

ASEAN PLUS THREE EMERGENCY RICE RESERVE (APTERR): An Analysis on Its Role to The ASEAN Food Security in The Global Pandemic

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Abstract

ASEAN Plus Three Emergency Rice Reserve or APTERR is a rice bank cooperation between ASEAN member states as well as China, South Korea and Japan (as +3 or Plus Three). This collective commitment is made in order to ensure food security, particularly in the form of rice, in their member countries. Initiated due to the crisis that occurred from 2007 to 2011, APTERR is now facing the global COVID-19 pandemic that has been going on for more than one year. This, of course, presents a threat to the availability of rice due to limited mobility in the production or distribution sector, while the needs of rice in the community remains the same. In this paper, we will discuss further efforts and actions that have been taken by APTERR in assisting ASEAN members who are in an emergency status in their availability of rice. The research method which this paper used is a literacy review method, which will provide facts related to the background of APTERR, problems that threaten the threat of rice in the ASEAN region, and the latest presentation data to answer whether or not the APTERR plan will succeed in overcoming this pandemic crisis.

Introduction

This Research is based on our interest in the unique action that is being taken by the Association of Southeast Asian Nations (ASEAN) to further ensure the food security of its member countries through the creation of a collective rice bank. This rice bank is created in the form cooperation that goes by the name of ASEAN Plus Three Emergency Rice Reserve (APTERR) which is based on an agreement between the ASEAN Plus Three (ASEAN+3) Nations which consist of ten ASEAN member nations that is Brunei Darussalam, Singapura, Malaysia, Indonesia, Thailand, Laos, Cambodia, Myanmar, The Philippines, and Vietnam as well as three East Asian nations that is

China, Japan, and South Korea. The cooperation was first enacted on 7 October 2011 at the Conference of ASEAN Minister on Agriculture and Forestry Plus Three (AMAF+3) which is being held in Jakarta, Indonesia. The main function of the APPTER is to provide assistance in the field of food security to the member nations of the ASEAN+3 that are undergoing an emergency status that causes them to be unable to fulfill their own food security needs (APTERR, 2021). Numerous examples can be found in the abundance of calamity that happened in the ASEAN member nations that ranges from natural disasters, such as Tsunami in Aceh and Typhoon in The Philippines, to economic calamity that happened in

1997. Moreover, the condition in which the majority of ASEAN member countries are in that are less developed, with exception of Singapore and Brunei Darussalam, often made them less able to deal with their own problems, particularly in the economic and food security fields. The emergence of the global Covid-19 pandemic that has been going on for more than a year is causing various global crises which covers not only medical sectors but also in social and economic sectors. The disruption of the stability of global economics is one of the reasons for the decreasing food security, particularly in the ASEAN region where the majority of the countries are less developed. This food security threat that is experienced by most of the Southeast Asian countries mainly happens due to the inability of farmers to do their usual farming activities and distribute their products which are caused by tight health protocols that are being implemented by their governments in order to control the spread of Covid-19. Moreover, the ability of the population to fulfill their own daily food needs are continually decreasing due to the fact that there are more and more people that are forced to leave their job because the company that hired them can no longer afford to pay their salaries. In thi research, we will further analyze the various attempts that APTERR has done in order to overcome the food security problems that are being experienced by a lot of ASEAN member countries.

One of the things that really captured our interest is the unique way of APTERR to assist ASEAN+3 member countries in overcoming their food security problems, that is by focusing their assistance on rice, and only rice. This assistance that are being provided by APTERR that only focused on rice is based by a couple of factors, that is: 1)

The majority of the Southeast Asian countries population chooses rice as its main consumption, and 2) Food products on the Southeast Asian countries are dominated by those that came from the agriculture sector. Taking into account those factors, the rice-focused assistance that is being provided by APTERR can be deemed reasonable because it will simultaneously fulfill the main consumption needs of the people in the Southeast Asian country and activate the strongest sector in Southeast Asia that is the agricultural sector. Interestingly, APTERR also provides a specific part of their aid using rice not in a form of money, but in a physical form which until now has gathered an estimated amount of 700,000 tons.

The purpose of this research is to analyze the positive and negative effects of APTERR to the ASEAN member countries. This analysis will be based on our observation of the steps and mekanism that are applied by APTERR in order to give assistance to the member countries that are in a state of emergency and therefore cannot fulfill their own food security needs. We will also analyze the effectivity of these steps and mekanism on its application. The analysis will be conducted by reviewing the assistants and aids that APTERR have given to its member countries in the middle of the Covid-19 pandemic. We will also be analyzing the rice-focused assistance realization in supporting its member countries that are in a state of emergency.

Hypothesis: APTERR will bring good impacts to its member countries in solving its food security problems in the middle of the Covid-19 pandemic.

Research methods

In this research we will also analyze the reason behind the

establishment of APTERR in the Southeast Asia region. In order to better understand the base of the establishment of APTERR we will be reviewing the theories of International Relations that, presumably, can explain the reason behind the establishment of this cooperation. One of the theories that we will be using is the securitization theory which explains that the emergence of non-traditional issues, such as Covid-19 pandemic, can be categorized as a security problem of a country. This theory, presumably, can explain the main reason for the establishment of APTERR, considering the main purpose of this cooperation is to guarantee the food security of its member countries that are categorized as non-traditional security.

Theories

In order to learn from the past crises and prevent future crises from happening, researchers have found three main factors that caused the 2005-2008 crisis. The food crisis that happened in 2005-2008 are caused by three interrelated factors that is: 1) the increase of the price of the world's oil that caused the increased price of food ingredients, 2) the increase of the demand of food ingredients from oil-importing countries, and 3) the increased demand of biogas that are caused by the increased price of oil. The increasing price of food ingredients also affects the supply of those food ingredients, countries that are the main exporters of food ingredients will implement restrictions to their exports and there will also happen panic buying of food ingredient products. Rice as a main food commodity among the ASEAN member countries experienced a massive price escalation because of the decrease of the export rate of rice-exporting countries, which only 10% are sent to the international market while

90% are allocated to their own local market. Weather factors and trade restrictions made the price of wheat escalate for up to two folds the normal price. Droughts that happened in Australia and export restrictions from wheat-exporting countries due to harvest failure made supplies of wheat increasingly threatened (European Commission, 2011).

In order to handle the crisis that has been happening, ASEAN conducted a meeting to establish a prevention measure to prevent similar crises from happening in the future. On the meeting that are held on June 2012 in Cambodia, there are established three important preventive measures to prevent food ingredients crisis to happen in the future, that is:

1. ASEAN member countries can be more sustainable in the middle of crises if they established deeper trade strategies, maintaining a certain amount of rice at the regional and national levels, and correctly read market information.
2. ASEAN member countries can maintain the price of rice at an affordable level by developing the regional rice prices index and standardize the quality of rice.
3. ASEAN has to increase reserves in order to prepare for future calamities that are caused by climate change.

On facing this food security issue, ASEAN apparently sees the issue as a non-traditional issue in the level of regional security complex. Securitization are defined as an effort to maintain the survival of a nation when being faced with an issue that can potentially threaten the existence of the nation itself. Issues that can be securitized by a country, according to the Copenhagen School, is an issue that came from five categories, that is: 1) Military Security, 2) Political Security,

3) Economic Security, 4) Societal Security, and 5) Environmental Security (Caballero, Anthony, and Emmers. 2006).

Regional security complex, according to Barry Buzan, is a unit in the process of securitization, desecuritization, or both that are interconnected. This means that security problems that happen in countries in the same regional territory cannot be divided in its analysis and resolution and have to be solved on the regional level, not on the national level of every country in that region (Buzan 2012).

The concept of food security that brought upon by ASEAN member countries are initiated by planning a rice reserve for ASEAN member countries on 1979 that is ASEAN Food Security Reserve (ASFR) in order to establish ASEAN Emergency Rice Reserve (AERR) which has the main purpose to help population in poverty and in a condition of malnutrition which often found in the rural areas of the less developed ASEAN member countries. The main component of AERR is the donation of rice from its member countries that add up to about 50.000 Metric tons. After ASEAN have established a good relationship with East Asian countries (China, South Korea, and Japan) they started to establish a cooperation that goes by the name of ASEAN Plus Three (ASEAN+3). On 7 October 2011 the former rice reserve cooperation that was established by ASEAN member countries that is ASEAN Emergency Rice Reserve (AERR) was revised into ASEAN Plus Three Emergency Rice Reserve (APTERR) due to the involvement of ASEAN+3 member countries (Kim and Paula P. Plaza 2018). The main component of this agreement are:

1. In achieving the emergency condition and humanitarian

purposes, APTERR still use the ASFR definition of 'state of emergency'.

2. In its programs APTERR uses allocation of rice and physical reserve of rice. The reserve that APTERR has can be allocated in the form of cash or physical rice in a state of emergency.

Results and Discussion

APPTER Cooperation: The post 2007-2011 Food Crisis Calamity Prevention Measure

The food crisis that struck the world in 2007-2008 started when India and Vietnam, the main rice exporters in the world's economy, decided to implement restrictions to its rice exports. These restrictions cause a panic in the international world which cause the increase in the price of food products, particularly rice which spiked for up to two fold than before. Another food crisis also happened in 2011 when Russia implemented restrictions on its wheat exports due to the massive drought that beset the country. These food crises have a massive impact on the well-being of food security in different countries around the world, especially Southeast Asean Countries (Asian Development Bank, 2012). This happened because Asian countries, particularly Southeast Asian countries, are the biggest consumers of rice in the world. Rice, for the people of the Southeast Asian countries, is one of the main necessities that cannot be separated from their daily lives and we can imagine how big of an impact would it be if the price of the thing that people consume three times a day spiked for more than two folds of its former price. These food crises also can be more extensively perceived by Southeast Asian countries considering there are still a lot of under the middle class population that are still dependent

on the availability of rice because they can't afford other alternatives. In responding to the massive effects of food crises to the well-being of food security in the Southeast Asian region, countries come together and formed a cooperation that has a main purpose of maintaining the balance of food security and overcome food insecurity in the Southeast Asian region that is ASEAN Integrated Food Security (AIFS) that pioneered the rice reserve cooperation of the ASEAN+3 member countries that is ASEAN Plus Three Emergency Rice Reserve (APTERR).

Before further reviewing the decision that has been made by APTERR in preserving and resolving the food security of the ASEAN+3 region countries in the middle of the global pandemic that has been going on for more than a year, we first going to be reviewing the decisions that has been made by APTERR in preserving and resolving the food security of the Southeast Asian countries outside of the pandemic era. In achieving its purposes, APTERR divided its rice-aid programs into three tiers, which is:

1. First Tier

The first tier of the aid programs covers all of the forms of aid that are given by APTERR to the requesting member countries that are based on agreements that have been made beforehand in a form of contract. Through the contract, APTERR and the aid-requesting countries will make an agreement regarding the quantities and qualities of rice that are going to be sent, payment and delivery requirements, and other necessary requirements.

2. Second Tier

The second tier of the aid programs covers all of the forms of aid that are given by APTERR to the requesting member countries through

spontaneous agreements that are made to respond unanticipated emergency situations. This tier covers all of the things that are not covered by the first tier.

3. Third Tier

The tier three programs covers emergency rice aids that are released in response to severe emergency situations and humanitarian crises such as poverty prevention and malnutrition eradication. Tier three programs can be proceeded without agreements between aid-sending countries and aid-receiving countries beforehand.

From the time APTERR was made until present day, it has been observed that the rice aids that are given by APTERR to its member countries are dominated by the implementation of the tier three programs instead of the tier one and tier two programs. Based on the track record of APTERR activity from the time that it was made until 2013, there are at least four recorded implementations of its tier three programs.

In 2010 there were two recorded rice aids that are given by APTERR through its tier three program. The first one is the rice aid from Thailand to the Philippines in response to the emergency status caused by the Ketsana Typhoon, the Megi Typhoon, La Nina, and massive floods. The rice aid that was given by Thailand is delivered in a physical form of rice with an estimated amount of 520 metric tons in order to assist the Philippines in preserving its food security. The second one is the donation of 347 metric tons of rice from Japan to Laos that was also in an emergency situation due to the Ketsana Typhoon (Jongskul, 2012). There are also recorded rice aid through APTERR in a form of tier one program that is given by Vietnam to the Philippines with an amount of 10.000 tons (Briones, 2011).

In 2012 to 2013 there were also recorded two implementations of the tier three programs that is first on December 2012 where APTERR donated 50 tons of rice to assist six villages in Indonesia that are impacted by long periods of drought and second where Japan donated 200.000 US Dollars through APTERR to assist the Bopha Super-Typhoon victims that took place in Philippines on February 2013 (Mission of Japan to ASEAN, 2013). The voluntary donation from Japan to the Philippines were not included in the mandatory contribution which supposedly can be only in a form of physical rice. However there are no recorded implementations of APTERR's tier two programs.

Why Rice?

Unlike the South Asian and a couple of countries in the East Asian regions, the Southeast Asian region didn't have a sustainable wheat production which made its population relies on rice more for consumption and the working sector (Dawe, 2013). The abundance of rice resources in the Southeast Asian region became a factor behind the tendency of rice exports in its member countries. However, not all of it is in abundance, because the data suggests that the annual increase of rice production doesn't necessarily means the increase in a country's self sustaining capabilities, this can be seen on Indonesia and the Philippines imports rate that are the highest in the Southeast Asian region while Thailand and Vietnam have the highest export rate in the region (Bandumula, 2017). One of the cause factors of this phenomenon is the explosion of population numbers in Indonesia and the Philippines. Even though APTERR member countries portray themselves as rice-producing countries, in reality they themselves are

also vulnerable to rice shortage which is the main food source in their region.

APTERR member countries also realise their similarity in needs, good qualities, and trust between each member country, considering geographically their regions have a massive potency on becoming fertile lands. The pretty big similarity between countries on the needs of rice also means a pretty big similarity in their food problems. With the formation of APTERR, instead of creating market, member countries are signaling mutual interest to prevent rice shortages in each country and minimize price spikes in the future.



Table 1. Impacts of Covid-19 on food security and poverty (Cole, 2020).

However, in reality price changes in all of the ASEAN member countries. The price changes that negatively affect the food security of ASEAN member countries are caused by the Covid-19 global pandemic. The severity of this pandemic forces countries to implement lockdown policies which caused the disruption of the economic wheel which caused the disruption on the agricultural sector production in the ASEAN region that still relies heavily on manual labor (Qurani & Choiruzzad, 2021). The poor distribution of technology in this sector caused the massive decrease in the supply of rice, as a consequence of the population demand that are not decreasing. This results in the increase of the price of rice which cause the increase

in the unemployment rate.

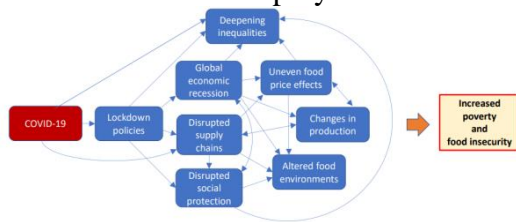


Table 2. Food products price increase from February 2020 to January 2021 (FAO, 2021).

The price increase can be reviewed from the date of Food and Agriculture Organization (FAO). It can be seen that all of the ASEAN member countries with Myanmar in first place with an estimated 32% increase and Vietnam in last place with an estimated increase of 4%. The extreme increase of rice price in Myanmar is also caused by the lengthy crisis that continues to heathen up in 2021. The Myanmar internal conflict of Rohingya humanitarian crises and the military coup d'etat cause food instability. It has to be mentioned that the data did not only consist of rice price, but also other food products such as vegetable oil, soy, and sugar. However, the availability of rice as a main food source of the ASEAN region population made the data presented more or less valid.

On the other hand, other ASEAN member countries such as Thailand and Vietnam can become the main exporters of rice which indicates an abundance of rice or rather they don't consume as much rice as their neighboring countries. Through APTERR, member countries have to send an annual rice contribution for the purpose of filling the emergency rice banks as well as maintaining their identity as rice-producing countries which represented by ASEAN's organization symbol that is the golden paddy. Food security, if simplified, can be accounted from the difference between production and consumption of food. APTERR offered rice reservoirs so that ASEAN Plus Three member

countries can contribute together (Trethewie, 2012). The contribution of the East Asian countries that is China, South Korea, and Japan has also been proven by respectively donating 300.000 tons, 250.000 tons, and 150.000 tons of rice while ASEAN member countries collectively gather a total amount of 87.000 tons of rice. As a simplified illustration of food security, APTERR member countries have been estimated to consume a total of 542.000 tons of rice every single day (United States Department of Agriculture, 2021). From this data, it can be estimated that the system that has been implemented by APTERR have a potential to briefly create food security if an emergency situation occurred in all of the member countries.

The Effectivity of APTERR in The Pandemic Era

The Covid-19 pandemic brings negative impacts to the economic and agricultural sector of the people. The spike on the price of products and farming tools which are caused by high demands and low supplies is causing a panic in the society which are not well prepared in responding the pandemic situation. In the economic sector, the population experienced a turmoil due to the implementation of social restrictions policies which disturb economic activities of the people. In the Southeast Asian countries, the production activities at the agricultural sector experienced depression for as much as 3,11% or an estimated amount of 17,03 million tons and the increase of production will be futile due to the restricted distribution activities (Choiruzzad & Qurani, 2021).

Another impact in the economic sector is the high rate of unemployment because of thigh social restriction regarding production activities that requires a massive amount of labor. The

unemployment rate escalation was recorded in Thailand, Singapore, and the Philippines for up to twofold in December 2020 compared to January 2020. Indonesia and Malaysia experienced the escalation of unemployment rate for up to 50% while other ASEAN countries such as Myanmar, Brunei Darussalam, Cambodia, Laos, and Vietnam experienced unemployment escalation at a much lower rate (Choiruzzad & Qurani, 2021).

This disruption in the economic sector also negatively impacts the population's capability to maintain its own food products needs due to the increase of the price of food products and decrease of income. In Malaysia a lot of people choose to decrease their food consumption in order to save some money, in Myanmar there are a shortage of healthy food that caused pregnant mothers struggling to find good nutritions, in Vietnam a lot of the population are force to consume poor quality food with an expensive price, and in the Philippines the starvation rate increased significantly from 8,8% in 2019 to 21,1% (Choiruzzad & Qurani, 2021).

In assisting its member countries in the middle of the pandemic, APTERR tends to use more of the third tier programs because in the first and second tier there are still a couple of things that haven't been finished such as the determination of price which will be used to give money-based donations. Rice reserve aids that are owned by APTERR in 2013 have a total amount of 787.000 tons with the data of total rice consumption of all APTERR member countries of 542.000 tons. The amount of rice reservoir that APTERR has is a result of the contribution of its member countries which consist of 300.000 tons from China, 250.000 tons from South

Korea, 150.000 tons from Japan, and 87.000 tons from ASEAN member countries. However APTERR member countries prefer to solve this problem internally (Trethewie, 2012).

In delivering food security aids to APTERR member countries that are in a food security crisis due to the Covid-19 pandemic, there are a couple of reports which are displayed in APTERR official website that is:

1. The donation of 300 metric tons (MT) of rice from Japan to assist Cambodia that was in a food security crisis. This delivery of rice aid is implemented through the use of APTERR's tier three program which means the aid comes in a form of physical rice. This aid will be allocated for as much as 222 MT to help civilians that are unable to fulfill their own food needs while 78 MT will be allocated for future reservoirs.
2. A rice donation by Japan with a total amount of 1.779 MT to three APTERR member countries that is Cambodia, Myanmar, and the Philippines which are going to be used as prepositioned and urgent request systems.
3. A rice donation by Japan and South Korea with a total amount of 1.350 MT for the people of Myanmar. This rice donation was initiated by South Korea by donating 600 MT of rice as an emergency donation to prevent a food security crisis in Myanmar.

From the data mentioned above, can be concluded that APTERR as a cooperation that has a purpose to overcome food insecurity in its member countries has done its job quite well. However the participation that came from ASEAN member countries in rice contribution are much lower than those that came from the ASEAN Plus Three member countries namely China, Japan,

and South Korea. Although the crisis that we are in came suddenly, there are still some hope that APTERR can independently guarantee the food security of its member countries.

Conclusion

The establishment of APTEER by ASEAN alongside China, Japan, and South Korea has proven to be able to overcome or assist its member countries that are in an emergency situation and therefore cannot maintain its own food security. The effort to overcome food availability problems is still there despite the fact that the collective rice contribution from the ASEAN member countries is still far less than East Asian nation contribution. The food stock disparity situation that are experienced by APTERR member countries can be overcome with the tier one, tier two, and tier three donation programs.

In the case of food insecurity that are caused by the Covid-19 global pandemic, APTERR often used the tier three donation program rather than tier one and two programs which can be seen from how APTERR takes care of food insecurity problems in Cambodia, Myanmar, and the Philippines. This happened because tier three programs enable APTERR to act faster in case of an emergency situation in its member countries, while tier one and two programs have to be proceeded with much more complicated steps which make donations much harder to be delivered in a case of emergency.

Through simple efforts such as rice contributions and diversification donation program tiers, APTERR can do a pretty good job in providing, anticipating, and guaranteeing the main food needs of the people of its member countries. Moreover, the existence of APTERR can also generate a better utilization of the Southeast Asian

countries resources which are dominated by the agricultural sector with rice as its main commodity. The existence of this cooperation can also create an opportunity to observe more rice production acceleration potential while cooperating with China, Japan, and South Korea. Therefore, ASEAN member countries can learn a little bit more about the utilization of technology and other efforts to increase rice production, considering the decrease of labor that is willing to work in Southeast Asian countries' agricultural sector.

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