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Food Security Response Measures to COVID-19

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KEY MESSAGES

- The COVID-19 pandemic has caused major disruptions to both food production and distribution, resulting in severe bottlenecks along the entire food supply chain.
- Challenges to food production and processing include preventing outbreaks among food workers and managing restrictions on the movement of people to ensure the availability of workers.
- International entry restrictions and lockdowns implemented in many APEC economies have created several challenges to food distribution, including connectivity issues for cross-border trade due to substantial declines in the availability of air and sea freight. Additionally, shifts in consumer demand due to a rise in at-home consumption has created severe disruptions along the food supply chain.
- Economic challenges are adding a more fundamental layer of difficulty to ensuring food security as many people, including farmers, face cash flow issues. Food security risks for vulnerable populations have been exacerbated around the APEC region and new populations are now also at risk of food insecurity.
- APEC members have implemented a number of policy measures to address the challenges currently being faced, but will need to remain vigilant and proactive in order to build greater resiliency in food systems. The following are particularly important to address food security in the context of the COVID-19 crisis:
    - Implementing temporary and targeted measures to assist actors along the food supply chain, especially workers in affected industries and vulnerable populations.
    - Promoting public-private partnerships that seek to improve food security through greater resiliency in the food system, including investments in infrastructure, such as improved access to broadband, as well as the development and adoption of digital technologies, such as e-commerce strategies and supply chain management solutions.
    - Pursuing initiatives across the region to keep food trade open, accelerate the processing of food shipments, and expedite customs clearance of food products.
    - Recognizing that food trade is an essential component of food security and avoiding protectionist measures such as export restrictions and measures that are not based on evidence and scientific risk assessment.

The COVID-19 pandemic has had an unprecedented economic and social impact on economies around the world. As such, ensuring food security in the midst of a continually evolving landscape has become a challenge for many APEC members. In May 2020, the APEC Policy Support Unit (PSU) prepared a policy brief on export restrictions in the context of COVID-19.[1] This policy brief builds on that foundation by more closely examining the numerous and varied challenges confronting the food system as a result of the pandemic and highlights some of the response measures that have been put in place across the APEC region to ensure food security. It has been drafted at the request of the APEC Policy Partnership on Food Security (PPFS) as an input to

help inform an APEC High-Level Statement on Regional Food Security and the post 2020 APEC Food Security Roadmap.

Overview of current global and regional food security

In response to the uncertainty surrounding the COVID-19 pandemic, several economies placed restrictions on food exports as the crisis began to take hold around the globe. Although three APEC members implemented temporary export restrictions on an economy-wide basis – a ban on eggs, a quota on rice, and quotas on grains such as wheat and maize – these have all since ended. As of 4 August 2020, there are just a few economies worldwide that have active export restrictions on certain food products in response to COVID-19, suggesting that most governments are not currently resorting to restrictive trade policies and are instead maintaining trade in agricultural products.[2]

A useful indicator of food security in the region is how the imports of APEC economies were affected by export restrictions put in place by economies around the world. As of 16 June 2020, the cumulative share of imports (in kilocalories) affected by food export restrictions due to COVID-19 ranged from 11% in Thailand and 10% in the Philippines to 1% or less in Australia; Canada; Chile; Japan; New Zealand; and the United States.[3] Examining the share of food imports (in kilocalories) that were affected by active export restrictions as of 16 June 2020, nearly all APEC economies had shares under 1%, except for Korea at 3% and Peru at 2%.

Global stocks of staple food commodities such as wheat, maize, rice, and soybeans are generally healthy as evidenced by their stock-to-use ratios for the world in the 2019/20 marketing year (Figure 1). Based on the projections for marketing year 2020/21, these ratios are expected to improve slightly across most of the major food commodities, mainly due to higher output levels with both maize and rice production heading for record levels.[4]

Except for soybeans, the APEC region has much higher stock-to-use ratios for the major food staples than the world average. However, stocks in China comprise over half of the regional stocks of each of these four food commodities, accounting for 87% of the regional stocks of rice. If China were to be excluded from the analysis, then stock-to-use ratios for maize and rice would be at 20% or below for the APEC region. At the economy-level, there are several instances in which the stock-to-use ratio is below 10% for a particular staple food commodity, underscoring the importance of maintaining trade in agricultural products.

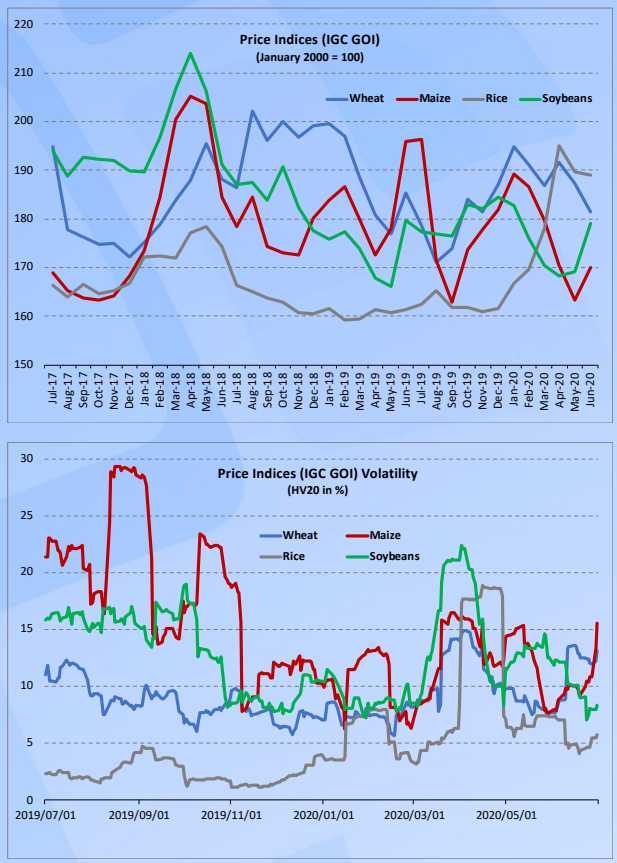
Figure 1. Stock-to-Use Ratios of Staple Food Commodities (%)

Note: Stock-to-use ratios are ending stocks divided by domestic consumption. Data shown for marketing year 2019/20 are forecasts and for 2020/21 are projections.

Source: United States Department of Agriculture, Production, Supply and Distribution (PSD) online database, 11 June 2020 Release.

International prices for wheat, maize, and soybeans declined in the first half of 2020 and remain lower than their level a year earlier (Figure 2). In particular, year-on-year prices for maize fell by 13% in June 2020 due to high levels of production combined with less overall demand. In contrast, export prices for rice rose by 17% over a year earlier as a result of high demand as well as logistical issues constraining global trade. After experiencing large increases in price volatility from mid-March throughout much of April as the COVID-19 crisis took hold around the world, global prices for major food commodities became more stable in May and June. Examining commodity prices over the past three years, price volatility is trending upwards for the export prices of maize and rice, while trending downwards for wheat and soybeans.

Figure 2. International Food Prices of Staple Commodities



Note: Price indices data are the monthly averages of the daily index levels, which are derived from daily export quotations. Historic volatility of the price indices is calculated as the standard deviation of daily movements from the mean over a 20-day period (HV20), expressed in percentage terms.

Source: International Grain Council (IGC), Grains and Oilseeds Index (GOI), online data.

Production issues impacting food security

Despite the fact that global food stocks for the main staple commodities are generally healthy and international price volatility is also relatively low, the COVID-19 pandemic has caused major disruptions to the production of several other food products, particularly those that require intensive use of labour under certain conditions, creating bottlenecks along the food supply chain.[5] In this context, major challenges relating to food production and processing, such as outbreaks of COVID-19 among food production workers and the unavailability of temporary migrant workers, could have an impact on food security in the region.

Preventing outbreaks among food production workers

Working conditions in labour-intensive food processing facilities, in particular, are often not conducive to current guidelines on social distancing, with workers typically working alongside one another on fast-moving production lines for several hours at a time. As a result, there is a very real risk of an outbreak occurring in a food processing plant, especially in those facilities in which food processing is more labour-intensive. For instance, conditions in meat processing facilities, such as close proximity of workers, physically demanding work, and cold temperatures in an enclosed setting, are especially conducive to viral spread.

In fact, COVID-19 outbreaks in meat processing facilities have been widely reported around the world, including in Brazil; Canada; Germany; the United Kingdom; and the United States.[6] For example, as of 25 June 2020, there had been reported outbreaks of COVID-19 in nearly 250 beef, pork, and poultry processing facilities in the United States, including those of major food producers.[7] Many of these plants temporarily closed due to the outbreak, resulting in a significant slowdown in meat production.[8] This reduction in processing capacity in turn led to a surplus of market-ready livestock for livestock farmers, resulting in the tragic culling of millions of heads of livestock as well as temporary shortages of meat products across the United States.[9]

Outbreaks of COVID-19 in production facilities in other food sectors are also being reported around the world, including in packing plants for fruits and vegetables, which have similar working environments to meat processing facilities.[10] Shortages caused by slowdowns in production due to COVID-19 outbreaks in food processing facilities for some of the world's largest agricultural exporters could indeed have implications for global food security, especially for high-value food commodities.[11]

In order to help protect food production workers from exposure to COVID-19 as well as prevent disruption to the food supply chain, the Food and Agriculture Organization (FAO) together with the World Health Organization (WHO) recommend a number of safety measures be implemented in food production facilities.[12] These include the use of personal protective equipment (PPE) and training to ensure their appropriate use as well as installing physical barriers between workers. It is also recommended that there is greater physical distancing of workers on production lines by, for instance, spacing out workstations. Legally mandated paid sick leave for food production workers is another vital component to preventing outbreaks in processing plants since workers are too often faced with a stark choice of either going to work sick or not getting paid.[13]

These new guidelines should be enforceable by governments as part of the basic food safety and hygiene standards that are currently in place in APEC economies so as to help ensure a greater level of compliance in implementing preventive measures against an outbreak of COVID-19 in food production and processing facilities. In addition, clearly defined protocols should be established that dictate the proper procedures for when a worker tests positive for COVID-19 as well as when a facility can re-open. It is possible that the implementation of effective social distancing measures in processing facilities will reduce the efficiency and/or capacity of production lines, resulting in a slowdown in production. Nevertheless, incorporating measures to mitigate against viral spread between workers into overall food hygiene standards in production facilities is one component to ensuring greater resiliency in the food supply chain in the longer term.

It is also important to protect workers in downstream food distribution points such as supermarkets and wet markets. Working conditions of food markets, in particular, tend to be conducive to viral spread given the usually close proximity of workers. Indeed, outbreaks of COVID-19 at food markets have been reported in several APEC economies, including China; Indonesia; Mexico; and Peru.[14] In some cases, the outbreaks have led to the temporary closure of affected markets, which are often an important source of both livelihoods and affordable access to food for vulnerable populations. The WHO and the FAO are currently developing a set of international guidelines to better ensure the safe operation of wet markets. In the interim, the FAO has issued a number of best practices that could be undertaken in wholesale food markets, including changes in the layout of the facility to promote greater social distancing and modification of access rules to prevent congestion.[15]

Ensuring the availability of temporary migrant workers

Another major challenge for food production are the international entry restrictions on people, including migrant workers, that have been put in place by nearly all economies in the region to help prevent the spread of COVID-19.[16] This presents an obstacle for labour-intensive food production, such as the harvesting of fruits and vegetables, which often relies heavily on seasonal and migrant labour. Since the agricultural sector of many APEC economies relies on temporary foreign workers, these entry restrictions can result in labour shortages, which could then result in a reduction of agricultural production. This particular challenge has been reported in several APEC economies, including Canada; Japan; Korea; and Malaysia.[17] There are a number of policy measures that members can introduce in order to address this issue (Box 1).

Box 1. Policy Measures in Canada to Mitigate Labour Shortages due to COVID-19

In 2018, 20% of jobs in the agricultural sector of Canada were filled by temporary migrant workers, including up to 40% of the workforce in the horticulture industry, which includes fruit and vegetable farms and greenhouse operations.[18] Given the international travel restrictions that have been put in place, Canada has introduced a number of measures to help facilitate foreign labour for the agricultural sector. These include granting exemptions to travel restrictions for temporary foreign workers, facilitating the extension or the transfer of their visas between employers, and waiving the recruitment requirement to complete a labour market impact assessment application in some circumstances.[19]

Since employers need to ensure a paid 14-day isolation period before foreign workers can begin to work, the Canadian government has introduced the CAD 50 million Mandatory Isolation Support for Temporary Foreign Workers Program, providing CAD 1,500 per temporary foreign worker, to help employers in the farming, fish harvesting, and food production and processing sectors defray a portion of the cost of quarantine. In addition, several provinces have also put in place programmes to help the sector deal with challenges associated with costs relative to the COVID-19 pandemic.

However, there continues to be a shortage of labour in the Canadian agricultural sector despite these measures. Challenges associated with labour shortages predate the pandemic, but logistical difficulties, such as securing flights for migrant workers as well as issuing visas in their home economies, have been reported and exacerbate the situation.[20] In addition, many migrant workers are simply not travelling due to concerns surrounding exposure to the novel coronavirus, particularly in light of recent COVID-19 outbreaks among workers on several farms in Canada.[21]

Despite these challenges, as of 5 July 2020, approximately 83% of temporary foreign workers had arrived in Canada compared to the number of temporary foreign worker arrivals between January to June 2019.[22] In order to make up the shortfall in labour, Canada is currently exploring many avenues, including how to attract and retain more of the domestic workforce in the agricultural sector. Nevertheless, it is expected that Canadian horticulture production will be reduced this season.

Restrictions on the movement of people within economies to help mitigate against the spread of COVID-19 also presents a challenge to agricultural production. In Peru, for example, the coffee harvesting season was just beginning when the COVID-19 crisis took hold. As a result of the Peruvian government implementing a strict quarantine across the economy, coffee farms faced severe labour shortages in harvesting the crop. In a recent survey of coffee growers in Peru, nearly half believed that a lack of labour would be the main issue they will face this harvesting season. Although many coffee farmers are turning to family and community labour in order to harvest their crop, 35% of respondents estimated that they would lose over 10% of their harvest as a result of the challenges facing the industry.[23] For smaller farmers already operating without substantial cash reserves, crop losses can result in significant financial strain, putting livelihoods at risk.

Most food producers face similar challenges in preventing COVID-19 outbreaks among employees and in ensuring the availability of labour in light of travel restrictions. However, the impact of the pandemic so far seems to be somewhat fragmented rather than resulting in an overall inability to produce food in an economy. Policy makers will need to closely monitor the situation in order to ensure that reductions in production capacity do not occur in multiple food sectors at the same time, which could potentially cause a breakdown in the overall domestic food supply chain, and, for some food products, the international supply chain.

Distribution issues impacting food security

There are also many issues impacting food distribution channels as a result of the COVID-19 pandemic. Most of these obstacles stem from measures that economies have introduced in order to help prevent the virus from spreading. The so-called “lockdowns” implemented in many APEC economies have disrupted both domestic and international food supply chains, creating difficulties in getting food products to markets as well as causing a notable shift in consumer demand. Most relevant for cross-border trade are the shipping delays due to reductions in freight capacity and increased safety protocols at the border.

Resolving connectivity issues

Logistical challenges, especially for air cargo, were most acute as the COVID-19 crisis began to take hold and economies around the world quickly enacted restrictions on the movement of people. The most immediate impact was the dramatic drop in passenger demand for air travel, which in turn drastically reduced available air cargo capacity. Total air cargo capacity fell year-on-year by 22.7% in March and by 42.0% in April, followed by 34.7% in May (Table 1). Prior to the COVID-19 pandemic, over half of annual global air cargo was transported in the belly of passenger aircraft, with the remainder transported by dedicated freighter aircraft.

Although freighter capacity has continually increased partly due to ongoing efforts by airlines to convert passenger aircraft to carry cargo, it has not been enough to overcome the massive drop in belly capacity. In May 2020, international freighter capacity was up by 25.2% over a year earlier, while belly capacity had fallen by 66.4%. The extraordinary fallout in available capacity has outstripped reduced demand for air freight and large increases in the cargo load factor, which measures capacity utilisation, suggest that there is still significant pent-up demand for air cargo. As a result of this imbalance, prices for air freight have risen substantially, peaking in mid-May. For example, at that time, the air cargo spot rate for Shanghai to North America peaked at four times higher year-on-year.[24]

Table 1. Air Cargo Market in 2020 (year-on-year % change)

	Demand	Available Capacity	Cargo Load Factor
February	-1.4	-4.4	1.5
March	-15.2	-22.7	4.8
April	-27.7	-42.0	11.5
May	-20.3	-34.7	10.4

Note: Data shown for cargo load factor are the changes in percentage points (not percentage changes).

Source: International Air Transport Association (IATA), Air Cargo Market Analysis – February 2020; March 2020; April 2020; and May 2020.

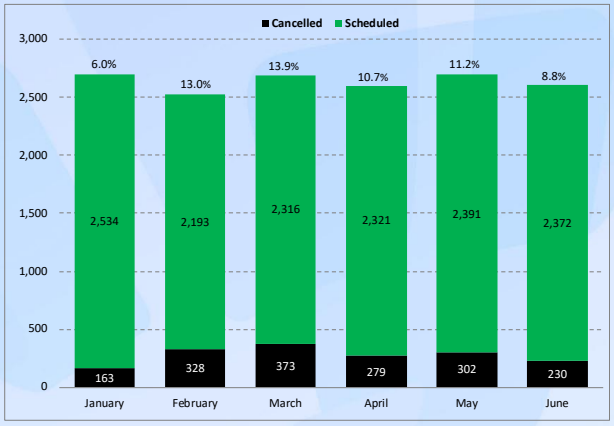
This presents an obstacle for higher-value food products that are typically shipped via air, including highly perishable and/or delicate fruits and vegetables such as berries and asparagus, as well as those products that previously might not have gone via airfreight, but which have been unable to access sea freight channels as a result of the pandemic. In addition, priority for air cargo is being given to essential medical supplies. A notable initiative to assist food producers that rely on air cargo is Australia’s International Freight Assistance Mechanism (IFAM), which allocates AUD 110 million to help secure air freight access to key markets for agricultural and fisheries exporters until commercial capacity can be restored.[25]

Advancements in cold chain technologies have meant that most agricultural products, including many perishable foods, are shipped via road, rail, or sea. In fact, UNCTAD reports that around 80% of total global goods trade by volume is shipped via sea. [26] Although most major seaports have remained open and shipping lines are still operating, there have also been substantial delays in shipping times for sea freight due to reduced container capacity as well as newly introduced border measures to help prevent the spread of COVID-19.

The recent fall in exports, due to a decline in industrial production combined with weak consumer demand globally, has resulted in overall less demand for maritime cargo. [27] With many economies around the world implementing mandatory lockdowns, factories temporarily closed or operated with limited production. In response, shipping lines have decreased the number of container ship sailings.

By the end of April, 1,675 sailings had been "blanked", or cancelled, for the first half of 2020, representing 10.6% of all scheduled sailings (Figure 3). This has resulted in an overall reduction in sea freight capacity and an increase in shipping times due to the more limited availability of sailings. For instance, on the Far East to North America haul, the actual deployed container capacity was at 71% of proforma capacity in February and 80% in May, declines of 31% and 21%, respectively, over the same months in the previous year. Although rates for sea freight initially remained stable since there was already existing idle capacity, they began to rise in late May as a result of reduced capacity combined with stronger than anticipated demand and have since remained high. For example, by mid-June, the container spot rate for China to the west coast of the United States peaked at nearly double its level the previous year.[28]

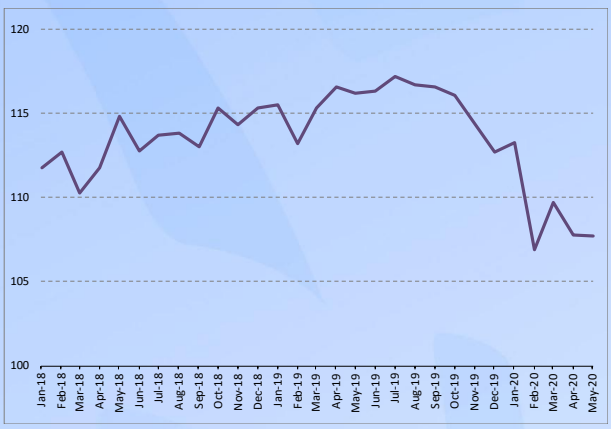
Figure 3. Container Ship Sailings in 2020 (number)



Note: The percentage of total scheduled sailings that were cancelled is shown at the top of each column.

Source: The Maritime Executive, "Global Container Ship Trade Suffers Capacity Drop", 23 April 2020. (Based on data from eeSea.)

Figure 4. RWI/ISL Container Throughput Index (seasonally adjusted index level, 2015 = 100)



Note: The index is based on data from 91 ports. May 2020 is an estimate based on data from 61 ports, which account for around 84% of the handling shown in the index.

Source: Institute of Shipping Economics and Logistics, RWI/ISL Container Throughput Index, online data.

In addition, measures introduced at ports of entry to help prevent the spread of COVID-19 are further delaying shipments. For instance, international entry restrictions have created an issue as to the entry status of transport workers such as seafarers, while domestic lockdowns have caused labour shortages at maritime ports. Increased product testing and/or additional attestation requirements in some economies are also slowing customs clearance times.

As a result, global container throughput, which is a measure of capacity at ports based on the number of cargo containers handled, has continued to fall throughout 2020. Based on data from the RWI/ISL Container Throughput Index, year-on-year throughput was down by 5.6% in February and 4.9% in March, followed by 7.5% in April and 7.3% in May (Figure 4). For instance, container throughput at China's top eight ports dropped by 19.8% in February over a year earlier, while the port of Los Angeles registered a year-on-year fall of 30.9% in March.[29]

Similar bottlenecks are also being experienced by truck haulers due to delays in customs processing at border crossings in the region. For example, in early March 2020, there was a reported backlog of over 1,000 container trucks at the border from Viet Nam to China due to delays resulting from measures that had been implemented to help prevent the spread of COVID-19. [30] Most of the containers were carrying fruit, which spoiled before it could be delivered. In the first quarter of 2020, the

year-on-year value of fruit exports from Viet Nam to China fell by 29.4%.[31]

Such delays present an obvious and fundamental challenge for food distribution. A joint statement from the World Customs Organization (WCO) and the International Maritime Organization (IMO) stresses the need for a coordinated approach to resolve disruptions in the global supply chain and facilitate cross-border trade in essential goods, including critical agricultural products.[32] Measures to better facilitate customs processing of food products at cross-border ports of entry include establishing clear guidelines concerning the mobility of transport workers, ensuring that there is adequate staff to move cargo efficiently, and expediting customs clearance.

Although it is important that economies maintain science-based food quality standards, there are several measures that can help to prevent delays in customs clearance for agricultural products, thereby mitigating obstacles in the context of COVID-19. These include the establishment of processes to ensure the unfettered flow of essential cargo across borders (sometimes referred to as "green lanes") as well as the introduction of trade facilitation measures, including greater use of digital tools such as the acceptance of electronic copies of import documentation. In an environment of quickly changing policies, it is also important to ensure that border control agents are informed of the latest rules and regulations concerning food imports and exports. Temporary measures introduced by APEC members in order to better facilitate trade in food products include the following:

- Chile simplified some import-export control procedures such as accepting scanned copies of phytosanitary certificates;
- China implemented a number of measures to facilitate the import of food and agricultural products such as shortening the quarantine approval process and setting up green lanes on a reservation basis at key ports;
- Indonesia eliminated import certification requirements on imports of onions and garlic;
- Korea waived the need for original import declaration documentation to be received before food imports are cleared for entry; and
- New Zealand and Singapore agreed to a binding Declaration on Trade in Essential Goods to expedite the release of essential goods upon arrival, including food products, through procedures such as advance submission of import documents.[33]

Managing shifts in demand

The lockdowns implemented by many APEC members have created unique logistical challenges for food distribution. With the closure of businesses and marketplaces such as restaurants and wholesale markets, food producers were unable to sell their produce via traditional channels. Many small-scale farmers and fishermen in the region turned to e-commerce and mobile money for the first time in order to connect with buyers (Box 2). This underscores the importance of improving digital skills and access to IT solutions, especially in rural areas where much of the food production occurs. Not only would this assist in promoting and maintaining the livelihood of small farmers, but it would also build greater resiliency in the food supply chain.

Box 2. IT Solutions for Small Farmers

- A farming cooperative in Indonesia that sells directly to restaurants, hotels, and supermarkets in Greater Jakarta saw sales drop by over 60%. Going online enabled 2,500 farmers from 89 villages to continue selling their fresh produce to customers across the economy.
- Tech company Alibaba allowed farmers in China to access its Taobao Live platform and Foodie Livestream channel for free, reporting that 15 million kilograms of produce were sold during the first three days.
- Singapore-based Lazada assisted farmers in Malaysia to go online at the start of the "Movement Control Order", reporting that 1.5 tons of vegetables were sold in the first weekend.

Source: Harper, Justin, "Asia's fishermen and farmers go digital during virus", *BBC News*, 2 June 2020.

The lockdowns have also disrupted the food supply chain by creating fundamental shifts in consumer demand for food products. Restrictions on "dine-in" services and travel resulted in a collapse of the hospitality industry, including restaurants, hotels, and entertainment venues. In addition, the closure of educational institutions in many economies also led to plummeting demand for the food and beverages typically supplied to cafeterias and canteens. As a result, while the demand for food products from wholesale customers such as schools and the food service and hospitality industry practically disappeared, the demand for those products from end-customers at the retail level rose substantially.

This considerable and sudden increase in at-home consumption has created a challenge for food supply chains. Since a large share of food production is sold to business and institutional

customers, food producers and processors found themselves with substantial amounts of surplus product. At the same time, there were reports in many APEC economies of grocery stores experiencing shortages of certain products, particularly staples such as rice and pasta as well as perishable essentials such as milk and eggs, as many consumers around the region stockpiled over fear of food running out.[34] This mismatch in supply and demand for certain food products raises unique challenges for economies to adapt to shifting consumer behaviour as the COVID-19 crisis takes hold.

For example, with schools and businesses in the food service industry closed in many economies worldwide, a significant number of dairy farmers and milk processors suddenly found themselves without a main buyer. As a result, there have been several reports of dairy farmers around the world having to dump milk, including in Canada; the United Kingdom; and the United States.[35] Since packaging sizes for wholesale and retail customers are typically different, it takes a significant amount of time and investment to re-configure production lines in order to switch from food service customers to end-consumers. As distribution channels also tend to be different, some food producers and processors without the necessary supply chain contacts could not redirect their produce to retail stores.

The COVID-19 pandemic has also had an immense impact on consumer behaviour more generally. For example, Japan did not implement as strict a lockdown as experienced in many other economies. However, year-on-year restaurant sales fell by 17.3% in March and by 39.6% in April, followed by 32.2% in May of 2020.[36] Although it is likely to persist in the short- to medium-term, it is difficult to estimate how long the hospitality industry will continue to experience suppressed consumer demand, making it difficult for food producers to plan production schedules and investment decisions.

Some APEC members have introduced relief measures to mitigate the disruptions caused by the supply and demand mismatch and to help stabilise commodity markets. For instance, as part of the Coronavirus Food Assistance Program, the United States has allocated USD 3 billion to purchase fruits and vegetables, meat products, and dairy products and redistribute them to organisations serving populations in need such as food banks.[37] Canada has also launched a CAD 50 million Surplus Food Purchase Program to redistribute existing and unsold inventories of fruits and vegetables, meats and poultry, and fish and seafood to local food organisations.[38]

As a result of the many challenges impacting both food production and distribution, there is evidence that food losses have risen substantially due to the pandemic. As this report has illustrated, the culling of livestock, the ploughing of unharvested vegetable fields, the dumping of milk, the spoiling of fruit at the border – there has been an enormous loss of food due to bottlenecks in the supply chain. It is indeed troubling is that these food losses are happening at a time when many vulnerable people around the world are being pushed into food insecurity and farmers are experiencing large financial losses. The FAO recommends a number of policy measures to mitigate food losses during the COVID-19 crisis, such as facilitating the development of e-commerce to ensure efficient food marketing and providing financial support to food redistribution organizations.[39]

Economic issues impacting food security

The COVID-19 pandemic has already had a devastating economic impact around the world. The IMF forecasts that global growth will contract by 4.9% in 2020 before rebounding in 2021, although there remains a considerable amount of uncertainty given the unpredictability of the crisis.[40] Real GDP growth is projected to contract and unemployment rates are forecast to rise across the APEC region in 2020.[41] This bleak economic scenario has already reduced aggregate demand as well as the ability of vulnerable groups to afford food, which could significantly impact food security in many APEC economies.

Providing financial assistance to food producers

The disruptions to the food supply chain caused by the COVID-19 pandemic have had a detrimental impact on the financial situation of food producers and processors, resulting in severe cash flow issues. Some of the challenges highlighted in this policy brief that have a financial impact include the following:

- re-configuring food processing facilities to implement guidelines on social distancing;
- higher transport costs, including rates for air cargo and sea freight; and
- loss of wholesale buyers due to the closure of businesses and institutions as a result of lockdowns.

Smaller food producers and processors, which already tend to be more vulnerable to external

shocks, may find the financial challenges as a result of the COVID-19 crisis to be especially difficult. For those involved in crop production, it may also result in small-scale farmers not having the necessary funds to invest in seeds and fertilizer in order to plant for next season, thereby impacting future crop cycles. Small-scale fisheries across the APEC region also face significant financial challenges, including falling prices for fishery products due to lower demand as a result of many restaurant closures across the region, while operational costs, such as fuel, remain expensive. For example, a survey of fishermen in Indonesia found that they were being greatly affected by these issues, while artisanal fishermen in Osorno, Chile estimate that their economic losses are close to 100% of their usual production.[42]

Given the numerous challenges impacting the food system as a result of the COVID-19 crisis, there are a number of policy measures that APEC members could implement in their economies in order to improve food security. These include providing grants and soft loans to those operating in food production and processing as well as developing partnership schemes between food producers and food organisations. It is important that these temporary emergency measures be targeted to address the actual needs or specific obstacles facing food producers as well as being evidence-based and transparent so as to better mitigate the impact of the COVID-19 crisis. In addition to the support measures implemented by APEC members that have already been mentioned in the policy brief, Table 2 highlights a selection of some of the initiatives in each APEC economy that aim to ensure recovery in the agricultural sector and also to build greater resiliency in the food system.

Table 2. Financial Measures targeting Food Security in response to COVID-19

Economy	Measure
Australia	A Coronavirus Supplement of AUD 550 per fortnight is being paid to recipients of the Farm Household Allowance. Also, the establishment of an AUD 1 billion COVID-19 Relief and Recovery Fund to support regions, communities, and industry sectors that have been disproportionately affected, including agriculture and fisheries.
Brunei Darussalam	Importers of food have been given a six-month deferment of principal repayments on their loans.
Canada	The lending capacity of Farm Credit Canada was raised by CAD 5 billion to help food producers and agri-food businesses with access to cash flow. More than CAD 252 million was provided to support farmers, food businesses, and food processors, including an Emergency Processing Fund of CAD 77.5 million to help food producers access more PPE, adapt to health protocols, and automate or modernize their facilities and operations and an additional CAD 125 million to the AgriRecovery Fund, a federal-provincial-territorial programme aimed at helping farmers during disasters. In addition, CAD 100 million has been allocated for food banks and local food organizations.
Chile	The Institute of Agricultural Development (INDAP) implemented several measures to support smallholders and family farmers: automatic rescheduling of credit payments and expirations by 120 days without charges (benefiting 29,580 smallholders); reduction of interest rates for current loans (benefiting up to 3,369 smallholders) and for new loans (benefiting 9,271 smallholders); and a CLP 4.5 billion fund with relaxed requirements to apply for working capital (benefiting 39,000 micro-producers). Chile also introduced a program to distribute 2.5 million food baskets to those in need at an expected cost of USD 100 million, while a planned second stage will distribute 3 million food baskets.
China	Expansion of re-lending and re-discounting facilities by RMB 1.8 trillion to support SMEs and the agricultural sector and a reduction of their re-lending and re-discounting rates by 50 bps and 25 bps, respectively.
Hong Kong, China	(Although stimulus packages totalling around HKD 287.5 billion have been announced, there are no specific financial measures targeting agriculture or food security.)
Indonesia	Cash assistance of INR 300,000 per month and subsidies for fertilizer and seeds worth another INR 300,000 are to be provided to 2.4 million farmers. A budget of INR 110 trillion has also been allocated for increased benefits and broader coverage of existing social assistance schemes such as food aid.

Economy	Measure
Japan	The comprehensive JPY 117.1 trillion Emergency Economic Measures to Cope with the Novel Coronavirus (COVID-19) package includes support for the next crop in response to new domestic and overseas demand; emergency measures for sales promotion of agricultural, forestry, and fishery products; and an emergency support project to ensure the availability of labour in the agricultural and fisheries sectors.
Korea	Korea introduced emergency funds of KRW 71 billion and a third stimulus budget of KRW 290.5 billion that includes support to agricultural and food sectors directly affected by the crisis. Additional loans of KRW 40 billion for business operations and interest rate cuts of 0.5 percentage points are available to restaurants and food service providers. Korea also expanded agricultural manpower services to address farm labour shortages and is seeking alternative markets for the organic produce produced for school meals.
Malaysia	MYR 1 billion has been allocated for a Food Security Fund to strengthen the food supply chain, with an additional MYR 100 million allocated for food storage and distribution facilities. Malaysia has also established a fund of MYR 64.4 million for the development of short-term agricultural projects to boost production and a micro-credit financing scheme of MYR 350 million for businesses in agriculture and food supply. MYR 40 million has also been allocated as wage incentive and mobility allowance for companies providing on-the-job training in order to increase the labour force in the agrofood sector.
Mexico	(Although loans are being offered to micro businesses in both the formal and informal sectors, there are no specific financial measures targeting agriculture or food security.)
New Zealand	The NZD 50 billion COVID-19 Response and Recovery Fund includes a number of measures relating to agriculture and food security, such as a contingency fund to purchase and redistribute food products currently experiencing a supply and demand mismatch to prevent food waste, providing job transition support to address the labour shortage in the primary sector, and helping food-related businesses to comply with enhanced safety measures while operating during the COVID-19 pandemic. New Zealand has also worked with its trade partners to ensure that trade continues to flow unimpeded and that critical infrastructure such as air and seaports remain open to support the viability and integrity of supply chains globally.
Papua New Guinea	An extra PGK 600 million of budget support has been allocated, comprising 320 million for agriculture, businesses, and households and 280 million for health and security.
Peru	Partnering with the International Fund for Agricultural Development, the USD 71.1 million 5-year Extension of Public Services for Local Productive Development Project aims to improve the competitiveness and resilience of family farmers, benefiting 17,400 small agricultural producers and their families.
The Philippines	The MSME Credit Guarantee Program is to support PHP 120 billion in working capital loans to small businesses and the agricultural sector under a 50:50 risk sharing arrangement. The Asian Development Bank provided a USD 5 million grant to deliver food baskets to up to 140,000 vulnerable households in Manila and neighbouring areas.
Russia	Tax payment deferrals and low-interest credit for affected industries, including the agricultural sector.
Singapore	To support Singapore's initiative to locally produce 30% of its nutritional needs by 2030, measures introduced since the start of the COVID-19 crisis include grants of SGD 30 million to help farms accelerate production of eggs, vegetables, and fish and SGD 55 million to help boost the innovation capabilities of agriculture and aquaculture firms.
Chinese Taipei	A total of TWD 8.8 billion has been allocated to help the agricultural sector, including soft loans to agricultural businesses and subsidies for air and ocean freight costs of horticultural exports.
Thailand	Part of an additional THB 600 billion budget has been allocated to provide monthly payments of THB 5,000 for three months to around 10 million farmers. In addition, THB 170 billion in soft loans will be offered to help restore the farm sector.

Economy	Measure
United States	The Coronavirus Food Assistance Program will provide up to USD 16 billion in direct payments to farmers and ranchers. The Coronavirus Aid, Relief, and Economic Security Act allocates more than USD 25 billion for existing domestic food assistance programs. An additional USD 470 million will be made available for Section 32 purchases of nearly two dozen specific commodities for distribution to local food banks.
Viet Nam	To improve resiliency in the agricultural sector, Viet Nam plans to boost production of high-value crops, strengthen connectivity to develop domestic and export value chains, improve the quality of processed food products, and develop additional export markets.

Note: This table does not include those support measures discussed in the text of the policy brief. Also, it includes only those financial measures that specifically target the agricultural sector or food security.

Source: Compiled by the APEC PSU using publicly available news sources; official government websites; information provided by APEC members; and International Monetary Fund, "Policy Responses to COVID-19", online policy tracker.

Protecting the vulnerable from food insecurity

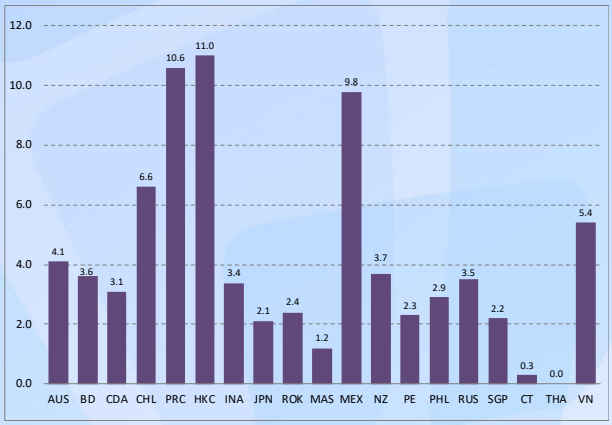
An essential component to ensuring food security in APEC economies involves providing support to vulnerable groups that may be pushed into food insecurity as a result of the COVID-19 pandemic. The World Bank forecasts that the crisis will push between 177 million to 233 million people around the world into poverty, with about one-quarter of those in East Asia and the Pacific.[43] Global remittances to low- and middle-income economies are also estimated to fall by 19.7% to USD 445 billion in 2020, largely due to a decrease in the wages and employment of migrant workers, further adding to the financial difficulties for many people around the region.[44]

Although international prices for staple commodities are generally stable, prices for more labour-intensive, high-value food products are increasing due to the production and distribution challenges disrupting the supply chain for these products. As a result, consumers are facing higher market prices for food. In spite of low headline inflation around the region, APEC economies have registered large increases in the price of food. In May, consumer prices for food were at least 3.0% higher than they had been a year earlier in around half of APEC economies (Figure 5).[45]

In response to the COVID-19 crisis, most APEC members have launched stimulus packages that include direct cash transfers to residents as well as

Figure 5. Consumer Prices for Food (year-on-year % change)

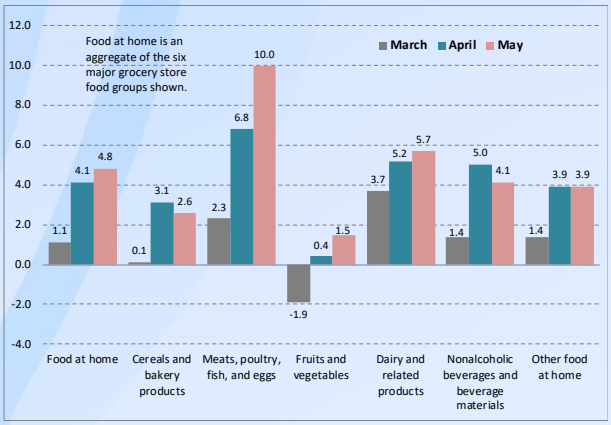
Food prices in APEC economies, May 2020



Note: Data shown for AUS and NZ are 2nd quarter 2020. Recent data for PNG are unavailable.

Source: Official consumer price index website of each APEC economy.

Prices for 'food at home' in the United States



Source: United States Bureau of Labour Statistics, Consumer Price Index, online database.

additional subsidies for workers in particularly affected industries. However, despite this financial support, food banks across the region have experienced recent surges in demand. The Global FoodBanking Network (GFN), which operates in most APEC economies, announced that all of their partner food banks have reported increases of between 50% to 100% in the demand for emergency food, with 59% of food banks experiencing a critical shortfall in funding.[46]

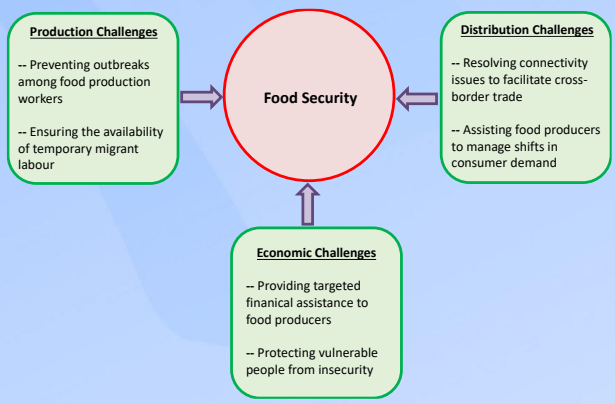
Although several APEC members have increased funding for food organisations such as food banks, there is also a crucial need for well-functioning social safety nets in order to prevent food insecurity in the longer term. Given the expected protracted length of the crisis along with the fact that many of the financial support measures introduced by APEC members are only temporary, these programs will be essential. Schemes such as comprehensive unemployment insurance, as well as job retraining and skills building programmes, will be most relevant in order to ensure the food security of those that are most vulnerable to the disruptions caused by the pandemic.

What APEC can do to help improve regional food security

The COVID-19 pandemic has underscored the urgent need to improve resiliency in the food system across the APEC region. In this regard, developing more sustainable agricultural practices, such as through greater support for smallholder farmers and the development of more efficient and effective food supply chains, will help to protect the food system from external shocks. Given the uncertainty that continues to surround how the crisis will continue to develop around the world, the many challenges facing food production and distribution discussed in this policy brief could quickly spiral, threatening food security (Chart 1). Policy makers must therefore remain vigilant in monitoring the situation and proactive in implementing the necessary measures to help ensure food security, while also avoiding the introduction of trade restrictions that are not based on risk assessment.

This policy brief has highlighted a number of best practice measures that APEC members could implement in their economies in order to address some of the challenges caused by the COVID-19 crisis and improve resiliency in food systems. In addition to working to prevent future zoonotic disease outbreaks, the following are some suggestions as to what APEC can do to help improve regional food security:

Chart 1. Food Security Challenges in the Context of COVID-19



- As an international forum, APEC can serve as a platform for members to discuss the challenges being faced by the agricultural sector in their economies as well as the sharing of policy strategies to address those challenges. For instance, APEC economies could share lessons learned from the implementation of response measures to assist farmers and vulnerable populations as a result of the pandemic, with members adapting successful initiatives to their particular domestic circumstances. APEC members could also share evidence-based information concerning the transmission of COVID-19, particularly as it relates to food production and food products, and the approaches that members are taking to protect consumers and maintain trade.

- Given its emphasis on trade facilitation, APEC is well placed to address some of the connectivity and supply chain obstacles being faced in the cross-border trade of agricultural products, including collaboration to maintain and expand trade. Members are encouraged to pursue agreements to collectively develop processes around the region in order to keep trade lines open and accelerate the processing of food shipments as well as implement enhanced transparency and facilitation measures to expedite customs clearance of food products (e.g., publication and implementation of new rules across all customs offices, acceptance of electronic documentation). In this regard, members are encouraged to actively participate in APEC's current efforts to enhance the interoperability of electronic single windows among the economies, which will help to build resiliency in the food supply chain in the longer term.

- Noting that trade also contributes to food security, APEC economies should stay firm and commit to avoid the implementation of protectionist measures that affect trade in

agricultural products, particularly export restrictions as well as measures that are not based on evidence and scientific risk assessment. As the COVID-19 crisis continues to unfold, some APEC members may also wish to consider the temporary elimination of import tariffs on essential food products, a measure already implemented by some WTO members.[47]

- APEC could also actively promote public-private partnerships in the region in order to mitigate the impacts from the COVID-19 crisis and improve resiliency in food systems. Food security often depends on collaboration between governments and the private sector. Among the priorities to develop these partnerships, investments in infrastructure, such as improved access to broadband, as well as the development and adoption of digital technologies, such as e-commerce strategies and supply chain management solutions, could help to address the current limitations in food distribution channels revealed by the crisis. Such investments would enable a better matching of food supply and demand, thereby helping to reduce food losses and developing a more resilient food supply chain.

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