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Asean Regionalism towards Food Security

Mohd Ikbal Mohd Huda, Norasila Kasim

Centre For Research in History, Politics and International Affairs, Faculty of Social Sciences & Humanities, The National University of Malaysia

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Abstract

ASEAN member states (AMS) are aware that food security is a national issue and should be prioritised. AMS also acknowledged those local efforts are insufficient to face achieve food security. AMS recognize the importance of regional cooperation to achieve food security. ASEAN has come up with several regional initiatives to ensure food security in the region such as AIFS, APTERR and AFSIS. Despite the initiatives there are challenges that impede regional food security cooperation for instance, ASEAN dependency on food imports, non-tariff barriers, and the readiness to adopt advance technology in agriculture and food producing industry. There are many ways to improve regional food security cooperation such as increasing public private partnership and increase investment for research and development. Other than that, ASEAN needs to Standardise the mechanisms and regulatory frameworks at regional level as it will ease and promote trade. Besides, ASEAN also needs to improve, expand the existing food security cooperation mechanism. Regional food security cooperation would optimise ASEAN potential as the world's food basket.

Keywords: ASEAN Member States (AMS), Food Security, Regional Cooperation, Cooperation Mechanism

Introduction

The world population is increasing rapidly and will keep growing in the future. In the recent decade, the world population has grown from 6.9 billion in 2010 to 7.8 billion people as of March 2020. Asia hosted 4.6 billion people which is the 58 percent of the world population and the number of hungry people in the region stood at 496.1 million in 2017 (FAO 2018). Southeast Asia with 600 million people is home to one of the worlds most populated country Indonesia with 273 million people (Worldometer, 2020). In 2019, East and Southeast Asia scored 11.5 on the Global Hunger Index (GHI) while South Asia scored 29.3 (GHI, 2019).

The Global Hunger Organisation (GHO) reported its 2018 results for the Global Hunger Index (GHI) and the results show that ASEAN states are relatively still hungry. With the exception of countries like Brunei and Singapore (which were not included in the survey), even the bloc's top performer, Thailand, only came in 44th place out of the 119 countries surveyed. Remarks for Thailand, Malaysia and Vietnam are "moderate" while the GHI index

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shows that the state of hunger in Myanmar, the Philippines, Indonesia, Cambodia, and Lao PDR is still "serious" (The Asean Post, 2019).

By addressing the root causes of hunger, poverty and malnutrition, the Sustainable development Goals (SDGs) can be achieved. Food Security is the key to Sustainable Development Goals (SDGs) Success. Targeted in SDG 2: "to end hunger, achieve food security and improved nutrition, and promote sustainable agriculture". SDG 2 is interconnected to many other SDGs such as SDG 1: to eradicate poverty, SDG 3: Good health and well-being, SDG 6: Clean water and sanitation, SDG12: Responsible consumption and production, and others. By ensuring food security, besides fulfilling the population's food, energy, and nutritional needs, as well as advancements in sustainable agriculture, it also provides for conducive conditions to improve health, mental and labour capacity, sustainability of cities and urbanisation.

Food security remains a major challenge for ASEAN and the world. As the high commodity prices and economic uncertainty, the increasing population escalates the problems further. ASEAN member states (AMS) are aware that food security is an issue of national security. Many are working towards achieving food security in their country. ASEAN as a regional organisation realise that local effort would not be sufficient to ensure food security.

ASEAN acknowledge the importance of food security cooperation among countries on regional level. ASEAN region has the potential to become the food basket of the world. To achieve food security AMS and ASEAN as a whole have made efforts to ensure food security in the region. However there are many issues and challenges that impede regional cooperation for food security. This essay will discuss about ASEAN initiatives for regional food security. It attempts to examine the issues and challenges of food security cooperation in ASEAN. Other than that, this essay also explores the recommendations for securing food security in Southeast Asia.

Food Security Initiatives in Asean

To achieve food security, there must be a concerted effort from all parties involved within ASEAN to ensure that mutually beneficial goals and targets are met. Hence, ASEAN has initiated a number of food security initiatives such as the ASEAN Food Security Reserve. This is an agreement among AMS to set aside and share rice stocks during contingency periods.

ASEAN Integrated Food Security (AIFS) Framework

AIFS was established in response of the sharp increase in international food prices in 2007-2008. This framework covers five-year period of 2009-2013 and is supported by a strategic plan of Action on Food Security (SPA-FS) in the ASEAN region with the goal to ensure long term food security and to improve the livelihoods of farmers in ASEAN region. This plan covers the priority commodities for food security for ASEAN region include rice, maize, soybean, sugar and cassava. The AIFS Framework comprises of four components which are: 1. Food Security and Emergency/shortage Relief; 2. Sustainable Food Security Arrangements;

3. Integrated Food Security Information System; 4. Agricultural innovation.

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These components are supported by corresponding strategic thrust as detailed in the plan of actions. (ASEAN.org, 2008) To ensure the effective implementation of AIFS Framework, ASEAN Ministers on Agriculture and Forestry (AMAF) coordinate with relevant ASEAN sectoral bodies for implementation and monitoring besides forming partnership with international organisation and donor agencies such as FAO, World Bank, IRRI, IFAD and others. The progress of AIFS framework and SPA-FS were monitored, reviewed and reported to relevant stake holders annually. In 2014, recognizing the need for continued regional cooperation, they adopted the AIFS Framework and SPA-FS for another phase, from 2015–2020.

ASEAN Pluss Three Emergency Rice Reserve (APTERR)

ASEAN Plus Three (ASEAN, China, Japan and South Korea) launched the ASEAN Plus Three Emergency Rice Reserve (APTERR) in response to 2007-2008 food price crisis as it caused great uncertainty in the regional rice market and led to export bans and extreme import orders. APTERR aims to make rice available during emergencies, to stabilise rice price, and improve farmers income and welfare, thus improve food security without distorting the international rice market. ASEAN Plus Three members pledges to allocate an amount of rice for the reserve.

Plus Three countries would contribute 700,000 tons while ASEAN members pledge for 87,000 tons combined (ASEAN, 2011). The contribution of AMS is roughly its domestic consumption of rice for one day which is low considering rice reserve should provide at least one or two weeks of domestic consumption. Despite being among the largest rice producers and consumers in the world, AMS is showing lukewarm support for the regional rice reserve program (Desker at al., 2013). This has led to the inefficiency of APTERR's process. ASEAN Plus Three needs to be consistent in their strategic engagement in the rice sector.

ASEAN Food Security Information System (AFSIS)

Due to the growing concerns on Food Security in East Asia., ASEAN Plus Three also has built the ASEAN Food Security Information System (AFSIS) which is led by Thailand's Ministry of Agriculture and funding from Japan trough ASEAN Trust Funds. The objective is to strengthen food security in the region through the systemic collection, analysis and dissemination of food security related information (FAO, 2015).

AFSIS focused on human resource development through knowledge sharing and mutual technical cooperation among ASEAN member states to enable member states to provide accurate, reliable and timely information required for the construction of regional food security information, and the development of an early warning and commodity outlook information to facilitate the management of food security policies and programmes. It was envisioned to enable the assessment of food security situations in the region and help identify areas where food insecurity is likely to occur.

In 2010, the International Rice Research institute (IRRI) launched the Global Rice Science Partnership (GriSP) which is a strategic work plan for global rice research, bringing together hundreds of scientists from all over the world. GRiSP mission is to increase productivity and resource efficiency for rice production system (cgiar.org 2018). This initiative is not an initiative by ASEAN but it involved ASEAN countries who are rice producers.

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Issues and Challenges for Food Security Cooperation in Asean

While AMS are aware of the importance of securing food security, there are many issues and challenges as the region is rapidly changing. AMS also acknowledge that food security cannot be achieved with at national level only. Regional cooperation is a must to catalyst efforts towards food security. However, there are many challenges when it comes to regional cooperation as states would have their priorities and national interest. This chapter will discuss the challenges and issues that impedes the regional cooperation for food security.

Food Import Dependency

World market are becoming an important source of food for developing countries. Countries with natural constraint like Singapore which has limited arable land tend to import food. Other ASEAN members like Malaysia, Indonesia and Vietnam also import food despite being food producers. The following table shows the growth of ASEAN imports of agricultural products from 2008 to 2017. The data shows that there are increase of food imports among ASEAN countries. Only rice shows downwards trend as ASEAN are rice producing countries. However, ASEAN still import rice.

Table 1
Growth of ASEAN imports of agricultural products from 2008 to 2017

Description	2008 (Million USD)	2017 (Million USD)	Growth (%)
Rice	3062	1,123	-9.5
Banana	25	58	8.7
Pineapple	14	17	2.3
Mangoes, guava, mangosteen	104	473	16.4
Coconut oil	250	296	1.7
Soybeans	2051	3399	5.2
Sugar and honey	1540	3431	8.3
Shrimps, prawn, lobster	436	1117	9.9

Source: ASEAN Secretariat 2018

Developing nations are taking the self-sufficiency strategy for their food security policy. A country that pursues food self-sufficiency produce food within the borders of a country. It advocates for simple and natural diets that can be produced domestically. While a country that pursues a self-reliance food security policy would generally import food not only to ensure domestic supplies, but also because certain commodities can be procured cheaper abroad than produced domestically (Chandra & Lontoh, 2010). Food self-sufficiency tends to benefit the weak and poor, while food self-reliance benefits the rich and powerful

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(Kent, 2002). Therefore, food self-reliance is generally a stance commonly adopted by rich nations, whereas food self-sufficiency policy is adopted by poorer nations.

As ASEAN countries depend on food imports, there are concerns around the countries' import capacity and the reliability of world markets. In terms of import capacity, there is evidence to suggest that developing countries are increasingly able to either maintain or improve their ability to finance food imports. In Southeast Asia, for example, there has been a significant shift in the economic production of the region from the agriculture sector to manufacturing and, increasingly, the services sector (Chandra, 2009). This phenomenon of food import dependency cripples the sustainability of agricultural sector, thus, food production. For reliability concerns, food importers cannot control the uncertainties of the exporting countries.

In Singapore's case, they apply "food resilience" strategy for their food security. Singapore opted to import food from multiple source country and avoid heavy reliance on one country only. This is due to its high import capacity. As other ASEAN countries also have the capacity to import food, the agriculture and food industry experience decline in production. Farmers and food producers are moving to more profitable industry. This make jeopardize regional efforts to increase regional food production and regional food cooperation.

Non-Tariff Barrier

The high trade costs associated with intra-regional agricultural products affects competitiveness. Agricultural products are usually bulky, perishable, have high shipping cost, and face unique logistical challenges. Non-tariff barriers are imposed on foreign food to protect the countries' interest and local agricultural industry. As the result of AEC implementation and the creation of ASEAN Free Trade Area (AFTA) barriers to intra-regional trade has reduced. However nontariff barrier (NTB) remains high. They contribute more to trade costs than tariffs, which account for just 6 percent of total trade cost. The efforts to reduce NTBs has been unsuccessful. Many ASEAN government is still enforcing protectionist policies which reduce overall food availability for trade.

Tariff rates are higher for food products than in other sectors, and agricultural goods were not included in the Common Effective Preferential Tariff scheme of the ASEAN Free Trade Area (AFTA) because they were too politically charged (Desker et al., 2014). Politicisation of the food sector and structural shortcomings are expected to hinder the process to bring about freer trade for agricultural products, and individual countries are expected to adhere to different trade liberalisation schedules. This would impede the flow of food products and demotivate farmers and food producers from producing more food.

Adoption of Advance Technology in Agriculture

ASEAN countries varied in term of development level. This has made the adoption of modern technology in agriculture different too. In order to increase food crop productivity, some countries are using advanced biotechnology in farming. Advanced countries have been adopting advanced biotechnologies in agriculture. Planting Genetically Modified Organism (GMO), while some are still reluctant to cultivate GMO. AMS all have different responses towards GMO. ASEAN countries responses to GMO can be categorised into three groups.

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First category is accepting GMO, taking Vietnam and Philippines as example. Second, the "precautionary approach" category like Malaysia, Indonesia and Thailand. These countries are half accepting and half resisting GMO, they require more researches and studies to be done before fully cultivating and commercialise GMO in their country. Third is the category that outright reject GMO such as Cambodia.

The reason of these different response could be due to many factors. Cambodia rejects GMO because they saw an opportunity in being and exporter of organic products. While Malaysia, Thailand and Indonesia took precautionary approaches due to the uncertainty of GMO and the many concerns around it. Besides, these countries also took considerations of the NGO pressures. NGO such as Greenpeace and Fairtrade have been loudly voicing out their concerns to the public and the government. They have been influencing the public opinion which made the government wary.

Leaders are forced to take into consideration of demands from such groups. Meanwhile Singapore, despite having resources and intelligence, shift their focus from GMO plants as they don't have the land capacity to cultivate GMO plants. Countries like Brunei, Myanmar and Laos have the potential to adopt GM crops, but do not have biosafety regulations yet.

These different responses with different reasons has hindered ASEAN from having a comprehensive approach towards GMO for food security. Thus far, ASEAN only came up with guidelines for its members to follow, however an inclusive policy or framework has yet to be established.

Recommendations

All ASEAN members have their own advantages and weakness which could be complement by collaborating with other members. Leveraging on the diversity and complementary between countries could potentially catalyst ASEAN Food Security regional cooperation.

Public Private Partnership and investment in R&D of new technologies

Given the implication of climate change and degradation of natural resources on agricultural production, agricultural research should focus on new technologies that are greener, more adaptable, more affordable and more suitable for small farmers, besides being innovative and affordable for large agricultural or food corporation. More research on biotechnology and GMO should also be encouraged as ASEAN countries are still reluctant to cultivate GMO commercially due to various concerns despite scientific research has proved that GMO would give benefit in term of crop yield.

More funds should be provided for R&D as increased investments and institutional innovations should strengthen the access of farmers to input and output markets, financial and extension services, education, and rural infrastructure, including irrigation and rural road networks (Fan, 2011).

Cooperation and partnership between national and international agricultural research institutes and the development of new technologies will help small farmers and large food producers as food availability depends heavily on scientific research capacity to develop new technologies. The regional platform may facilitate working groups to discuss general issues or issues relating to certain sectors. In the framework of this platform, working

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groups may be created among AMSs' FSN regulatory bodies in order to discuss general or specific issues related to the establishment and enforcement of FSN policy.

Standardisation of Mechanisms and Regulatory Frameworks at Regional Level

As is with many areas of ASEAN cooperation, coordination both at the national level and the regional level is critical. At the moment, there are still extreme discrepancies among policies concerning trade and food security pursued at the local, national and regional levels in nearly all ASEAN member countries. While ASEAN as a grouping is still committed to the open regionalism principle, which would translate into the implementation of a food self-reliance strategy to improve the region's food security status, most member countries of the grouping remain adamant that such an objective would be better achieved through a food self-sufficiency strategy.

Regional cooperation and national policies will determine how well the region responds to the changing regional environment and leverage on the opportunities to make ASEAN a competitive food exporter in the global market. ASEAN has to resolve issues that impede potential beneficial integrative policies including regulatory issues and concerns of food sovereignty, cross border labor movement and informal cross-border trade.

The harmonization of regulatory framework and the standardisation of mechanism could greatly promote trade if consistently adopted across the region. Single window policies, more harmonious safety standards, and integrated transportation systems could prove to be the strongest drivers of regional food trade (Desker et al., 2014).

Improve, Expand the Existing Food Security Cooperation Mechanism

ASEAN has pursued extensive cooperation in the area of food security. While early food security mechanisms developed in the late 1970s, were primarily safeguard mechanisms that member countries could resort to in times of food emergencies, more recent initiatives, such as the AIFS and its corresponding SPA-FS, as well as the wider ASEAN Plus Three's APTERR, were more holistic in their approaches to the food security issue in the region. Interestingly, many of these relatively new food security initiatives have also been tied up on international trade (Dano, 2006). While all these more recent developments are encouraging, there are weaknesses that needs to be improved.

Another critical element to improve ASEAN's food security status is the region's sense of ownership of many of its food security schemes. In the past, it was mainly its dialogue partners, particularly Japan, that pushed ASEAN to revisit the performance of its food security initiatives (Dano, 2006). This trend should change, and the organization and its member countries should understand that food insecurity is a key issue that could have significant political and security repercussions for the region as a whole.

Conclusion

In response to 2007-2008 food prices crisis, ASEAN has come up with many significant and relatively successful regional food security initiatives. ASEAN has established the AIFS framework to ensure long term food security in the region and has formed partnership with various international organisation to ensure the success of the framework. Other than that ASEAN also collaborate with their Plus Three partners and launched APTERR initiative to

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improve food security by focusing on rice market. In addition, AFSIS initiative was also established as a platform for knowledge sharing and technical cooperation among ASEAN members in the effort to improve food security in the region.

Most ASEAN members are dependent on food import, despite being food producer themselves. Other than impairing the sustainability of agricultural sector, food import dependency also inhibits the regional cooperation for food security. The flow of food products among AMS should be undisrupted for a smooth regional food security cooperation, but it is restrained due to the non-tariff barriers imposed on food products among AMS. ASEAN also could not establish a comprehensive approach towards food security due to the varied development level and adoption of advance technology in agriculture.

As ASEAN recognize that regional integration and cooperation means moving towards a common goal using a common strategy, it is essential that the ASEAN member countries agree on what food security means to them, and what food items are important to each of them and the region in general, so that regional integration and cooperation initiated by ASEAN can be better promoted and implemented.

Food security can be enhanced through cooperation and interdependence among the ASEAN member countries. ASEAN countries should be producing and trading food in such a manner that trade complements domestic production and reserves assure supply. AMS should encourage more Public Private Partnership and increase investment in R&D of new agricultural technologies which are greener, more affordable and more feasible. ASEAN countries should agree not to restrict food trade through embargoes, export taxes, and other restraints. Standardisation of mechanisms and regulatory framework at regional level is also important to improve regional cooperation. If all ASEAN members are committed to the initiatives and adhere to the regulations and frameworks, ASEAN's potential as the world's food basket could be realised.

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