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IMPACT OF COVID-19 ON GLOBAL FOOD SECURITY

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Anil Mishra (2022). Impact of Covid-19 on Global Food Security. *Indian Journal of Global Economics and Business*, Vol. 1, No. 1, pp. 27-36 Abstract: The COVID-19 pandemic is a health and human crisis threatening the global food security and nutrition of millions of people around the world. Hundreds of millions of people were already suffering from hunger and malnutrition before the virus hit and, unless immediate action is taken, we could see a global food emergency. In the longer term, the combined effects of COVID-19 itself, as well as corresponding mitigation measures and the emerging global recession could, without large-scale coordinated action, disrupt the functioning of food systems. Such disruption can result in consequences for health and nutrition of a severity and scale unseen for more than half a century.

INTRODUCTION

The COVID-19 pandemic is already affecting food systems directly through impacts on food supply and demand, and indirectly but just as importantly through decreases in purchasing power, the capacity to produce and distribute food, and the intensification of care tasks, all of which will have differentiated impacts and will more strongly affect the poor and vulnerable. Potential risk for global food availability and food prices will depend on the duration of the outbreak and the severity of containment measures needed. Isolated country-level policies are likely to amplify the effects of the crisis on food security and nutrition at the global level, especially for low-income and food-insecure countries. Further, the potential impact of the pandemic on food production in major food producing and exporting countries (e.g. China, EU, USA) could have serious implications for global food availability and food prices. The experience gained so far with the COVID-19 outbreak comes mostly from high-income and industrialized countries (China, South Korea, Italy, USA and Europe, among those more affected), and already there is a clear negative impact of the outbreak on the stock markets, industrial production and the demand for oil. However, it is difficult to predict the longterm impact of the outbreak on the economy as a whole and on FSN, and especially

in low-income countries, based on current experience. But signs of economic slowdown and food value chains disruption are evident.

The broader economic crisis that is emerging because of the COVID-19 crisis poses enormous challenges for food security and nutrition globally. In particular, people working in casual labour, services, restaurants, and retail, for example, face massive job losses (in part due to social distancing policies, and in part due to the broader economic slowdown) and hence will surely see a major drop in their incomes. Initial estimates of the International Labour Organization (ILO) indicate a significant increase in unemployment and underemployment in the wake of the pandemic. The ILO preliminary assessment suggests that dropping global GDP growth by 2 to 8 per cent would lead to the loss of 5.3-24.7 million jobs. This in return, implies large income losses for workers, estimated at US\$ 860 million to US\$ 3.44 billion.

While food producers may still see demand for their production, disruptions to agri-food supply chains and markets may make their livelihoods less secure as well, especially from countries with strict policies that are leading to a reduction in overall demand. Further, given the seasonality of agricultural production systems, most food producers today, especially in the developing world, engage in non-farm and off-farm activities, both domestically and internationally, to support their livelihoods and equally raise capital for investments in their farms. A reduction in the ability of farmworkers to travel to their employment, both domestically and internationally, contributing to declines in income for food security and capital investment, can have direct implications for people's access to food, in the present and immediate future.

The inevitable global economic recession is also likely to lead to longer term implications for food security, nutrition and poverty. This coming recession will be very different from the previous economic crisis in that we are not seeing spikes in agricultural commodity prices in the same way as occurred in the 2008 financial crisis. Although there may be price gouging at the retail level as noted above, it is expected that commodity prices could fall due to a lack of demand. Also, in this period, because of current downward pressure in oil prices due to a greatly lowered demand, we are currently not seeing the same kinds of pressures leading to increased food prices. But the shocks to both supply and demand for food are likely to affect people's food security, nonetheless.

IMPACT OF COVID-19 ON FOOD SUPPLY, DEMAND AND ACCESS

COVID-19's impacts on food supply and demand will directly and indirectly affect all four pillars of food security and nutrition (FSN): availability, access, utilization and stability. It is also expected that there will be immediate effects resulting from the containment measures adopted in several countries, and these measures will also have longer-term impacts affecting the full global economy.

IMPACT ON FOOD SUPPLY

As caseloads of COVID-19 increase in countries around the world, there are likely to be disruptions to agri-food supply chains according to FAO. Although there may have been plenty of food within the supply chains at the start of the crisis, disruptions to food supplies have tracked outbreaks due to a rise in panic buying by people concerned about food supplies during potential lockdowns. If outbreaks around the world are severe or continue over long periods of time, there are likely to be more serious disruptions that may reduce food availability in the markets over the medium and longer terms. These disruptions may occur as a result of producers themselves becoming ill or because of disruptions to markets due to policies to contain the virus, and the resulting weakened capacity to produce, transform and transport food. One specific issue is the access to inputs in time for the agricultural planting season, as delays due to transport and market disruptions may affect yields and income. Restriction to workers' movements will cause workforce shortages especially relevant for labour-intensive crops, such as fruits and vegetables. Disruptions in food chains and social distancing policies may also affect social assistance, including children relying on school meals when schools close down. According to the World Food Programme (WFP), already about 320 million children have had their primary schools closed due to COVID-19, with most of them losing access to school meals vii. Declining demand due to a decline in purchasing power will in turn affect the ability and willingness of farmers and producers to invest and adopt adequate technology and will further shrink food production and availability.

IMPACT ON FOOD DEMAND

Social distancing policies and illnesses cause a drop in the overall demand and in the demand for food-related services (e.g. restaurants, hotels) with repercussions on loss of jobs, incomes and livelihoods. Starting with the containment and social distancing policies, the pandemic creates first a spike in demand, due to panic buying and hoarding of food by consumers, which will increase food demand in the short-term, primarily among those who have the means to over-buy food for storage in their homes. However, it is expected that this short-term spike in purchases will be followed by a declining trend in demand, both in terms of physical ability to purchase food due to movement restrictions and closure of restaurants or other catering facilities, and in terms of loss of income and purchasing power linked to the loss of jobs and the freezing of economic sectors. Changes in short-term preferences towards packaged food due to perceptions of food safety or convenience can become long-term changes, with repercussions on food systems, livelihoods of food producers and dietary diversity.

IMPACT ON FOOD ACCESS

Supply disruptions as well as the loss of jobs, incomes and employment outlined above will fall especially hard on low wage and casual workers with more limited savings and access to public healthcare in some contexts. In the absence of responsive social safety nets and robust income assistance, the working poor will see their ability to access nutritious food decline in many situations. Many households will downshift to so-called "inferior goods" as a cost-saving measure, as well as more shelf-stable goods, which could be more processed and less nutritious foods in industrialized countries, or less processed and arguably more nutritious foods in less industrialized countries. However, these too have a cost in terms of enhanced demands on women's time and labour to process these foods, as became evident during the Structural Adjustment Programmes of the 1980s.

MAJOR THREATS DUE TO COVID-19

Poverty and Poor Healthcare Infrastructure

COVID-19 poses considerable risks to already vulnerable populations living in countries with severe development deficits, limited government capacity and, importantly, poor healthcare infrastructure. According to WHO, the virus spreads countries with weaker health systems. There is also considerable risk to refugee populations. Today, more people are displaced from their homes because of violence, conflict and persecution than at any other time since the Second World War. Many of those who have left their countries are living in camps. Refugee populations living in close proximity to one another, and lacking adequate medical facilities, are at an especially elevated risk from COVID-19.

Social Safety Nets

Safety-net systems are critical lifelines to help stem the negative economic and nutritional impacts of COVID-19. Many developing countries, however, lack safety-net systems to fill that void. In fact, less than 20 percent of people living in low-income countries have access to social protections of any kind, and even fewer have access to food-based safety nets.

Hunger or Malnourishment

Africa's 1.2 billion people face the highest percentage of undernourishment on the planet, affecting over 20 percent of the population. The COVID-19 virus has proved especially deadly for those who are elderly or whose health is already compromised. This likely includes people suffering from malnourishment.

Food Supply Chains

In many developing countries, millions of families already spend upwards of half of their income on food in normal circumstances. Countries that rely heavily on imported food to meet demand, including sub-Saharan Africa, face disproportionate risk from supply chain failures, especially in the face of border-crossing closures. Finally, it is the impacts of farmers leaving their fields fallow (or facing delays in planting and harvesting) because of sickness and breakdowns in non-food supply chains, like fertilizer and other critical inputs, that may ultimately most impact developing country economies.

Global Economy

Latest edition of the State of Food Security and Nutrition in the World report (SOFI), economic decline has major impacts on poverty and food insecurity. Economic decline, poverty and food insecurity often accompany one another. Global food security programmes could face additional risks if humanitarian and development resources are diverted away from them to combat COVID-19.

RISKS TO THE FOOD SYSTEM DUE TO COVID 19

Supply-Side Risks

Trade Barriers: Trade is a key mechanism for allocating scarce resources efficiently. Global food systems rely on trade for access to key inputs as well as to move food from surplus areas to deficit areas. As border controls are being put in place to contain the spread of the virus, cross-border trade in critical inputs like seed, fertilizer, plant protection products and on-farm equipment could be constrained. These barriers to trade increase transaction costs, in turn reducing margins for smallholder farmers and potentially decreasing their on-farm investments as well. Reduced on-farm investments could inhibit farmer's resilience to unrelated shocks such as droughts and pest and disease outbreaks and generally limit their productive capacity even further.

Labor Shortages: Public health outcomes and restrictions on mobility could result in shortages of a critical factor of production for global food systems: labor. As operations within food systems in developing countries are highly labor intensive, border closures and domestic lockdowns could have the unintended consequence of limiting seasonal and casual labor availability. Additionally, increased morbidity and mortality from the virus could have a further impact on labor availability. Labor pressures from public health issues reduce on-farm productivity, limit processing capacity, and constrain food distribution, thereby reducing aggregate food availability and placing upward pressure on food prices. Identifying those food value chains in feed the future countries most susceptible

to labor shortages in the coming months and seasons would be important for understanding the anticipated duration of the shock to the system and quantifying the potential effects on supply and price.

Informal Market Closures: There is a growing outcry calling for the closure of all "wet" informal markets across developing countries. Vendors in wet markets sell fresh produce and meat, often including live animals. The objective of these calls is to reduce risks for zoonotic disease spillover from animals traded in high-risk markets to human consumers as COVID-19 may have originated in a wet market. However, informal food markets serve as an important source of food and income across the developing world. Blanket closure of all informal wet markets could therefore ultimately result in shocks to food availability and income sources in some developing countries.

Regulatory efforts that enforce basic food safety standards, support best practices of live animal husbandry and species separation at markets and slaughterhouses, and prevent illegal and unsustainable wildlife trade in informal markets can help to ensure food security, public health safety, and wildlife conservation. Over the longer term, market-led initiatives will be equally important, such as supporting additional safe and sustainable domestic animal food sources, raising consumer demand for safe foods and supporting small-scale value chains for emerging supermarkets to provide safe and sustainable food sourced from local producers. All people need safe and sustainable sources of food and income. Better law enforcement, improved biosafety policies, and stronger natural resource conservation can help prevent the spread of disease.

Demand-Side Risks

Access to Nutritious Foods: The poorest segments of the population in developing countries often depend on income from casual labor along food value chains, both on farms and in firms that may be unavailable under lockdowns. A reduction in income is likely to result in reduced access to foods. Since nutritious, fresh foods are often more expensive than nonperishable staples, it is expected that the price of nutritious foods will rise faster and become less accessible for the more vulnerable segments of society. Further, since the desire to buy goods at a higher price is less common in poorer countries, if prices of nutritious foods rise faster than nonperishable foods, and incomes decline, then lower overall spending on nutritious foods can be expected. Reduced access to nutritious foods could further impact immune response in populations already most vulnerable to COVID-19, including the elderly, those with underlying health conditions, and the already immune-compromised.

Global Industrial Capacity and Purchasing Power: A sharp global economic slowdown appears unavoidable as a result of lockdown measures to control the virus, and the damage to developing country agriculture sectors is expected to

follow. Today, as global industrial capacity shuts down, oil prices are cratering, and there are signs that food commodity prices are following suit. In addition to slowing industrial capacity, a simultaneous decline in global aggregate demand could further exacerbate falling prices of export-oriented foods. As many developing countries are reliant on agricultural exports for foreign exchange, declines in food exports will not only impact export-oriented farms and firms, but will also influence broader macroeconomic performance that will have ripple effects through the agriculture sector.

Domestic Panic Buying: While global commodity prices are falling, there is also anecdotal evidence emerging of domestic panic buying in developing countries that is driving food prices up. It is unknown how widespread this behavior has been or how long it can be expected to last, but rising domestic food prices along with a collapse of global commodity prices could have a devastating impact on food security in the least developed countries.

RECOMMENDATIONS

- Just as management of COVID-19 requires a globally coordinated response, so does its impacts on food security. The CFS should take a lead role in coordinating the global food security policy guidance in response, in close collaboration with other agencies such as the WHO, FAO, WFP and the United Nations Secretary General's Special Envoy for the preparation of the 2021 World Food Systems Summit.
- Governments should prioritize the most vulnerable and affected by COVID-19 and its impacts, such as the elderly, the ill, the displaced, and the urban poor. The specific role of women in health and food systems should be recognized, as food producers, processors and careers. Solidarity among people and communities should be promoted and as a priority continue to empower and support everybody to collaborate and cooperate to confront the emerging challenges.
- Social protection mechanisms for the poorest and most vulnerable people during and in the aftermath of the COVID-19 crisis need to be employed that incorporate provisions on the Right to Food, both in terms of quantity and nutritional quality. These mechanisms should provide essential assistance in the short-term and support livelihoods in the long-term.
- When developing action plans for minimizing COVID-19, governments need
 to take into account the broader interactions with food security and nutrition.
 Governments should be aware of the competition between resource allocations
 between public health and food security. Plans will also need to be responsive
 to the fact that this is a rapidly evolving situation with differentiated impacts
 on different communities.

 Governments will need to support food supply chains and avoid disruptions in food movement and trade, to ensure that they function smoothly in the face of the crisis and increase resilience of food systems so that they can support food security and nutrition.

- It is essential that both workers and inputs necessary for agricultural production be able to circulate in the coming months, when most of the world's production occurs.
- National governments should support local communities and citizens to increase local food production (including home and community gardens) through appropriate stimulus packages (in cash and kind) to enhance food resilience, minimize food waste, and avoid over-buying to ensure equitable access to food for all community members.
- Governments should provide guidelines tailored for food workers involved in food production, handling and processing to help avoid catching and spreading COVID-19.
- Governments should collect and share data, as well as support research, on the impact of the COVID-19 pandemic on food systems.
- The CFS should consider its work priorities, including how the HLPE can continue to provide science-based advice on the COVID-19 crisis through its current work on the Global Narrative report.

CONCLUSION

We are in the midst of a global crisis, and while the number one priority of policymakers is to save lives, we must also understand the short- and long-term impacts on global food security. It remains important for governments grappling with the COVID-19 public health crisis to continue to prioritize food and nutritional security. Evidence is urgently needed to understand the severity and duration of these, and other potential impacts, on food systems in Feed the Future countries. Only then can policy and intervention responses be appropriately tailored to this unfolding crisis.

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