



# Impacts of coronavirus on food security and nutrition in Asia and the Pacific: building more resilient food systems

## INTRODUCTION

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The COVID-19 pandemic poses a serious threat to food security and nutrition. Economic turmoil caused by the pandemic threatens both economic and physical access to food (FAO, 2019). Declining incomes may make food, particularly nutritious food, less affordable for some, especially the poor. Disruptions to and possible breakdowns of marketing, logistics and trading systems could make food unavailable in some locations at some times. Hunger and malnutrition could rise.

This brief will assess the current situation, provide some examples of how governments and other stakeholders are attempting to build more resilient food systems in response, and offer some broad policy recommendations.

## INCOME GROWTH IS SLOWING AND JOB LOSSES ARE SEVERE: GOVERNMENTS ARE RESPONDING

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To stop the spread of the virus, governments around the world have locked down large portions of their economies. This massive decline in economic activity has caused the IMF to slash its growth projections for 2020, and the Fund is now forecasting a global contraction of 3 percent. However, the IMF is projecting 1 percent growth for emerging and developing Asia (International Monetary Fund, 2020). That rate is still a steep decline from the 5.5 percent recorded in 2019 – a clear indicator of an economic slowdown that dangerously approaches a downturn. Slowdowns and downturns produce job losses and other disruptions that often lead to increased food insecurity for vulnerable groups such as women, children and the disabled (FAO, IFAD, UNICEF, WFP and WHO, 2019).

In the region, the slowing global economy has caused widespread job losses, collapsing incomes, and falling remittances. In Thailand, one source (CNA, 2020) estimated that 7 million people (nearly 20 percent of the labour force) have already lost their jobs, with more losses expected. Remittances have declined in many countries (The Financial Express, 2020; Xinhua, 2020), and the World Bank projects a 20 percent decline globally (World Bank, 2020). Evaporating employment has led to severe loss of income. In Bangladesh, a nationwide survey by BRAC (BRAC, 2020) found that 93 percent of respondents have suffered a loss of earnings, with 54 percent reporting no income in March. The study estimated a 60 percentage-point increase in extreme poverty (from 24 percent to 84 percent). Increased poverty of this magnitude will likely push many people into food insecurity in the short term. In the long term, attempts to cope with the economic shock will lead to lasting negative repercussions for many: family hardship will force children out of school; people will sell productive assets at low prices; children will lack nutritious food at critical growth stages of their lives (e.g. the first 1 000 days).

In past crises, such as the Asian financial crisis in 1997-1998, the agriculture sector played an important role in many countries by providing employment to those who lost their jobs in urban areas (Bresciani, Feder et al., 2002). More than twenty years later, however, economic growth and the

accompanying structural transformation of economies have translated into a declining share for agriculture in gross domestic product (GDP) and a greater reliance by rural households on non-farm income. For example, in Thailand, non-farm income is estimated to account for 65 percent of rural incomes today compared to just 45 percent at the onset of the Asian financial crisis. In India, non-farm income now accounts for 61 percent of rural incomes, up from 28 percent four decades earlier (Janssen, 2020; Chand, Srivastava and Singh, 2017). Compounding the reduced importance of farm income is the substantial mechanization of the sector during the past few decades (FAO, 2018). This time around, agriculture will be able to play less of a buffering role for those who have lost employment in other sectors, both because it is smaller in relative size and because its very structure has changed. Agriculture's buffering capacity will be further constrained if supply chains are not functioning properly (see below).

Nearly all governments in the region have responded with a range of social protection measures. Relief has included cash transfers and unemployment benefits, provision of food in kind (e.g. school feeding) or through vouchers, wage subsidies, and waiver or postponement of utility bills (Gentilini, 2020). For pre-existing programmes, governments have implemented vertical expansion (increased benefits for those already covered), horizontal expansion (an increase in the number of people covered) and accelerated payment of benefits. Some have also introduced a range of new programmes. The new benefits are typically three months in duration, although this may change as time goes on. Depending upon the future spread of the virus, governments may need to provide more assistance for a longer period of time. Providing more benefits will be a challenge for all countries, but especially for low- and lower-middle-income countries. International migrants, both formal and informal, may be among the most vulnerable as they may or may not receive social-protection coverage in either their country of residence or their home country (FAO, 2020a).

### **INTERMITTENT MALFUNCTIONING OF FOOD SUPPLY CHAINS**

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Despite the global economic downturn, agricultural production has been less affected. Global supplies are ample and international market prices generally soft (FAO, 2020b) (see below for more details). The issue is how to keep supplies flowing from producers to consumers. Indeed, there are many reports of malfunctioning food supply chains where food is left to rot or is burned due to movement restrictions. Supply chains are being disrupted not only by movement restrictions (e.g. subnational or international border closures), but also by shifts in the source of consumer demand, e.g. away from restaurants and schools because of closures, towards markets and supermarkets because more people are preparing food at home. Supply disruptions can occur all along the value chain, from input provision (most importantly labour, but also seed, animal feed, fertilizer and pesticides) to storage, processing and transport of food to retail markets. Disruptions may affect supplies of perishable foods (fresh milk, fruits and vegetables, meat and fish) more than for other foods with a longer shelf life, with potential adverse impacts on nutrition.

Labour availability for agricultural activities (e.g. crop establishment, harvesting) will vary from place to place. Migrant labourers from eastern India have returned home, leaving few people available to harvest crops in Punjab and western Uttar Pradesh (Jadhav, Bhardwaj and Thukral, 2020). In Indonesia, migrant labour from Java was reportedly unavailable for rice-crop harvesting in Bali, so farmers increased the use of combine harvesters (Kamis, 2020). In some cases, as in Bangladesh, falling rural wages caused by the return of unemployed urban workers (BRAC, 2020) appear to co-exist with rural labour shortages in nearby locations that the government is trying to remedy with subsidized sales of combine harvesters for the boro rice crop. Such contradictions can exist if movement restrictions prevent the integration of labour markets, or if some tasks require specific skills that are usually supplied by migrant labour from in-country or from neighbouring countries.

Urea fertilizer prices on global markets are at relatively low levels in historical terms. The collapse in petroleum prices may put further downward pressure on fertilizer prices. Nevertheless, movement restrictions may prevent market integration and fertilizer prices could rise in some local markets. Most countries in Asia and the Pacific are net importers of fertilizer, so it will be important for governments and the private sector to monitor markets for supply disruptions and act quickly to solve them.

Movement restrictions will obviously hinder the availability of both inputs and outputs. However, agriculture and food have been deemed essential services that are exempt from the movement restrictions in many countries throughout the region, although there has been confusion in some circumstances (Neo, 2020). In principle, such declarations mean that supply chains should function well. However, complications can arise. For example, labourers may be afraid to return to work while the virus is still spreading. Staff at internal border checkpoints may not always be aware of the rules (Business World, 2020). Trucks might be carrying non-essential items as well as agricultural inputs, leading to delays. Solving these problems will require extensive collaboration with the private sector and improved information systems so that the relevant people can quickly identify and resolve emerging problems. In order to solve such problems, Thailand has created “war rooms” for specific food products such as rice, livestock, fruits and vegetables, and processed food (Arunmas, 2020). Delivery services that bring food from markets or restaurants to consumers have also seen increased business (Eloksari, 2020; Bangkok Post, 2020). Ultimately, public-health interventions (e.g. maintaining physical distancing) will need to control the spread of COVID-19 so that workers are not afraid to contribute to the food supply chain, whether they are commuting to farms, working in food processing factories, or delivering food to consumers.

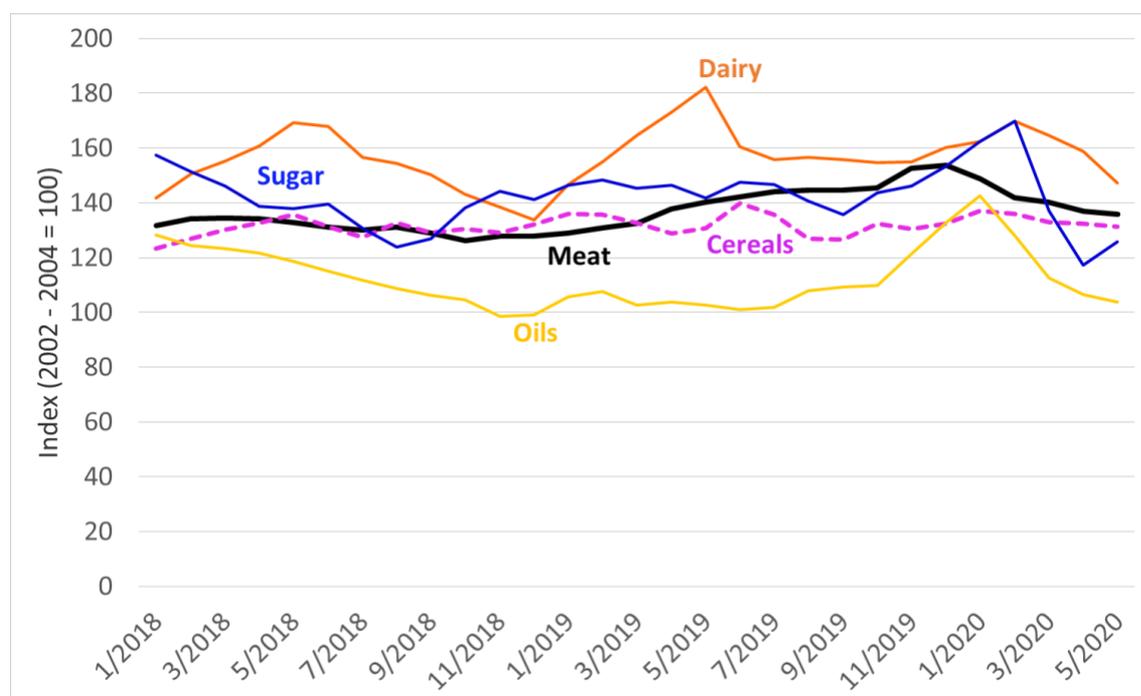
Finally, consumer preferences and perceptions can affect supply chains and lead to shortages or surpluses of particular goods in particular locations. For example, prices for ginger and turmeric have risen in Indonesia because consumers believe that they can improve immune system functioning (The Straits Times, 2020). There can also be episodes of speculative buying when consumers fear that supplies of a particular item will run out. So far, food supply chains in the region have largely been able to meet such challenges relatively quickly, but constant monitoring and creative solutions will be necessary to make sure it stays that way.

### **WORLD FOOD MARKETS ARE RELATIVELY CALM, WITH PRICES SOFT**

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Disruptions in food supply chains around the world have raised concerns that food prices may increase rapidly, as happened in 2006 to 2008 just before the Great Recession. Over the past few months, however, world food markets have been relatively soft. The FAO Food Price Index (a measure of international market food prices) in May 2020 was 10 percent below its level in December 2019 (FAO, 2020c). Cereals prices have been relatively stable, falling by 1 percent. Prices for the other food groups have fallen more substantially – dairy by 9 percent, meats by 12 percent, vegetable oils by 22 percent and sugar by 18 percent (Figure 1). International rice prices (Thailand 5 percent broken) have been an exception to the trend for other cereals, rising by 20 percent during this time. Rice prices behaved differently because of drought in Thailand that reduced production, coupled with export restrictions from several Southeast Asian countries. These countries have for the most part removed their restrictions now. As a result, rice prices have declined from their peak in early April.

Figure 1 | Trends in the FAO food price index (monthly, deflated), 2018 to the present.



Source: FAO

While the concerns over rising food prices are legitimate, there are several key differences between the current situation and that of 2007–2008 (Schmidhuber and Qiao, 2020). Stock-to-utilization ratios for rice, wheat and maize are currently close to 15-year highs, and there have not been any major production shocks due to bad weather as happened with wheat in 2007. Furthermore, petroleum prices have plunged (unlike the price spike in 2008), reducing demand for biofuel made from maize and sugar. The strength of the US dollar also puts downward pressure on global commodity prices (denominated in US dollars). Finally, while there have been some export restrictions so far, they have not been as severe as in 2007 and 2008, and have already been withdrawn in some cases. Many countries have pledged to keep international food trade flowing during this time and not impose restrictions (Subhani, 2020).

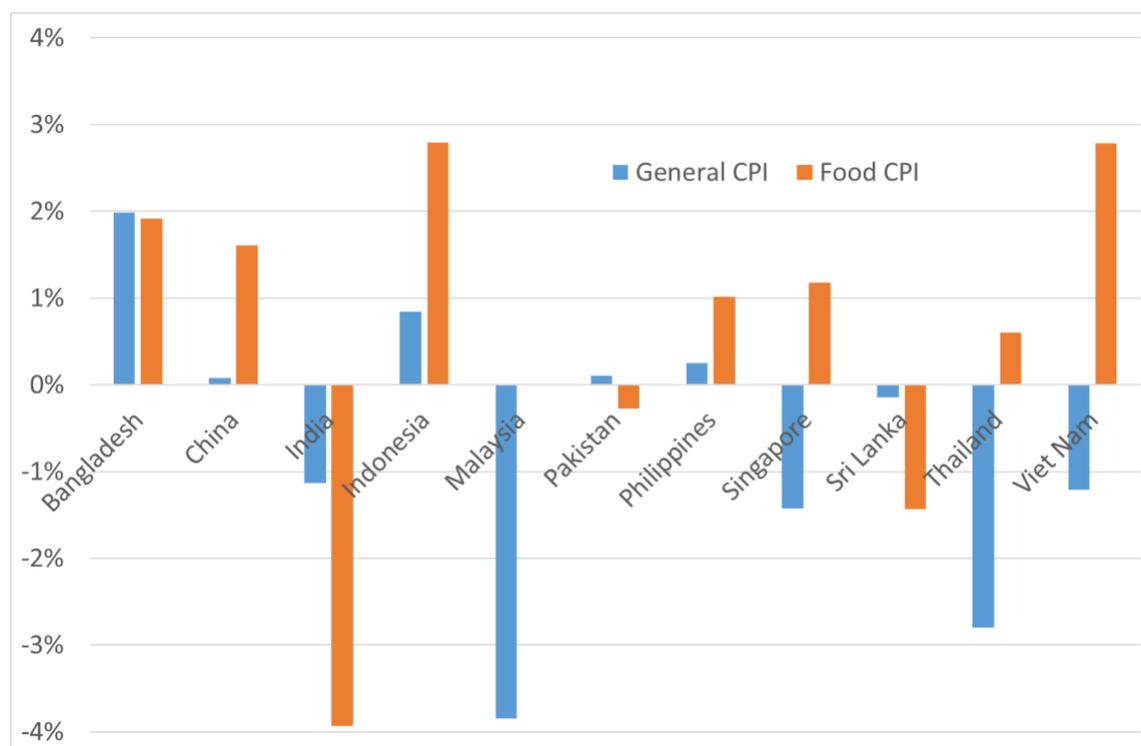
### DOMESTIC FOOD PRICES ARE STABLE SO FAR

The current COVID-19 situation will have two major effects on domestic food prices. First, lost income and unemployment will likely lead to some fall in food demand across the board, which would put downward pressure on prices. On the other hand, supply chain disruptions could cause unavailability of inputs in some circumstances, which would raise production costs and thus prices. Supply-chain disruptions that prevent food from reaching retail markets or consumers would reinforce this upward pressure. Thus, the theoretical impact of COVID-19 on food prices is ambiguous – the impact remains an empirical question whose answer will be context-specific.

Empirically, just as with world market prices, domestic food prices in the region have been largely stable so far (Figure 2). Across a sample of 11 Asian countries,<sup>1</sup> the median cumulative change in the consumer price index (CPI) between December 2019 and April 2020 was slightly negative (-0.15 percent). Food prices increased slightly, with the median increase being 1.01 percent, equivalent to an increase in real food prices of about 3.5 percent over a year.

<sup>1</sup> The 11 countries are Bangladesh, China, India, Indonesia, Malaysia, Pakistan, Philippines, Singapore, Sri Lanka, Thailand and Viet Nam.

Figure 2 | Cumulative percentage increases in the consumer price index and domestic food prices, December 2019 to April 2020.



Sources of raw data: National statistics offices of respective countries. Data for India are cumulative through March 2020.

Trends in consumer prices for perishables were varied, with median price increases<sup>2</sup> being mildly positive for meats, fruits and milk, cheese and eggs. Median price changes for fish and seafood and vegetables were slightly negative, however. Median price increases for the two main groups of non-perishables (rice, bread and cereals; oils and fats) were positive. Overall, the picture through the end of April is clearly one of food price stability. Of course, it is possible that larger effects will manifest themselves in the coming months.

Depreciations in currency exchange rates could cause price increases in the near term if they lead to imported food being more expensive. The biggest depreciations have been in Oceania, particularly Australia and New Zealand (down 8 to 9 percent between December and March), at least partially due to global commodity price weakness. Pacific Island currencies have been weak, hurt by drops in tourism and remittances. In Asia, depreciations have generally been less, but the declines are still notable. The biggest declines have been in Indonesia (down 12 percent from December to April), Thailand and India (down 7 percent). It is important to keep in mind that the vast majority of the region's population lives in countries that produce more than 85 percent of their food domestically (FAO, 2018).

### VULNERABLE COUNTRIES IN THE REGION

The impact of COVID-19 is likely to be especially severe in countries that are engaged in conflict, sheltering large numbers of refugees, or experiencing particularly severe natural disasters (FAO, 2020d). In Afghanistan, seasonal floods combined with a worsening of the 40-year-old conflict have

<sup>2</sup> The analysis in this paragraph refers only to the five countries in the sample of eleven for which food subgroup data were publicly available on national government websites: China, India, Malaysia, the Philippines and Singapore.

put more than 11 million people in a crisis level of acute food insecurity (IPC Phase 3) (Food Security Information Network, 2020). In Bangladesh, around Cox's Bazaar, large numbers of refugees remain in camps where food has been inadequate and in short supply. The people of Bangladesh have also been affected by reduced access to land and lower wages. In Pakistan, ongoing drought in Sindh and Balochistan have pushed more than 3 million people into IPC Phase 3 or above, and desert locust infestations will exacerbate the situation. The spread of COVID-19 will worsen food insecurity and malnutrition in all of these countries.

Many Pacific Small Island Developing States (SIDS) are still COVID-19-free as of time of writing. However, these countries are very dependent on tourism, which has been substantially diminished worldwide as a result of the virus' spread. As a result, the IMF projects that some of the largest economic contractions among the region's developing countries will take place in the Pacific, with declines in GDP of more than 3 percent in Fiji, Palau, Samoa, the Solomon Islands and Vanuatu. Pacific SIDS are also very dependent on food imports – these countries typically produce less than 65 percent of their dietary energy supply domestically (FAO, 2018). The economic contraction is also hitting at the same time as the tropical cyclone season.

The above combination of factors makes the Pacific SIDS very vulnerable to food insecurity (FAO, 2020e). In addition to the types of policies being implemented by all countries to combat the impact of COVID-19 on food security and nutrition, it will be particularly important to make sure that international trade restrictions do not adversely affect these countries. Fortunately, Australia and New Zealand have both committed to keeping international food trade open (Subhani, 2020). There may also be a role for introducing formal social protection programmes to supplement informal traditional community-based social protection.

## SUMMARY OF GENERAL POLICY RECOMMENDATIONS

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COVID-19 will be with us for some time to come. The analysis above points to five key general policy recommendations:

- Control the spread of the virus and implement physical distancing to reduce fear among all labourers, including those working in food supply chains (FAO, 2020f).
- Expand social protection, in the short-term as part of countries' economic stimulus measures, to cover more people and provide more generous benefits to ensure food access for all, while also reducing the administrative burden needed to access the funds (FAO, 2020g).
- Governments should work together with the private sector to solve disruptions in food supply chains when they arise (FAO, 2020h).
- Avoid export restrictions in international trade to make sure supply chains continue to function (FAO, 2020i).
- Build resilience into food systems to safeguard them against future economic and health shocks as part of stimulus measures to ensure food access (FAO, 2020j).

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