SOUTHERN AFRICAEUROPE CEO DIALOGUE

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# Unlocking the Potential of the Agroindustry sector in Africa

## Position Paper

In cooperation with:

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With the patronage of:

The European House Ambrosetti

## The Agroindustry sector in Africa

Africa is endowed with vast agricultural resources including fertile lands, diverse climates, and abundant natural resources, yet the continent needs to face the severe impact of climate change. **Agriculture** remains the **main source of livelihood** for the majority of the population, contributing to rural development and poverty reduction. Agroindustry is a potential driver for inclusive economic development, employment generation and export diversification. The sector is expected to play a key role in meeting food demands reducing post harvest losses and promoting sustainable agricultural practices. Given its relevance, the purpose of the position paper is to explore the role of small and medium enterprises (SMEs), the adoption of new technologies, sustainability practices, export opportunities, and international cooperation in agroindustry.

Africa is the continent with the highest share of total gross economic product (GDP) coming from agriculture.

Indeed, **agriculture, forestry and fishing account for about 35% of the continent's GDP** in Africa and support the **livelihood of more than 50% of the continent's population.** These shares are more than double compared to the global average and much higher than those of any other emerging region as in developed countries the share of GDP from agriculture tends to be much smaller compared to services and industrial sectors. At regional level, compared to other regions of the world, **Sub-Saharan Africa (SSA) has the highest share of value added coming from agriculture (17.2%)**, compared to Latin America & Caribbean (7.2%), East Asia & Pacific (5.8%) and Middle East & North Africa (5%).

Furthermore, the **relevance of the agricultural sector has increased over the last decade** by additional 2.3 percentage point – going from 14.9% in 2011 to 17.2% in 2021 – whereas the relevance of the industry sector decreased by 1.6 percentage point over the same time frame.

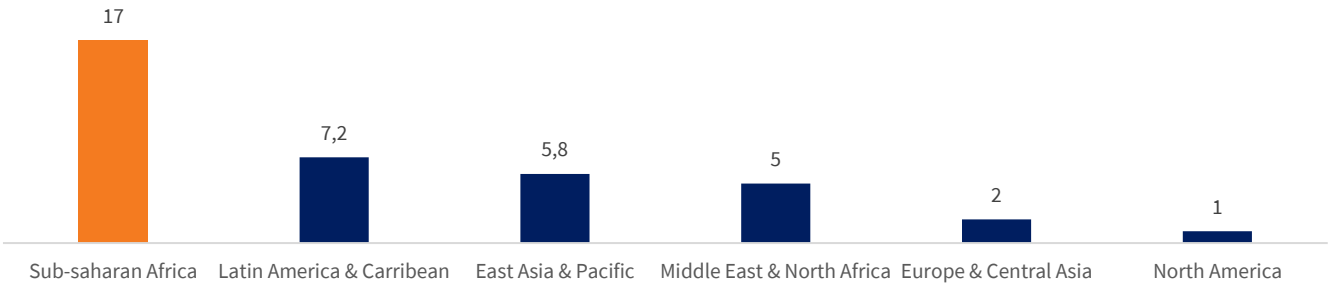



**Figure 1.** Agriculture, forestry, and fishing, value added (% of GDP), 2021. Source: elaboration by The European House - Ambrosetti on World Bank data, 2023.

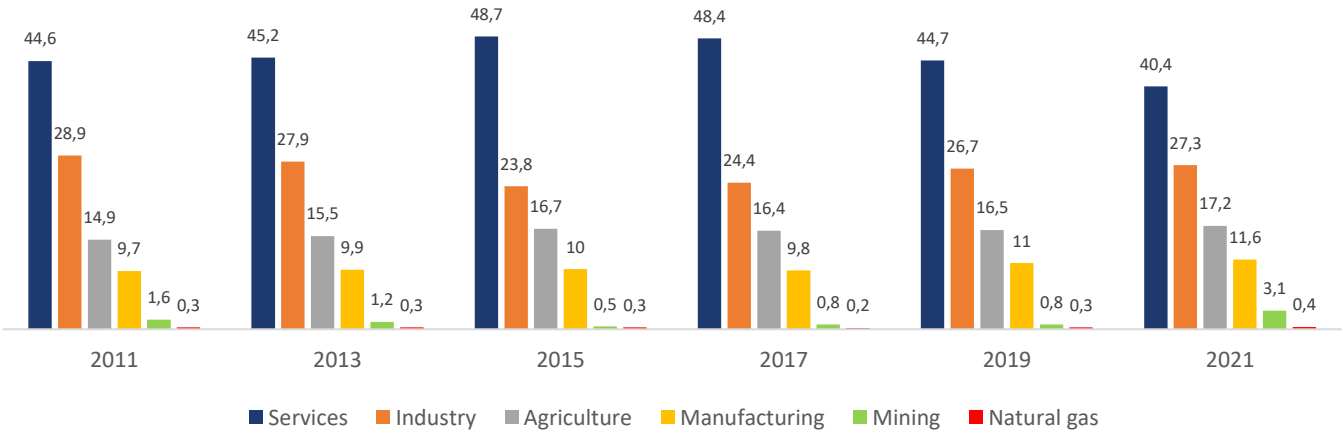



**Figure 2.** Distribution of GDP in Sub- Saharan Africa by sector (%) 2011-2021. Source: elaboration by The European House - Ambrosetti on World Bank data, 2023.


**Figure 3.** Sub-Saharan Africa Food Products Imports and Exports by region (billions US $), 2021. Source: elaboration by The European House - Ambrosetti on WITS, 2023.

## Sub Saharan Africa's partners in food trade

In the analysis of Sub-Saharan Africa food exports and imports by region, it emerges that the largest and strongest trade relations are with **Europe and Central Asia**. In particular, in 2021 Sub-Saharan Africa's food imports from Europe and Central Asia amounted US$ 3.73 billion (corresponding to 41.6% of total imports), while the food export to these regions was US$ 3.37 billion (corresponding to 60.5% of total exports).

The level of **intraregional trade in agricultural products** is **lower in Africa than in other regions of the world:** African countries import only 15% of total food from other countries on the continent. The most traded food products are sugar (5.6% of the total trade), palm oil (5.1%), maize (4.8%).

The top 5 traded products among unprocessed goods are cereals, rice, coffee, and oilseeds, together accounting for about 14% of total intra-African exports. Among processed food, the prominent products are sugar, palm oil, cigars and cigarettes, and tea accounting for 23% of intra-African agricultural exports.

In terms of imports, African countries import 54% of cigars, 89% of palm oil, and 38% of wheat flour from Asia, and 50% and 66% of sugar is imported respectively from Latin America and from the BRICS countries.

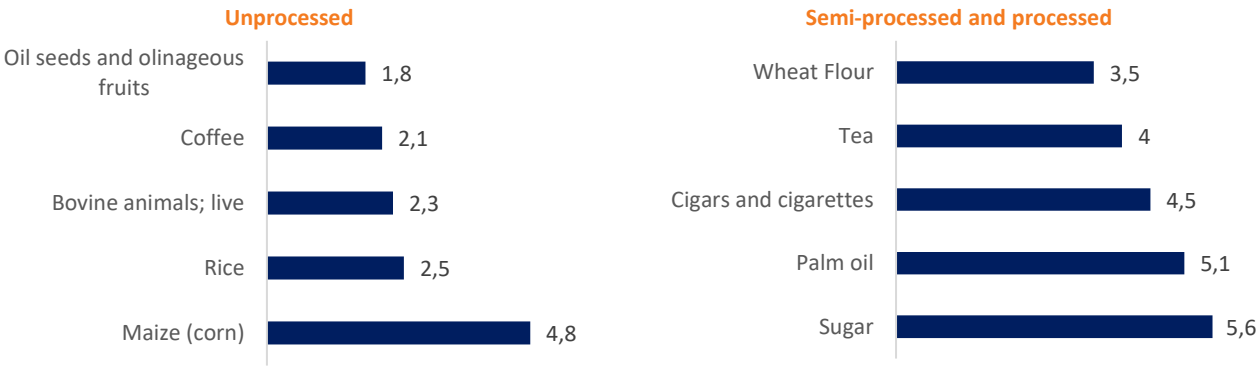



**Figure 4.** Top 5 products in intra-African agricultural trade by type of processing, (export share %) 2018–2020. Source: elaboration by The European House - Ambrosetti on Africa Agriculture Trade Monitor 2022 - IFPRI, 2023.

Even if Africa is the continent which relies the most on agriculture, it is also the one in which people are **least able to afford a healthy diet,** i.e. a diet that offers a diversity of nutrient-rich food, as defined in food based dietary guidelines (FBDGs) by the Food and Agriculture Organization.

Indeed, in Africa the percentage of population unable to afford a healthy diet is over 77%, much higher than in Asia (44%), in the Americas (14.4%), in Oceania (2.9%) and in Europe (1.5%). Within Africa, the suffering the most from food malnutrition is Western Africa (85.4%), while Southern Africa's percentage is 67%.

The situation of food security in Africa is expected to further worsen in the coming years: according to UN estimates, Africa's 1.2 billion population is expected to more than triple by 2100 reaching 4.3 billion people. In relative terms, it corresponds to an increase in the share of global population from 17% to 40%.

Feeding a growing population will require significant advancements in Africa's food systems. Food security is a pressing concern and agroindustry plays a vital role in ensuring sufficient food production, distribution, and access to affordable and nutritious food for the growing population.

However, agricultural advances may be difficult to achieve because of increasingly severe climate impacts. The global temperature of the planet is increasing at an unprecedented rate: over the past 10 years, the global land temperature continued to increase over 1 C° every year, posing an additional threat to the agricultural sector.

In addition to rising temperatures, extreme phenomena are and will continue to increase, both in frequency and intensity. Over the last decade, Africa has been severely hit by extreme weather events, as many as 81 severe droughts and 458 floods between 2010 and 2022.

It is expected that, even though Africa is the least accountable region for carbon emissions, it is set to pay the highest economic price: without appropriate adaptation measures, GDP in Africa would suffer a significant reduction, as much as 12.1% by 2050.

## The key role of Small and Medium Enterprises

In order to boost the agriculture sector, it is crucial to unlock and recognize the **potential of agricultural SMEs in Africa**. SMEs are crucial in creating jobs and driving economic development. In Africa, **SMEs represent approximately 90% of all businesses**. They create between 60% and 80% of jobs and contribute 40% to the total GDP. By way of comparison, SMEs in the US and Europe account for, 53% and 65%, respectively.

Out of the estimated number of micro, small and medium enterprises (MSMEs), Sub-Saharan Africa accounts for 15% of the total in the world, after Asia.

Nevertheless, it is also important to note that informality prevails in many small and medium enterprises across Africa and **86% of total employment in the continent is informal**.

In particular, informal employment constitutes a large share of total employment, with 72% of non-agricultural employment and 98% of agricultural employment being informal.

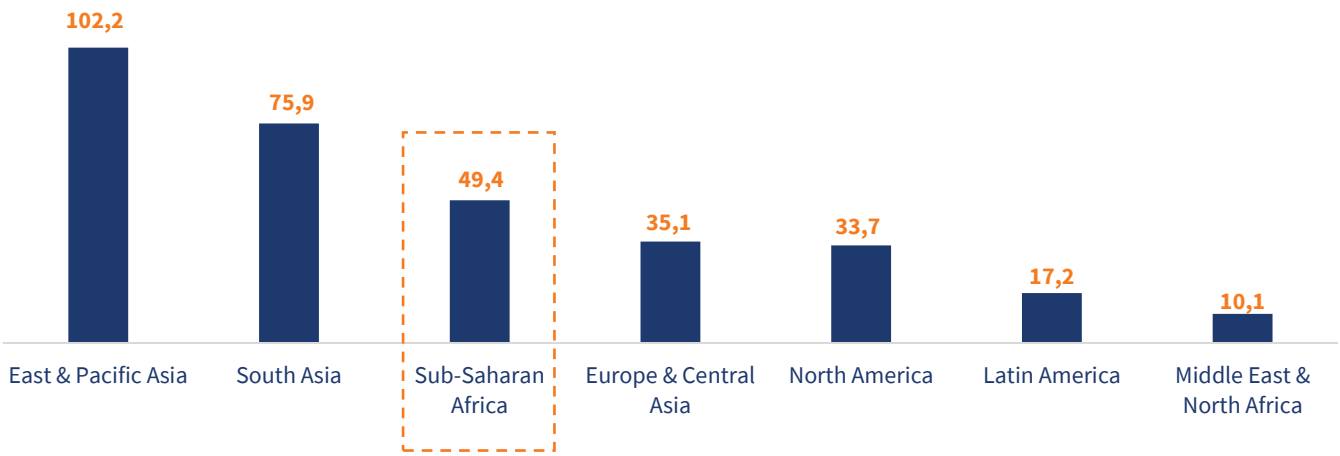



**Figure 5.** Estimated number of MSMEs by region (in million), 2019. Source: elaboration by The European House - Ambrosetti on MSME Economic Indicators Database data, 2023.

Agricultural SMEs in Africa are involved across all stages of the agricultural value chain, from production and processing to distribution and marketing. Some agricultural SMEs in Africa are adopting innovative practices and technologies to improve efficiency and productivity.

Women often play a significant role in agricultural SMEs, both in terms of labor and entrepreneurship: **33.9% of food enterprises in South Africa** has a **female top manager**. Across all sectors, the majority of women do not cover position of top management but are permanent full-time workers. In particular, the food sector is the one with the highest proportion of permanent full time female workers. Moreover, in the food sector the percentage of female top manager is lower than in the manufacturing and retail sector.

Considering youth engagement in the sector, while the **median age in Africa is around 20 years old,** the **average farmer** in Africa is estimated to be around **60 years of age**.

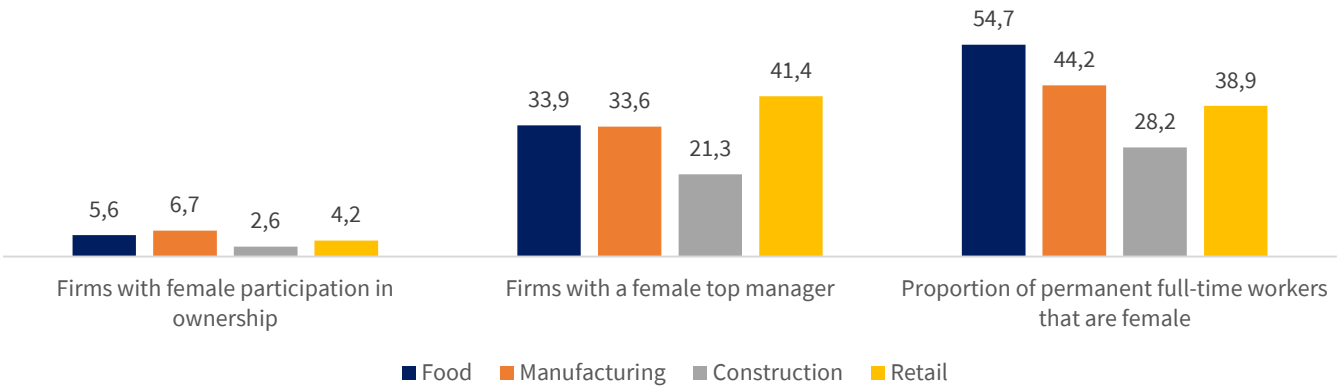



**Figure 6.** Gender in South Africa firms (%, 2020). Source: elaboration by The European House - Ambrosetti on Enterprises Surveys, World Bank, 2023.

In 2021 agricultural enterprises of large size were those with the highest income from all types of activity. However, small enterprises' income was more than the double than the one of medium enterprises and also at micro levels the values were quite high. For example, the total income of medium enterprises dealing with growing crops, market gardening and horticulture was US$ 700.000 while the one of small enterprises in the same category was US$ 1.6 million and of micro US$ 600.000.

Giving a closer look within South Africa, In 2021 agriculture represented the 2,5% of South Africa's GDP. **Western Cape** and **Free State** are the **provinces that sell the most goods and services in agriculture**. The province with the largest income from sales of goods and services in the agriculture and related services industry in 2021 was Western Cape with 19.5% of the industry total (US$ 3.9 billion) followed by Free State with 13.2% (US$ 2.7 billion) and Gauteng with 12% (US$ 2.4 billion).

South Africa has a highly diversified agricultural economy. Commercial grain-growing areas are predominantly located in Western Cape, North West and Free State. Subsistence farming mostly occurs in the North West and the Eastern Cape provinces while the Western Cape produces mainly fruits with plenty of vineyards.

Considering employment and wages, in South Africa, **the agricultural sector accounts for 21% of employment**. The largest contributor to salaries and wages in 2021 was Western Cape with 25.6% of the industry total, followed by KwaZulu Natal 12.1%, and Limpopo 11.3%. Moreover, in terms of employment, Western Cape was the largest contributor with 23.2% of the industry total, followed by KwaZulu Natal 13.1% Limpopo 12.2% and Mpumalanga 10.1%.

## Adopting new technologies to optimize value-added processes

The Covid-19 pandemic changed mainly the market access and health and safety measures of agri-SMEs. At the same time, the pandemic crisis accelerated the adoption of technological measures and innovation in African SMEs.

The integration of digital technology into agriculture presents a major opportunity for Sub-Saharan Africa.

The emergence of the mobile phone as a popular communication tool, coupled with internet-based solutions, could significantly boost access to financing for agricultural inputs across the value chain. Digitalization, as well as the effective use of fertilizer and seeds, will become increasingly important in unlocking agriculture prospects in Africa. Trending technologies in agriculture include data management, machine learning, artificial intelligence, automation, and drone-based applications. **Production research and technology**, in which South Africa needs to invest, are relevant areas of opportunity not only for economic growth of the agricultural sector but also for the alleviation of the vulnerability of crops and livestock.

The disruptive and transformative potential of agricultural technologies has become increasingly evident in recent years, and Covid-19 has further accelerated the trend towards greater use of ICT in Africa's agriculture sector. During the pandemic, digital solutions that enable a continuation of business while allowing customers and employees to adhere to social distancing measures have boosted the adoption of technology across many sectors, including agriculture. An example of this is the improvement of mobile connections in Sub-Saharan Africa: 3G connections are expected to increase from 45% to 58%, 4G from 10% to 27% and 5G will account for 3% of total connections by 2025.

Moreover, even if all countries in the region, except South Africa, have low ICT skills, **governments are improving their national ICT strategies**.

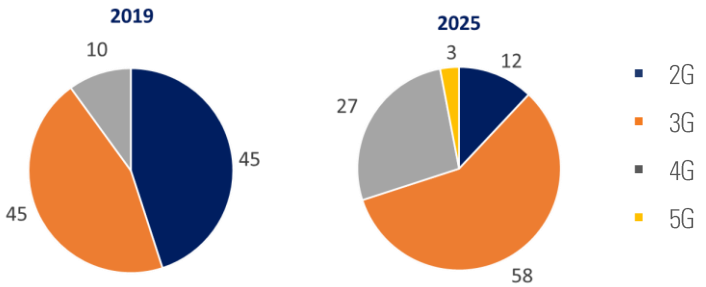



**Figure 7.** Mobile connections in low and middle income countries of Sub-Saharan Africa, (%) 2019 vs 2025F. Source: elaboration by The European House - Ambrosetti on "Agriculture in Africa 2021", Oxford business group, 2023.

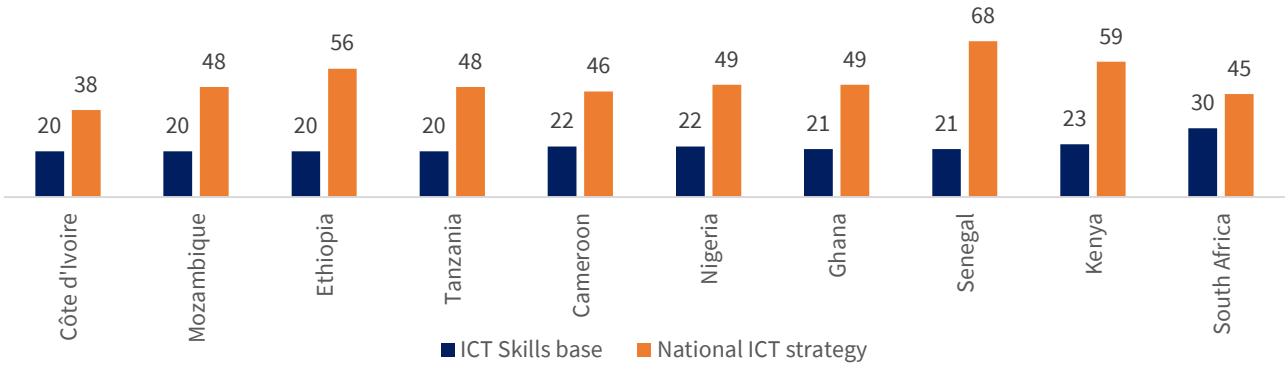



**Figure 8.** ICT Readiness in Selected Sub-Saharan African Countries (0-100), 2021. Source: elaboration by The European House - Ambrosetti on "Africa's Pulse", World Bank Group, 2023.

Within Sub-Saharan Africa, **South Africa is the country which is more likely to initiate and expand the use of digital platforms,** with an estimated 51% of probability according to the World Bank. In Sub-Saharan Africa, on average more than one in five firms started or expanded their use of digital technology in response to the Covid-19 shock: this was more frequent in firms located in East and Southern Africa, compared to West and Central Africa.

Analysing the average adjusted probability of starting or increasing the use of digital technology in Sub-Saharan Africa across sectors of economic activity, firms in sectors with a greater share of tasks that can be performed from home were more likely to have increased their use of digital platforms in their businesses.

Larger firms were more likely to use digital technologies in response to the pandemic shock than smaller ones. The likelihood of firms using digital platforms to respond to the shock ranged from 16% (micro firms) to 40% (large firms). Additionally, the uptake of digital platforms was more widespread among formal firms than informal ones. Firms in agriculture were less likely to increase their use of digital platforms because the activities cannot be performed from home.

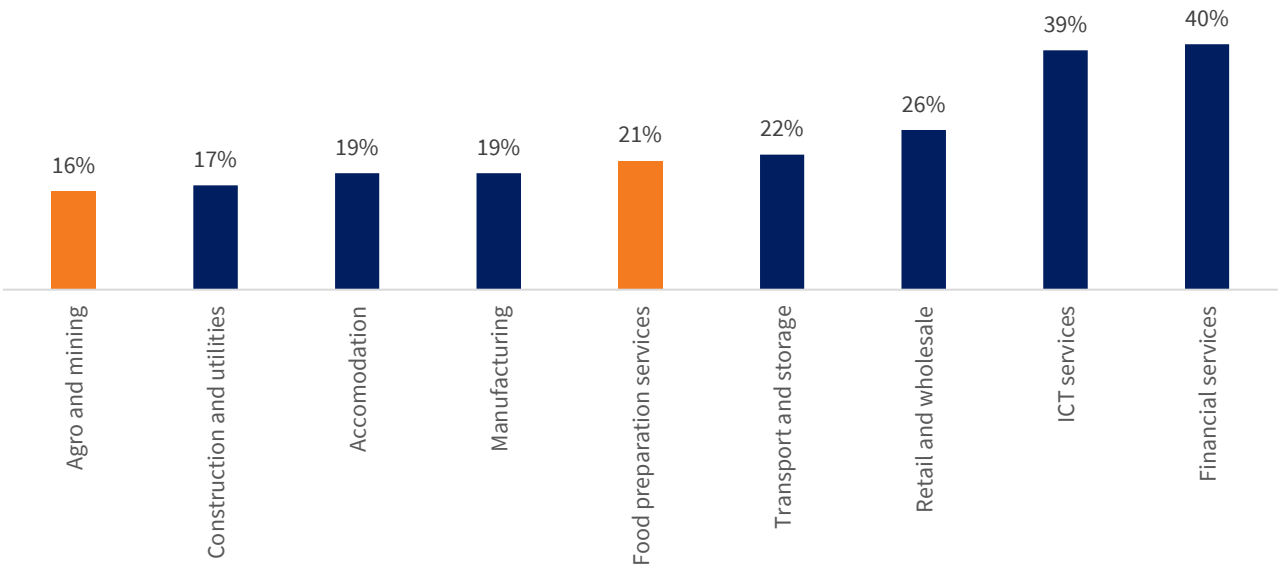



**Figure 9.** Average adjusted probability of starting or increasing the use of digital technology in Sub Saharan Africa, by sector of economic activity, (%) 2021. Source: elaboration by The European House - Ambrosetti on "Africa's pulse", World Bank Group, 2023.

Nearly 83% of employment in Africa and 85% in Sub-Saharan Africa is informal, making transparency and development of technology harder. South Africa had an estimated 1.75 million small businesses in 2022. The number of small formal businesses in South Africa reached 710 thousand in 2022 increasing from 680 thousand in 2019 and 590 thousand in 2010.

On the other hand, the number of informal businesses increased through the 2010s, jumping from 1,3 million to 1,75 million by the last quarter of 2022.

Informality in business makes the people of Africa more vulnerable to economic crises and external shocks.

## Sustainability and Growth of the agroindustry sector: challenges and opportunities

In light of the continent's exposure and vulnerability to climate change and their potential for soil conservation, water management, biodiversity preservation, and the reduction of chemical inputs, it is of utmost importance the enhancement of sustainability practices.

First, more than one-quarter of the world's greenhouse gas (GHG) emissions come from agriculture, forestry, and land-use change. In Africa, **over half of the total greenhouse gas emissions (52.8%) are consequence of agriculture, land-use change and forestry.**

Unless actively addressed, these emissions are likely to increase as the population and the need for food continues to grow in the coming deades. A period of transition is likely required to limit the impact of climate change, and this may be more challenging for agriculture, while other sectors have identified many technologies that could substantially reduce emissions.

The first step in reducing emissions from agriculture is to produce food as efficiently as possible—that is, to change how we farm. A set of proven GHG-efficient farming technologies and practices could achieve about 20% of the sector's required emissions reduction by 2050.

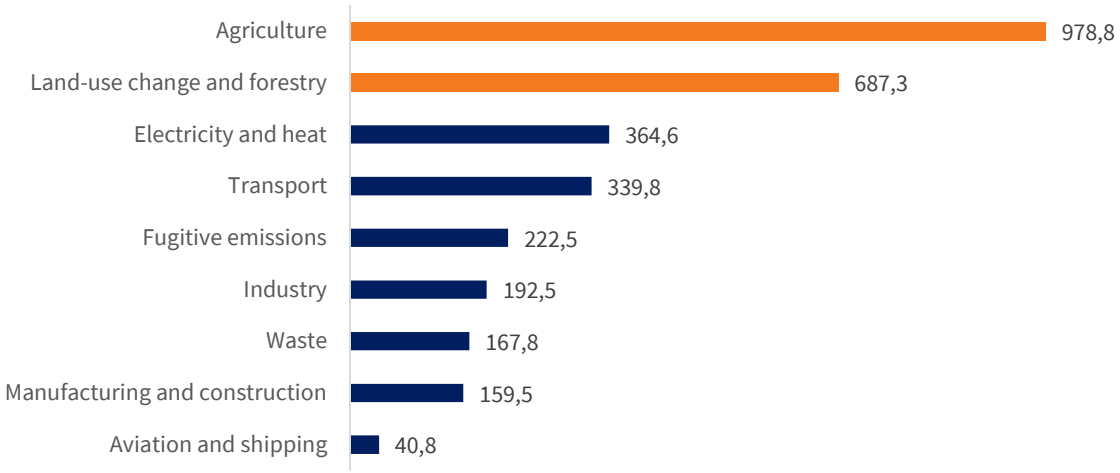



**Figure 10.** Greenhouse gas emissions by sector in Africa (million tonnes), 2019. Source: elaboration by The European House - Ambrosetti on Our World in Data, 2023.

In terms of sustainability, some indicators that will be analyses and that are linked to sustainability are: food loss, pesticides, forestry, and water management.

Reducing **food loss and waste** could be one of the leading strategies for Africa, and globally, for achieving a sustainable food future. Indeed, 17% of total global food production is wasted in households, in the food service and in retail all together.

At the same time, significant volumes of food are lost after harvest in Sub-Saharan Africa each year, estimated at 4 billion worth for grains alone. This exceeds the value of the total food aid received in Sub-Saharan Africa over the past decade and equates to the annual value of cereal imports.

This waste occurs while an estimated 100 million people faced catastrophic levels of food insecurity in 2020 across Africa.

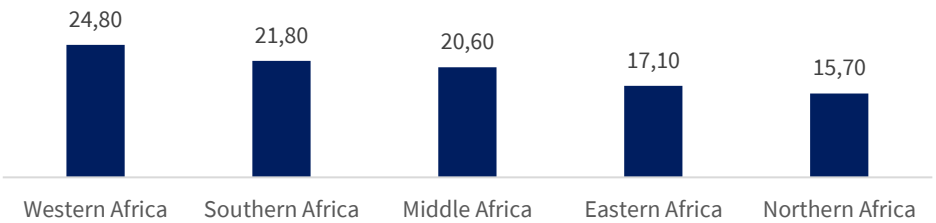


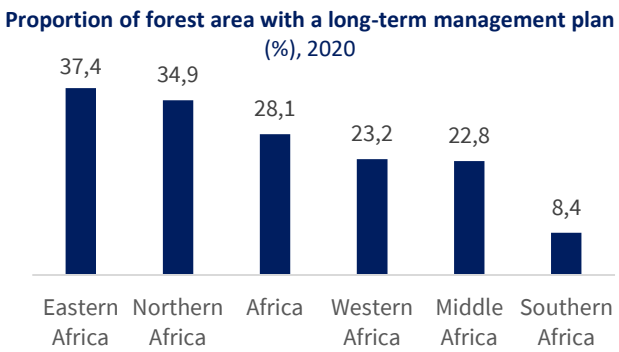

**Figure 11.** Food loss percentage (%), 2020. Source: elaboration by The European House - Ambrosetti on FAO, 2023.

Another crucial element is forestry. In Africa only **28,1% of forest areas have a long-term management plan and 25,7% of forest areas are protected**. Sustainable forestry is about maintaining or enhancing the productivity, diversity, and resilience of forests. At the same time, sustainable forestry methods also lead to the production of natural resources and services that directly benefit local communities and the wider world.

On the other hand, in cultivations millions of smallholder farmers are exposed to the risks associated with chemicals through widespread adoption of pesticides. Africa is quickly developing a dependency on agricultural pesticides, but most African governments do not have adequate resources to monitor the impacts of pesticides or the capacity to prevent negative human health and environmental consequences. An effective management strategy for pesticides in Africa must include educational programs focusing on pesticide use, health and environmental risks, stringent policies on imports of highly hazardous pesticides (HHPs), increased government support to production systems that promote agroecology, and long-term monitoring on the impacts of pesticides.

Finally, agriculture is the sector with the **lowest water use efficiency** in South Africa. According to the Target 6.4 of the UN Sustainable Development Goals, it is desirable to substantially increase by 2030 water use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

The global current water use efficiency value is 18.9% while in Sub Saharan Africa is 12.8% and in South Africa 13.7%. **From 2015 to 2020 water use efficiency increased of 9%.** In South Africa water use efficiency increased overtime in the services sector but decreased in industry and agriculture.



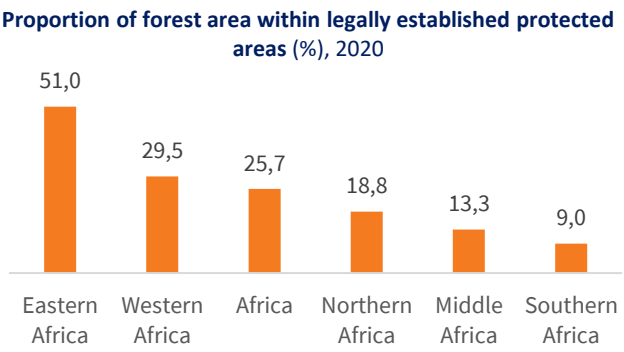




**Figure 12.** Proportion of forest area with a long-term management plan and within legally established protected areas, 2020. Source: elaboration by The European House - Ambrosetti on FAOStat, 2023.

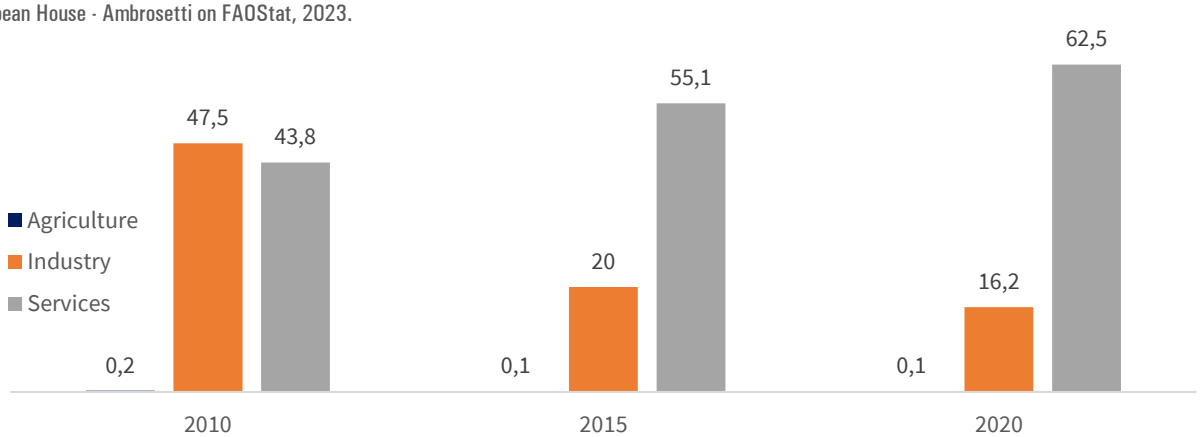



**Figure 13.** Water use efficiency in South Africa, by sector (US $ per cubic meter). Source: elaboration by The European House - Ambrosetti on SDGs indicators data portal, 2023.

## Effects of the African Continental Free Trade Area on Agriculture

The **African Continental Free Trade Area (AfCFTA)** is expected to become the largest free trade areas in the world once fully implemented. It could potentially connect 1.3 billion people across 55 countries with a combined GDP valued at US$ 3.4 trillion.

It has the potential to lift millions of people out of poverty, increasing total exports by as much as US$ 560 billion by 2035, income by 7%, and wages by about 10%.

The free trade area can also influence African agricultural trade as GDP growth increases the demand for processed agricultural products—which could provide new opportunities for agriculture and agri-business growth in the region.

The AfCFTA will increase value addition, meet new local demand and bring smallholder farmers (who are responsible for 80% of Africa's food production) into wider supply chains. In particular, opportunities abound in the AfCFTA for new investment in agro-processing.

**Stronger intra-African trade through the AfCFTA** will help reduce dependency on foreign agricultural inputs. Currently, the continent imports about US$ 50 billion worth of agricultural products per year. By 2030, intra-African agricultural trade is projected to increase by 574% if import tariffs are eliminated.

**AfCFTA is expected to boost regional output by US$ 211 billion by 2035**. Within Africa, only in Northern Africa there will be an output decrease in agriculture due to AfCFTA, which will amount to US$ 35.3 billions.

Moreover, the AfCFTA will also change the import and export of food products between Africa and the rest of the world. It is forecasted that imports and exports of agri- products will increase for each country under the AfCFTA scenario, except the exports to China, which will decrease of US$ 1.5 billion.

Finally, under the AfCFTA scenario also the employment in agriculture will increase. **Sub-Saharan Africa's employment is expected to grow** from 437 million to more than 650 million, **at an annual rate of increase of 2.7%**. In absolute terms, the number of skilled workers would grow by nearly 92 million, at an annual rate of increase of 2.8%.

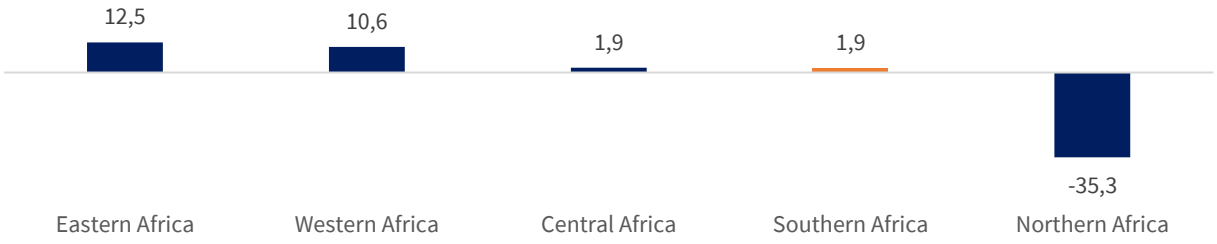



**Figure 14.** Output changes in agriculture due to AfCFTA in 2035 by region change with respect to baseline scenario (billion USD). Source: elaboration by The European House - Ambrosetti on World Bank «The African Continental Free Trade Area», 2023.


**Figure 15.** Employment reallocation in agriculture due to AfCFTA in 2035, change with respect to baseline scenarios (millions). Source: elaboration by The European House - Ambrosetti on World Bank "The African Continental Free Trade Area", 2023.

## Key solutions and strategies that can contribute to the advancement of agriculture in Africa

In conclusion, some strategies that can contribute to the advancement of the agricultural sector in Africa include:

- **Government policies**: it is crucial to implement policies that support and incentivize sustainable agriculture, land tenure security, and rural development;
- **Research and development**: invest in agricultural research to develop innovative solutions and new crop varieties tailored to the African context;
- **Private sector engagement**: encourage private sector investment in agriculture, including agribusinesses and technology companies, to drive innovation and efficiency;
- **Youth involvement**: advance agriculture as a viable career choice for the youth by offering training, access to land, and entrepreneurial support;
- **Cross border collaboration**: promote regional cooperation and trading partnerships to enable the free movement of agricultural goods and enhance food security;
- **Investment in infrastructure**: improve rural infrastructure such as roads, irrigation systems, and storage facilities to enhance transportation and reduce post harvest losses;
- **Access to finance**: improve access to credit and financial services for small scale farmers and strengthen market linkages for small scale farmers to access national and international markets, reducing the vulnerability of farmers to price fluctuations;
- **Promote sustainable farming practices**: encourage sustainable agricultural practices, such as crop rotation, organic farming, and reduced chemical pesticide use, to maintain soil fertility and reduce environmental impact;
- **Access to technology**: boost the adoption of modern agricultural technologies, such as precision farming, drones, and mobile apps, to enhance productivity and reduce labor intensive practices;
- **Education and training**: invest in agricultural education and training programs for farmers, including techniques for better crop management, pest control, and sustainable farming practices;
- **Cooperative farming**: facilitate the formation of agricultural cooperatives to help smallholder farmers pool resources and negotiate better prices for their products.