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The Challenge of Food (In)security in ASEAN

By Dipinder S. Randhawa

SYNOPSIS

Driven by climate change and structural changes within and beyond agriculture, food security will continue to be a challenge for ASEAN in the foreseeable future. Solutions to it require cross-border collaboration.

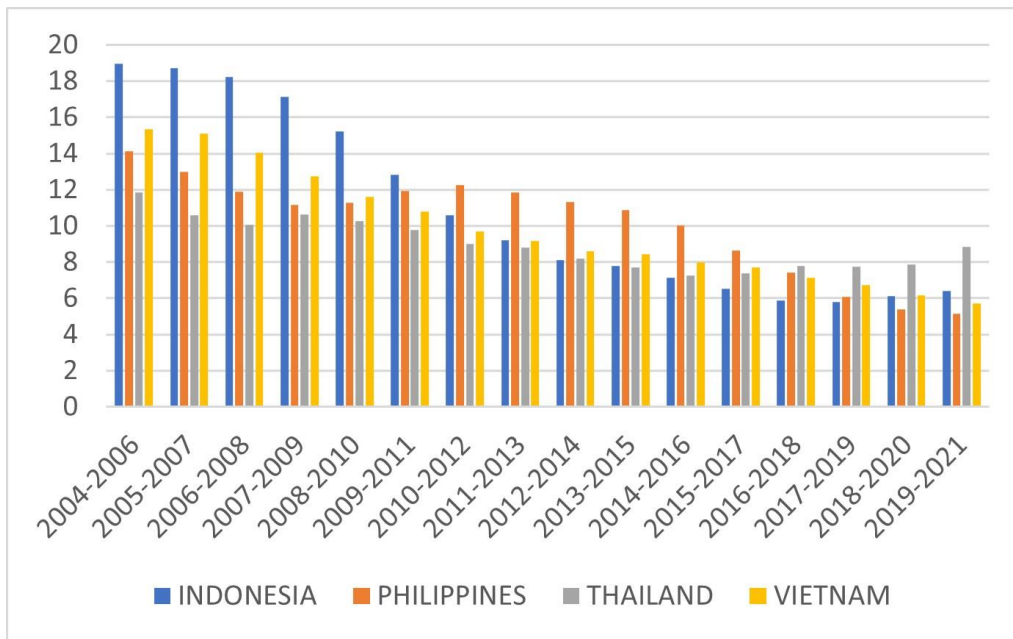
COMMENTARY

Despite the end of the COVID-19 pandemic, food security, or the lack thereof, will continue to be a major policy challenge for the developing world, including Southeast Asia. An end to the war in Ukraine and resumption of foodgrain and fertiliser supplies will mitigate only the immediate risks. The growing incidence of weather abnormalities, structural changes within agriculture, and developments external to agriculture will continue to render the poor vulnerable to rising food prices.

The Food Situation in Southeast Asia

In the early 1990s, undernourishment rates in Southeast Asia were among the world's highest at about 31 per cent, but strong economic growth and the development of agriculture and fisheries enabled the region to make remarkable progress towards [improving food security](#). (See Figure 1). By 2014-16, these rates had fallen below 10 percent, lower than levels seen in other regions.

Figure 1: Percentage of Undernourished People in Southeast Asia
(Three-year moving averages of percentage of the undernourished)

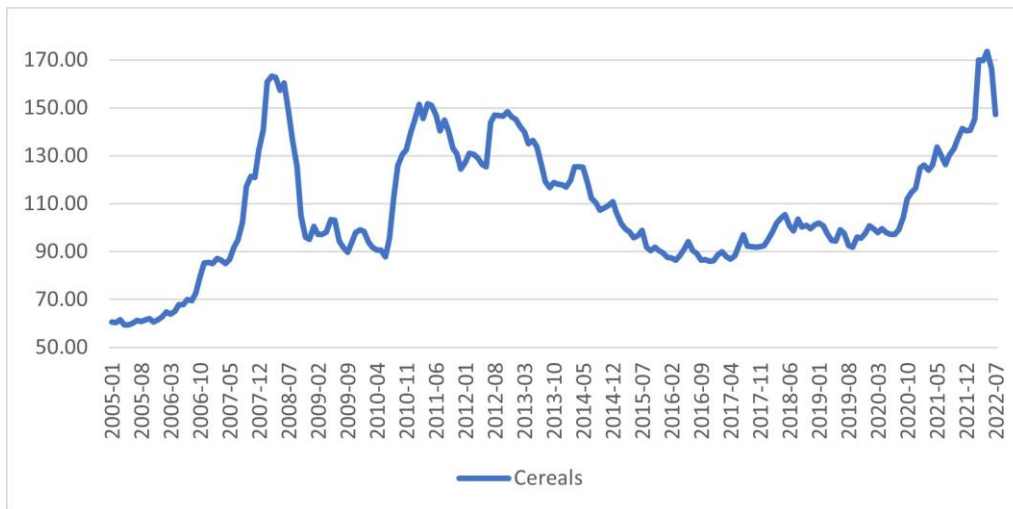


Source: <https://www.fao.org/faostat/en/#data/FS>

However, progress in reducing hunger further, then stalled, and even reversed. Widening divergences in the levels of development, increasing inequality within the ASEAN states, coupled with the aftermath of the global financial crisis in 2007-08, resulted in food insecurity recurring as a significant challenge. In 2014-16, the region, which had a population of about 630 million (9 per cent of the world total), accounted for [60 million](#) of the undernourished.

The COVID-19 pandemic dealt a heavy blow to the quest for a hunger-free, healthy region. Food inflation accelerated (see Figure 2), with prices in 2020 increasing as much as the preceding five years combined. By December 2023, food price inflation in most low-income countries exceeded overall inflation rates, pushing millions of people into [hunger and poverty](#).

Figure 2: FAO Food Price Index (Cereals)
Year 2014 - 2016 = 100.



Source: FAO, 2022 <https://www.fao.org/worldfoodsituation/foodpricesindex/en/>

Up to [783 million people](#) worldwide faced hunger in 2022, 122 million more than the number before the pandemic. In the most vulnerable countries, [258 million](#) faced acute food insecurity, setting back progress in food security and nutritional intake by years. Of those suffering from acute malnutrition, [22.1 million were in Southeast Asia](#), while another [125 million across the region were undernourished](#).

The most vulnerable were the poor, especially women, children, the rural landless and unskilled migrants to cities. Sustained hunger can impair cognitive and non-cognitive abilities of the very young; for older people, it results in increased incidences of illness and morbidity, loss of work days, and lower productivity, and eventually compromising growth potential. The situation was [compounded by growing inequality](#), and substantially aggravated during the pandemic.

Causes of Food Insecurity Intrinsic to Agriculture

Since the 1980s, [productivity in a range of agricultural crops](#) including rice – a Southeast Asian staple – has been stagnant or falling, driven by lower investments in agriculture and [lack of investments in research and development](#). Deforestation, increasing use of chemical fertilisers and salination of the soil has contributed to the [erosion of soil fertility](#). The growth of agricultural markets and trade in agricultural products has led to increasing allocations of land to cash crops, resulting in the expansion of monoculture and the consequential end-of-crop rotation that re-nourishes the soil, further eroding soil quality.

The increase in land prices has also induced farmers in locations proximate to urban settlements to [sell their land](#), to exit farming, or to switch to cash crops. These processes are an inevitable concomitant of growth, and if conducted sustainably, are a welcome rite of passage as countries develop manufacturing and services and diversify. However, in a scenario characterised by small holdings, slow productivity growth, growing populations, and increasing pressures on agricultural land, countries

not yet self-sufficient in food grains may find themselves turning to imports to meet local demand.

Developments Outside Agriculture

Southeast Asia is [one of the most vulnerable regions](#) to climate change and natural hazards, especially heat, high humidity and rising sea levels, with estimates of losses due to climate change substantially higher than thought earlier. High population densities and concentrations of economic activity along extensive coastlines add to the vulnerability. Floods, droughts and fires have resulted in losses of food crops to the tune of US\$21 billion between 2008 to 2020. Warming waters may also cause native species of fish and other marine life to migrate to cooler waters, further jeopardising food security for the region.

While trade is integral to global food security, experience has repeatedly shown that governments with agricultural surpluses often [readily resort to protectionist measures](#), banning exports of foodgrains, if they expect future shortfalls. Since the start of the pandemic, 94 countries have imposed trade restrictions, with more than a third of these restrictions continuing to be in effect till the present.

The ban on exports of rice, and later onions, by India has led to another round of food price inflation with consequential effects on Southeast Asia. During the pandemic, expectations of shortages induced Indonesia and Malaysia to impose export bans on palm oil and poultry respectively, which triggered speculation and hoarding by both consumers and retailers, further exacerbating the situation.

Agricultural production is turning increasingly resource and fossil-fuel intensive, catalysed by mechanisation and growing dependence on fertilisers and external markets for inputs, including high-yielding varieties of seeds and pesticides. Food production alone accounts for over [a third of global greenhouse gas emissions](#).

Options for ASEAN

The immediate priority for ASEAN is to develop capacity to take care of deprivation and hunger. Targeted fiscal transfers and support can help to cushion the impact on the most vulnerable. This underscores the necessity of developing national databases to facilitate targeted help. With government budgets stretched by the pandemic, such policies will need to be offset by increased taxes or lower government spending in other areas.

Agricultural markets in developing economies suffer from pervasive information gaps and lags in reporting data, enabling market participants to engage in potentially [destabilising speculation](#). Therefore, another priority is to establish mechanisms for reporting and collation of timely data on a range of indicators underpinning Agricultural Market Information Systems (AMIS). This includes monitoring crop health, weather and storage conditions, buffer stocks, indices of regional prices, trade data, production and productivity data, and alternative sources of supply. Without homogenisation and standardisation of data reporting norms, it is difficult to formulate coherent strategies.

Longer-term Measures

Rural ASEAN is dominated by small farms. While new technologies in agriculture are scale-neutral, access to high-quality inputs is not affordable for small farmers. To secure rural livelihoods and sustainability of such farms, regional policy initiatives encompassing insurance, pooling of resources for harvesting, access to finance, and access to community irrigation resources are needed – measures that are accessible at the community level but not individually to the small farmer.

Post-harvest agricultural value chains' share of expenditure on common food items can reach 75 per cent of the entire value chain, indicating considerable scope for streamlining costs. [Food losses in the Philippines and Indonesia](#) have been as high as 50 per cent and 20 per cent of total produce respectively. The solution entails streamlining along all points of agricultural value chains.

Although maintaining buffer stocks is expensive, a minimum buffer and agreements with partners in the region and among ASEAN+3 members will help to buttress credibility and deter speculators during times of instability.

Developing ASEAN countries lack the resources and ability to secure food security. However, collaborating across ASEAN can help to boost collective security. ASEAN needs to regard agricultural development as a major policy objective.

With its network of agricultural research universities and agreements, ASEAN has the institutional capacity to invest in the development of more climate resistant variants of major crops, especially rice. This calls for the coordination of research efforts and collaborations with multilaterals for testing hybrids across countries and under different conditions.

Food security is integral to a nation's security. While aggregate food availability is not a problem, as experiences across Southeast Asia and elsewhere over the past fifteen years have shown, distribution and affordability of decent diets is. The current increase in prices is the third such instance since the global financial crisis. The risks of growing food insecurity and hunger are profound. The famine in Africa in 2015-16 and the resultant mass migration to Europe, the Arab Spring in 2011 are but a few recent instances of movements initially triggered by food price increases and shortages. History is replete with episodes of violence, regime changes, rise of populist governments and deep instability when a large percentage of the population is unable to access adequate nutrition. Access to food is the most fundamental need for sustenance and survival, and a basic tenet of maintaining societal stability. For ASEAN to sustain the stability and growth it has achieved over the past four decades, it is important to act early to address the threats to food security that lie ahead.

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