

Assessment of the Impact of COVID-19 on Food Systems in Africa and Recommended Mitigation Measures

**Summary Findings** 

April – May, 2020

## **Executive Summary**

In light of COVID-19, SAA carried out a virtual assessment to establish the current and anticipated effects of the pandemic on food systems. Using the findings, SAA proposed recommended measures to help mitigate the impact. Interviews were conducted with stakeholders across the entire agriculture value chain.

Results of the assessment indicated that COVID-19 has had a significant effect on the agriculture sector and food systems within a short time frame. The pandemic affected stakeholders in different countries in various ways. The restrictions on travel and social gatherings, for example, reduced access to postharvest handling and agro-processing technologies, financial credit services, adequate labor, and led to an increase in produce prices. The provision of agricultural extension and advisory services was also disrupted, leaving farmers with limited access to training and capacity building opportunities — this is further exacerbated by most administrators, lecturers and students at agricultural colleges/universities lacking access to ICT systems, which could offer online learning as a solution.

Overall, findings suggested that should the pandemic continue, these limitations, combined with the reduced availability of labor, are expected to affect most activities along the crop value chain, including crop production and productivity, postharvest handling, and accessing finance. The disrupted teaching at agricultural colleges and universities will also have a far-reaching impact on the overall learning cycle, and food security in Africa.

SAA is committed to mitigating the impact of the pandemic via short, medium and long-term solutions. Proposed agricultural extension solutions will seek to strengthen knowledge transfer between extension agents and farmers through e-extensions, and to improve the use of scarce resources. The supply chain will also be strengthened by using ICT to link and improve farmers' access to input and output markets, and to establish methods of e-learning in academic institutions.

#### Introduction

The global impact of the COVID-19 pandemic is expanding rapidly, and has severely disrupted supply chains, created significant volatility in global financial markets, as well as changing the communication and business landscape. Governments across the globe are tasked with minimizing the impact of the pandemic, whilst also protecting human lives, livelihoods, and ensuring sufficient food availability along the entire food supply chain. The agriculture sector of African countries, in particular, is extremely vulnerable to the pandemic – with millions at risk of being deprived of their livelihoods. The International Monetary Fund (IMF) estimates the continent's GDP to contract by 1.6% this year, whilst the International Food Policy Institute (IFPRI) maintains that global economy contraction could push over 140 million people into poverty. This will have direct negative consequences for food and nutrition security.

In Africa, limited testing means that much remains unknown about the trajectory of the transmission of COVID-19 and its true scale. The continent currently has over 336,000 official cases<sup>1</sup>, and many countries remain vulnerable to an increase in outbreak and are ill-prepared to deal with a future surge of cases. Additionally, there is a fear that the high levels of poverty in Africa, grouped with inadequate health systems and crowded urban areas, could lead to devastating consequences. In a bid to reduce the spread of the disease and protect citizens, many countries in Africa have implemented restrictive measures, including lockdowns, travel restrictions, and the closure of training institutions. Whilst preventing the spread of COVID-19 remains the number one priority for African governments, food and nutrition security as well as the economic livelihood of the population should also be addressed.

The economy of African countries is largely dependent on agriculture, and compared to the previous Ebola outbreaks in Uganda, DRC Congo, Liberia, Sierra Leone and Guinea over the years, the COVID-19 pandemic appears to have a greater, more direct, impact on agriculture due to the widespread restrictions limiting farmers' ability to carry on with their activities. Subsequent measures taken by governments to mitigate the spread of the coronavirus have already been shown to have a significant effect on the entire food system — including reduced rates of production and productivity. Widespread health concerns have resulted in fluctuating market patterns, which have been further exacerbated by disrupted supply chains, unpredictable food prices, reduced labor availability and sparse sources of nutritious and varied food. The livelihoods of smallholder farmers has also suffered as a result of the pandemic, with unemployment levels rising.

The Global South, and especially Africa, is most at risk as food systems in these areas are already fragile, and their inhabitants have fewer resources to cope with the loss of jobs and income. Additionally, an increase in food prices and limited availability reduces the ability to adapt to the crisis, and could also lead to a global food security crisis. Therefore, measures that do not lead to disruptions in food supply chains should be promoted to support the most vulnerable – such measures include providing social safety nets, minimizing disruptions to the safe movement and transport of people delivering essential services, and keeping roads open for food and agriculture trade.

Opportune and strategic action is needed to minimize the impact of the COVID-19 pandemic on food security in Africa at large, so as to avert the risks of social instability. In partnership with their network of extension and advisory service actors across the entire value chain, SAA has undertaken an assessment on the effect of the pandemic on agriculture food systems in Africa. The assessment will play an important role in raising awareness of the threats to food systems, while guiding SAA's extension and technology intervention strategy to ensure sustainable and impactful solutions are presented, with lasting impacts.

<sup>&</sup>lt;sup>1</sup> As of 25 June, 2020. African Center for Disease Control (https://africacdc.org/covid-19/)

## **Study Objectives**

The overall objective of the survey was to assess the impact of the COVID-19 pandemic on food systems across the entire agricultural value chain, and to identify measures which can be taken to mitigate the impact. The study concentrated on SAA's focus countries in Africa: Ethiopia, Mali, Nigeria and Uganda; in addition to Tanzania, Malawi, Mozambique, Burkina Faso, Ghana, Sierra Leone, and Benin where academic institutions were surveyed.

## Study Methodology

The survey targeted a diverse group of stakeholders engaged in the agriculture value chain process, including farmers, off-takers/traders, input dealers, Ministry of Agriculture personnelAgriculture Private Service Providers and Agro-processors, Development partners, and representatives from financial services and academic institutions. Geographically, it assessed field sites where SAA is currently operating and academic institutions implementing the Agriculture Extension Education programs.

A total of 434 respondents<sup>2</sup> were contacted with tailored questions via telephone and email from 13-16 April, 2020.

<sup>&</sup>lt;sup>2</sup> Breakdown of respondents by country: Ethiopia (98), Mali (112), Nigeria (97), Uganda (95), combined total of 32 from Benin, Burkina Faso, Ghana, Malawi, Mozambique, Sierra Leone and Tanzania.

Breakdown of respondents by gender: Male (80%), female (20%).

# Assessment findings

#### **Ethiopia**

The survey conducted in Ethiopia covered four regional states and nine universities. The majority of smallholder farmers reported that access to training and relevant technical support had been hindered by the pandemic – this was further reiterated by extension agents, over half of which claimed they were unable to provide training to farmers. Farmers also reported inputs are in short supply, while a few expressed concerns about the inflation of prices. Similarly, the majority of farmers think that their accessibility to labor would be challenged, especially during the upcoming peak season. The pandemic also affected farmers' public work campaigns (community soil and water conservation, community canal constructions), and halted farmer groups' planning and resource mobilization activities.

According to the assessment, agribusinesses are seriously affected by the mobility restrictions imposed by the government. A significant number of output traders reported that they did not have enough grain in their stock. Agro-processors reported shortages of raw materials due to the restrictions on travel, but also partly because of speculation hoarding by some in expectation of price hikes. Traders faced capital deficit for the lack of credit access from financial institutions, and were thus unable to aggregate retail agricultural products.

The majority of financial institutions are also affected by the pandemic. Due to the disruption of loan disbursement and repayment process, institutions have limited funds at their disposal. As a result, credit flow to a number of farmers is interrupted. This has triggered a slowdown of economic activities. Business enterprises are going bankrupt and the overall effect has negatively impacted agricultural production. Furthermore, a significant number of service providers reported shortages and high price of raw materials, which resulted in reduced sales of processed grain.

According to the study, face-to-face classroom sessions have been halted at SAA's partner universities. Most of the universities turned to alternatives, including regular voice call services, text messaging, emailing and telegram. However, poor telecommunication services and the high costs associated with using the internet and telephone makes it difficult for students to access online course materials. Notably, a significant number of respondents reported that they do not have access to ICT facilities. However, it is worth noting, universities which administered a semi-distance summer delivery program are not significantly affected.

Overall, findings suggest it is highly likely that the above consequences will, in turn, affect Ethiopia's food and nutrition security.

## <u>Mali</u>

In Mali, smallholder farmers emphasized that the pandemic has disrupted the provision of agricultural extension and advisory services, leaving farmers with limited access to training and capacity building opportunities, and also necessary technologies. Respondents also reported that their access to labor, credit, quality seeds, transportation services, and output markets has been limited – this in turn reduced crop production and productivity. The pandemic also caused an increase in market prices of food, which triggered food and nutrition insecurity. The restrictive measures taken by the government has led to reduced market opening times, leaving value chain actors at a risk of earning a reduced income, which may lead to increased poverty.

Moreover, respondents of the survey projected that there will be delays in the procurement and supply of agro–inputs, which will result in delays in the execution of agricultural activities. This will cause a significant reduction in productivity. Staff members at the Ministry of Agriculture also reiterated this as they claimed the availability, and mobility, of labor between farms is disrupted as a result of travel restrictions. Such restrictions may result in increased rural unemployment and are likely to impact the overall performance of the cropping season. In relation to this, due the outbreak, borders with neighboring countries have been closed, thus reducing trade opportunities and access to imported goods such as fertilizers, agro-chemicals and vegetable seeds.

Half of agro-processors interviewed reported that performance of their business is negatively affected, while stakeholders of financial institutions reported that there has been a reduction in farmers servicing their financial loans with concomitant reduction in rural credit flow. Farmers also believe that the reduction in their income and related increase in poverty will reduce their ability to afford the guarantee fund (collateral) required by banks to access credit.

Restrictions have also led to the closure of training institutions from pre-school to universities. More than 3,000 students from Sasakawa Africa Fund for Extension Education (SAFE) program partner universities are deprived of the benefits of face-to-face lectures. Furthermore, they are not able to benefit from online learning due to limited relevant ICT infrastructure. As a temporary solution, telecommunication services are being used for essential communications.

#### Nigeria

In Nigeria, the government has imposed a complete lockdown in some areas and this has affected different sectors of the economy, including agriculture. Consequently, the majority of respondents believe that food security and nutrition is threatened due to limited mobility, whilst all respondents felt that the lockdown has reduced basic agricultural activities. The majority of smallholder farmers who took part in the survey reported that they have experienced limitations in accessing their farms, as well as limitations in utilising extension services and training, pre/postharvest handling services, labor, transportation services, reduced output markets and an increase in input prices as a result of the outbreak.

Respondents from the Ministry of Agriculture believe that favorable grounds are already in place to use the e-extension system. However, less than half of the respondents believe that the use of e-extension will help overcome the current restrictions imposed by the pandemic. Conversely, the majority of extension agents interviewed believe that if access is granted, they can effectively use the e-extension system.

Furthermore, the majority of agro-processors and private service providers reported low demands for grain milling, a lack of access to grain products for processing and new input stocks, and limited access to necessary raw materials for processing. In relation to this, a large proportion of respondents reported an increase in food prices; while agro-dealers experienced limitations in sourcing inputs, reduction in the level of input stock, and limited access to input supply during the lockdown. The majority of financial institutions interviewed reported reduction in loan repayment servicing by farmers and reduced rural credit flows.

The restrictions put in place in response to the pandemic has forced SAA and SAFE partner universities to rely on ICT platforms in order to interact with students. However, only a limited number of institutions have the necessary ICT facilities to provide lectures, and most are turning to alternative methods for

delivering their training programs in a way that reduces physical contact between students and farmers. Unremarkably, only several lecturers have used virtual methods to deliver training.

## **Uganda**

In Uganda, a significant number of farmers reported an increase in food prices and reduced household food rations, with some reporting a low uptake of nutritious foods as well as reduced number of meals per day. The study also found that the performance of businesses engaged in the supply of agricultural inputs were considerably affected by the pandemic.

Restrictions put in place highly limited access to agricultural inputs, limited sales, led to an increase in input prices, increased transaction costs, delayed delivery of imported inputs, and delayed payment of debtors. The majority of agriculture private service providers observed a sharp decline in demand for services. This was further marred by unreliable and costly transport services, and limited working hours due to imposed curfews as part of lockdown measures. Output markets have also been affected by high transport costs, and scarcity of produce due to restricted transport and hoarding by some farmers, with some traders having to close their businesses altogether. Moreover, the financial institutions have not received new loan applications and are challenged by poor loan servicing by farmers. This has reduced funds available to re-invest in agriculture technologies and related activities.

Furthermore, the restrictive measures introduced as part of the lockdown have affected universities – especially the administrative activities which has resulted in delayed completion of the school year and new admissions. In addition, classroom activities, laboratory practices, supervised enterprise projects and capacity building events, such as training workshops for lecturers, have been significantly affected. Face-to-face classroom interaction is halted and as a result, students have resorted to e-learning, where this is feasible.

## Human Resource Development (SAFE program) in other African countries

The Human Resource Development (HRD) theme of SAA conducted a similar survey in seven additional African countries where SAFE operates: Benin, Burkina Faso, Ghana, Malawi, Mozambique, Sierra Leone and Tanzania. Whilst the situation surrounding the pandemic may vary across different countries, ultimately, the day-to-day activities of SAFE partner universities have been significantly affected by COVID-19. Unanimous agreement was recorded amongst university administrators, lecturers and students who responded to the study that routine activities, including sitting examinations and conducting field practicals, have been entirely interrupted. Similarly, activities within supervised enterprise projects, which form the pillars of the SAFE program, have been negatively impacted. Findings also showed that implementing virtual learning is challenging due to limited and expensive internet facilities.

## **SAA's key recommendations**

- Continue to liaise closely with government agencies, including the Ministry of Agriculture.
- Introduce and adopt smart approaches (i.e. e-methods) to continue administering capacity building and knowledge transfer, and disseminating technologies.
- Facilitate adequate access to agricultural inputs for farmers.
- Facilitate and adopt reliable ICT and e-commerce systems.
- Encourage the sourcing and procurement (on recovery basis) of appropriate pre-and postharvest equipment.
- Produce appropriate material, including training manuals, posters, leaflets etc. in SAA's official languages for distribution amongst key players across the agriculture value chain.
- Support the production of food security crops (e.g. cassava, biofortified sweet potato) and high value fast growing crops, such as vegetables.
- Continue partnerships with media houses (print, electronic, online) to deliver key messages to the public.
- Promote e-extension as a way of reaching out to as many farmers as possible during, and after, the COVID-19 pandemic.
- Establish a revolving fund in the form of a loan to support commodity association traders/trainers, as well as private service providers.
- Increase the logistical support available to field extension workers.
- Support SAFE program alumni associations in raising awareness of COVID-19 measures at country level in their 2020 newsletters.
- Establish online courses (e-learning) in two pilot training institutions in Ethiopia and Mali.
- Link e-learning platforms with SAA/SAFE webpages in Ethiopia, Mali, Nigeria and Uganda.
- Upload training modules and training materials on SAA/SAFE webpages in Ethiopia, Mali, Nigeria and Uganda.