized transit trade system who can provide support to any other ECOWAS member state wishing to adopt the new IT solution.[386]

Food Across Borders Program

Alongside the PACIR/SIGMAT program above, ECOWAS also introduced an initiative specifically targeted at improving the transit of food in the region. The Food Across Borders Program (ProFAB) was launched in 2015 by ECOWAS and UEMOA to raise the value and volume of intraregional trade in agricultural products by improving the economic and regulatory environment for trade. Funded by the US Agency for International Development and the Government of Canada, ProFAB is implemented by several regional organizations including Le Hub Rural, the African Center for Trade, Integration and Development (ENDA/CACID), and the Borderless Alliance — all of which are coordinated through the Permanent Intergovernmental Committee for Drought Control (CILSS). To achieve its aims, the program seeks to: build a stronger understanding of trade patterns and barriers with enhanced data collection; support the implementation of agreements on free movement of agricultural products and people; and where required, contribute to the formulation of regional policies and strategies to promote agricultural trade. The primary focus of the initiative has been on addressing the barriers to trade such as checkpoints, illegal taxes, and red tape along specific trade and transport corridors, including the Abidjan-Accra-Lome-Cotonou-Lagos route, Abidjan-Yamoussoukro-Ferkéssedougou-Zegoua-Sikasso-Bougouni-Bamako route, and Dakar-Louga- Saint Louis-Rosso-Tiguent-Nouakchott route. The program is due to end in 2020.[387,388,389,390]

Access to market information

ECOWAP was implemented through the National Agricultural Investment Plans (NAIP) and the Regional Agricultural Investment Program (RAIP). While the NAIPs reflect national-level priorities on investments in the agriculture, livestock, fisheries, and forestry subsectors, the RAIP focuses on investments and public policy instruments at the regional level. It specifically promotes strategic commodities for food security and self-sufficiency in products such rice, maize, cassava, livestock, meat, poultry, milk, and fisheries and a global environment conducive to agricultural development.[391] Under the RAIP, the ECOWAS Regional Integrated Agricultural Information System (ECOAGRIS) was developed to give decision-makers in the region access to reliable and up-to-date data and analysis for better formulation and monitoring of agricultural development policies and strategies. ECOAGRIS is also designed as a tool to promote trade among all the actors (public and private) of the agriculture sector within ECOWAS. The ECOAGRIS agricultural markets component aims to enhance the functioning of markets by improving market actors' access to information that can strengthen the bargaining power of producers, broaden consumer choices and enable traders to ensure a better flow of cereals. The agricultural markets component also targets to improve evidence-based decision-making by policy makers, the cereal boards and development partners. The data includes information on cereal prices, supplies and stocks. In addition, regular analyses of markets and food supply are published on a weekly, monthly and quarterly basis through bulletins.[392] All ECOWAS members and non-members - including Mauritania and Chad - have been included in the system allowing the interconnection of their national agricultural information systems. The system is expected to publish a yearly report on agricultural products within ECOWAS.[393]

The ECOWAS Trade Information System (ECOTIS) is another initiative with the aim to improve access to timely and relevant trade related information and intelligence for informed business decisions, policy formulation and academic research. ECOTIS is a centralized portal developed by the ECOWAS Commission to respond to the increasing need of trade information and data analysis in understanding the functioning of world markets and value chains. ECOTIS compiles all trade information available in the region and from different sources in an online system. The keys areas around which ECOTIS is structured include trade agreements, trade policy, trade statistics, trade promotion, trade capacity building and resources. [394]

Market access facilitation for livestock

Under the Regional Sahel Pastoralism Support Project (PRAPS), initiated in 2015 and being implemented in four ECOWAS member states (Burkina Faso, Mali, Niger, and Senegal) and two nonmember

Economic Community of West African States (ECOWAS)

states (Mauritania and Chad), national activities were aligned with regional priorities defined by ECOWAP.[395] PRAPS aims to improve access to important productive assets, services, and markets for pastoralists and agro-pastoralists in cross-border areas and along transhumance routes, and to strengthen national capacities to respond efficiently to crises or emergencies. The Permanent Inter-State Committee for Drought Control in the Sahel (CILSS) is responsible for coordination at the regional level. The project seeks to improve the living conditions for more than 2 million pastoralists and agro-pastoralists, at least 30 percent of whom are women. Under its market access facilitation component, the project aims to increase producers' access to competitive, inclusive markets and to increase trade in pastoral products (especially live animals). In the short term, the aim is to increase the number of reference markets; and in the medium term, to increase the number of animals sold at reference markets.[396] In Mali – one of the leading exporters of livestock in ECOWAS – a project report shows that the building and rehabilitation of seven markets increased the number of animals sold.[397]

Conclusion

Improving intraregional trade, including trade of agricultural products, is one of the priorities of ECOWAS in achieving economic integration and social development in the region. The evolution of ECOWAS institutional frameworks provides clear evidence of the importance of trade for the REC. In addition, ECOWAS has created an enabling environment for intraregional trade that facilitates access to finance, attracts investment, and ensures fair competition, in tandem with a judiciary to settle investor–government disputes.

The establishment of the free trade area is another key achievement of ECOWAS in promoting intraregional trade with the removal of tariff and nontariff barriers for agricultural products originating within the region. ECOWAS has also made significant progress in the formation of a customs union by adopting a common external tariff, and significantly, has implemented a regional agricultural policy. Moreover, the harmonization of quality standards and a reduction in transit time along key corridors, achieved by digitalizing customs procedures, are strong signals for continuing regional integration. Furthermore, progress has been made within the region in improving access to regional market information through ECOAGRIS.

However, increasing the volume of intraregional agricultural trade remains a challenge for the ECOWAS region, requiring increased agricultural productivity, larger investments in trade infrastructure, and continued dedication to reducing trade barriers, along with more effective enforcement of regional trade rules and regulations.

CASE STUDY

Southern African Development Community (SADC)

The Southern African Development Community (SADC) was formally launched in 1992 by nine heads of state. It is one of the eight regional economic communities (RECs) recognized by the African Union that facilitate regional economic integration among member states. By 2019, SADC membership included 16 countries,[§§] representing nearly 354 million people, over 40 percent of whom were employed in the agriculture sector. The region's total GDP amounted to more than US$721 billion, growing at an average of 3.8 percent from 2011 to 2019, with agriculture contributing more than 11 percent.[398]

Intraregional trade within SADC is among the largest on the continent.[399] In 2019, intra-SADC trade was valued at US$16.5 billion, about 45 percent of which went through South Africa alone.[400] Almost 85 percent of SADC's trade within Africa took place within the REC itself, signifying a deep level of integration.[401] Intra-SADC trade is largely in petroleum, agricultural products, electricity, and some textile products. The agricultural products most commonly traded within SADC are sugar, live animals, vegetables and fruits, and cereals, and intraregional trade in staples such as maize has effectively replaced imports from the rest of the world. Intra-SADC agricultural and food imports account for 19 percent of total agricultural and food imports to the region. Yet, high-value products like coffee, tea, cocoa, spices, processed foods, and vegetables as well as dairy products and eggs continue to face the highest tariffs within the REC.[402] At the same time, trade in other agricultural and food products such as beef have benefitted those countries with a greater comparative advantage. In 2016, South Africa's meat exports were valued at ZAR 3.6 billion (US$244 million), of which nearly half went to regional SADC neighbors: Mozambique (17 percent), Lesotho (14 percent), Namibia (10 percent), Eswatini and Botswana (4 percent each).[403]

Beyond SADC's borders, trade with the Asia-Pacific markets is highest, followed by the European Union. Extra-SADC trade consists mainly of natural resources such as coal, manganese, precious metals and diamonds, manufactured goods that are high in resources, some textiles, and from the agriculture sector, tobacco.

The flourishing intraregional trade and regional integration in SADC has been supported by a robust institutional set up, holistic policymaking, and effective programs.

Institutional innovations

SADC aims to build a more prosperous, sustainable, open, equitable, safe and secure future for the people of southern Africa. To realize this vision, SADC seeks to achieve greater co-operation and integration across borders combined with good governance and lasting peace and security, as well as efficient production systems. These overarching ambitions provide the foundation for thematic areas of co-operation and are reflected in formal structures. Five strategies guide the harmonization of political and socioeconomic policies, mobilize resources, facilitate the free movement of capital, labor, and goods and services, and accelerate the development, transfer and adoption of technology. In addition, a robust and synchronized institutional framework has been established to guide and implement these goals in a transparent and inclusive manner, and to ensure that the core principles are preserved. As a result of the inclusion of more economically advanced countries in the REC, SADC benefits from greater access to domestic funds to support institutional development. At the same time, its institutions have also garnered support from international partners to continue refining their operations.

Top-down coordination with inclusive engagement

SADC's institutional framework includes both a top-down approach for smooth coordination and an inclusive approach that empowers stakeholders within member countries to engage in the formulation of regional policies and strategies. In this respect, the overall policy direction and control of functions of the REC are overseen by the Summit of Heads of State or Government, in turn managed by a troika comprised of the former, current, and forthcoming (current deputy) chairpersons, who rotate on an annual basis.[404] A Council of Ministers representing every member country, and drawn from the respective ministries of foreign affairs, economic planning, or finance, ensures effective domestic implementation.[405] A Secretariat provides strategic planning, management and administrative support for executing, monitoring and evaluating SADC's policies. It also designs harmonized policies and programs for adoption by the Council of Ministers. [406]

To ensure that the development of regional policies and strategies is inclusive and reflects the priorities of member states, the National Committees serve as a platform for government, private sector and civil society stakeholders to provide inputs and guide the implementation of programs domestically. The National Committees are a key link between member

§§ Angola, Botswana, Comoros, Democratic Republic of Congo, Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Tanzania, Zambia, and Zimbabwe.

Southern African Development Community (SADC)

states and the Secretariat, as they marshal national consensus on regional initiatives and channel the inputs of domestic stakeholders into the SADC institutions via the Secretariat.[407]

Institutional reform and quality standards

In 2012, the SADC Secretariat was officially recognized for having achieved international standards in accounting, audit, internal controls and procurement. A comprehensive reform process spearheaded by the Council of Ministers and managed by the Secretariat ensured that institutional compliance was achieved. Financial and technical assistance from the European Union (EU) and Germany through GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) was critical to facilitate the process and build capacity within the Secretariat. In addition, a Secretariat Institutional Reforms Coordinating Committee was formed to coordinate the process and implement the recommended changes, while Technical Working Groups enabled external parties to support the redesign of policies and frameworks. The accreditation signals the adoption of international best-practices to enhance governance and accountability. It also contributes to improved efficiency and effectiveness, hence greater impact. Most importantly, this process qualified the Secretariat to access significant funds from Contribution Agreements from the EU. Following the achievement of international standards, the EU committed EUR 84 million (US$109 million) for regional political co-operation, regional economic integration support, and project preparation and development facilities. In addition, the EU extended a further EUR 12 million (nearly US$16 million) to support continued institutional compliance processes over 2013–2105. GIZ offered a further EUR 4 million (US$5 million) to boost policy dialogue among regional stakeholders and strengthen collaboration between the Secretariat and the member states over the period 2013 to 2016.[408, 409]

Cross-sectoral coordination

Regional integration in SADC is organized through six Sectoral and Cluster Ministerial Committees comprised of ministers from each member state for:

- Trade, Industry, Finance and Investment (TIFI)
- Infrastructure and Services
- Food, Agriculture, Natural Resources and Environment (FANR)
- Social and Human Development and Special Programmes
- Politics, Defense and Security
- Legal Affairs and Judicial Matters

Drawing on their expertise, ministers provide input and advice into the formulation and implementation of regional plans.[410]

Approximately mirroring the Sectoral and Cluster Ministerial Committees, five directorates situated in the Secretariat coordinate the implementation of policies and programs. The mandates of each directorate, outlined in individual protocols, are linked with the overarching aim expediting integration and unlocking trade opportunities.[411] To enhance agricultural trade specifically, the TIFI directorate is responsible for the development of regional value chains and increased value addition for agricultural products as well as greater compliance with international standards and sanitary and phytosanitary (SPS) measures.[412] The FANR directorate manages the production and protection of crops through intensification, irrigation, mechanization, sustainable use of fertilizers, and better seed quality and distribution (including through seed trade); and increased livestock trade supported by improved animal disease control and health services and development and dissemination of a SADC Livestock Information Management System.[413]

Dispute settlement

In 2005, a Protocol on the Tribunal established a SADC Tribunal, composed of appointed judges from member states. The Tribunal's key role is to ensure accurate interpretation of the provisions of the SADC Treaty – the founding declaration and treaty that led to the establishment of SADC – and subsidiary instruments and protocols, including the Protocol on Trade. It is an independent forum and has the authority to make rulings on the correct interpretation and application of the legal instruments available in SADC. The Tribunal thus performs the function of a court and a judicial organ. For each dispute brought to the Tribunal, a panel of nominated and selected representatives are assembled.[414]

In the case of the Republic of Zimbabwe v. Mike Campbell (Pvt) Ltd and Others[415] regarding the loss of farmland, the Tribunal concluded that 78 white Zimbabwean farmers could keep their farms because Zimbabwe's land reform program had discriminated against them. The Zimbabwean government rejected this ruling. It questioned the legality of the decision and persuaded the Summit to suspend the Tribunal in 2010 while an independent review of its role, functions and terms of reference was carried out.[416] Following several delays, a new Tribunal was convened in 2014. However, its mandate was restricted to disputes between member states only, as opposed cases brought by any natural and

Southern African Development Community (SADC)

legal persons against member states. Since African governments are unlikely prosecute each other, the new Tribunal has little potential impact. Worse, it also limits the degree to which the rights of private parties are protected by SADC's legal framework.[417]

However, a further twist occurred in December 2018 when the South African Constitutional Court invalidated the withdrawal of South Africa from the original Tribunal and its subsequent signing up to the new one. Similarly, the Tanzanian government also concluded that the disbanding of the original Tribunal undermined the Rule of Law, in itself a founding principle of SADC. Consequently, at the time of writing, SADC remains without a functional Tribunal, especially as the new one, although convened, had not been deployed.[418]

Budget and financing

The coordination function of SADC is primarily funded by member states, proportionate to the share of their GDP in the combined SADC GDP. In addition, development activities are funded by International Cooperating Partners (ICPs), of which the EU, the African Development Bank, the World Bank, the Commonwealth, the World Health Organization, the Food and Agriculture Organization of the United Nations, and the Global Fund to Fight AIDS, Tuberculosis and Malaria are leading partners. In addition, regional institutions such as the Forum for Agricultural Research in Africa and the Southern African Trust also provide technical and financial support.[419]

SADC's institutions are relatively well funded, although not consistently. For instance, the budget for the 2014/15 fiscal year stood at US$88 million, of which US$34 million was funded from member states' contributions and US$54 million from ICPs.[420] However, following an economic downturn in several member states, the budget for the fiscal year 2016/17 shrank to approximately US$72 million.[421] Nevertheless, in 2017, SADC launched a long-awaited SADC Regional Development Fund (RDF) to provide seed funding and mobilize additional and new resources for infrastructure development in the region.[422] Although not yet operational, the RDF will include a share for disaster preparedness and response, and one for agricultural development.[423]

Gender mainstreaming

In addition to the roles outlined above, the Secretariat is also responsible for gender mainstreaming in all SADC policies, programs and activities. A Gender Unit within the Secretariat, accountable directly to the Executive Secretary, was established in 1998 to facilitate, coordinate and monitor the implementation of SADC's gender commitments – as outlined in a Protocol on Gender and Development – within SADC institutions; regional integration priorities, including on agriculture and trade; politics and decision-making; and access to and control of productive and economic resources.[424] The Protocol on Gender and Development explicitly calls for national trade and entrepreneurship policies to be made gender-responsive by 2015. It also requires that the economic value of persons engaged in agricultural

Southern African Development Community (SADC)

and domestic work be recognized and remunerated appropriately.[425] Moreover, member states are also required to develop subsidized training programs to develop women's entrepreneurial skills and provide opportunities to enhance the production, marketing and export of quality products (including across agricultural value chains) by women. Regional women's networks are required to be included in trade policy structures and gender quotas have to be created for all trade missions.[426]

A 2010 study by the UN Economic Commission of Africa showed that there is an elaborate enabling environment as well as clear institutional frameworks across Malawi, Mozambique, Namibia and Zambia for dealing with gender-related issues in general terms. Although little progress had been made in directly addressing gender within trade frameworks, the implementation of strategies within the Protocol on Trade, such as elimination of nontariff barriers, had indirectly benefitted women by empowering them to participate in intraregional trade activities.[427]

In addition, a study in Malawi, Zambia and Zimbabwe showed that these concerted efforts at the regional level have resulted in agricultural and trade policies across SADC that consider gender equality and empowerment. The countries have also acceded to international conventions that address gender equality. However, the application of these is not always consistent or coordinated within government departments nor among policy tools. In addition, efforts are more readily implemented through agriculture sector interventions than trade. Hence it is urgent to mainstream gender issues into trade policy, which in turn will initiate the collection and management of gendered trade data. Comprehensive data will form the basis of policymaking, while closer collaboration between sectoral policymakers will ensure that there is coherence between gender responsiveness in agriculture and trade.[428]

Policy innovations

Since its formation, SADC's institutions have designed, evaluated and refined an array of long-term plans and protocols to harness the economic and social potential of the region. The Regional Indicative Strategic Development Plan (RISDP) forms the core guiding framework upon which the regional integration agenda is constructed, and through which policy harmonization is initiated. In addition, the Regional Agricultural Policy and the Regional Trade Protocol provide further impetus toward expanding intra-SADC agricultural trade.

An evolving Regional Indicative Strategic Development Plan

The Regional Indicative Strategic Development Plan (RISDP) is a 15-year roadmap providing a comprehensive outline of policies, strategies, principles and specific targets that provide a regionwide impetus to deepen integration, accelerate poverty eradication, and meet economic and social goals. RISDP was adopted by the SADC Summit in 2003 and implemented beginning in 2005 over three 5-year phases. Although RISDP does not specify sources of funding for the implementation of all activities, it does present a broad menu of conventional and alternative pools of capital, as well as mechanisms through which they can be mobilized. Importantly, RISDP also outlines a comprehensive plan to monitor and evaluate the implementation of the actions at political and policy level, operational and technical level, and stakeholder level.[429]

The original RISDP identified 12 priority action areas, composed of 4 sectoral and 8 cross-sectoral intervention areas. In this context, RISDP included sustainable food security as a priority intervention area within the first group and outlined five strategies to promote (fair) trade in agricultural products, in addition to strategies to raise productivity, transform subsistence agriculture, improve food safety, and reduce the impact of food-related disasters. These include strategies to: improve rural infrastructure, eliminate trade barriers on agricultural products, mobilize public and private investments in the sector, bolster farmer support systems, and foster partnerships between commercial and smallholder farmers. In addition, RISDP also called for the completion of the annex to the Trade Protocol on Sanitary and Phytosanitary measures, and set two targets to unlock trade: (1) reduce the prevalence of transboundary animal diseases such as foot-and-mouth disease by half in 2015, with the aim of ultimately eliminating them, and (2) meet SPS measures and standards as per WTO Agreements – both of which would improve the trade of food and animal-sourced products. [430]

Two evaluations of RISDP have taken place to date. The Secretariat conducted a desk assessment covering the period 2005 to 2010, and an independent mid-term review was carried out for the period 2005 to 2012. The former concluded that implementation of RISDP over the first phase had been satisfactory and progress had been made toward the targets. Specifically, for agricultural trade, achievements include:

Southern African Development Community (SADC)

- **Marketing**: initial grants had been made for research for improving marketing of livestock (from small-scale producers) and commodities.
- **Migratory pests and phytosanitary measures**: strategies for managing migrant pests in crops had been developed and approved, along with a plan to assist member states in implementing the measures. Advocacy efforts on phytosanitary measures had resulted in more member states adhering to international treaties on plant protection.
- **Food safety**: a project on harmonizing food safety guidelines and processes had been launched to foster greater regional trade and facilitate access to EU and world markets, and the Secretariat mobilized EUR 7.5 million (US$10 million) toward these efforts.
- **Transport infrastructure**: guidelines on rural accessibility had been developed.[431]

The independent review of the RISDP, completed in 2014, also recorded moderate progress toward enhancing SADC intraregional trade and economic diversification. The review recommended a consolidation and realignment of priorities, bringing forward strategies for industrialization, accelerating market integration, and infrastructure development. Maintaining the original vision and mission, a revised 2015–2020 RISDP condenses 12 priorities to 4, with a focus on regional value chains and value addition for agricultural and non-agricultural products, and on intraregional and intra-African trade. Although the priority for sustainable food security is no longer specified, productivity, competitiveness and market access for agricultural products feature within special programs for the region. In this context, the revised RISDP specifies interventions in access to and use of land, inputs, capital, and entrepreneurship skills, as outlined in the Regional Agricultural Policy.[432] As RISDP comes to an end in 2020, a review of its implementation is on-going, parallel to the formulation of the new 10-year framework for 2021–2030.[433]

Regional Agricultural Policy

The SADC Regional Agricultural Policy (RAP) was approved by the SADC Council in 2014 as the overarching framework for the region's agriculture sector. Like the Protocol on Trade (see below), the RAP is founded on the direction set in the RISDP and implemented in five-year cycles. In addition to setting out priorities and proposed interventions for enhancing productivity, increasing investments in the sector, and addressing vulnerabilities posed by climate change, gender inequalities, HIV/AIDS, migration, and youth unemployment, the RAP also outlines **comprehensive, innovative and inclusive** avenues for improving trade and access to markets for farmers in SADC. Specifically, policy guidance focuses on increasing the efficiency and effectiveness of input and output markets, transforming the regional and international trade environment, and upgrading relevant infrastructure. Key measures facilitating greater agricultural trade in the RAP include:

- **Input and output markets**: supporting the development of national and regional commodity exchanges; extending and harmonizing the use of commodity grades and standards (including for grains), quality specifications, traceability, and environmental norms for trade; and facilitating the participation of informal traders, small and medium enterprises, and marginalized groups such as women and youth.
- **Infrastructure**: in addition to investing in infrastructure and designing infrastructure in a way that takes agriculture into account, improving agriculture's utilization of existing infrastructure such as intercountry transport corridors, sanitary and phytosanitary (SPS) facilities, and shared water resources for agriculture such as cross-border irrigation schemes.
- **Price management and stabilization**: investing in storage and related infrastructure; boosting contract farming with more robust value chain governance; and designing market-friendly food emergency policies.
- **Reduction of barriers to trade**: promoting mutual recognition of member states' SPS certificates and simplifying Rules of Origin (RoO).
- **Sustainability**: reducing external tariffs on selected production factors such as green technologies.

Across the board, the approach of the RAP is to support and complement member states to achieve related national goals. Where national goals require updating to align with regional plans, the RAP proposes support for their development, as well as financial and technical assistance toward their implementation.[434] To drive implementation of the RAP forward, the Council of Ministers approved a corresponding Regional Agricultural Investment Plan in July 2016, with a total budget of US$1.3 billion.[435] The RAIP and national agricultural investments plans (NAIPS) are thus mutually aligned such that NAIPs form the basis for disbursements of resources under the RAP.[436]

Southern African Development Community (SADC)

Protocol on Trade: pragmatic and flexible

Building on the direction provided in the RISDP, SADC's Protocol on Trade (PoT) is the founding legal instrument guiding trade liberalization in the region, with the goal of establishing a free trade area by 2008, a customs union by 2010, and eventually a common market and monetary union. Signed in 1996, implemented from 2000 and amended in 2010, the PoT obliges member states to (gradually) reduce customs duties and other intra-SADC trade barriers on goods and services, create an attractive environment for investments, and drive diversification and industrialization. By 2008, about 85 percent of goods traded in the region had attained zero duty, and a Free Trade Area was launched by 12 of 15 member states on schedule.¶¶ Furthermore, a tariff phase-down process for sensitive products was completed by 2012, which marked maximum tariff liberalization. However, due to capacity constraints, the formation of a customs union, and hence the common market and monetary union, have been delayed.[437] Nevertheless, to further facilitate intra-SADC trade, the PoT proposes adoption of common rules of origin, streamlining and harmonization of customs rules and procedures, including SPS measures, and elimination of nontariff barriers, as well as recourse and avenues for dispute settlement.[438] The PoT adopts a pragmatic approach to addressing nontariff barriers by excluding more sensitive measures such as local content requirements, levies, and other border charges and import and export licensing arrangements, as long as the trade-distorting effects are minimal. While this approach may have expedited the transition to a free trade area, it has also led to a multiplicity of nontariff barriers which, in turn, have had a debilitating effect on intraregional trade.[439,440]

Protecting vulnerable sectors: the Sugar Agreement

On the other hand, the PoT incudes special agreements for products or industries from the region that are "sensitive" to external market forces. One such agreement is on sugar. Sugar production has significant socioeconomic impacts across several SADC countries, particularly in rural areas and small nations where it provides substantial employment, including to low-skilled workers. The sector contributes as much as 6 percent of GDP and 93 percent of agricultural GDP in some SADC member states. It also optimizes comparative advantages and contributes toward diversification (energy and bio-chemicals). However, on the global stage, sugar is a heavily subsidized product and its average world market price is consistently below the average cost of production. Hence, its separate treatment in the PoT protects regional producers from dumping and ensures that the sector continues to grow in the face of cheap extra-SADC imports. The Sugar Agreement (Annex VII of the PoT) negotiated an extended period of preferential access to the Southern African Customs Union (SACU) market, comprised of Botswana, Eswatini, Lesotho, Namibia, and South Africa. The Sugar Agreement allowed non-SACU surplus producers such as Malawi, Mauritius, Mozambique, Tanzania, and Zambia to export

¶¶ Angola, DRC and Seychelles are being assisted by the Secretariat to accede.

Southern African Development Community (SADC)

an agreed portion of that surplus sugar to SACU member countries on a duty-free basis, thereby fostering greater competitiveness domestically. Access quotas are calculated based on the share of total SADC sugar surplus. Until 2012, access was also based on a steady increase in the volume of exports into the SACU market, to be reviewed pending a positive assessment of the state of the world sugar market. A review began in 2017.The future of the Sugar Agreement will also be impacted by reforms of the sugar regime of the EU, as the largest importer of sugar from SADC, as well as post-Brexit relationships with the United Kingdom.[441,442,443]

Programmatic interventions

Support Towards Operationalization of the SADC Regional Agricultural Policy

To operationalize the RAP, the Secretariat launched a program of support in March 2019, in partnership with the EU and FAO. The EUR 9 million (US$10 million) program titled Support Towards Operationalization of the SADC Regional Agricultural Policy (STOSAR) has three key components: evidence-based decision-making with more robust agricultural information systems; managing transboundary plant pests and diseases to improve access to markets; and executing the Regional Food and Nutrition Security Strategy.[444] The program provides technical assistance to the Secretariat's ongoing efforts to create a regional Agricultural Information Management System (AIMS). AIMS collects, analyses, disseminates and integrates information on crop and livestock production, pests and diseases, vulnerability and other socioeconomic data, as well as national budgets, so as to enhance policy development, emergency preparedness, and decision-making. In addition, the program supports member states' efforts to solve phytosanitary issues, thus increasing productivity and exports, and preventing the entry and spread of pests. Finally, STOSAR aims to control three of the most damaging transboundary animal diseases — foot-and-mouth disease, PPR (peste des petits ruminants/sheep and goat plague), and highly pathogenic avian influenza (HPAI) — in order to improve the productivity and market access for livestock and livestock products.[445]

In 2020, STOSAR funded biopesticide trials in Tanzania against the fall armyworm, the successful completion of which paved the way for its registration in June 2020.[446] Tanzania's livestock sector is also benefitting from interventions to strengthen disease surveillance and control in the north and central zones of the country, thereby contributing to the sector's sustainable growth.[447]

Strengthening institutions for risk management of transboundary animal diseases

Livestock is a key source of food, employment and income for millions of southern Africans. Hence, the region has long focused on facilitating trade in livestock within the region. For example, from 2007 to 2012, the Secretariat, in partnership with the Emergency Centre for Transboundary Animal Diseases, implemented the Transboundary Animal Diseases (TADs) project to promote livestock as a safe and tradeable commodity in Angola, Malawi, Mozambique, Tanzania and Zambia. Funded by the African Development Bank, the project implemented five key activities to strengthen the capacity for detection, identification, monitoring and surveillance of (TADs):

- Developed a comprehensive framework for the Southern African Commission for the Control of TADs, including financing, sustainability and legal formation.
- Introduced the Digital Pen Technology and provided training on its use for efficient and rapid transmission of disease data from the field. A study conducted between September 2009 and August 2010 concluded that, although expensive, the new technology was found to improve timeliness and frequency of reporting. With regular maintenance and replacement of equipment, and better access to the appropriate forms, the technology would have a greater impact in monitoring the prevalence of disease.[448]
- Conducted training for 50 lab technicians and over 100 veterinary field staff on improved risk analysis and mapping, including a simulation exercise to strengthen the capacity of countries to respond to PPR.
- Analyzed and harmonized national TAD preparedness plans.
- Established National Virtual Centres — networking and collaboration hubs for the institutions involved in the project.[449,450]

Seed Trade Project

In 2015, USAID initiated the Feed the Future Southern Africa Seed Trade Project, in partnership with the Crop Development Unit of the Food, Agriculture and Natural Resources Directorate. The project aims to improve access to and availability of high-quality seeds across the region by promoting seed trade and consolidating small and marginal markets into one large regionwide market. To do so, the Seed Trade Project is engaged in efforts to provide

technical assistance to align policies and regulations covering seed trade across all member states with the SADC Harmonized Seed Regulatory System (HSRS), which includes seed certification and quality assurance, quarantine and phytosanitary measures, and variety release. By 2020, the Seed Trade Project had established the SADC Seed Committee, which oversees the regional seed system and the SADC Seed Centre; worked with 13 seed companies and registered 55 seed varieties, all eligible for regional trade; facilitated the production of the first hybrid maize seed under the HSRS, which can be produced relatively easily in Zambia but not in the DRC; trained more than 1,500 technicians on HSRS and improved business management practices. The project also facilitated the transfer of new seed varieties and online seed certification systems as well as new laboratory technology.[451, 452] In addition, in 2018, Seed Co. Zambia Ltd planted the hybrid maize seeds in a pilot within the Seed Trade Project. The pilot produced over 200 tons of certified hybrid maize seed, 60 tons of which were then successfully and without incident exported to neighboring DRC in September 2019, confirming the success of the quality control, certification and assurance process.[453]

Conclusion

Intraregional trade in SADC is among the highest within the eight RECs officially recognized by the African Union. SADC is also pursuing a resolute integration agenda. A robust and inclusive institutional framework complemented by synchronized policies underpins this success. However, some challenges persist, such as the proliferation of nontariff measures, complexities in aligning national policies where countries are part of several regional trade agreements, the political economy difficulties of implementing regional directives – as seen in the case with Zimbabwean farmers – which have led to a weakening of institutions and changing dynamics with external trading partners such as the EU and United Kingdom.

With more committed implementation of SADC's protocols and policies, the region has the potential to achieve even greater success in improving agricultural trade. In the immediate term, there is an urgent need to invest in greater data collection, particularly on the impact of NTBs, so as to unblock trade, particularly in agricultural products.[454] Moreover, to build resilient regional value chains and develop a *regional* competitive advantage, SADC institutions can work with member states to identify and build regional complementarities. For instance, where Malawi and Zambia prioritize soybean production, other countries in the region can participate in up- and downstream value addition along the soybean value chain.[455] Finally, forward-looking engagement with the United Kingdom will ensure access to its markets after its departure from the EU. This is particularly vital for SADC's sugar sector for which the United Kingdom is a key market.[456]

In the medium to long term, it is also essential to revisit the composition and authority of key institutions such as the Tribunal to ensure they are able to reach and exert decisions that are beneficial to the region. The Secretariat would also be more effective with the authority to drive policymaking and implementation (rather than administer the process), as well as legislative powers to propel greater integration.[457] Similarly, given the central function of National Committees in ensuring an inclusive governance system, it is vital that they receive the requisite human, financial and technical resources for effective engagement.[458] Although SADC's institutional and policy frameworks are relatively advanced on gender mainstreaming, some key challenges persist. Including gender perspectives in the Protocol on Trade would ensure that gender mainstreaming is truly cross-cutting, rather than sidelined to specific sectors like agriculture.[459] Reinstating monitoring and evaluation frameworks, including the Gender Monitor, would also keep up the pressure to continue implementation of the Protocol on Gender and Development. Although the EU has already committed substantial support for strengthening SADC's institutional framework, it can also be – as the most influential donor of SADC and trading partner of several member states – a useful partner is designing coherent policies for the region.

8. Conclusion

Agricultural trade is a key driver and enabler for agricultural growth, economic development and transformation in Africa. While smallholder farmers benefit from lower entry barriers to regional and global markets, consumers benefit from improved food security and nutrition as more affordable, diverse and nutritious foods become available through trade. If combined with advances in agro-processing and packaging, the benefits of food trade can spill into other sectors too. Flourishing agricultural trade therefore has the potential to generate much-needed employment opportunities and wealth, thereby significantly improving socioeconomic development and livelihoods across the continent. It can also reinforce the resilience of African countries to better withstand socio-economic, climatic and health shocks, such as the ongoing COVID-19 pandemic.

African countries have already made significant and determined efforts to eliminate trade barriers and increase agricultural trade through the RECs and numerous other regional and bilateral trade agreements. Currently, the largest share of agricultural trade across Africa is channeled through the RECs. This will be further catalyzed by the AfCFTA when it starts trading on 1 January 2021. The success of the RECs can therefore offer important lessons in boosting intracontinental agricultural trade too. At the same time, strengthening the implementation and further integration of the RECs themselves in a way that drives sustained agricultural and economic growth can enable a successful AfCFTA.

It is also critical to have systems in place for technical and institutional innovations in the sector and regulations to spur intraregional agricultural trade while accounting for the adjustment costs and safeguarding the environment, maintaining quality standards, and ensuring that smallholder farmers, youth and informal traders are included in opportunities. To fully harness the opportunities of increased intraregional trade, and within a coherent rules-based policy framework, support must be given to information sharing, trade financing and small and medium-sized enterprises.

Important lessons can be learned from trading blocs to boost agricultural trade in Africa:

COMESA has developed a sound institutional framework that supports agricultural development as well as agricultural trade. The REC has adopted a pragmatic approach to addressing key barriers to agricultural trade. Focusing on unlocking finance for trade through robust banking and insurance institutions is a unique and innovative approach. Similarly, developing sector-focused interventions have significantly improved the productivity of the leather and staples sectors, especially of cassava. Finally, complementing these with a wide range of solutions to ease transit across and between countries has further strengthened intraregional trade.

ECOWAS is financially self-sufficient. This provides immense capacity to lead and implement policies and programs that benefit intraregional agricultural trade. Supported by an evolving institutional framework, the REC has created an enabling environment for intraregional trade that facilitates access to finance, attracts investment, and ensures fair competition, in tandem with a judiciary to settle investor–government disputes. Dedicated efforts to harmonize quality standards and a reduction in transit time along key trade corridors are strong signals for expanding agricultural trade and regional integration.

Intraregional trade in **SADC** is the highest within the eight RECs officially recognized by the African Union. SADC's institutional framework includes both, a top-down approach for smooth co-ordination, and an inclusive approach that empowers stakeholders within member countries to engage in the formulation of regional policies and strategies. Moreover, the REC has invested significant efforts and resources in strengthening the effectiveness of its institutions. By actively aligning national and regional priorities reflected in the National Agriculture Investment Plans (NAIPs) and the Regional Agricultural Investment Plans (RAIPs), respectively, the REC ensures that trade and other agricultural sector interventions are optimized.

The Malabo Montpellier Panel has identified a set of actions summarized below that, if brought to scale, could have a significant impact on driving sustained intraregional agricultural trade.

1- Improve data and information collection and provision to support efficient price formation and informed and inclusive policy design and decision making.

2- Fast-track trade facilitation arrangements at REC level and adopt coordinated ICT systems to expedite the elimination of tariff and non-tariff barriers for facilitating agricultural trade and greater integration.

3- In conjunction with robust systems, institutions and policies, design and adapt innovative models for financing the expansion and use of hard infrastructure to drive intraregional and intracontinental agricultural trade.

4- Better align national with regional priorities as set out in the NAIPs and RAIPs to accelerate the implementation of intraregional trade and integration agendas.

5- Invest in the design and development of technologies as well as skill and innovation capacities to strengthen Africa's emerging food processing sector and overall value chain competitiveness.

6- Coordinate policy responses to crises and shocks within RECs and at the continental level through designated centers and taskforces to improve the level of preparedness and response capacity and to maintain agricultural and food trade flows across borders.

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