Co-Chair John McDermott, Director, CGIAR Research Program on Agriculture for Nutrition and Health (A4NH), *Impacts of COVID-19 on food systems and government program and policy responses in Lower to Middle Income Countries (LMICs)*

Food stocks globally are high, without the disruptions in international trade in food staples seen in the 2007-8 food price crisis that were exacerbated by export bans. Disruptions in food production, supply chains, markets and services are more driven by domestic circumstance and control mechanisms. Much bigger impacts of physical distancing are seen in food production and supply chains that are labor rather than capital intensive, such as those that require migrant workers for harvesting as opposed to combine harvesting. In almost every country with control measures, the food service side is completely shut down, leading to many disruptions.

As COVID spreads to South Asian and African countries, the economic contraction will be sharp and severe and recovery may be slow if the disease persists. This presents a significant problem for the poor. If GDP decline estimates are consistent, 140 million people will be moving into extreme poverty, despite progress made in past years, with 80 million located in Africa.

Given this, public food distribution, nutrition and health, and social safety net programs will be critical as the poor will be constrained in earning their livelihoods and obtaining food if movement restrictions and lockdowns persist. International support will be important, as most governments are facing large debt loads, potential currency exchange challenges and loss of tax revenue, and have little room for fiscal stimulus. As a result, they must prioritize policies and investments and adapt quickly to changing circumstances.

Co-Chair Ruth Oniang’o, Chair of the Board of Sasakawa Africa Association, SAA, founder and Editor-in-Chief of AIFAND, founder of Rural Outreach Africa, Recipient of the African Food Prize, *Implications of COVID-19 on Food Systems in Africa*

Dr. Oniang’o compared the COVID-19 pandemic to a conflict, with major disruptions in people’s lives that impact food production for majority of smallholder farmers and also disrupts the food supply chain. The virus was slow arriving on the African continent. With the whole world predicting the worst for Africa’s 54 sovereign states, countries with very weak economies were forced to get ready, despite the fact that these governments do not have social safety net programs to cushion the impact on their populations. They have no reserves, coping with their periodic food crises through donors that now have to mobilize all resources to help themselves. In addition, bad governance leads to the kind of inequality seen over
the decades, leaving low income citizens unable to cope with hunger and malnutrition that result from drought and conflicts.

A number of the countries that had a head start with the virus are highly urbanized. In most African countries, much of the population lives in rural areas, while 80% of the urban populations live in urban settlements, with meagre incomes. People derive comfort and security from living together but this social culture is now are challenged through social distancing and requirements to wash hands are imposed, even though there may be no water or it has to be bought. The virus is impacting in the middle of the land preparation and planting season in East Africa and, with many sub-Saharan African countries adopting measures similar to those by Western countries, major food deficits are anticipated.

However, to every challenge there is a silver lining. COVID-19 provides African countries the opportunity to find local solutions and to revisit relevant policies that have hitherto not been taken seriously. As lockdown restrictions begin to ease, countries and regions have to come back with new ways of cooperating and more equitable ways of working together. There is a lot going on in many countries; hopefully, all this can be documented.

**Catherine Bertini**, World Food Prize Laureate, Former UN Under Secretary and Executive Director of the World Food Programme, *Crisis Management - Interruptions in the Food Chain*

The hope is that countries yet to be hard hit by COVID 19 are planning and learning lessons from other countries. From villages to nations, leaders must be nimble and move quickly to fix disruptions in food chains.

Examples include the shutdown of the food service side of the food industry. As restaurants close, suppliers lose customers. Wherever possible, guidance should be provided to those food suppliers to pivot to sales in markets and stores where demand is growing. As schools close, school food programs, should be maintained with arrangements for orderly pick up of food from the schools or distribution in relevant areas.

As demand for food rises, rules for acceptable sales and distribution to avoid wasting of food must be implemented. As national leadership reacts to growing food needs, they should avoid knee-jerk political decisions, such as closing borders, that negatively impact their own consumers, farmers, and processors. Organizations and governments must find creative approaches for delivery of food and food aid, sometimes even house to house. Systems are needed to avoid people rushing the food distribution process.

The importance of food assistance within the first 1000 days of life – from pregnancy until the age of 2 – must be recognized as the most critical time in development, during which the requirement for adequate food must be met with the creation of more production and distribution of special food for this vulnerable population to avoid a generation of stunted children.

Poor leadership decisions can make matters worse. Leaders at every level must surround themselves with thoughtful advisors from a variety of disciplines to help them to make quick and informed decisions to protect the health and wellbeing of their people. In addition, the voices of women in their community and family leadership roles must be heard.
Cheikh Ndiaye, Executive Director, African Food and Agriculture Skills Development Centre, Senegal, COVID-19 and African Governments policies implications on the Food System of Vulnerable Populations

The strategy of everyone solving their own problems is unsustainable and counterproductive. As the virus is ignoring borders, it cannot be tackled individually by each nation – a global approach is needed. While we are physically distanced from one another, we can still come together to solve these problems. If not, the virus will not be defeated and will bounce back and re-infect the world.

African nations are faced with technical and practical problems, but governments do not have the money to implement meaningful interventions and support. People depend not only on protection from the virus but also on access to nutritious and sufficient food without which they lose their livelihoods, sparking tension and social unrest.

As the COVID 19 pandemic takes hold in Africa, it will spread like wildfire, taking advantage of favorable preconditions: people on the extreme end of the hunger spectrum, weak and less well equipped to face any pandemic; the majority of the African population depending heavily on traditional, seasonal agricultural production and its attendant job, fishing or pastoralism; and the lack of health facilities, promiscuity, existing and frequent comorbidities, such as AIDS, hypertension and diabetes.

The globally accepted practice of closing down cities and businesses is difficult to implement in the African context. If the farmers have no planting season, seasonal workers are restricted, and access to seeds and markets are closed, it will lead to food shortages, price increases and starvation in vulnerable populations. Efforts should be made to assist workers impacted in the hope that with support from the international community, some of the foreseeable negative impacts of COVID 19 can be mitigated.

There is no doubt of the impact of the pandemic on the food system (for chefs, farmers, food service workers, processing and distribution workers and many others). Governments across the continent have stepped up measures to contain the massive spread: screening of travellers and deployment of agents for surveillance; cut down on flights; tightening of borders; restrictions of movements and gatherings with social distancing; and closing of schools and public places, all under a state of curfew and emergency with measures to go along with it. While some measures are generic, some must be country/region specific and consideration must be given to how best to apply them to avoid causing more harm than good.

Samuel Godefroy, Senior Food Regulatory Expert, United Nations Industrial Development Organization, Arab Food Safety Initiative for Trade Facilitation (SAFE), Crucial Role of Food Regulators to Support the Food Production Sector at Times of Emergencies

During these unprecedented times of the COVID-19 Pandemic, maintaining the safety and availability of food and agrifood products is essential. Closure of businesses and food service establishments and necessary restrictions in movement has put a strain on conditions of production. Food regulators play a key role in limiting supply disruption and maintaining operations. There are three areas where they can intervene in addressing and mitigating the impact on food production systems:

1. They have an immediate role in addressing COVID-19 as possible food hazard, including any communication related to it and busting myths related to the virus and the food production system. It is important to reiterate the scientific consensus that food and food packaging is not a vehicle for
transmission. Food regulators around world and, in particular in developing nations, must be the source of credible information to provide guidance regarding the hazard and food.

The role of regulators is key to maintaining the trust and confidence of consumers in the safety and availability of the food supply. They must gather pertinent information and translate it to industry and consumers. Regulators must be able to network to provide the correct information and maintain its consistency in relaying it to their stakeholders. Regulators of sub-regions could be mobilized in networks to provide a single voice for scientifically credible information.

2. Regulators are expected to be the go-to party where guidance is needed for food and agrifood producers. Guidance is needed regarding sanitation and protection of workers. It must be adapted to the realities of the food production sector and to the realities of African countries and developing economies. They need to be proactive in volunteering guidance in specific to some parts of their supply chains, such as how to practice social distancing in the context of farmers markets and small farmer production.

3. Regulators must maintain their core food regulatory capacity, in part as related to food inspection and overseeing recall of high risk or contaminated products. They must ensure that no new threats or hazards are introduced, including food fraud and prevention of dumping to avoid shortages.

The situation emphasizes the importance of development of business continuity plans and emergency response plans in advance of crises. Collaboration is required so that core food regulatory functions can be exercised to avoid added the strain of the failure of core regulatory functions.

Lara Hanna Wakim, Vice Director of Higher Center for Research, Former Dean of the Faculty of Agricultural and Food Sciences, Holy Spirit University of Kaslik, Lebanon,
Lebanese Economic and COVID-19 Crises: Impact on food supply, demand and access

Currently, Lebanon is struggling with a number of issues: a major financial crisis related to the total blockage of Lebanese banking facilities to purchase inputs from abroad that has limited the availability of needed agri-food inputs in quantity and on time; the absence of credit to farmers; inflated prices for imports when 85 percent of Lebanon’s food basket comes from external sources; and a possible shift in diets as people purchase more affordable and stable pre-packaged food.

COVID-19 is not an ordinary shock to supply, demand and access; it is a shock to the world and is a human crisis. Its impacts on the food supply will directly and indirectly affect all four pillars of Lebanese food security and nutrition: availability, access, utilization and stability. The specific issue is access to imports in time for the planting season, which may affect yields and income. Restrictions to worker movement will cause labour shortages, especially relevant to labour-intensive crops.

Declining demand due to a decline purchasing power will affect the ability of farmers and producers to invest and adopt adequate technology and will further shrink food production and availability.

Panic buying increases demand. It is important to raise awareness to reduce food waste and to better consider the categories food that consumers are buying in terms of nutrition facts.

In terms of the impact on food access, supply disruptions and loss of jobs and incomes falls hardest on low-wage workers, and in the absence of safety nets and income assistance, the working poor will see their access to food decline.
**Action recommendations:**

**Short-term**

At the government level, the Lebanese government has started safety nets and social and financial protection for the most vulnerable. Political actors, alongside municipalities, have played a leading role in the campaign. At the Individual level, individuals and some NGOs have launched initiatives to encourage people to return to their villages and engage in agriculture. Plans have been made to cultivate unused land, distribute seeds and organize agriculture cooperatives and technical assistance. This is promising but not enough. Dynamics have been set in motion empowering municipalities that will drive more decentralized activities that can be part of the solution.

In the broader picture, disruptions to society are having an impact on women and children. Access to food and learning are needed, and Lebanese Government has launched support for online teaching and learning.

**Medium-term**

There is a fundamental need to support productive capacity and the private sector, NGOs, and academia should be urged to bring technical and analytic capabilities to support the government. Assess the diverse impacts of the crisis: There is an urgent need for a holistic and strategic food security plan to be led at high government levels and coordinated at national and international levels.

Given the demands placed on international funds, Lebanon must help itself and find ways to revive its economy. Increasing local food production (called *Mouneh*) is vital to address these challenges. Trade barriers should be dismantled and supply chains re-established.

**Long-term**

Strengthen the policy environment for sustainable food production. The present crisis highlights existing challenges in food systems and emphasizes the need for improved resilience in food supply chains and in food systems.

This is a moment of solidarity – all leaders must convey a strong message asking for people to do it together.

**5. Theodore Knight-Jones** Senior Scientist Epidemiology, Animal and Human Health, International Livestock Research Institute (ILRI) *Urban Informal markets in Africa – Challenges of Crisis*

Dr. Knight-Jones focused on the zoonotic risks that Africa may have but noted that, in the struggle to suppress COVID-19, we should not forget the broader pattern of disease emergence. These zoonoses have shaped society over time and continue to do so. Drivers are changes in society and its environment and the pace of that change, which is arguably happening faster in Africa now than anywhere else. While every continent has produced serious epidemics and pandemics, with the fastest growing and youngest human population of any region in the world, some regions of Africa are now approaching the high-density levels seen in Asia.

There are a few primary routes that facilitate the rise of zoonotic pathogens: wildlife infections directly passing to people; wildlife species passing infections to domestic animals that in turn pass them on to people; and pathogens arising in domestic species passing to people. A key factor in the subsequent spread within humans is dense urban populations, potentially exacerbated by extensive and uncontrolled food chains. The faster this can happen, the less time we have to control wider impact. Societal changes that have an impact include exposure of any of these hosts to new environments and new species through climate change, changing ranges of agriculture, and changing ranges of wildlife reservoirs, creating new ecological niches favoring interspecies transmission of pathogens and the emergence of new pathogens.
The phenomena that facilitate these events are present in Africa today: the spread of agricultural practices into areas reserved for wildlife populations, changes in farming systems, and expanding ranges for agriculture. Urbanization is occurring at a massive rate with poor sanitation, food processing and marketing standards of hygiene which is potential pathogen spread and emergence. Population growth drives demand for protein and expansion of food production into new areas. A reflection of this is increased consumption of bush meat prevalent across Africa, a high-risk activity for pathogen emergence, precipitated and exacerbated by inefficiencies in livestock production.

It is also important to consider how ready society is to detect, track, understand and control these pathogens once they emerge, before wider dissemination. The limited capacity of government services in Africa is a challenge as there is not the capacity to track this. Evidence of this is the persistence of zoonotic diseases controlled elsewhere but not in Africa. If COVID persists in Africa in a way that it does not elsewhere, it may result not only in an ongoing health burden but cause economic burdens from trade and movement barriers.

COVID is a new emerging pathogen. While these threats have been periodically emerging over time, we have been more aware of and tracking them for last two decades. We do wonder if there was a case of warning fatigue by some countries. The current situation is a painful illustration of need to maintain readiness and strategies. When to trigger pandemic control measures for poorly understood and rarely occurring events is a costly and challenging issue, but failure to do so is even more costly. What is required is a better understanding of the diseases, ongoing surveillance capacity to detect emerging threats and deal with them, and an improved understanding and monitoring of the drivers and causes of zoonotic disease and their spread.


In developing countries, efforts to ensure a high-quality food supply chain are faced with challenges under normal conditions. Operating as a food business within a pandemic as large as the current COVID-19 pandemic adds to them significantly throughout the food supply chain, which in South Africa is a web of formal and informal interactions between agricultural inputs, logistics, farmers, spazas, bakkie traders, processing plants, shipping, retailing, biosecurity and more. Ensuring a sustainable food supply within this complex system is becoming more of a concern.

Specific challenges include

- The incorrect classification of “essential goods and services”. This has a significant impact of food security, as it should extend across agriculture and not just to food. Agricultural value chains are intertwined and, if not managed carefully, will have a direct and negative impact on food security. The “food industry” in South Africa is complex and includes a number of support services that, directly and indirectly, enable the efficient and effective operations of the holistic food value chain, and therefore, fits the fundamental definition of essential services. From a food supply chain perspective, essential goods and services entail all activities and processes which support the production, processing, distribution, consumption, and waste disposal of food in the system.

- Lack of accurate information on the informal food supply chains. The essential role that the informal sector plays in the “business as usual” food system must be acknowledged, as it supplies a variety of
essential food and related services to the poor and vulnerable groups. A systemic disruption to their operations will impact livelihoods and rural economies significantly.

- Lack of an implementation plan regarding the issuing of permits and the enforcement of health and safety requirements within informal food trading.

- Insufficient productivity of certain demanded foods during COVID-19 (raw materials, packaging, staff shortages) and non-availability of essential imported food products that SA is dependent on, such as rice, wheat and palm oil.

- Cross-border transportation limitations and restrictions.

- The impact on food security caused by the demobilisation of the workforce, restricted movement of goods, closure of ports of entry, and panic-buying of food.

- The strain placed on the food supply chain by the significant increase in demand, price volatility, increased inflations, complications of exchange controls and trade relations, and weak management of macroeconomic dynamics.

- Food insecurity at the household-level (especially the poor). South African agriculture is export-oriented, and the food left for local consumption is expensive.

- The closure of schools means hundreds and thousands of poor children in rural areas and informal settlements will no longer access the food and nutrition they rely on when are at school.

- Although South Africa is a net exporter of agricultural products, most South Africans are ravaged by poverty and have to fend for themselves, a situation worsened by the virus and the lockdown. Panic-buying and stockpiling will lead to further disenfranchisement of the most vulnerable in society – the unemployed, the elderly, and most of those dependent on a single source of income. This inability to purchase food may actually last far longer than the lockdown, making it a long-term problem that can lead to more under-nourished people in the country.

Some solutions to these issues can be identified:

- In order to ensure that food remains available to South African consumers, continuous tracking of operations within the value chain will be necessary. A disruption of activities at any single point will have implications for others. Furthermore, problems with cross-cutting services, such as transportation of employees and goods, could impact at multiple nodes simultaneously. In this regard, logistical services within the chain to ensure efficient movement of both products, services and labour are critical.

- A web-based monitoring tool has been developed by the Bureau for Food and Agricultural Policy (BFAP) to enable key role players to report blockages and breakdowns within the chain, thus enabling rapid and appropriate responses. This End-to-End Agro Food Chain Tracker forms part of the initiatives that government is driving in collaboration with the Agricultural Task Team.

- Government should ensure the correct classification of essential goods and services and Inclusion of the informal sector as an important component of the food supply chain and ensure that critical agricultural production activities continue uninterrupted in essential services.
- With regard to food access, measures should be taken to promote school feeding at home; establish municipal food banks; compel food-producing companies and food retail stores to recycle consumable foodstuffs and make it available to the most vulnerable; establish humanitarian food reserves; ensure emergency foodstuffs are mobilised; ensure all food needs are fully met; and scale up nutritional support and feeding schemes.

- Social protection programmes for food prices should be adjusted and restrictions on price hiking should be imposed.

- Immediate and urgent increases in food supply should be available from farm food production.

- Export of strategic agricultural commodities should be facilitated.

Speakers’ quotes, and other reference materials may be obtained through secretariat@iufost.org.

This information is available to all with notification to the IUFoST Secretariat secretariat@iufost.org and recognition of source. Thank you.

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