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In search of food security: Addressing opacity and price volatility in ASEAN's rice sector

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The availability of rice has long been considered a key indicator of food security in Southeast Asia. However, for largely strategic reasons, there is a paucity of information in the public domain on rice availability, particularly figures on production, storage and trade. As a consequence, households, producers, mills and traders participating in the market have been doing so based on opaque information, and this has had significant impact on rice price formation. When price shocks and volatility occur, the ramifications of trading with insufficient data are magnified. This NTS Policy Brief recommends four measures that Southeast Asian governments might take to increase transparency, and thus address the continuing problem of price volatility.

Introduction

Given that volatility in rice prices is expected to continue, governments in Southeast Asia should consider policy measures to address the factors that impact price formation and stability. The non-transparent nature of the way rice is traded in Southeast Asia is contrary to the free-trade rationale of ASEAN agricultural trade policy and food security frameworks. The underlying dynamic of opacity (of information) is the reason for policy decisions that contribute to instability in rice price formation. In particular, limited information on the availability of rice and composition of trade deals results in misinformed purchasing behaviour, particularly during price shocks. The lack of transparency perpetuates distrust in the regional rice market, leading countries to disengage from the market and instead pursue economically inefficient self-sufficiency strategies.

This NTS Policy Brief recommends four measures that ASEAN member states might take to address the deficit of information on rice availability, with the goal of achieving the competitive and open trade environment that its trade and food security policy frameworks were designed to function in. Specifically, this brief suggests (1) improving access to information on rice availability at the state level; (2) supporting efforts to improve data on non-state rice storage; (3) fostering private-sector involvement in the rice trade; and (4) considering regulatory measures to manage trading by 'outside' speculators (that is, those, particularly from the financial sector, who have no intention of dealing with the physical commodity) should an international rice futures market be developed in Southeast Asia.

Rice, a pillar of Southeast Asia's food security

Rice is the staple food for 3 billion people globally, most of whom live in developing countries. According to the Asia Society and the International Rice Research Institute (IRRI), rice accounts for half the poor's food expenditure and one fifth of total household expenditure in Asia. Despite anticipated widespread shifts in the developing world in coming decades towards urban diets less reliant on rice as a staple food, a rise in overall demand (primarily due to population growth) will result in the need for an increase in production of 8–10 million tons of rice per year. The world will have to produce 25 per cent more rice over the next 25 years, with Asia needing an estimated 67 per cent more rice than at present. Some of the world's largest exporters and importers of rice are in Southeast Asia, and approximately 90 per cent of the world's rice is produced and consumed in Asia.

Despite (and perhaps because of) the importance of rice to Southeast Asia, the systems for distributing rice in the region often tend to prioritise domestic needs at the expense of the health and potential of the broader rice economy. The regional rice market is seen merely as a platform for offsetting supply and demand imbalances in order to achieve domestic rice price stability. Governments play a heavy-handed role in the rice economy in comparison to other agricultural commodities, particularly through tariffs, subsidies and farmer assistance programmes. Many government interventions were established decades ago when the sector was more vulnerable, and, in spite of flourishing production, these policies have carried through to today. Government bodies are involved in the trade and distribution of rice, in importing countries and exporting countries alike. Private traders are, however, playing an increasingly prominent role.

The strategic significance of rice is underlined by the fact that price rises and volatility have been a catalyst for political tensions in the region, as seen in the reactions to tariffs on rice, and in the responses to a proposal for a Southeast Asian rice cartel (the Organisation of Rice Exporting Countries) that excludes the region's importing countries. A cartel would run counter to commitments on free trade made by ASEAN member states under the World

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Trade Organization (WTO) Agreement on Agriculture and is unlikely to be formalised. Even so, volatility in the price of rice continues to be both impacted by, and a catalyst for, the strategic decisions of rice producing as well as consuming states.

Rice price volatility and the opacity factor

Food prices rose in 2008, and continued to be volatile in the years since. They increased again to a new peak in early 2011. After easing downwards in the second half of 2011, food prices began to climb again in January and February 2012. Economic modelling by the New England Complex Systems Institute suggests that the trend will continue, and there will be another peak in food prices in 2013. Furthermore, the model suggests that this pattern of episodic peaks within relatively short time frames will continue long term.

Given the expectations of continued volatility, it is timely to consider the factors contributing to rice price formation that are a direct result of policymaking, and of strategic behaviours that reflect the dynamics of the region's rice sector. Food prices are influenced by a range of complex supply and demand factors including commodity market speculation, environmental challenges and natural disasters, state protectionism, demand for biofuel, as well as the price of fuel and other inputs. However, several factors that go into the price of rice are quite unique from that of other food staples such as maize and wheat. These include high degrees of trade protection, thin trade, relatively inflexible demand and supply responses, strategic storage, and hoarding. In Southeast Asia, these factors are all influenced by the lack of information on the availability of rice.

The level of information on rice availability provided by ASEAN member states varies. Whether because of resource limitations or due to an unwillingness to share data, official statistics are not always available on rice production and trade, leaving outside stakeholders to put together estimates. The lack of statistics on rice in the ASEAN Food Security Information System (AFSIS) exemplifies this reality. Figures on stocks held in emergency rice reserves are also not made public. Collectively, Southeast Asia has committed to contribute 87,000 tonnes of the total 787,000 tonnes pledged to the ASEAN Plus Three Emergency Rice Reserve (APTERR) launched in 2010. Nevertheless, clear information as to the stock each country holds is still not available. There are clearly strategic reasons, including those related to competition, for keeping this information from fellow member states, but the dearth of data plays a role in the decision-making behaviour of rice sector stakeholders. Furthermore, there is very little data available on the stores of rice held by millions of rice farmers, households, mills and traders in the region.

A virtual international grain reserve has been suggested as a means of providing emergency reserves and a steady trading platform. Managed well, this scheme would undoubtedly provide stability in rice price formation and transparency in trade. However, it would be extremely costly to implement (USD10–20 billion would be needed) and would require immense political willpower. It would also likely contravene WTO restrictions on international arrangements that generate price distortions.

The price of opacity

Three major impacts arise from the opacity of information on rice availability. First, the lack of transparency on rice availability has, during past price shocks, caused excessive rapid importing. For example, during the 2007–2008 food price crisis, some ASEAN member states doubled and tripled imports in order to prepare for the perceived shortages and price increases, placing extreme stress on the market and further triggering price hikes.

It is not only governments which increase stocks during periods of perceived need. Rice is highly storable, and millions of rice economy stakeholders in Southeast Asia, including households, producers, mills and traders, store rice on a small scale for strategic reasons. During shocks, the lack of information on the availability of rice induces these actors to increase their stocks. As with the actions of state actors, those of these non-state actors upset the supply-demand balance, spurring further price jumps.

Longer term, the lack of transparency on rice availability and trade deals has contributed to waning trust in the rice market. This has led to policy decisions that are economically inefficient and go against the free-trade principle present in ASEAN policy frameworks. For example, the Philippines and Indonesia have moved towards the goal of self-sufficiency in rice by 2014, with the aim of becoming rice exporters soon after. While this seems an appealing strategy for ensuring national food security in the face of an unpredictable market and volatile food prices, it will put both countries at a potential economic disadvantage. These countries risk challenges in meeting demand during supply or price shocks. Furthermore, self-sufficiency in

rice typically leads to consumers paying higher prices for rice in order to support minimum prices for farmers. At the same time, by pursuing self-sufficiency, and thus minimising the role of trade, countries perpetuate the perception that the rice market cannot be trusted.

Recommendations for ASEAN member states: From opacity to transparency

- ***Encourage governments to provide data on national rice availability.***

ASEAN member countries should strengthen efforts to share information on rice availability. While concerns about loss of competitive advantage are legitimate given current clandestine market dynamics, a collective move towards transparency would bolster rice price stability through making the market more predictable and trustworthy. If countries are more forthcoming with information on rice availability, including data on production, trade and storage, that would also strengthen the resources of the AFSIS. Though it would not be feasible to expect mandatory reporting of figures, ASEAN member countries should collectively aim to be more transparent in declaring national stocks in order to meet the requirements for the APTERR, and ensure the most efficient outcome for the rice reserve. Capacity should be built and partnerships formed with international organisations and non-governmental organisations that can assist in developing accurate data.

- ***Improve data on the rice storage behaviour of non-state actors.***

ASEAN member states should support the development of a project to provide better data on the strategic rice storage practices of millions of non-state actors including households, producers, mills and traders. The collective impact of their behaviour is significant for the price of rice, as inaccurate perceptions of rice stores trigger panic buying. An accurate assessment of their storage practices, and the volumes involved, would go some way towards preventing such panic among those same actors.

Such data would also serve to identify the different acquisition patterns, and the specific conditions under which each occurs, so that a model to predict future hoarding behaviour could be developed. Such a project would be a complex undertaking. A partnership of multiple private and public stakeholders across the region would be required, and information support from ASEAN member states would be necessary.

- ***Facilitate private-sector involvement in the rice trade.***

Rice has been predominantly traded in Southeast Asia through government-to-government deals for decades. In some ASEAN member states there has been a shift to more private-sector driven trade, subject to government trade targets. Those governments that continue to prefer state deals should consider allowing more private-sector involvement, in line with regional trade policy and food security frameworks, and to keep pace with the more nuanced trade dynamics in the region's rice sector.

The strategy that the Philippines' National Food Authority (NFA) adopted in late 2011 could serve as a model for other net importing countries. The NFA has for many years directly imported rice into the country, but as the Philippines moves towards self-sufficiency, it has taken a new strategic direction of non-involvement in imports. Instead, the private sector is allowed to import rice through a tender system. Such a shift towards more private-sector trade allows for potentially more transparency in deal-making.

- ***Consider regulatory measures to manage outside speculation should an international rice futures market be introduced in Southeast Asia.***

Various rice sector stakeholders have proposed an international rice futures market for Asia that is based in Singapore. The existence of such an exchange would go some way towards opening up trade transparency and improving access to market information on rice availability.

However, a robust international rice futures market risks producing increased opportunity for outside speculators to participate in the trade of rice, negating the potential stabilising effects of a futures market on the price of rice. Regulation of the potential exchange would be crucial, as shown by the experience of the US. The country deregulated its agricultural futures markets under the Commodity Futures Modernization Act of 2000, providing outside speculators with unlimited access. According to a food price model developed by the New England Complex Systems Institute, speculation in the trade of agricultural commodities was one of two key factors contributing to food price increases between 2004 and 2011. To address the role of outside speculation in price increases and volatility, the US Commodity Futures Trading Commission then implemented regulatory measures in October 2011 to restrict the number of contracts any investor

could hold in agricultural futures markets. Should an international rice futures market be established in Singapore, ASEAN and its member states would need to encourage the country to implement similar measures to limit speculation while still ensuring adequate liquidity and as little impact as possible on rice price formation.

Conclusion

With rice prices likely to remain high and volatile in coming years, ASEAN member states should consider policy measures to reduce the price instability, and stabilise domestic rice prices without negatively impacting the international market. A shift to align with the free-trade principle implicit in regional agricultural trade and food security policy frameworks would contribute to such stabilisation but would take considerable political willpower. Developing policy measures and strategies to address the lack of transparency in rice availability and trade information will be crucial in preparing Asia's rice sector for not only continued food price volatility, but also the rapidly changing dynamics of the region's other food security challenges.

About the Author

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The RSIS Centre for NTS Studies, NTU, was inaugurated by the ASEAN Secretary-General, Dr Surin Pitsuwan, in May 2008. The Centre maintains research in the fields of Food Security, Climate Change, Energy Security, Health Security as well as Internal and Cross-Border Conflict. It produces policy-relevant analyses aimed at furthering awareness and building capacity to address NTS issues and challenges in the Asia-Pacific region and beyond. The Centre also provides a platform for scholars and policymakers within and outside Asia to discuss and analyse NTS issues in the region.

In 2009, the Centre was chosen by the MacArthur Foundation as a lead institution for the MacArthur Asia Security Initiative, to develop policy research capacity and recommend policies on the critical security challenges facing the Asia-Pacific.

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