Impact of COVID-19 on food systems: Perspectives from the field

EDITION 1 – APRIL 3, 2020
Key Messages

- This rapid assessment involving key informants, small business owners, and secondary sources shows that COVID-19-related control measures are beginning to impact food systems in the ten low- and middle-income countries where GAIN works.
- Some effects on food access are reported due to the closure of food shops, transport limitations, or lost wages.
- Some food price increases are reported, though in some cases these vary across urban and rural areas or by types of food. Limited availability of certain foods was also widely reported.
- Food system SMEs are facing considerable challenges with staff coming to work, product distribution, and obtaining equipment or ingredients; those dependent on imported equipment or inputs seemed particularly hard hit. Demand had also decreased in many cases.
- As most countries are early on in their pandemic response, the situation is changing rapidly; measures taken and impacts also vary widely across contexts.

1 SCOPE AND PURPOSE

This document summarises a rapid assessment that was undertaken by the Global Alliance for Improved Nutrition (GAIN) to understand early impacts of the COVID-19 coronavirus pandemic on food systems in a set of low- and middle-income countries where GAIN works (Bangladesh, India, Pakistan, Indonesia, Mozambique, Ethiopia, Kenya, Tanzania, Rwanda, and Nigeria). A particular focus is placed on small- and medium-sized enterprises (SMEs) within the food system.

The information reported here should be interpreted with caution, as it does rely heavily on personal experience and perceptions. The information is current as of approximately 3 April 2020.

2 SOURCES AND METHODS

The information presented here comes from three sources. First, GAIN country representatives (country directors or their designees, n=10) provided input based on their experience in country via a short, structured questionnaire. Second, programme managers for the Marketplace for Nutritious Foods (MNF, a programme that provides grants and technical assistance to food system SMEs) in Mozambique and Rwanda collected data from all firms supported by the programme in those countries, asking about the impact of the COVID-19 crisis on their operations. This covered 27 firms total, producing a range of nutritious foods—e.g., poultry, fish, horticulture, and fortified cereals. Less detailed data on Kenya was also provided by the MNF project manager, based on his own insights into the MNF-supported firms. Finally, some secondary data was taken from the UN World Food Programme (WFP), Food and Agriculture Organization (FAO), and Food Industry Asia.1

3 RESULTS

3.1 Measures Taken to Control COVID-19 Spread

The table below summarises different measures taken to control the spread of COVID-19 in GAIN countries. The focus here is on those measures that could have an impact on the food system, but all countries also have some recommendations in place related to general social distancing – e.g., advising work from home or banning large events and/or religious services. For context, the number of reported cases of COVID-19 in each country (as of 7 April 2020) is also noted.

All countries have restrictions on the use of public transport and most on domestic travel. India, Pakistan, Indonesia, and Kenya have closed at least one type of food source, while others have put in place restrictions on their operating hours. The most restrictive countries (India and Pakistan) are also the hardest hit (3,800+ cases), while those with only a small number of cases (Ethiopia, Tanzania, and Mozambique) have fewer restrictions.

Table 1. Summary of Measures in Place to Control Spread of COVID-19

<table>
<thead>
<tr>
<th>Control Measures in Place</th>
<th>India</th>
<th>Pakistan</th>
<th>Indonesia</th>
<th>Nigeria</th>
<th>Kenya</th>
<th>Bangl.</th>
<th>Rwanda</th>
<th>Ethiopia</th>
<th>Tanzania</th>
<th>Mozamb.</th>
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<tbody>
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<td>Curfew</td>
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<td>Public transport closure/restrictions</td>
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<td>Barriers to domestic travel</td>
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<td>Non-essential business</td>
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<td>Open-air food markets</td>
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<td>Supermarkets</td>
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<td>Small food shops</td>
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<td>Restaurants</td>
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<td>Street Food vendors</td>
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</tbody>
</table>

Notes: a dark red-shaded cell indicates a measure has been taken, light red shading indicates partial restrictions (e.g., limited trading hours for food shops). Countries are sorted left to right in descending order of number of cases. Case data are from 7 April, 8:00 CET.

3.2 Impacts of these Measures on Local Food Systems: Country Representatives’ Views

These actions are having some (limited) impact on food access. Seven of ten respondents (GAIN country representatives) noted impacts of these measures on access to food in their countries, though usually these were limited to certain groups and/or types of products, while overall access to staple foods remained stable (so far). For example:

‘The most affected group of people are casual employees. They normally depend on daily wages to buy food, but this time it is difficult. Because of the closure of public transport, access to market is limited. Only those who have personal transport can go to market without any time.’ [Rwanda]

‘The access to regular commodities such as rice, lentils, and vegetable oil has remained stable across Bangladesh. The access to food in urban areas is limited because the majority of the small food vendors that sell the low-grade and low-cost vegetables have left the city, and the daily wage earners cannot afford the food commodities that are currently being sold in regular markets.’ [Bangladesh]

2 Of note, lockdown measures had been in place for approximately 1-2.5 weeks at the time of this survey; their effects will likely change considerably over time.
Food Industry Asia reports that, while the Indian central government permits essential goods to be produced, transported, and sold during the lockdown, states and district authorities are interpreting ‘essential’ differently, leading to ‘mayhem’ in certain food supply chains.

While not covered in the GAIN country representative survey, food access for children has also been heavily impacted by school closures: WFP estimates that over 368 million children globally are missing school meals as a result, including over 100 million in GAIN countries.  

**Job losses are happening but so far are thought to be minimal in most countries.** Exact figures on job losses were generally unavailable, and many respondents could not estimate with confidence what they might be. Most respondents, however, estimated job losses among lower-income urban residents as minimal (5% or fewer), but five respondents estimated them as being much greater (up to 50%), particularly in the countries with more drastic lockdowns. Job losses among lower-income residents in rural areas were generally estimated to be lower than in urban areas but still a factor. Several respondents noted that these losses affected certain groups more than others—particularly casual day laborers (in several countries) and migrant workers in India.  

**Some food price increases are reported.** Eight of ten respondents noted some increase in prices for certain goods; half of these were reported for many items and half for only a small number of items or dissipating quickly. One respondent noted that prices of fruits and vegetables had increased in urban areas but declined in rural areas, likely due to difficulty moving goods to where demand was higher. Some examples:

‘The prices of imported fruits and vegetables has skyrocketed. The price of regular commodities such as rice, lentil, and salt has increased. In urban areas the prices of local fruits and vegetables have also increased. But in rural areas the prices of local vegetable and fruits have dropped significantly.’ [Bangladesh]

‘It has been observed among pulses, the prices of moong and masoor have increased by 8% and 53%, respectively. It is mainly due to the increase in demand as pulses are easy to store for a longer period. Highly increasing price trends are also being observed for orange, i.e., about 34%.’ [Pakistan]

‘Food prices have significantly gone up in Nigeria; and there is limited availability of many items due to the restriction of movement within states in country, which has adversely affected supply. We are experiencing increases between 50-100% for some commodities such as rice, Irish potatoes, and fruits (lemons, pineapple, ginger and garlic are rumoured to be helpful in treating the coronavirus, and so the demand has caused price inflation and scarcity).’ [Nigeria]

‘[No price increases reported.] Government strictly forbids price increases because of COVID-19. A number of businesses have been punished by closure for that reason.’ [Ethiopia]

All but one respondent noted (based on personal experience and/or media reports) a decrease in availability of certain foods, at least in urban areas; three (of ten) respondents felt this applied to many items, whereas the rest felt it applied only to a small number of items and/or only briefly (e.g., due to ‘panic buying’). Several noted that imported foods were particularly affected; whether perishable foods or processed unperishable foods were more affected varied by country. For example:

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3 https://cdn.wfp.org/2020/school-feeding-map/
Availability of fresh foods has been affected to a small extent due to restricted movement especially at night. Vegetables are mainly moved at night, hence the curfew affects this supply chain. The government is now issuing exemption for food transporters.’ [Kenya]

The situation varies widely across countries. Overall, country representatives’ observations on the impact of COVID-19 varied widely from minor (e.g., in Ethiopia, impacts are mainly limited to less use of restaurants) to considerable (e.g., in Bangladesh, the country’s approximately 3.5 million garment industry workers have been forced to stop work, meaning the numerous food SMEs operating to serve them have also stopped; the garment workers themselves are also seen as highly vulnerable). Several respondents noted that difficulties with importing food or moving food between regions had led to challenges, with farmers in rural areas struggling to sell food and/or those in urban areas facing shortages or higher prices. In addition, government responses have varied. In Rwanda, India, and Bangladesh, governments have worked to address the fallout from job losses, such as via donated or subsidised food provision. In Indonesia, layoffs had been forbidden by the government, and the Ethiopian government has forbidden food price changes.

3.3 Impacts on Small- and Medium-Sized Enterprise (SME) in the Food Sector: Perspectives from GAIN Country Representatives

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Pct. Citing</th>
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<tbody>
<tr>
<td>Difficulty with staff getting to work</td>
<td>90%</td>
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<tr>
<td>Disrupted transportation/distribution for products</td>
<td>70%</td>
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<tr>
<td>Low demand/sales</td>
<td>60%</td>
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<tr>
<td>Difficulty importing, obtaining, installing equipme</td>
<td>60%</td>
</tr>
<tr>
<td>Difficulty getting inputs/ingredients</td>
<td>50%</td>
</tr>
<tr>
<td>Inadequate staff</td>
<td>50%</td>
</tr>
<tr>
<td>Difficulty accessing financing</td>
<td>40%</td>
</tr>
<tr>
<td>Production levels have decreased</td>
<td>40%</td>
</tr>
<tr>
<td>Closed retail outlets</td>
<td>40%</td>
</tr>
<tr>
<td>Forced to close</td>
<td>20%</td>
</tr>
</tbody>
</table>

All country representatives noted that local food system SMEs were facing some challenges due to COVID-19-related measures. The table at left shows the main challenges reported: difficulty with staff getting to work (due to curfews, travel restrictions, or public transport limitations) was the most common, followed by disrupted distribution, low demand, and difficulty importing, sourcing, or installing equipment. Only two respondents reported that SMEs had been forced to close due to these issues in their countries. The respondent in India noted that small retailers (grocery shops in residential areas) were actually doing very well, whereas the restaurants, app-based home delivery businesses, and major online platforms were suffering due to difficulty supplying under lockdown conditions.

These perspectives were largely corroborated by the firms supported by GAIN’s Marketplace for Nutritious Foods programme, as noted in the next section.

3.4 SME Impacts: Perspectives from the Marketplace Programme Managers and Grantees

Due to transport restrictions and/or border controls, SMEs are having trouble importing equipment and, in some cases, sourcing inputs or distributing products. As countries have closed land borders or restricted traffic to certain crossings, this puts further limitations on food supply chain firms that import

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1 Note that this likely overrepresents the challenges related to sourcing equipment, as the Marketplace programme specifically worked with firms that were trying to change their operations (often through the addition of new equipment).
equipment and/or inputs from neighbouring countries (e.g., Mozambican firms often import from South Africa, but currently there is only one open border crossing). Firms in Africa are also fairly dependent on China as a source of equipment; that sourcing has been disrupted for a few months due to the COVID-19-related economic shutdown in China and restrictions on exports. Of the Marketplace-supported firms in Mozambique and Kenya, about one third are awaiting the delivery of equipment and/or technicians to support the installation of that equipment from China and/or South Africa. China has started to reopen its business operations, and shipments are expected to resume soon for equipment ordered in 2019/early 2020. If trade barriers or port closures are enacted in the receiving countries, though, this could be further delayed. Some firms are worried about potential closure of land borders to goods, and a Rwandan firm noted difficulty in accessing imported veterinary products.

In general, there are fewer issues reported with domestic procurement of goods. However, Rwandan firms raising fish and chickens noted an inability to access feed; one fish farm noted losing 1 MT of fish due to this. Others noted that travel restrictions were making it difficult to source inputs and equipment, to get machinery repaired, and to distribute their products (especially outside of their region). Firms also faced difficulty with getting staff to come to work (in terms of them being allowed to travel to work and keeping them safe at work); some noted that they had already had to lay off staff.

**Demand has slowed, especially for those firms that sell through street vendors, restaurants, hotels, and similar.** Of the Rwandan SMEs interviewed, 83% noted that sales had declined due to the closure of schools, restaurants, and hotels (some of their clients) and consumers’ preference for non-perishable goods due to the challenges with frequent shopping. Others reported that customers who bought on credit were not paying, and wholesalers were not buying as planned. However, two firms noted an increase, which they attributed to closed borders and hence less competition from foreign food products. In general, Marketplace-supported firms in Kenya report some slowdown: a lower level of operations and slightly lower demand for final products and services.

In Rwanda, which faces a more extensive lockdown, six (of 18) firms interviewed had closed, at least temporarily. Those that were able to stay open noted the importance of keeping their stock or crops alive, the fact that they were still able to reach markets with their products, and a responsibility to help feed people during the crisis. Those that closed, however, blamed it primarily on a lack of customers. To summarise the experience of one fish farmer: ‘Bars and restaurants are closed. Private customers cannot travel across town to buy our fish. Fingerling customers will not risk police checkpoints to come here. Tourism has stopped. Income is zero. Expenses are unchanged.’ Several firms note that these lower revenues make it difficult to continue to pay staff.

**SMEs report that prices are unchanged or lower than normal, due to decreased demand.** In terms of price, 39% of Rwandan SMEs interviewed reported a fall in market prices due to low demand and/or the market being flooded as firms were forced to unload goods quickly before shutting down. The same percentage lowered their sales prices, as well. One mushroom farmer reported: ‘We were selling 1 kg of mushroom at $1.50-2.00 on local markets and $2.50-3.00 on regional

**Box 1: Price Trends in External Data**

FAO Food Price Index data for March 2020 shows a decline in global food prices (4.3% from February), largely driven by COVID-19 pandemic-related demand contractions, with the largest falls for vegetable oils and sugar. At the global level, overall weaker demand (and much weaker demand for biofuel crops due to low oil prices (due in part to COVID-19)) is helping to keep grain prices low. However, there is some increase in global prices due to stockpiling of rice out of fears related to COVID-19. Global import demand for milk powder decreased considerably, mainly due to disruptions in dairy supply chains due to COVID-19 containment measures. Of note, food prices at a global level remain higher than one year ago, despite these falls.
markets, but today we are only selling on local markets to a few customers at $1.10. None reported raising prices. This overall trend is corroborated by global FAO food price data (see Box).

In sum, the information summarised here indicates that COVID-19 is having some impact on food systems in GAIN countries, though the extent of this varies widely across countries. SMEs in countries where the more extensive measures have been taken and for longer are seeing larger impacts on their business operations.
ANNEX 1.6

Relevant Media on Covid19 Control Measures & Impact on Local Food Systems in GAIN Countries

**Indonesia**
- Opinion: Preventing global food crisis caused by COVID-19 (link)
- Risks to the poor in Jakarta (link)
- Food Supplies in Jakarta for Ramadan (link)

**Bangladesh**
- Daily essentials see price hikes amid COVID-19 lockdown (link)
- Challenges with Ensuring Food for the Poor in Bangladesh (link)
- Dairy and Poultry Farms suffer Losses due to Coronavirus (link)
- Dairy Farmers Losses (link)

**Pakistan**
- Measures to Support SMEs in Pakistan (link)

**Nigeria**
- Impact of COVID-19 on Food Security in Nigeria (link)
- Impact of COVID-19 on Nigerian Economy (link)

**Rwanda**
- Rwanda’s policy response (link)

**Mozambique**
- Impacts in Mozambique (link)

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Inclusion of a news article here does not indicate endorsement of the source or its veracity; they are included to highlight indicative ways in which food systems issues are being represented in local and regional media.