

Building Resilient Agriculture Systems

Are agriculture systems well prepared to withstand high impact shocks such as the COVID-19 pandemic, and, faced with such shocks, are they resilient?

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How have agriculture systems developed to handle external shocks?

Although agriculture is a major driver of economic development in many African countries, the sector is heavily vulnerable to shocks caused by both natural and man-made events. These include drought, floods, pests and diseases, market failures and economic challenges. These events are increasing in frequency, intensity and impact due to climate change and other global phenomena. These shocks negatively affect agriculture production, food security, agricultural incomes, livelihoods and general economic development.

In response to these shocks, there have been growing efforts to make agriculture systems more resilient by putting in place various strategies and interventions. These include: establishing strategic reserves (food or funds); putting in place insurance schemes (weather or crop insurance); establishment of warehouse receipt systems, contract farming; development of resistant crop varieties and livestock breeds (resistant to drought, pests and diseases); pursuing integrated farming including intensified irrigation; and other physical measures.

Is the COVID-19 pandemic “the big one” or are ag systems built to withstand such a shock?

The impact of the COVID-19 pandemic is already being felt globally. The United Nations World Food Programme has warned that an estimated 265 million people could face acute food insecurity by the end of 2020, up from 135 million people before the crisis¹. The potentially devastating impact of the COVID-19 pandemic on health and economies underlines the importance of answering the questions “Are agriculture systems well prepared to withstand high impact shocks, and, faced with such shocks, are they resilient?”.

This policy brief looks to examine these questions and test the resilience of the sector by answering key questions. First, whether there are knock on effects caused by market disruption severe enough to cause food insecurity. Second, how are export and import systems coping with the knock-on effects caused by the pandemic? Third, are farmer support systems delivering? Fourth, Are the needs of sick farmers – who don't have COVID-19 – being sidelined as governments focus on urgent COVID-19 cases? Fifth, how is growth across Africa being affected? and sixth, Will the devaluation of the U.S. dollar worsen the macroeconomic environment.

¹ <https://www.worldbank.org/en/topic/agriculture/brief/food-security-and-covid-19>

We concluded by suggesting ways forward for governments to mitigate the impact of the COVID-19 pandemic on agricultural systems

Is the agriculture sector resilient enough to limit the negative health and economic Impacts of the COVID-19 pandemic?

Market disruptions

Government responses and restrictions on movement imposed across Africa designed to limit the spread of COVID-19 have led to severe market disruptions. As a result of market closures or limited trading hours, agricultural markets in many countries (tobacco/tea auction markets, commodity exchanges) have stopped functioning. This has resulted in loss of income to farmers, increased storage costs and post-harvest losses. In addition, local input and output markets including food markets are being restricted due to lockdown and social distancing measures, increasing prices for inputs and, in some cases, causing food price spikes. The trade and market shocks as a result of restrictive trade policies has led to price hike for imports and disrupted supply chains- for instance in agriculture inputs and food as well as increased job loss in our economies, increasing the number of vulnerable people in need for social safety net programmes. At least 49 million people, more than 70% of them living in our countries have been pushed into extreme poverty.

Import and exports are slowing

Second, the export and import systems for agricultural commodities and supplies have been brought to a near stop, thereby affecting local food supplies, input supplies and overall income streams for the farmers. The general financial, economic and industry operations and infrastructure have also been severely crippled so that they cannot effectively provide services and support to the general population as well as for the farming communities. The result is likely to be increased food insecurity and malnutrition, loss of income and declining livelihoods especially for the majority poor farmers in rural areas. Countries are faced with additional spending needs to finance the immediate health response, provide support to households and firms, and invest in the recovery once the pandemic is under control. At the same time, revenues are collapsing, particularly for commodity exporters and tourism and other services-dependent countries. Global public debt stocks are projected to jump by 13 percentage points of gross world product in just one year, from 83 to 96 per cent (IMF Fiscal Monitor, 2020). The IMF expects fiscal balances to turn sharply negative to -5.7 per cent of GDP in low-income countries.

Farmer support systems are not providing necessary services

Thirdly, farmer support systems which provide much needed technical and financial support to farmers and local agro-dealers are failing. These include extension systems, technical services (e.g. veterinary services, pest control) and financial services. Due to restrictions on social distance, movement and office operations, government extension and technical service are not able to provide much support to farmers to help them achieve the best out of their efforts. Also due to the financial and economic squeeze that governments are feeling as a result of the urgent need to prioritize funding to health systems to support the increasing caseload of COVID-19 patients, funding to agriculture activities has been reduced in many countries resulting in fewer activities to support agriculture services.

Supporting COVID-19 patients comes at a price

Fourth, the COVID-19 pandemic has also caused a severe strain in capacities (technical and financial) of health systems and support structures. The result is that the health systems are preoccupied in supporting emergency COVID-19 cases at the expense of the general health needs of poor farmers in rural areas who fully depend on already constrained health support services.

Policy unpredictability is slowing growth and government spending

Fifth, overall demand will fall due to economic uncertainties, and political knee jerk decisions as a result of policy unpredictability which will constrain spend at the macro level. In March, UNECA cut the forecast for Africa's economic growth from 3.2% in 2020 to 1.8%. This may fall further if restrictions continue and the virus spreads. This forecast is more mildly echoed by the OECD, which has concluded that growth in Sub-Sahara Africa could fall from 2.9% to 2.4% and down to 1.5% if the COVID-19 pandemic and restrictions intensify further.

Fiscal position

A further variable is the degree of fiscal headroom governments have to sustain agricultural budget spending, including subsidies. The greater the fiscal pressure, the higher the chance of suspensions to funding, especially for non-COVID agricultural development projects. Without coordinated debt restructuring support from IFIs and strategic partners (notably China) there is a credible risk of a disorderly debt crisis in some African markets, which would undermine development across the continent and negate growth opportunities. This in turn will stretch public resources leaving many African governments reliant on donors and private sector, risking state capture and limited ability of governments to provide leadership for the people.

What can be done?

It is clear from the discussion above that the COVID-19 pandemic could lead to a grinding economic downturn in sub-Saharan Africa with dire knock-on effects for food security and malnutrition. It is important for governments to urgently devise workable solutions and interventions to mitigate the shock of the COVID-19 pandemic. Time for business as usual is now passed in terms of addressing these shocks.

In the short term, AGRA recommends that:

- Countries should strengthen access to food particularly for the vulnerable population by making use of the strategic food reserves, whether organized by government or in the private sector, to address food shortages, remove restrictions that impede access to markets including border closure policies and movement of food especially when strategic food reserves are low.
- The communication being sent out on health and security at this time should include information on access to food, nutrition advisory and food availability.
- Governments should provide protection for the farmers to enable them to engage in the planting season by for example, providing face masks and other sanitation facilities alongside provision of inputs (seeds and fertilizers) for the planting season.
- Planning and coordination should be strengthened with real time data which can be collected through the sub-national mechanism.

In the long term, AGRA recommends:

A regional approach should be taken to strengthen markets through harmonization of key policies as well as certification and standardization to improve cross border trade for agriculture and food. Trade will remain a core political priority in the medium to long term in relation to access to foreign markets and the pandemic has aggravated key challenges around non-tariff barriers (NTBs), tariffs relatively high compared to other regions, infrastructure bottlenecks still prevalent and high levels of informality. This therefore presents an opportunity to strengthen regional trade integration initiatives (e.g. via AfCFTA implementation), given how COVID-19 has underscored the benefits of shorter, more resilient supply chains.



Data strengthening through real-time updates and digitization of data management is required. COVID-19 has revealed the huge challenge the agriculture sector faces with data. With the forecast that Africa's population will be 1.71 billion by 2030 and the fact that the pandemic's impact will last for the medium to long term, data will play a pivotal role in mitigating food insecurity. Strengthening data and accountability systems will improve food balance sheets, strategic food reserve to the national level and improve planning and policy predictability particularly for Africa's growing population. A shift to digital agriculture creates a valid opportunity to connect the ecosystem around the farmer which will increase productivity and drive growth as well as improve income levels. Furthermore, strengthening data systems will integrate government, market and village ecosystems which will in turn create information flows that are mutually beneficial and improve government decision making.

Mechanisms that support policy predictability are required to ensure that markets are predictable and private sector engagement is less risky. Due to COVID-19, 93 trade policies have been enacted of which 60% of them have restricted trade flows having negative impacts on developing economies and disrupting emerging markets. A framework that ensures participation, accountability and transparency in critical areas of trade, market and micro-policies that impact on food and agriculture.

A resilience approach needs to be taken in reviewing National Agricultural Investment Plans (NAIPs) and finally climate change and environmental sustainability plans and actions must put people at the center. In addition to low yields, the agriculture sector in Africa is faced with a number of shocks and these have been aggravated as a result of COVID-19. These include climate related shocks, fragility of the input and market systems, floods, commodity price instability and pest outbreaks like the locust invasion in the horn of Africa. It is therefore important to design and implement policies and strategies that anticipate and treat recurrent shocks and stresses as perennial features, not as unanticipated anomalies. Furthermore, resilience indices should be included in baseline and monitoring frameworks as well as mainstream them into central outcomes.