COVID 19

ECONOMIC AND HEALTH IMPACTS ON REGIONAL FOOD AND NUTRITION SECURITY

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Photo credit: WFP/MALAWI
1. Macro-Economic Context – Fragile Financial Systems, Food Deficits and Commodity Exports

On the 28th Jan 2020, the World health Organisation (WHO) declared a public health emergency related to the Novel Corona Virus (COVID 19). Following a rapid increase in cases around the world, WHO declared a pandemic on 11th March 2020. Economic growth and developmental pathways are subject to a range of shocks that affect economies in varying ways with direct impacts on the food security and nutritional status of the most vulnerable populations. A health crisis such as COVID 19 intersects with food security and food systems as an external shock with impacts on well-being and generates losses in employment, livelihoods, income, and remittances.

Economic Vulnerability

Increased reprioritisation of national expenditure towards control of COVID19 will affect allocations to other sectors such as agriculture which would have long-term effects on food production and supply. The economic fallout for the continent has the potential to be severe and long-lasting. While some global economic impacts of COVID 19 are already emerging, there is less discussion on the effects on individual economies and even less on the impact this will have on food security within the region. It is widely projected that a pandemic would disproportionately affect Africa given its relatively underdeveloped healthcare sector, limited infrastructure and population movement across borders.

Tourism will be impacted heavily in the region as a result of border and travel restrictions and, according to research by Price Waterhouse Coopers, the impact of COVID 19 on tourism revenue for South Africa alone represents a potential loss of at least ZAR 200m in Chinese tourism spending. This figure is likely to increase significantly in the months ahead.

![Figure 1: SADC TOURISM & TRAVEL DATA 2018 (Adapted from WTCC)](image)

National economies in Southern Africa, such as Zimbabwe, Lesotho, Mozambique and Malawi, receive high levels of remittances that are critical for both the monetary system and household consumption. Increased unemployment will reduce the inflows of hard currencies and the ability of households to purchase essential commodities.
Many of the countries in the southern Africa region have a high dependence on commodity exports to China, relatively weak sovereign balance sheets, high debt burdens and volatile currencies, and exposure to a number of economic externalities. Chinese demand underpins the economies of various resource-rich countries on the continent, with a slowdown in China as a result of COVID 19 having a disproportionate impact on trading partners such as Angola, Zambia, Congo Brazzaville and the Democratic Republic of Congo (DRC). Data visualizations of trade flows by country can be found here: https://comtrade.un.org/labs/

Recessionary trends at the global level and the potential for a prolonged reduction of economic growth in China will have direct impacts on commodity exports in the region ranging from copper in Zambia, precious metals in Tanzania, coltan in DRC and petroleum in Angola and the Republic of Congo.

The main export items between SADC countries include petroleum, agricultural products, electricity and clothing and textile products. Main export items to the rest of the world consist of predominantly export of natural resources (e.g. coal, ferrochromium, manganese ores, platinum, as well as precious metals and diamonds), resource intensive manufactured goods, mainly for the automotive industry, clothing and textiles, and tobacco. The highest share of total SADC exports over time is to the Asia-Pacific region followed by the EU. Trade within Africa is the smallest and of this the majority is intra SADC trade.

Although the petroleum sector represents a declining percentage of African economic activity, many governments remain overly dependent on it for the revenues required to fund national budgets. In Angola, oil accounts for around 75 percent of total government revenue and 90 percent of export revenues. According to Africa Confidential, three-quarters of Nigerian and Angolan oil production for export in April remains unsold. Within sub-Saharan Africa, ODI projected that Angola, RoC, Lesotho and Zambia are among the most exposed to the economic impact of coronavirus and estimates that sub-Saharan Africa will stand to lose USD4 billion in export revenue prior to the identification of a single case of COVID 19 on the continent.
2. COVID-19 and National Health System

COVID-19 has exposed the weakness of national public health systems. The impact of the outbreak on the Southern Africa region could be catastrophic unless efforts are undertaken to manage the spread of the virus. With experience from the regional HIV and AIDS response, it is known that the HIV response in this region has been sustained by external resources from the Global Fund and PEPFAR. Most countries in the region struggle to allocate sufficient budgetary allocations for health and nutrition and will have limited capacity to address COVID impacts.

In order to cope with the crisis, many countries will require external financing and expertise at a time when global capacities are stretched or overwhelmed. According to WHO measurements of progress towards Universal Healthcare in SADC (WHO uses an index which considers the availability of a range of essential services), on average, SADC countries score 53%, which is higher than the African regional average of 46%, but lower than the global average of 66%. The range across SADC countries varies from 40% to 71%. Investments in preparedness mean SADC countries are faster and more effective in responding to emergencies. Across the SADC Region, the average time taken to detect an outbreak, reduced from 9 days in 2016 to 7 days in 2019 and the time taken to control outbreaks reduced from 236 days in 2016 to 94 days in 2018.

Supply Chain

It is known that people living with HIV have an increased risk to morbidity and there is a growing concern that a global disruption of supply chain commodities may also influence the supply of Active Pharmaceutical Ingredients (APIs), the basic ingredients for any medications. This includes ARVs which are mainly produced in China. Affordable generic ARVs are mainly produced in India which has also enacted emergency measures and shutdowns to prevent the spread of COVID-19. This means that the entire ARV supply chain depends upon two countries affected by COVID-19.
Demographic vulnerabilities

Countries that have been hardest hit by COVID-19 have a very small population of people living with HIV - of the 1.4 billion plus population in China, only about 532,000 are living with HIV hence it’s been difficult to assess the impact of virus on PLHIV from the cohort that tested positive to COVID-19. There is no mention of HIV as an underlying condition from the cohort that tested positive/succumbed to COVID-19 to provide more insights to the implications of the virus on HIV. WHO and other experts in this area (British HIV Association) have stated that for now, there is no evidence to determine whether people living with HIV are at greater risk of COVID-19 acquisition or severe disease. The main mortality risk factors to date are older age and co-morbidities, including renal disease, diabetes, heart and respiratory problems. Some groups with relative immune suppression, such as the very young and pregnant women, do not appear to be at higher risk of complications, although numbers are very small. They also caution that there is a possibility of unusual presentations in clients who are immunocompromised. However, some of the public health concerns drawn from available literature and data collected from the most affected countries are as follows:

a. PLHIV not on treatment face an increased risk of infection compared those on ART: Experts suggest that if an HIV-positive patient is on antiretrovirals, their response to the COVID-19 will be pretty similar to what an HIV-negative patient’s response would be based on what is known from other similar viruses (measles and influenza). However, for people living with HIV who are not on treatment, the risk could be greater. The Southern Africa region has about 17 million people living with HIV and just over 10 million of those are on life-saving treatment. This virus poses a big threat to the over 6 million PLHIV not on treatment in the region as their susceptibility to COVID-19 infection could be increased given their compromised immune system.

Whilst we do not have any data on the response to COVID-19 by adolescents and youth living with HIV, it is known that there is a growing number of infections amongst this group and there is poor adherence to ART treatment due to varying reason. This group might also be vulnerable to COVID-19 infection due to poor adherence rates.

b. HIV/TB Co-infection: Very little is yet known about what the new virus means for people with TB. However, for the Southern Africa region the rates of TB and HIV co-infections are quite high given that countries with high HIV prevalence in the region like Eswatini, Lesotho, South Africa, Namibia, Malawi and Mozambique also have the highest TB cases in the world. Early reports from countries point to the fact that patients with underlying respiratory problems are more susceptible to morbidity and mortality from the virus. This could present a huge challenge for the health sector as well as TB patients and PLHIV/ TB in general.

c. Older Populations and OVCs: More than 80 per cent of those who have died from Covid-19 in China have been aged over 60, according to the National Health Commission of China, identifying older people as the age group most at risk from the disease. Another study of more than 44,000 patients carried out by the Chinese Centre for Disease Control and Prevention has also confirmed that patients older than 80 who become infected with coronavirus have a 15
per cent chance of dying. This is far higher than the general estimated mortality rate of 2.3 per cent. *(Source: Help-Age International)*.

One of the most devastating impacts of HIV in the Southern Africa region has been the loss of whole generations of people in communities hardest hit by the epidemic leaving children in the care of the elderly. This is evident in Eswatini where the impact of HIV has resulted in about 355,349 children being orphaned and/or vulnerable (OVC) with many of these children in the care of the elderly. The susceptibility of the elderly to COVID-19 infection and the increased mortality in this age group, could further deepen the vulnerabilities of these children and their households. Given the limited HIV sensitive social protection mechanism in most countries in the region, the region could see another spike in orphaned and vulnerable children who require social support.

### 4. Production, Access and Affordability

#### Food Availability

Crucially, reduced levels of agricultural production in recent years as a result of natural disasters and climate change in the region represented the backdrop for the current health crisis which may have long lasting and widespread consequences for vulnerable populations in the region. Similar health crisis in the region, such as the Ebola crises in West Africa and DRC, have had significant impacts on agricultural production, marketing and trade.

On the production side, restricted movement and limited access to inputs such as seeds, fertilizers and insecticides directly impact the food security of smallholders. Many of the countries affected faced acute labour shortages in the agriculture sector with more than 40 percent of agricultural land remaining uncultivated. This also affected market access, as farmers faced distribution challenges in transporting fresh produce to local and urban markets.

8 of the 12 SADC countries with a WFP presence are Low-income Food Deficit Countries ([http://www.fao.org/countryprofiles/lifdc/en/](http://www.fao.org/countryprofiles/lifdc/en/)). Disruptions to local, national and cross-border trade is particularly relevant for urban populations in the region who may have less access to own production and fresh foods. International trade can be disrupted by health crises as shipping services are either delayed or cancelled because crew members of cargo vessels refused to travel to those hard-hit countries.

An assessment done by FAO during the West African EVD showed that the EVD outbreak had disrupted the functioning of several cross-border agricultural market chains. Above all, it had a major negative impact on collecting and transporting agricultural production to consumption areas. This disruption stemmed from collector’s reluctance to travel to contaminated areas (the number of traders decreased by 20 percent at the peak of the outbreak according to WFP) and, to a lesser extent, to transportation difficulties arising from Ebola checkpoints, quarantine zones and the closure of certain borders.

#### Access to Food
Food insecurity and malnutrition are not just about production, it is also about access and the functioning of the food system. This is affected by the value of assets when sold, the ease with which things can be bought and sold in markets, the value of cash as influenced by currency fluctuations and inflation, local and cross-border trade opportunities, and all the social, institutional and cultural dimensions that go into exchange.

Currently, the green harvest (maize) season has already started in countries such as Lesotho, Malawi, Mozambique (south/central), Eswatini, Zambia, with the main harvest season to commence in April for most countries in the region. Currently, South Africa’s maize production is expected to be approximately 20% higher than the previous season. Malawi’s initial maize crop estimates are also 9% higher than the previous year.

**Figure 4: ZAMBIA GLOBAL MAIZE TRADE FLOWS (Adapted from resourcetrade.earth)**

Global outbreaks like Ebola, Severe Acute Respiratory Syndrome (SARS), and Middle East Respiratory Syndrome (MERS) all had negative impacts on food and nutrition security – particularly for vulnerable populations including children, women, the elderly, people with chronic illnesses and the poor. For example, when Ebola spread in Guinea, Liberia, and Sierra Leone in 2014, domestic rice prices increased by over 30 per cent while the price of cassava, a major staple in Liberia, shot up by 150 per cent. In 2003, the SARS outbreak triggered food market crises in Chinese cities of Guangdong and Zhejiang.

The reason for the widespread concern about food price increases impacting on food and nutrition security is the large share of food in household expenditure in developing countries within our region. As food prices affect the real income of the population – positively for net sellers of food, negatively for net buyers – they can have substantial impacts on the distribution of income and on investment in natural, human, and physical capital. These factors, in turn, determine the
prevalence of poverty which also affects the household's ability to purchase food. An increase in food prices will lead to a situation where poor households are unable to afford a nutritious diet, leading to poor diets - a key driver of malnutrition. The Minimum Acceptable Diet (MAD) indicator for countries in Southern Africa ranges from 8% in Zimbabwe to 23% in eSwatini against an international target of 70%. Higher food prices could result in a much lower rate leading to increased malnutrition.

The affordability of a nutritious diet can vary widely within a country, due to higher prices of nutritious food, lower economic status of a population, availability of nutritious foods or a combination of these factors. The WFP Fill the Nutrient Gap study in Lesotho, Mozambique and Tanzania found that 7-20% of households could not afford to meet their energy needs while over 50% of households could not afford nutritious diets. Increases in food prices due to COVID 19 could further prohibit this access, leading to higher malnutrition rates and increasing the risk of harmful coping mechanisms such as transactional sex which could exacerbate HIV prevalence. A strong positive correlation has also been found between the non-affordability of a nutritious diet and stunting.

Additional Points: Regional Food Security and Nutrition Concerns

- In Mozambique, the availability of nutritious foods is poor, especially in rural areas. Varying food prices, which directly impact the cost of a nutritious diet, often mirror urban-rural divides. In the urban south of Mozambique, the price of eggs and tomatoes, which are imported from South Africa, are four to five times higher than in the rural central region, where they are mainly produced by local households. However, affordability of a nutritious diet was higher in the urban south, even if it was more expensive, because incomes were higher. This is a typical observation in many countries. These largely rural areas are also impacted more strongly by seasonality, with food prices in rural areas rising higher in the lean season compared to urban contexts.
- Even if food prices were relatively uniform across a country, the ability to afford a nutritious diet can also vary among different areas depending on levels of poverty and income. In the Zambezi, Gaza and Nampula regions of Mozambique, where there are fewer income earning opportunities and considerably lower incomes, households spend only half the money on food compared to households in Maputo Province.
- In Tanzania, households, including rural households, rely on markets for more than one third of their energy intake. Rural populations spend 56% of their income on food while the poorest households spend 70% of their income on food. Increased food prices due to COVID 19 would result in a higher percentage of the household's income spent on food leaving less money for healthcare and other key expenses. This further predisposes children to malnutrition given that disease and inadequate health care is a key contributor to malnutrition. In Madagascar, non-affordability of nutritious food ranged from 25 to 97%. Based on the FNG data, it is clear that where poverty is widespread, a small increase in the cost of a nutritious diet will markedly increase the proportion that would not be able to afford it leading to increased malnutrition rates.
- WFP in this case needs to analyse and distinguish the impact that economic shocks caused by COVID 19 will have on net buyers and net seller of food commodities. While the former may experience a decrease in disposable income, the latter may benefit from price increases if they sell their surplus produce on the market. However, research also suggests that if farmers plant only to take advantage of temporary price spikes they may flood the
market and see depressed prices due to oversupply. More specifically, net buyer households, which urban households usually are, are likely to be adversely affected by food price increases. As government policies restrict people's movements through road blockages and community quarantines, markets become disrupted, leading to less available food, less diversity of options, and higher prices, especially on more scarce foods.

- Studies by WFP on the 2008 Food crisis, have also found that under similar economic shocks, price increases lead to an implicit income transfer from (on average better-off) urban citizens to (on average poorer) rural households, but they also lead to income reduction for the poorest part of the rural population. While price increases may improve nutrition security for some of the poor rural population, they may simultaneously further worsen the food supply of those who are already food insecure. For this reason, the effects on urban and rural households needs to be carefully considered as well as coping mechanisms available to mitigate against high prices and limited supply. Researchers studying the Ebola virus disease's (EVD) effect in Liberia found a reduction in incomes for households across the board, not just in the communities where EVD was present, leading them to suggest that the impact of the outbreak had both direct and indirect income effects. They also “found that the community-level incidence of EVD negatively affected crop production of farm households, which may have exacerbated the problem of food insecurity throughout the country.”

- In China, the current COVID 19 outbreak is driving up the cost of food and many other necessities adding to the pressure on household budgets. China's consumer price inflation hit 5.4% in January and prices rose in February at their fastest rate since October 2011, when China was battling to control months of soaring inflation. Food, which makes up nearly a third of spending by Chinese consumers, has increased at the highest rate.

- Zimbabwe is a key example of the intersection of climate and micro economic shocks on food security with the World bank projecting that poverty in Zimbabwe would remain stagnant in 2020 with continued high inflation, further undermining the purchasing power of the poor and the stability of supply. This was before the impact of coronavirus on the global economy and without any analysis of the impact on Zimbabwe's economy, of which the WB projected that the key external risks for Zimbabwe in 2020 include an unexpectedly sharp decline in commodity prices, an abrupt tightening of global financial conditions, and escalating trade tensions involving major economies.

- A study conducted by ODI of 11 countries in sub-Saharan Africa and South and Southeast Asia found that in the absence of health insurance or other forms of universal health coverage, responses to health shocks by people in poverty or near the poverty line commonly included distress sales of assets and taking out loans from informal moneylenders, sometimes at exploitative rates. Coupled with this the upsurge of information and misinformation of Covid 19 through social media is fuelling speculative behavior and panic buying that disrupts the normal functioning of markets resulting in artificial shortages and high prices of commodities. The resultant lack of access to essential commodities for those in income brackets that cannot afford to buy supplies in bulk will also negatively impact food security of the most vulnerable.

- In principle, high food prices represent an opportunity for smallholder farmers to increase production (although this would be constrained by measures taken by governments to
restrict movement and contain the pandemic). However, high food prices alone are not
sufficient and some of the incentive to produce more may be affected by increasing input
costs – fertilizer prices have risen much faster than producer prices. Smallholders in
Southern Africa may need to overcome many “supply-side” constraints if a significant
supply response to the current economic and trade impacts do not materialise. Rabobank
for example predicts that as a result of reduced manufacturing, prices for inputs such as
fertiliser may increase as many of the macronutrients and also the active ingredients for
agricultural inputs are heavily concentrated in China. Coupled with this is the impact of the
outbreak on consumer markets, potentially driving down prices for agricultural products
and affecting farmers' intentions to invest in fertilizer due to lack of capital.

- Whether urban or rural, it is the poorest of the poor who spend the largest share of their
income on food and who have no access to assets such as land who suffer most. Female-
headed households figure disproportionately on both counts, so the negative impacts of
high food prices and affordability issues also have a gender dimension that needs to be
considered in WFPs programming response.

5. References

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