Food Security in Indonesia: A Continued Reliance on Foreign Markets

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**Key Points**

- Indonesian food security has continued to improve; however, the expansion of the middle class poses new challenges.
- The agricultural sector is likely to continue to grow, but at a slower rate than the industrial and service sectors, leaving Indonesia reliant on food imports.
- A focus on improving inter-island connectivity could improve the food distribution network and reduce food prices, but this will take time and considerable levels of economic investment.
- Investing in industries where Indonesia could build a comparative advantage, such as fisheries, could boost export earnings.

**Summary**

Indonesia has long sought to restore its self-sufficiency in key agricultural commodities, such as rice, while also increasing domestic production of high-value food products, such as beef. Restrictive importation policies, however, have failed to achieve the level of agricultural development that the government had hoped for and, if pursued further, have the potential to undo advancements in achieving greater food security. Increasing inter-island connectivity to provide greater access to markets for domestic food producers, while continuing to supplement food supplies with imported produce, is a better method of enhancing food security.
Analysis

Successive Indonesian governments have connected self-sufficiency to enhanced food security. Quite often the focus on self-sufficiency, however, has led to worse food security outcomes. Indonesia was once self-sufficient in rice and sugar but, as the population increased, production failed to keep up with demand. The farming of more profitable crops, such as palm oil, which is not a food crop and does nothing to further food security, also made the importation of produce more likely. Competition for land from industry and housing also pushed many farmers out of the market further reducing the country’s ability to produce its own food.

The Current State of Agriculture in Indonesia

While agriculture makes up less of Indonesia’s gross domestic product than in the past, its labour force is still predominantly engaged in the sector. Currently, about 40 per cent of the workforce is employed in some form of agricultural activity. Approximately 30 per cent of the country’s land area is set aside for farming, which includes that used for the production of non-food commodities such as palm oil and rubber. It is possible that more land could be set aside for agriculture in the future; however, as industrial and urban areas are also set to expand, this growth is likely to be minimal.

The agriculture sector is expected to continue to expand, but at a slower pace than the industrial and services sectors. As with many developed and developing countries, Indonesian youth are less likely to be engaged in the sector. Only 12 per cent of the country’s 35 million farmers are under the age of 35. A failure to attract young people into the industry will lead to labour shortages and a lack of innovation and institutional change, which is vital for future agricultural productivity.

Current Food Security Challenges

Food security has improved significantly in recent decades, but challenges remain to the future stability of the Indonesian food system. According to the 2015 Global Hunger Index (GHI), Indonesia reduced its GHI score by up to 25 per cent since 2000. While it has not reduced hunger at the same rate as other South-East Asian countries, such as Thailand and Vietnam, it has made considerable efforts to combat food insecurity.

Largely due to the fear of supply disruptions, Indonesia announced its intention to meet 90 per cent of its food needs from domestic sources by 2014. As FDI forecast in 2013, this highly ambitious goal has not been achieved. Most food-crop farmers are smallholders and face problems of economies of scale. It will be difficult for the industry to increase production to meet self-sufficiency targets, particularly when climatic conditions become increasingly variable as a consequence of climate change.

Since taking office in 2014, President Joko “Jokowi” Widodo has pursued policies that he believes will make Indonesia self-sufficient in key food products. He has reduced or delayed the importation of raw sugar, beef, corn and rice in the hope of spurring increased production. Instead of pushing up production, however, these policies have resulted in supply shortages and price rises. Continuing to promote self-sufficiency policies, instead of
sustaining programmes that gradually increase agricultural productivity, have the potential to reduce food security.

The ongoing demographic transition poses a potential problem for the food supply. The Indonesian middle class is currently the fourth largest in the world, after the US, India and China. In 2014, 17.3 million households were identified as middle class. By 2030, if current growth trends continue, 20 million households are likely to belong to the middle class. As the middle class grows to occupy a larger portion of the population, a shift in food preferences is likely to follow. Middle class consumers are more likely to purchase higher-cost food products, such as meat, dairy and processed foods, which Indonesia will struggle to supply through domestic production alone. Indonesia will continue to rely on foreign imports to meet domestic demand in key food products such as rice and beef.

**Malnutrition in Indonesia**

Rates of malnutrition remain high throughout South-East Asia and Indonesia is no exception. As with the wider region, however, malnutrition rates have been declining. In 1990, according to the Food and Agriculture Organisation, 36 million Indonesians were malnourished. By 2015, the number of malnourished people had declined to 19.4 million. As rates of undernourishment have declined, however, the obesity rate has increased. Indonesia is now the tenth-most obese country in the world. As the obesity rate increases the risk of diabetes, high blood pressure and other health problems increases. Addressing malnutrition rates will be necessary if Indonesia is to avoid a looming health crisis.

Stunting in children also remains a significant health challenge. Between 2005 and 2015, after steadily declining for decades, the rate of stunting in children under the age of five increased from 28.6 per cent to 36.4 per cent. Stunting can cause serious, lifelong complications among those affected. Brain development is most affected by childhood stunting. According to the World Bank, children that experience stunting in their early development are less likely to graduate high school and are expected to earn at least ten per cent less during their lifetime than their food secure peers. Such high rates of childhood stunting, therefore, are likely to have considerable impacts upon the Indonesian economy.

**Overcoming Geographical Constraints: Increasing Connectivity and Land Development**

As the world’s largest archipelagic state, Indonesia faces unique challenges that complicate its food distribution system. Transporting food throughout its 6,000 or so inhabited islands is a particularly difficult undertaking that the government has long grappled with. The food distribution network is one of the largest barriers to food security and increased consumption of domestically produced food. In 2013, the government announced that it was willing to invest in ships to increase inter-island connectivity. Jokowi maintained the government’s desire to increase Indonesian connectivity as a key plank of his maritime doctrine when he was inaugurated in October 2014. His policy seeks to transform the waters that divide the Indonesian archipelago into bridges that draw them closer together.

Improving the logistics network and boosting connectivity is one of the major policy goals of the Jokowi administration. In 2015, it launched its first live export ship that will be used to
transport cattle from the outer islands to Java, the main population centre. The ship, *Camara Nusantara*, is capable of transporting 500 cattle per month, well below the 700 to 900 Jakarta requires each day. Nonetheless, the government is pushing ahead with the programme, ordering the construction of another seven vessels. Shipbuilding is only one part of the process, the construction and modernisation of ports to increase access and efficiency will also be necessary. Boosting connectivity will be a costly process that will take time to show results.

Developing new agricultural land will also be necessary to fuel further production. Conflicts over land use have become more common as developers open up previously underutilised regions. During Susilo Bambang Yudhoyono’s ten-year administration, there were reportedly 1,391 land conflicts that caused 70 deaths. Many of these conflicts were caused by the spread of oil palm plantations into forests and small-scale agricultural land. As Jokowi focuses on increasing food production more land will need to be cleared for agriculture. Outer-lying islands, which have an historical mistrust of the central government, are the most likely to be targeted for this development, potentially fuelling more disputes over land rights.

**Beef: Market Diversification Unlikely to Lead to Greater Food Security**

Possibly due to a series of supply disruptions, Indonesia is now seeking new markets from which to import beef. It currently imports 80 per cent of its beef from Australia, but, if its market diversification policy goes ahead, this figure could soon be lower. Importing beef from alternative suppliers is not without its problems, however, as the countries currently under investigation as potential suppliers do not have the same stringent health and hygiene checks. There are reports suggesting that India could supply beef to Indonesia. Unlike Australia, parts of India are infected with foot and mouth disease. To circumvent this problem, the government has suggested the establishment of quarantine islands. Cattle from countries that are not entirely disease free would be impounded on these islands until they are cleared for the Indonesian market. Under this plan, imported meat would take weeks, rather than days, to reach the Indonesian market and, because of the longer transport time and quarantine process, domestic beef prices would inevitably rise.

Market diversification and self-sufficiency policies have been touted in Indonesia for some time, but have generally failed to gain traction. Any shift toward self-sufficiency or market diversification will take time, as legislative hurdles will need to be overcome. While reducing its reliance on a single provider is good economic practice, the policy, as it is currently conceptualised, is likely to come at considerable cost. Diversification policies, if they are ever enacted, are unlikely to last as consumers will probably refuse to pay markedly higher prices for what could be an inferior product.

**Indonesian Fisheries: A Potential Growth Industry**

Fish is a major source of protein for many Indonesians and many households rely upon fishing for their primary source of income. At 32 kilograms per person per year, fish consumption is almost double the global average of 19 kilograms per person per year. Approximately 54 per cent of animal protein consumed by Indonesians comes from fish and
seafood. In small, remote islands fish contribute up to 90 per cent of the protein requirements of local populations. Growing rates of illegal, unreported and undocumented fishing have damaged the domestic fishing industry by contributing to the lowering of wild fish stocks. Fisheries are incredibly important to maintaining Indonesian food security. Protecting fisheries, both on and offshore, has been a major priority for successive Indonesian governments.

Susi Pudjiastuti, the current Fisheries Minister, adopted a radical approach to remedy some of the challenges faced by the fishing industry. Over-fishing is a problem in Indonesian waters and while regulations exist, they have proved difficult to enforce. In late 2014, Ms Pudjiastuti banned large foreign fishing vessels and the transhipment of fish at sea, restricted commercial fishing and destroyed illegal fishing vessels. Since these policies were introduced, economic growth in the fishing industry has reportedly increased by 40 per cent. Ensuring that fishing regulations are properly enforced will go some way toward protecting the industry, however, other methods of fish production, such as aquaculture, will need to be considered.

Aquaculture has long existed in Indonesia. There are reports of brackish water aquaculture being practiced in western Indonesia as early as the 1400s. According to the Ministry of Marine Affairs and Fisheries, aquaculture is a major source of fish for the country. As wild fish stocks face increasing pressure from overfishing and climate change, aquaculture could become an important industry for maintaining a stable supply of fish.

Barriers to the widespread adoption of aquaculture remain, however, limiting Indonesia from achieving its full potential as a major fish producer. About 95 per cent of fish production comes from artisanal fishers, who largely continue to practice traditional methods. If the industry is modernised, it could provide the country with a greater degree of food security and offer access to a lucrative export market.

**Conclusion: Despite Self-sufficiency Plans, Indonesia Likely to Continue to Rely on Imports**

Indonesian food security has improved over the past two decades and it has the potential to produce enough food to feed its population, but it is prevented from doing so by a number of challenges. Large tracts of its agricultural land have been developed for palm oil plantations, which, while commercially successful, do nothing to bolster food security. Increased land use pressure from expanding industrial and urban areas will also make it difficult to find new agricultural land that is close to transport infrastructure. In the long-term, this could be overcome by increased investment in infrastructure development. Jokowi has ambitious infrastructure goals that could do much to improve the food distribution network that is partly responsible for Indonesia’s poor domestic food production capacity. Whether or not these goals will be met, however, remains to be seen. For the time being, Indonesia will continue to rely on foreign imports to meet demand for key food products and ensure its food security.

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