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Safeguarding Africa's food systems through and beyond the crisis

Understanding the impact of COVID-19 on African agriculture—and how governments and private-sector actors can respond

By Gillian Pais, Kartik Jayaram, and Arend van Wamelen



There is widespread concern about the potential impact of the COVID-19 pandemic on Africa's agricultural and food systems.1 This should certainly be a priority for leaders across the public, private, and development sectors: some 650-670 million people in Africa, roughly half of the population, already face food insecurity. Of those, more than 250 million people are considered to be severely food insecure.2

Agriculture is also one of Africa's most important economic sectors, making up 23 percent of the continent's GDP. In sub-Saharan Africa, it provides work for nearly 60 percent of the economically active population.3 Africa's exports of food and agricultural products are worth between \$35 billion and \$40 billion a year, and some \$8 billion a year flows through intra-regional trade in these products (Exhibit 1). In addition, Africa's food and agricultural imports amount to between \$45 billion and \$50 billion a year—along with \$6 billion a year in imports of agricultural inputs.

In this article, we present new McKinsey analysis on the impact of the COVID-19 crisis on the continent's agricultural and food systems, along with insights from on-the-ground discussions with agriculture value-chain players, governments,

and civil-society institutions. We show how the crisis has disrupted regional and global trade and slowed demand for Africa's agricultural export products, putting jobs and livelihoods at risk. But we also show that, to date, the impact on the food and agricultural system as a whole has largely been localized and muted. In addition, tailwinds—including good harvests in some African regions at the end of 2019—are helping to minimize the effects of the crisis.

There is no room for complacency, however. Existing vulnerabilities in Africa's agricultural and food systems, combined with demand and supply shocks likely to flow from COVID-19, could be heightened unless mitigating actions are taken

In the pages that follow, we evaluate the potential shocks to African demand for food products, trade in African export crops, and African agricultural and food production. We also outline practical steps that governments and companies along the value chain can consider to mitigate the impact of COVID-19 on agriculture, bolster Africa's food security, improve the sector's future resilience, and transform its effectiveness in the long term.

Exhibit 1

Snapshot on Africa's trade in agricultural products

Africa

Exports

between \$35 billion and \$40 billion worth of agricultural products



Imports

between \$45 billion and \$50 billion worth of agricultural products

\$6 billion in agricultural inputs



As well as

approximately \$8 billion

in food and agricultural products flows through regional trade



See, for example, "Protecting food security in Africa during COVID-19," Brookings Institution, May 14, 2020. www.brookings.edu.

² Food and Agriculture Organization of the United Nations (FAO), The State of Food Security and Nutrition in the World, 2019. FAO defines moderate food insecurity as where "people face uncertainties about their ability to obtain food and have been forced to reduce, at times during the year, the quality and/or quantity of food they consume due to lack of money or other resources." Severe food insecurity is defined as where "people have likely run out of food, experienced hunger and, at the most extreme, gone for days without eating, putting their health and well-being at grave risk.

³ World Bank and country labor statistics.

Tailwinds are helping to mitigate the disruption to Africa's agriculture and food systems

Prior to the COVID-19 crisis, African agriculture was experiencing several tailwinds. After years of drought, many major growing regions—including South Africa and large parts of East and West Africa—had high rainfall, which contributed to strong harvests in late 2019. In South Africa, for example, maize production in 2020 is projected to be more than 30 percent higher than in the previous years (its highest summer crop projections for three years). Moreover, in East and West Africa, major planting seasons had largely begun before COVID-19 escalated, and agricultural inputs had already been distributed.

These effects have helped to ensure that Africa's agricultural and food systems are largely still functioning, with minimal disruptions in the crisis to date. Furthermore, most African countries have declared agriculture and related activities an essential service and have made an effort to keep borders, ports, and inland transport routes open. This has helped to ensure that the continent's agricultural and food systems retain some resilience.

Nonetheless, many parts of Africa came into the crisis already at risk. Parts of East Africa have experienced locust infestations since mid-2019, and ongoing climatic events led to low rainfall in Zimbabwe and northern Mozambique in 2019. Flooding in East Africa in 2020, along with unrest in South Sudan, northern Nigeria, and the Sahel, have pushed these regions to the brink of, and in some cases, into, a food-security crisis. Some of Africa's major export crops, including cocoa and coffee, were already at historically low pricing levels coming into 2020—although signs of recovery were visible in late 2019 and early 2020.

As of May 2020, our discussions with agriculture value-chain players, governments, and civil-society institutions indicate that Africa's

agricultural markets remain largely open, and that prices in African markets are broadly stable, despite initial price hikes caused by panic buying. Agricultural exports, however, have faced severe disruptions. In particular, our findings are as follows:

- Agricultural products are flowing, albeit with some localized market and logistical bottlenecks. Markets largely remain open as countries have declared agriculture an essential service. For example, in Kenya, of 45 major food markets surveyed at the end of April, 90 percent were open (with the 10 percent closed being relocated to openair locations). In some cases, local traders have had to shift their models. For example, livestock trading in Uganda and Kenya has largely moved out of large markets and to on-farm sales. Supply disruptions have been isolated; however, logistics are under pressure and costs are being driven up by travel restrictions, border checks, curfews, delays caused by staff shortages, and a general reduction in volume. In some cases, changing regulations have also compromised trade flows. For example, wine exports from South Africa were banned in the initial lockdown as part of the overall ban on the sale of alcohol products, but the ban was subsequently lifted.
- Agricultural pricing faced some localized pricing spikes after the start of lockdown in many countries, with some indication that these might be stabilizing. For example, in East Africa, price hikes caused by panic buying and hoarding were most acute in the Great Lakes region, partly due to restrictions at the Ugandan border preventing the easy trade of agricultural products. This was more pronounced in retail. In Kenya, pricing for most food commodities was between 4 and 27 percent higher than this time last year.⁵ The Democratic Republic of Congo went so far as to suspend its four-day lockdown because

^{4 &}quot;South Africa's maize harvest expected to be 33% higher than last season," Reuters, March 25, 2020.

⁵ Data as of the month of March 30-April 27 for maize flour, grain, and wheat flour from the Kenya Bureau of National Statistics.

of significant price hikes that immediately followed the announcement of the lockdown. These increases appear opportunistic, rather than compelled by market forces. In some countries, prices for certain crops have actually fallen. As of early May, traders in East Africa were reporting falling prices owing to a reduction in hoarding behavior and the strong harvests in late 2019.

 Agricultural exports have faced demand disruptions and some supply-chain issues. This has been most severe for the flower sector in Kenya, which collapsed after the lockdowns, but exported vegetables, nuts, coffee, and cocoa are all affected to some degree. In many cases, this is due to slowed demand owing to lockdowns in Europe, North America, and India, leading to closure of coffee shops and restaurants as well as processing facilities, for example for cashews in India. In some cases, this has been further exacerbated by supplychain issues. For example, the suspension of international passenger flights has resulted in a reduction of about 75 percent in available cargo capacity and a twofold increase in cargo costs for the horticultural sector in Kenya, making it challenging to fulfill orders (see Box 1).

Watch for three potential shocks across food demand, trade flows, and production and processing

The potential for further escalation of the COVID-19 pandemic on the continent, combined with individual countries' ongoing mitigation and containment responses—especially if these are not coordinated—could exacerbate existing vulnerabilities in Africa's agricultural and food sector. Even if the negative impacts of the crisis on the sector have been muted in the short term, there are several serious shocks that might emerge in the medium to long term. As we discuss below, these potential shocks include reduced demand for food products within Africa, disruption

of demand for and trade in African export crops, and damage to agricultural production.

Demand-side shock: loss of jobs and livelihoods and food price volatility could amplify the crisis through increased food insecurity

COVID-19 has created significant demand-side pressure that may worsen food insecurity on the continent owing to loss of incomes and potential food price increases caused by localized supply shocks and depreciating currencies.

In the short term, with the closure of restaurants and hotels, demand for "higher-end" food categories such as meat and fresh produce has already been depressed in most countries. However, in the medium to long term, internal demand is likely to fall as more than 150 million Africans could lose all or part of their livelihoods as a result of the pandemic.⁶ Job losses are likely to disproportionately affect low-income earners and informal jobs in urban areas. Factoring in the impact of these job losses on dependents, it is likely that between 400 million and 460 million people in Africa are facing the prospect of reduced incomes.⁷

Given that lower-income households often spend 60 to 80 percent of their incomes on food, even a moderate reduction in income could lead to nutritional problems like skipping meals, reducing caloric intake, or switching to less nutritious (but cheaper) foods. This is likely to be exacerbated by school closures, given that school meal programs are often a major source of nutrition for children.

In the medium to long term, loss of jobs and overall economic contraction also imply an overall reduction in household consumption across Africa of between \$60 billion and \$90 billion. In a recent survey with middle-income consumers in Kenya and Nigeria in early May, we found that around 60 percent of respondents expected to be financially worse off in the next three months, 65 to 70 percent reported having less than four months' worth of savings to see them through the crisis, and about 25 percent reported having less than a month's worth of savings (Exhibit 2).8

⁶ Kartik Jayaram, Acha Leke, Amandla Ooko-Ombaka, and Ying Sunny Su, Finding Africa's path: Shaping bold solutions to save lives and livelihoods in the COVID-19 crisis, McKinsey & Company, April 17, 2020, McKinsey.com

⁷ Assuming a dependency ratio of 3-4 for each job lost.

⁸ McKinsey Financial Insights Pulse Survey, Nigeria n = 751 Sampled to match Nigeria gen pop 18+ years, Nigeria survey May 11, 2020; Kenya, n = 723, Sampled to match Kenya gen pop 18+ years; Kenya survey May 10, 2020; South Africa, n = 713, Sampled and weighted to match SA gen pop 18+ years; SA Survey May 7, 2020

Box 1

Export crops at risk from supply and demand disruptions

Fruit, vegetables, and nuts

With international trade either stalled or restricted, anything between \$500 million and \$2 billion could be lost in the export of fruit, vegetables, and nuts alone owing to supply-chain disruptions as flights are cancelled and cargo backlogs lead to spoilage. Fruit and vegetables also rely on large labor forces (including migrant labor) for harvesting, processing, and packing, which means many producers also have to contend with increased sanitization protocols at their farms and factories, as seen in the Western Cape, a major fruit-producing region in South Africa. Cashew demand has also been disrupted as a result of the closure of processing facilities in India.

Cocoa

The closure of some chocolate factories in the second quarter and early third quarter of 2020 in Europe, North America, and China owing to lockdowns and infections is affecting the supply-chain demands for cocoa, with possible implications for prices. This is a further setback to a sector that is only now recovering from the price collapses in 2017 and 2018, when many farmers simply abandoned their farms or uprooted cocoa trees. The long-term demand picture is unclear. While mainstream chocolate demand is somewhat resilient to economic shocks, specialty and fine chocolates are already affected. The main cocoa harvest in West Africa (which produces 60 percent of the world's cocoa) was completed by the time lockdowns were applied; however, any demand and price reductions could result in lost value up to \$2 billion and affect two million farmers in Ghana and Côte d'Ivoire.

Coffee

Coffee demand is likely to be affected as on-the-go coffee outlets in Europe and North America—which make up around 20 percent of all coffee consumption in those countries—were forced to close their doors and are only now slowly reopening. The International Coffee Organization is already reporting a reduction in exports of about 4 percent over the same time last year, with increased price volatility. Sub-Saharan Africa's top three destinations for coffee exports are Western Europe (50 percent, \$450 million); North America (10 percent, \$90 million); and Asia (8 percent, \$70 million). While the potential loss in value of between \$100 million and \$200 million may be dwarfed by that of fruit and vegetables as well as cocoa, some 6.6 million jobs in the sector may be affected, particularly in East Africa.

Tea

Tea might be a bright spot among export crops. Lockdowns in India came just at the beginning of the picking season, with the International Tea Committee suggesting a 7 percent drop in India's production. This could lead to more exports for East Africa's tea sector, with Kenya seeing some of its highest tea exports in March 2020 at favorable prices.

Flowers

The demand for flowers, viewed as a luxury item, crashed in the second quarter. This was due to reduced demand as European shoppers focused on purchases of essential items during lockdown and restrictions on ceremonies (like weddings and funerals) were imposed. Kenya—which in 2018 accounted for 85 percent of sub-Saharan Africa's flower exports, valued at around \$600 million—has been heavily affected as almost all of its orders were cancelled in late March. On the supply side, logistical delays can lead to losses as flowers cannot sit in storage for prolonged periods. The period from February to May is typically the peak season, covering peak demand like Valentine's Day and Mother's Day, during which flower producers can make a significant portion of their annual revenues. The Kenyan Flower Council estimates that its 2020 revenue from flowers could be halved. As much as \$400 million to \$600 million in revenue may be lost to the sector, affecting between 70,000 and 100,000 direct jobs. Our research shows that 30,000 temporary workers have been let go, while the industry's 40,000 permanent workers have been furloughed. While the industry was showing some signs of recovery in May 2020, prices are depressed and cargo capacity continues to be a challenge.

⁹ Survey from the 2018, National Coffee Drinking Trends Report (NCDT)/Source: UN Comtrade data 2018, National Coffee Drinking Trends Report NCDT 2018 survey.

¹⁰ ICO April 2020 Market Report.

¹¹ UN Comtrade data 2018, 2017.

A recent survey in South Africa found that 24 percent of respondents had no money for food. For people living in informal settlements, that number rises to 55 percent.¹²

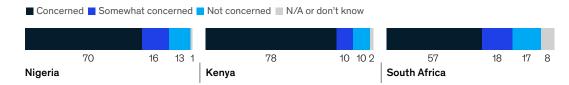
Additionally, as incomes contract, depreciating currencies and increasing logistics costs may drive

up the cost of goods, putting pressure on people's ability to afford food. With roughly half of the population already food insecure, this is a risk that will need to be closely monitored. Some indicators are already evident in localized price spikes driven by panic-buying, hoarding or localized supply disruptions.

Exhibit 2

Job security is a concern for more than 80 percent of households, with 25 to 35 percent reporting having less than one month of savings to live on

Overall job-security concerns, % of respondents¹



Ability to live on savings, % of respondents²



Question: How concerned are you about your job security, given the coronavirus (COVID-19) impact?

Trade shock: demand shocks in key markets may cause a drop in export earnings and increased price volatility for export crops

Ministers for agriculture of the African Union member states have highlighted the fact that the decline in demand and production from those economically developed countries affected by COVID-19 is causing a global recession, with direct repercussions in Africa.¹³

Around 80 percent of agriculture exports from Africa are to four regions: Western Europe (around

45 percent), South and East Asia (20 percent), the Middle East (10 percent), and North America (5 percent). Based on 2015–18 averages, those exports are valued at some \$35 billion to \$40 billion a year (Exhibit 3). This could result in a severe economic blow for countries such as Côte d'Ivoire, Ethiopia, Ghana, Kenya, Tanzania, and Uganda—all of which rely on these exports as their primary or secondary source of export earnings.

² Ouestion: If your household experienced loss of your job, how many months would you be able to live off of your savings without making any changes to your current standard of living?

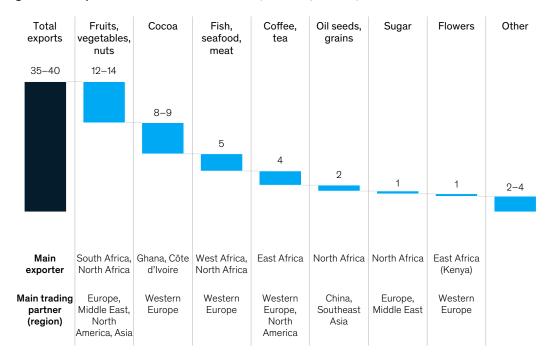
Source: McKinsey Financial Insights Pulse Survey, conducted May 7, 2020, in South Africa (n = 713), May 10, 2020, in Kenya (n = 723), and May 11, 2020, in Nigeria (n = 751), sampled and weighted to match general population aged ≥18 years in each country

^{12 &}quot;HSRC Study on COVID-19 indicates overwhelming compliance with the lockdown," April 26, 2020, Human Sciences Resource Council, hsrc.ac.za.

^{13 &}quot;Declaration on food security and nutrition during the COVID-19 pandemic," FAO, fao.org.

Approximately 80 percent of Africa's agricultural exports go to regions that have been severely affected by COVID-19





¹ Compiled from country-level averages, using years for which data were available Source: UN Comtrade Database

Supply disruptions could put between \$1 billion and \$5 billion of export value at risk for 2020 and affect the livelihoods of 10 million farmers through job loss or price reductions—and up to 40 million people could be affected if dependents are factored in (see Box 1).

Previous McKinsey research has modeled several scenarios for how the economic impact of COVID-19 might play out in Africa that we can extrapolate to the agricultural sector. 14 In our more protracted case of the outbreak, broad lifting of restrictions would happen only as late as the end of 2020. 15 Even when demand does recover, however, it may not be to pre-pandemic levels. It is likely to

be somewhat depressed owing to a contracted economic environment which might imply lower consumption of luxury food items in Europe and North America (the primary consumers of Africa's agricultural exports), with ongoing disruptions as lockdowns evolve. This might lead to increased price volatility, depressed prices over time, or buildup of excess stocks—particularly for coffee and cocoa, which were already at historically low price levels at the beginning of 2020.

In terms of food imports, as long as countries keep borders open and maintain trade flows, the disruption can be expected to be less severe. However, we have seen temporary bans put in

¹⁴ Kartik Jayaram, Acha Leke, Amandla Ooko-Ombaka, and Ying Sunny Sun, *Tackling COVID-19 in Africa*, McKinsey & Company, April 1, 2020, McKinsey.com.

¹⁵ Ibid.

place (as with rice exports from Vietnam), which have caused price spikes in many countries. Moreover, as neighboring African countries take very different approaches to the pandemic, this could have an impact on regional trade. For example, this was seen with initial closures of border markets in Uganda and at the border between Ethiopia and Somalia.

Historically, export bans have occurred during periods of food crises, such as the Ethiopian maize export ban in 2013 as that government sought to preserve food stocks for its own populations. If similar measures are implemented now, this could have an impact on regional trade, affecting both food security and regional trade balances. Should such measures escalate, that could create food shortages in subnational areas if not managed. It could also have an impact on vulnerable and landlocked countries such as South Sudan, which rely on trade passing through other countries.

Production shock: COVID-19 may disrupt upcoming planting seasons and impede an effective response to the East African locust outbreak

In terms of agricultural production, COVID-19 could disrupt the availability and affordability of agricultural inputs, particularly as devalued currencies and higher-cost logistics may make inputs more expensive. At the same time, contraction in remittances might impede farmers' ability to purchase inputs, and disruptions in port and inland logistics could affect distribution. However, these increased costs might be offset by a decrease in the cost of production for fertilizer because of lower oil prices.

Moreover, many farmers in countries like South Africa may still be emerging from debt caused by droughts in previous years which may cause ongoing financial challenges for upcoming production seasons, particularly if disrupted supply chains affect farmers' ability to sell crops. ¹⁶ It is hard to predict how these factors will evolve,

but these could be a particular risk for upcoming planting seasons in the third and fourth quarters.

Any escalation in the locust infestation in East Africa would be another major concern. Locust swarms have already disrupted food production in some countries, and logistics bottlenecks from COVID-19 could impede responses, for example, by delaying the provision of the necessary means to protect crops.

While on-the-ground damage assessments are still in progress, the Food and Agriculture Organization of the United Nations (FAO) estimated that 100,000 hectares had been affected in Ethiopia and Kenya. However, there are additional fears of a new swarm coming in from Somalia and Yemen, with the severity driven by wind patterns in the region. This could create a food-security shock in rural areas as well as potentially drive up prices for food crops across East Africa, further exacerbating the shock from reduced incomes mentioned above.

Immediate action could safeguard Africa's food security and speed up the recovery of the agricultural sector

Governments and other industry players are in a unique position to consider measures that could cushion the sector and speed up recovery when the "next normal" comes.

Our analysis suggests that it will be critical to minimize disruptions to Africa's agricultural and food systems. If governments and private-sector players along the value chain act now, they can lessen the potential shocks that lie ahead. Key steps include safeguarding food security, understanding and managing the forces that shape demand, and ensuring that agricultural production is sustained. It will also be important to maintain trade flows, including keeping regional and international borders open for trade as far as possible.

¹⁶ Wandile Sihlobo, "What COVID-19 means for South Africa's agriculture and food supplies," Agricultural Business Chamber of South Africa, March 23, 2020.

¹⁷ Desert Locust Upsurge: Progress Report on the Greater Horn of Africa and Yemen, January—April 2020, FAO, May 2020, fao.org.

In the remainder of this article we consider, in turn, the steps that governments and private-sector players can take—both to ensure continuity in African agricultural and food systems through the crisis, and to strengthen the sector's longer-term resilience and performance.

Governments can take action to ensure continuity in the agricultural and food system

There are four actions that governments can consider to ensure continuity in agricultural and food systems while also addressing food insecurity:

1. Ensure that robust national-level Nerve Centers are in place, with representatives from across relevant ministries and the private sector. Many countries have set up foodsecurity or agricultural response units in the face of COVID-19 as centralized strategic and planning hubs. Kenya, for example, has already set up a food-security "war room" and is deploying digital tools and data-gathering approaches to manage food availability, accessibility, and affordability—as well as providing support to value-chain players. Kenya is proactively gathering pricing and availability data on about ten food commodities at a subnational level on a weekly basis through a digital tool and maintaining dashboards on trends to identify any "hot spots" where interventions are required.

As this example suggests, there are several key considerations for governments to ensure that response units—or Nerve Centers—are robust. For one thing, a Nerve Center will need to monitor food availability and pricing on a subnational level, enabling governments to be proactive in identifying "hot spots" of shortages or hoarding, and in intervening where necessary. Further, a Nerve Center can develop and implement guidelines and policies,

track ongoing indicators to ensure continuity of the agricultural and food system, and provide targeted support where necessary. This could include guidance on how to prioritize food imports and agricultural inputs at ports and for inland distribution, as well as engagement at the regional level to ensure ongoing trade. Looking forward to the next harvesting and planting seasons, a Nerve Center could track availability and distribution of agricultural inputs, ensure that critical value-chain actors (such as seed inspectors, extension agents, and traders) are able to work safely, and ensure that key produce markets are open.

In addition, a Nerve Center can help governments provide targeted support to value-chain players. For example, this could include working-capital and tax-rebate support to ease financial burdens during a time when credit is likely to be constrained. Governments could also consider earmarking logistics subsidies for food distribution to high-cost regions, providing targeted input subsidies to more stressed value chains, or even stimulating local production through government offtake for buffer stocks. Last but not least, a Nerve Center can monitor food security across the country and provide support to vulnerable households, including offering cash transfers or food vouchers.

To be effective, a Nerve Center will need to engage across ministries—including the ministry of agriculture, ministries of water, economic development, trade, and the interior—in gathering information, ensuring fit-for-purpose initiatives, and driving rapid data-driven decision making on a daily basis. It will also need to engage actively with private-sector players.

- 2. Create digital data rooms to track and forecast food availability, pricing, and accessibility, both during and after the crisis. This type of data room should go beyond the tracking and forecasting of production based on food stocks and yield forecasts that are currently captured in many ministries of agriculture. It could track trade flows, food pricing at the retail level, and availability at food shops in urban and rural areas. It could also bring together multiple sources of data, including surveys of retail shops from consumer goods or e-commerce players, trade data from commodity traders, and stock data from processors (see Exhibit 4).
 - While this kind of data room could be created to support a COVID-19 response (particularly in the Nerve Center), it could be designed to persist as a long-term solution providing accessible and accurate data to different actors. Governments could use the opportunity provided by the current crisis to create this much-needed resource.
- 3. Prepare to transform Nerve Centers into standing crisis response units after the crisis. Even as economies open, the ongoing threats of pests, climate change, and isolated security events mean that food systems in Africa might face ongoing crises. Governments can draw on the lessons of COVID-19 to build longer-term capability to proactively manage and diminish such threats through setting up agile

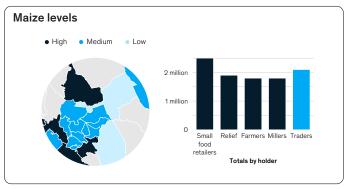
- Food Crisis Response Units that proactively monitor and mitigate risks in the agricultural and food value chain, leveraging the data room mentioned above. This is analogous to the pandemic health response units that many countries have set up.
- 4. Transform agricultural and food systems. While the immediate concerns of protecting the health of citizens may be taking precedence during the crisis, governments need to keep their foot on the pedal of agricultural transformation and can take this opportunity to strategically rethink their agriculture and food systems. For example, traditional open-air food markets may benefit from structural changes to mitigate the risks of disease transmission. Countries could also take the opportunity to reexamine the management of their Strategic Food Reserves, their policies on regional trade of agriculture and food, and mechanisms to reduce the overall risks faced by farmers, such as valuechain financing and crop insurance. They can also decide whether to reconsider biotech seeds, which might provide greater resilience against climate and pest threats to improve the overall health of the system in the longer term.

Development agencies and development finance institutions can support governments in these areas by driving one or more of these four initiatives as well as by supporting targeted efforts along the value-chain effort from a Nerve Center.

Governments could consider using a data room to track and respond rapidly to availability, affordability, and accessibility issues

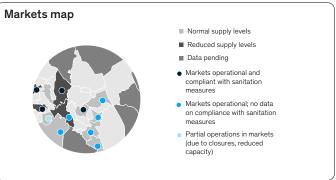
Food balance

Overall food balance, including looking at local production, imports, and consumption



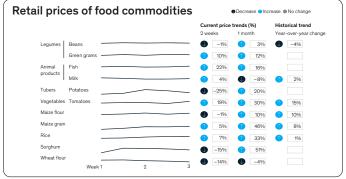
Food and market accessibility

Opening of farmer markets (eg, for livestock) and food markets at a subnational level (major markets), including consideration of retail points and availability of food at those markets/retail points



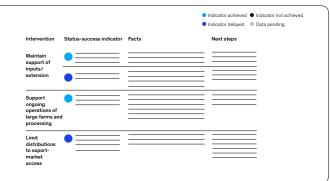
Food affordability

Price tracking of priority commodities at a subnational level (major markets)



Value and supply chain

Tracking of input availability, production, and logistics bottlenecks (at ports and inland)



Companies along the value chain can act now to ensure business continuity, but also plan ahead to reimagine for the long term

Private-sector actors along the agricultural value chain can work with governments and take steps now to ensure business continuity. While specific activities will vary by type of player, several common themes emerge in terms of resolving immediate needs. These include securing the supply chain (including deploying extra storage and working capital), protecting the health of employees and value-chain partners through sanitization protocols and physical-distancing measures, and setting up a cash-management war room to manage cash flow closely with upstream and downstream value-chain partners.

However, beyond these immediate measures, agricultural companies can also start thinking about the medium to long term, both to manage through the COVID-19 crisis and then to consider what changes they will need to make to their business models as a result of the impact of the crisis. We see four actions that agricultural companies can consider as they look to these horizons.

- 1. Manage localized supply-chain bottlenecks that are likely to persist until the end of 2020—or into 2021. As economies reopen, localized COVID-19 outbreaks might recur. leading to rolling lockdowns. It is likely that Africa and key trading partners will face an "up-and-down" situation over the coming months. Companies will therefore need to prepare for slower logistics overall, and also for localized supply and market disruptions. These disruptions could persist until the end of 2020 and potentially well into 2021, depending on epidemiological scenarios. Moreover, reduced international passenger travel well into 2021 may imply an ongoing shortage of air-cargo availability that will affect exporters.
- 2. Prepare for demand depression, particularly for export commodities and for food products among the low-income urban population and hospital industry. While many export commodities have historically shown themselves to be resilient in the face of downturns, traders are likely to experience rolling lockdowns of restaurants, hotels, and coffee shops in Africa's export markets. Exporters, particularly of "luxury" items like flowers, cocoa, and coffee, should therefore prepare for price volatility and softer demand overall. Moreover, food and agricultural companies targeting either the African lowerincome urban population or the higher-end hospitality industry should prepare for a decrease in domestic demand or at least a change in demand where households switch to lower-cost foods, or because of a significant reduction in international travelers, who drive significant restaurant spend. Companies may also want to evaluate whether they can participate in food-relief efforts through their distribution chains, particularly as most historical food relief has been targeted at more rural or outlying areas rather than the urban core. For example, Twiga Foods and Jumia in Kenya have partnered to deliver bundles of processed and fresh produce at a reduced cost via Jumia's e-commerce platform.
- 3. Embrace digitization right along the value chain. With restrictions on movement, interacting with farmers and value-chain partners digitally may become more important. Food-distribution chains (particularly in urban areas) are very likely to become more digitized. Activities further up the value chain could also be affected. Farmers may increasingly seek e-advice, digital savings products, or access to government subsidies that might be offered through digital wallets. Agricultural players can explore digital marketing and

extension to farmers, the offering of digital financial products, and digital tracking of the supply chain to monitor logistics and storage. Agricultural players do not have to build these themselves in all cases, but instead can potentially partner with other digitally enabled players in the supply chain. This could see nonagricultural players, such as telcos or banks, push into the agriculture-ecosystem space. Existing examples include Bank of Kigali's Ikofi offering and Safaricom's Digifarm.

4. Explore new mergers and acquisitions (M&A) and diversification, including going beyond borders. The crisis could lead to M&A among processors and traders as some smaller or medium-sized players seek to divest themselves of their assets and others seek to diversify risks across value chains, countries, and customers. This could include aggregation of smaller-scale millers within a country and across countries, larger-scale producers seeking to acquire production assets in other crops or regions to diversify risk, or exporters looking to diversify their customer bases across markets. One opportunity, for example, could be to promote a larger flower market in the Middle East and Asia.

By acting now and putting systems in place to ameliorate the impact of this crisis, countries can protect their food systems and citizens. Additionally, both governments and privatesector players could go further: to reimagine how agricultural and food systems can work in Africa in the longer term and work together to build longerterm resilience for farmers and the food system against future shocks.

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The impact of the COVID-19 crisis on Africa's agricultural and food systems has so far been localized and muted. Demand drivers for agricultural goods globally have historically been consistent and stable despite economic cycles and challenges, and the sector enjoys a degree of protection and resilience. Nonetheless, the crisis could deliver long-lasting shocks to agricultural demand and production in Africa, as well as to the continent's export trade. It could have ongoing repercussions on the prices of agricultural products, livelihoods, and food security, and these are likely to endure long after the virus has been contained and restrictions have been lifted.

Hundreds of millions of people in Africa already live with food insecurity and are now further at risk from potential job losses, loss of income, or reduced food production and trade. Decisive action in the immediate term can help to ensure that Africa's agricultural and food systems are strengthened, not just for the duration of the pandemic but for the longer term.

About the authors:

Gillian Pais is a partner of McKinsey & Company and leads the Africa agriculture practice; she is based in Nairobi. **Kartik Jayaram** and **Arend van Wamelen** are senior partners based in Nairobi and Johannesburg, respectively.

The authors wish to acknowledge and thank the working team who contributed to this article, including Frances Lee, Caroline Mutuku, Brenda Odhingo, Bradley Opere, and Tian Roelofse.