

## STRATEGY AND POLICY TOWARDS ACHIEVING SELF-RELIANCE FOOD SECURITY

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This policy brief is the result of an activity entitled “Economic Policymaking in Indonesia” which is jointly conducted by Centre for Strategic and International Studies (CSIS) and Economic Research Institute for ASEAN and East Asia (ERIA). This activity is a contribution from research community that is expected to assist the government in formulating more effective economic policies in the future. In this activity, CSIS and ERIA invited 16 economists with specific fields of expertise from some leading research institutions to conduct in-depth discussions on seven strategic issues facing Indonesian economy (infrastructure development, competitiveness, investment climate, food policy, services sector policy, fiscal policy, and social protection policy), which is then summarized into policy briefs covering each of the topics.

Dissemination of the findings and recommendations produced by this activity is conducted through several channels. First, this activity has made efforts to engage the relevant government officials through some Focus Group Discussions (FGD), the publication of High Level Policy Notes, and hearings with some strategic policymakers with regard to each of the strategic issues mentioned above. Secondly, this activity also conducts widespread public disseminations through Public Seminars on each of the strategic issues, along with publications of the Policy Briefs and supporting multimedia that can be accessed online through [www.paradigmaekonomi.org](http://www.paradigmaekonomi.org).

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## INTRODUCTION

**I**NDONESIA'S FOOD IMPORT is projected to continuously increase in line with a steady population growth, people's incomes and the development of food processing industry. The rate of growth of national food production could not keep pace with the growth of food demand. If this situation is not immediately anticipated, Indonesia will almost certainly be more dependent on imported food products, far away from the national target of achieving self-reliance national food security as mandated in the Food Law No 18 2012.

This policy brief aims to assess alternative government's strategy and policy, supports and incentives to enhance national food production capacity and to realize the national target of achieving self-reliance food security.

## NATIONAL FOOD SECURITY IN THE GLOBAL PERSPECTIVE

Food security is not merely an issue of availability of food, but it also deals with other issues of affordability, quality and safety standards. The Global Food Security Index (GFSI), published by the Economist Intelligence Unit (EIU, 2015), was used for the purpose of undertaking an across-country comparison. GFSI is a weighted index of various components, namely affordability, availability, quality and safety of food in each country.

**Table 1. Global Food Security Index (GFSI), Scores and Ranks, 2015**

Country	GFSI		Affordability		Availability		Quality & Safety	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Singapore	2	88.2	1	800	11	78.9	13	84.6
Malaysia	34	69	40	68.1	29	69.2	36	70.4
Thailand	52	60	46	63.4	57	58.6	61	58.6
Vietnam	65	53.4	69	48.9	52	58.4	69	50.7
Philippines	72	49.4	73	44.4	66	53.4	68	50.8
Indonesia	74	46.7	74	44.3	72	51.2	88	40.1
Myanmar	78	44	92	29	64	54.3	65	42.9
Cambodia	96	34.6	91	30.3	101	39.1	98	32.8
China	42	64.2	50	61	39	65.2	38	69.3
India	68	50.9	72	47.4	58	56.1	79	45.3

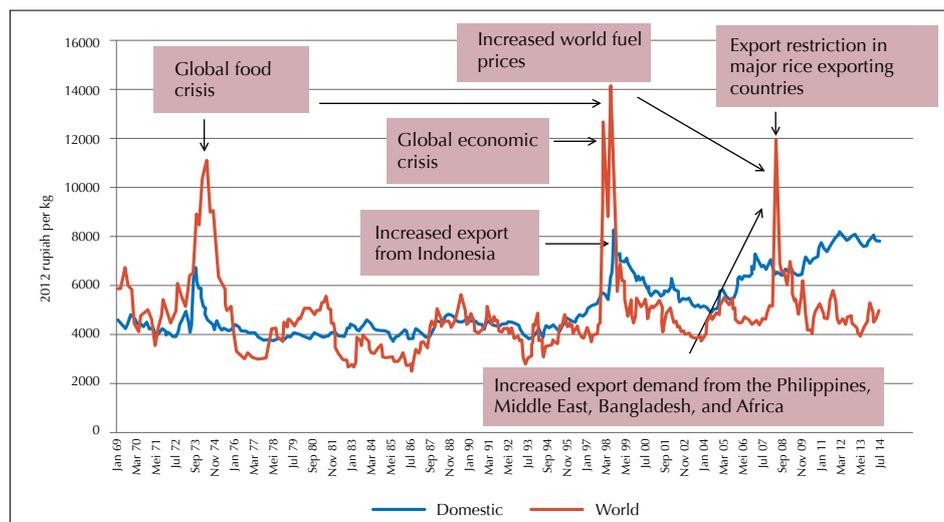
Source: The Economist, 2015.

As shown in Table 1, the rank of Indonesia's food security in 2015 was 74<sup>th</sup> out of 109 countries, well below Singapore (2<sup>nd</sup>), Malaysia (34<sup>th</sup>), Thailand (52<sup>th</sup>), slightly below Vietnam (65<sup>th</sup>) and the Philippines (73<sup>th</sup>) and, but above Myanmar position (78<sup>th</sup>) and Cambodia (96<sup>th</sup>). Indonesia's food security rank was also well below China of 42<sup>th</sup> and slightly below India of 68<sup>th</sup>. From food affordability criteria, the position of Indonesia was ranked 74<sup>th</sup>, below the position of Singapore (1<sup>st</sup>), Malaysia (40<sup>th</sup>) and Thailand (46<sup>th</sup>) respectively. Indonesia food security worsened in terms of food quality and safety criteria with its rank was 88<sup>th</sup>, far below the rank of Singapore, Malaysia and Thailand, that was 13<sup>th</sup>, 36<sup>th</sup> and 61<sup>th</sup>, respectively.

What interesting is that the country with relatively high dependence on imports, such as Singapore and Malaysia, could have had higher rank

food security index. This situation implies that national food security could be achieved only if the foods are easily available for and affordable by the people regardless they are imported or produced domestically. The policy regime of these two ASEAN countries, however, cannot be fully adopted by Indonesia. For the country with more than 250 million inhabitants, like Indonesia, relying on imported rice (staple food) to meet its ever increasing demand is too risky and not the right choice to take. This is particularly true given the fact of relatively thin and unstable the world rice market as reflected in its long run price volatility (Figure 1). Any demand or supply shock would easily trigger the world rice price to spike.

**Figure 1. The World and Domestic Rice Price, 1968-2014**



Source: Timmer, 2014.

Figure 1 shows the magnitude of rice price fluctuations in the world market. Any surge in the world rice price, as it happened in 1973, 1998 and 2008 were very detrimental to rice importer, especially big importer like Indonesia. Moreover, experience has shown that the world price immediately increase whenever there is an increased import demand from Indonesia. Therefore, it is too risky for Indonesia to rely on imported rice to meet its huge domestic demand.

### ENHANCING NATIONAL FOOD PRODUCTION CAPACITY

Many factors determine the national food production capacity. One important factor is the availability of land to grow crops as it determines the scale of farming. The government has, unfortunately, failed to sustain this production factor. Continued reduction in the area of food crops, due to land conversion to other uses, has caused in a substantial decline in national food production capacity (Erwidodo, 2014). In addition, national food production capacity is also a function of yields and cropping intensity that both appear to have been stagnated or deteriorated over time due to deteriorating irrigation facilities.

The new Government is aware of this situation. As it is mentioned in NAWACITA, the nine priorities agenda, the Government is currently taking concrete actions and proactive steps to increase the area of agricultural land, build new paddy fields along with tens of dams and reservoir

and irrigation facilities. These are all important factors of food production that need to be built or rebuilt to enhance national food production capacity.

The author would argue that building new and improving available agricultural infrastructures are much more important incentives for supporting and protecting farmers rather than pouring them with trillion rupiah of fertilizer subsidies. Trade distorting (fertilizer) subsidies should be phased out and more cost effective less distorting supports such as crop insurance should be phased in. Additional budget for Research and Development is also critically needed to generate yield increasing and quality improving technologies.

The Government's efforts to build other infrastructures across provinces, such farm roads, highway and railways, transportation facilities, telecommunication and warehouses need to be supported. These public infrastructures would increase connectivity, reduce logistical costs, enable market work efficiently, and therefore, enhance the country competitiveness. In the WTO rules, the above-mentioned supports fall in the general services and green box category.

## **RICE PRICE STABILIZATION POLICY**

Food price is one among determinants of food affordability. High food price would make food less affordable and it would then trigger additional millions of people fall below poverty line. Theoretically, high prices of food would benefit food producers, but not necessarily benefit small farmers since they are net food consumers. The drop in food prices would, on the other hand, benefit consumers at large, but is very detrimental to producers and farmers, particularly small farmers. This is the main reason for government to implement food price stabilization policy.

The central rationale for price stabilization policy lies in the arguments of market failure, characterized by: (i) inadequate infrastructure, (ii) incomplete risk-mitigating institutions like credit and insurance markets, and (iii) lack of safeguards against external shocks (Rashid, S., 2007; Abbott, P., 2010). There are two categories of price stabilization policies: (i) non-market-based options, consisting of government direct intervention on the sale and purchase of food, and the dual pricing policy, and (ii) market based policy options, consisting of a warehouse receipt system (WRS), commodity exchanges and future markets, and crop and weather-indexed insurances. Direct government interventions have been the main mechanism for stabilizing food prices in developing countries (Rashid, S., 2007).

Indonesia is one among Asian countries which has implemented price stabilization for rice using a dual pricing scheme. This dual pricing policy was considered successful in supporting Indonesia to increase rice production and achieve rice self-sufficiency in the first time 1984. The scheme has been somewhat modified in a way due to Government's budgetary constraints. The price stabilization for rice is regulated in the form of Presidential Instructions (INPRES), of which periodically revised. The newest one is the INPRES No 5, 2015.

The current rice price stabilization scheme consists: (i) Government Purchased Price (HPP), (ii) an ad-hoc selling price for market operation, (iii) rice stock managed by BULOG, (iv) import control policy using a combination of import tariffs, import licensing and a schedule to import. Government stocks,

which consist of emergency stock and stock for *raskin*, come from domestic rice procurement and import. In the domestic procurement, BULOG is obliged to purchase rice from farmers if prices fall below the HPP, of which usually happens during peak harvest season. No obligation for BULOG to buy if the market price surpasses the HPP.

The evidence shows that HPP has been effective in guaranteeing farmers to receive minimal price and reasonable level of profit, but it has not been effective for domestic procurement since the market prices of rice were always well above the HPP. Forcing BULOG to buy rice above the HPP is certainly against the INPRES No 5/2015. To effectively safeguard farmers from price drops during peak harvest season, BULOG's rice procurement should be directed to procure Gabah Kering Panen (GKP) and Gabah Kering Giling (GKG), rather than procuring rice from millers and traders.

## **WAREHOUSE RECEIPT SYSTEM**

WRS in Indonesia has been gradually implemented since 2008, two years after the enactment of the WRS Law No 9, 2006. As stated in the Law, warehouse receipt (WR) is a document proof of ownership of the goods stored in a warehouse that is issued by the warehouse service provider. WR are securities that can be traded, exchanged, or used as collateral for loans and can be used for delivery of goods in derivatives transactions as well as forward contract. WR can be used by farmers to obtain credit from a designated Bank or funding institution. Product that will be stored in the warehouses must meet certain quality standard and administrative requirement to be used by the service provider to issue the WR in accordance to the value of the product stored.

Many problems and obstacles encountered in the dissemination of WRS, among others, were: (i) lack of understanding of the benefits and procedures of WRS, not only farmers but other stakeholders, (ii) majority farmers are small scale, less than 0.5 hectare, (iii) they are selling their crop prior to harvest, and (iv) majority farmers are share-croppers or tenants in patron-client relationship, so that they do not have freedom to sell the crops. In addition, the WR service providers face limited availability of warehouses that meet standard requirements, and if available, the rents are expensive (Suryani, et.al, 2014).

Given the potential benefits of the WRS, the government needs to be more serious to accelerate the dissemination of this system to the region. To realize these goals, it is necessary for the government to prepare a road-map of WRS establishment along with a strategic plan for each commodity. Engagement of State Trading Enterprise (STE) is needed in the initial stage of WRS establishment. Subsidized interest rates for the construction of warehouses may also be critically needed to attract and encourage warehouse providers and farmers as well.

## **CONCLUSIONS AND RECOMMENDATIONS**

For the country with more than 250 million inhabitants, like Indonesia, relying on imported food to meet its ever increasing demand is too risky and not the right choice to take. The objective to achieve national self-reliance

food security is therefore legitimate. This is particularly true given the fact of relatively thin and unstable the world rice market as reflected in its long run price volatility. The government's commitment to rebuild and enhance national food production capacity is critically important to realize the national objective for achieving self-reliance food security as mandated in the Food Law No 18 2012.

Building new and improving agricultural and rural infrastructures are much more important incentives for supporting and protecting farmers rather than pouring them with trillion rupiah of fertilizer subsidies. Fertilizer subsidies should be phased out and more cost effective less-trade distorting supports should be phased in. Building new dams and reservoirs along with irrigation facilities would certainly enhance national food production capacity. Additional budget for Research and Development is critically also important to generate yield increasing and quality improving technologies, in order to significantly increase production, productivity and quality of food products.

The adequacy of government stocks is essential to stabilize prices of rice. Evidence shows that depleting BULOG stock would easily trigger speculative '*hoarding*' behavior among traders that would frequently result in spike of retail prices. In the situation of production shortage, import is the only option to secure the government's rice stock and stabilize domestic market price of rice. Import or not import should always be treated as an instrument not the objective or target.

The government needs to be more serious in accelerating the establishment and dissemination of WRS to the entire region in order to stabilize other (food) commodity prices. Recent commitment of the Ministry of Trade to speed up the dissemination of WRS needs to be supported by line ministries. Involvement along with concrete supports from the local government, particularly in the creation of an enabling business environment, is another key success in the establishment and dissemination of the WRS in all regions.

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