



Q&A: COVID-19 pandemic – impact on food and agriculture

Q1: WILL COVID-19 HAVE NEGATIVE IMPACTS ON GLOBAL FOOD SECURITY?

Both lives and livelihoods are at risk from this pandemic.

The disease is spreading quickly. This is no longer a regional issue—it is a global problem calling for a global response.

We know that it will eventually retreat, but we don't know how fast this will happen. We also know that this shock is somewhat unusual as it affects significant elements of both food supply and demand: (a) Supply will be disrupted due to the disease's impact on people's lives and well-being, but also the containment efforts that restrict mobility and the higher costs of doing business due to restricted supply chains and a tightening of credit; and (b) Demand will also fall due to higher uncertainty, increased precautionary

behavior, containment efforts, and rising financial costs that reduce people's ability to spend. (More info in Q3).

As a result, we know that border closures, quarantines, and market, supply chain and trade disruptions could restrict people's access to sufficient/diverse and nutritious sources of food, especially in countries hit hard by the virus or already affected by high levels of food insecurity.

We are faced with a looming food crisis, unless measures are taken fast to protect the most vulnerable, keep global food supply chains alive and mitigate the pandemic's impacts across the food system.

Q2: WHOSE FOOD SECURITY AND LIVELIHOODS ARE MOST AT RISK DUE TO THE PANDEMIC?

Currently, some **820 million people** around the world are experiencing chronic hunger – not eating enough caloric energy to live normal lives. Of this, **113 million are coping with acute severe insecurity** – hunger so severe that it poses an immediate threat to their lives or livelihoods and renders them reliant on external assistance to get by. These people can ill-afford any potential further disruptions to their livelihoods or access to food that COVID-19 might bring.

If COVID-19 cases, already present in more than 100 countries, proliferate in the 44 countries that need external food assistance, or in the 53 countries home to 113 million people experiencing acute hunger, many of whose public health systems may face capacity constraints, the consequences could be drastic.

Indeed, FAO is particularly concerned about the pandemic's impacts on vulnerable countries already grappling with hunger/hit by other crises – the Desert Locust outbreak in the Horn of Africa, insecurity in Yemen or the Sahel, for example – and countries that rely heavily on food imports such as Small Islands Developing States, and countries that depend on primary exports like oil.

Vulnerable groups also include small-scale farmers, who might be hindered from working on their land/

accessing markets to sell their products or buy seeds and other essential inputs, or struggle due to higher food prices/limited purchasing power, as well as millions of children who are already missing out on the school meals they have come to rely upon.

For example, in Latin America and the Caribbean, FAO-supported school meals programmes benefit 85 million children. Some 10 million children depend on them as the meals constitute one of their most reliable source of food each day. The suspension of the school meals programs due to the pandemic puts vulnerable children's food security and nutrition at risk whilst weakening their capacity to cope with diseases.

We also know from dealing with past health crises that these can have a drastic effect on food security, especially that of vulnerable communities.

Quarantines and panic during the Ebola Virus Disease outbreak in Sierra Leone (2014-2016), for example, led to a spike in hunger and malnutrition. The suffering worsened as restrictions on movement led both to labor shortages at harvest time even as other farmers were unable to bring their produce to market. The systemic effect was akin to that of an earthquake, highlighting how prevention and risk reduction strategies now are paramount.

Q3: WHAT ARE THE IMPLICATIONS OF THE COVID-19 SITUATION – NOW AND IN THE FUTURE – FOR FOOD PRODUCTION, AGRICULTURAL SUPPLY CHAINS AND MARKETS?

The food supply chain is a complex web that involves producers, agricultural inputs, transportation, processing plants, shipping etc.

As the virus spreads and cases mount, and measures tighten to curb the spread of the virus, there are countless ways the global food system will be tested and strained in the coming weeks and months.

As of now, disruptions are minimal as food supply has been adequate and markets have been stable so far. Global cereal stocks are at comfortable levels and the outlook for wheat and other major staple crops for 2020 is positive.

Although less food production of high value commodities (i.e. fruits and vegetables) is already likely, they are not as yet noticeable because of the lockdowns and disruption in the value chain

We are already seeing, however, challenges in terms of the logistics involving the movement of food (not being able to move food from point A to point B), and the pandemic's impact on livestock sector due to reduced access to animal feed and slaughterhouses' diminished capacity (due to logistical constraints and labour shortages) similar to what happened in China.

As a result of the above as of April and May we expect to see disruptions in the food supply chains.

Blockages to transport routes are particularly obstructive for fresh food supply chains and may also result in increased levels of food loss and waste.

Transport restrictions and quarantine measures are likely to impede farmers' access to markets, curbing their productive capacities and hindering them from selling their produce.

Shortages of labour could disrupt production and processing of food, notably for labour-intensive crops.

Spikes in prices are not expected in major staples where there is supply, stocks, and production is capital intensive, but are more likely for high value commodities, especially meat in the very short term and perishable commodities.

Developing countries/Africa are particularly at risk as the disease can lead to a reduction in labour force, and affect labour intensive forms of production (agriculture) but also because most of the food crises countries are in Sub-Saharan Africa.

Q4: HOW WILL THE PANDEMIC AFFECT FOOD DEMAND?

The 2008 financial crisis showed us what can happen when reduced income and uncertainty make people spend less and result in shrinking demand. Sales declined. So did production.

At the onset of the COVID-19 outbreak, there has been a significant increase in demand.

Food demand is generally inelastic and its effect on overall consumption will be likely limited, although dietary patterns may alter. There is a possibility of a disproportionately larger decline in meat consumption (as a result of fears – not science-based – that animals might be hosts of the virus) and other higher-valued products like fruits and vegetables (which are likely to cause price slumps).

Food demand in poorer countries is more linked to income, and, here, loss of income-earning opportunities could impact on consumption.

Fear of contagion can translate in reduced visits to food markets, and we expect to see a shift in how

people buy and consume food - lower restaurant traffic, increased e-commerce deliveries (as evidenced in China), and a rise in eating at home.

Following the outbreak of coronavirus, countries around the world started to implement a number of policy measures aimed at avoiding the further spread of the disease.

However, such measures might affect agricultural production and trade. For instance, many countries are implementing higher controls on cargo vessels, with the risk of jeopardizing shipping activities.

Measures affecting the free movement of people, such as seasonal workers, might have an impact on agricultural production, thus affecting market prices globally.

Measures to guarantee acceptable health standards in food factories, may slow down production.

Q5: WHAT IS THE PANDEMIC'S IMPACT ON THE GLOBAL ECONOMY?

There are several sources of effects over the global economy.

First, markets are more integrated and interlinked, with a Chinese economy that contributes 16 percent to the global gross domestic product. Thus, any shock that affects China now has far greater consequences for the world economy.

Second, the supply shocks due to morbidity and mortality, but also the containment efforts that restrict mobility and higher costs of doing business due to restricted supply chains and a tightening of credit will affect economies leading to a reduction of economic growth.

In March, the OECD cut its forecast for global economic growth in 2020 from 2.9 percent to 2.4 percent, which would be the lowest level since the financial crisis a decade ago, warning that a prolonged and more intensive coronavirus epidemic could even halve this figure to a mere 1.5 percent.

Third, the demand will also fall due to higher uncertainty, increased precautionary behavior, containment efforts, and rising financial costs that reduce the ability to spend.

Finally, there is a significant devaluation of the exchange rate with respect to the US dollar, which will also affect the import dependent countries.

Global food markets are not immune to these developments. However, they are likely to be less affected than other sectors that are more exposed to logistical disruptions and weakened demand, such as travel, manufacturing and energy markets (Source: [Market Monitor](#), [AMIS](#), March 2020). But given the complexity of the food value chains and the importance of trade and transportation, these could make them extremely vulnerable.

While COVID-19 likely represents a deflationary shock for the global economy, reflected in early moves by the [FAO Food Price Index](#), in the short term the real cost of a healthy diet may rise because of the increase in the cost of perishable commodities, which would have a particularly adverse impact on lower-income households and raise the price of progress towards the Sustainable Development Goals.

This effect, as shown in 2019 *The State of Food Security and Nutrition in the World*, will be most importantly in countries with high commodity-import dependence. Here, the negative effect is stronger, as a one percent increase in commodity-import dependence causes an average increase in undernourishment of 3.8 percent per year. When the country is food-import dependent, there is an average increase in undernourishment of 8% per year. Furthermore, the demand shock will contribute to prolonging and worsening the effect.



Q6: WHAT ARE FAO'S RECOMMENDATIONS TO MITIGATE THE RISKS OF THE PANDEMIC ON FOOD SECURITY AND NUTRITION?

Pro-active measures are paramount and will cost less at a time when economic resources will be heavily needed. This is doubly the case given growing expectations of a global recession. Economic slowdowns or contractions were associated with rising hunger levels in 65 out of 77 countries in recent years, as FAO and partners warned in the 2019 [The State of Food Security and Nutrition in the World report](#).

Main recommendations include:

1. Countries should meet the immediate food needs of their vulnerable populations.

For example: ensure emergency food needs are met; adjust social protection programmes; scale up nutritional support; support management and prevention of undernourishment; adjust school meal programs so as to continue delivering school meals even when schools are shut.

For example, with the halt of the FAO-supported school meals programmes in Latin America and the Caribbean, FAO called on the region's governments to implement measures to support children whose families have greater difficulties in accessing food, and ensure that children's access to nutritious food is maintained. Suggested measures included: food distribution to the most vulnerable families, increase in social protection programs; exemption from taxes on basic food for families with school-age children, especially for workers in the most affected economic sectors; delivery of fresh food from local farmers; use of digital tool (georeferenced applications) to improve communication on access points for food deliveries, distribution times, and measures to reduce the risk of COVID-19.

2. Countries should boost their social protection programmes

This could entail: increasing transfer amount to people already benefiting from social assistance through a one-off payment (prior to full blown impact of the crisis as early action to mitigate impact) or ensure multiple payments to help families meet their basic needs; providing complementary entitlement to off set loss of income for small-scale producers, for example;

if food insecurity becomes extremely severe due to massive layoffs, fall in remittances etc., exploring the use of food banks could be an option – through not only direct provision of food by government, but also donations from individuals, solidarity networks, non-governmental organizations; enabling mobile payment systems to prevent disruptions in delivery of cash entitlements due to restrictions on movement; injecting funds in the agricultural sector, for example through a grant facility, can help agri- Micro, Small & Medium Enterprises, casual laborers, and salaried staff that cannot work to stay afloat, temporarily, while all business stops.

Many governments have already introduced or boosted protective measures to combat the impacts of the pandemic on people's livelihoods.

3. Countries should adjust their cost to trade and tax policies

These include: immediately review trade and policy options and their likely impacts; avoid generalized subsidies for food consumers; reduce restrictions on use of stocks; reduce import tariffs and other restrictions; temporarily reduce VAT and other taxes.

Overall, avoiding any trade restrictions would be beneficial to keep food and feed supplies, as well as those of agricultural inputs, from worsening local conditions already strained by COVID-19 response measures.

It is also important that bolstering food security is on the agenda of the more affluent countries where COVID-19 cases are currently most intensely reported. Lockdown measures are likely to severely impact incomes of the most vulnerable.

Policy makers must monitor trends and take care to avoid accidentally tightening food-supply conditions, something that China has managed so far with creative and adaptive methods. Digital technologies have a role to play in anticipating problems and smoothing temporary shortages.

Building resilience is a duty for all if we are to reap the benefits of global interdependence.



Q7: WHAT IS THE CONNECTION BETWEEN COVID-19 AND ANIMALS?

FAO support countries and research institutions in ongoing investigations to identify possible animal hosts of the virus and reduce spillover effects to humans.

To date, there is no evidence that animals can transmit the virus to humans). At this point in time, the highest risk of COVID-19 spread is through human-to-human transmission.

FAO coordinates prevention, preparedness and detection of priority pathogens in animals, in close collaboration with World Health Organization (WHO) and World Organisation for Animal Health (OIE), using the One Health approach. This approach is a unifying force to safeguard human and animal health, to reduce disease threats and to ensure a safe food supply through effective and responsible management of natural resources.

With regard to COVID-19, FAO has activated an incident coordination group, which regularly brings together global, regional and country partners to ensure global coordination of activities and communication on the disease from the perspective of animal health and livelihood resilience.

FAO is working in close collaboration with the International Atomic Energy Agency through their Joint FAO/IAEA Division's Veterinary Disease Diagnostic Laboratories Network (VETLAB) in over 60 countries to ensure readiness to rapidly detect COVID-19 in animals and animal products, as well as to conduct thorough surveillance of virus circulation in the environment. This includes preparing regional training courses (delivered online) on COVID-19 in case of its appearance in the livestock sector, targeting medical and veterinary experts from Africa and Asia.

Q8: ARE THERE ANY RISKS FROM INTERACTING WITH ANIMALS OR CONSUMING ANIMAL PRODUCTS?

There is no evidence of any animal including pets playing a role in the spread of the virus. As a general practice when caring for any kind of animals, always wash your hands before and after interacting with them.

Meat from healthy livestock that is cooked thoroughly remains safe to eat.

People should not handle, slaughter, dress, sell, prepare or consume meat that originates from wild animals or livestock that are sick or that have died

from unknown causes. Raw wild meat or uncooked dishes based on the blood of wild animals should not be consumed. These practices place people at high risk of contracting any number of infections.

Any unusual morbidity or mortality of animals should be reported to the animal health authorities.

FAO urges animal owners to treat their animals humanely as misleading information may impact on their understanding of the possible risks posed by animals in the virus's spread.

