#### Why did the Philippine Government fail to Meet Domestic Consumption Needs?

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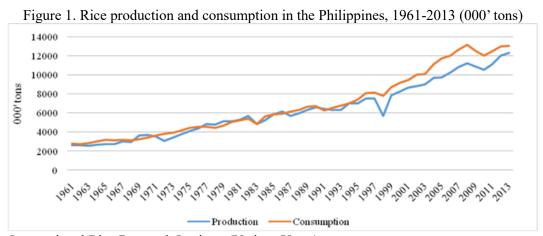
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#### **Abstract**

The grain rice and the country Philippines go hand in hand. Rice has played a crucial role in providing calorie source for the majority of the population and generating employment and income to a wide range of people. Hence, food security and stability in rice prices can be seen as two simultaneous priorities of the Philippine Government in recent years. This paper aims to interpret why the Philippine's rice sector is unable to stabilize domestic consumption. The results of this study demonstrated that low level of productivity, unsuccessful land reform, weak institutional capability, poor management of the National Food Authority, history, geography, and neoliberalism are reasons leading to failure of Philippine rice sector in supplying domestic consumption.

#### 1. Importance of rice in the Philippines

Historically, domestic production of rice in the Philippines was unable to meet its domestic consumption needs. The very basic plan of the department of the agriculture industry in any country particularly in the Philippines is to match the domestic production and consumption. There were few instances when domestic production was higher than domestic consumption, but this occurred way back in the late 1960s to 1970s. From 1995 onwards, the gap between the two continued to increase indicating that local producers were unable to keep up with the rising demand for rice. From 2009 onwards, the gap became smaller as this was the time when the Philippine government decided to pursue rice self-sufficiency (Department of Agriculture, 2012) (Figure 1).



Source: International Rice Research Institute (Various Years)

Rice has always been the most valuable agricultural commodity for the Filipino people. Based on a survey by the Philippine Statistics Authority, 91.88 percent of Filipino households consider plain rice as their staple food (Philippines Statistics Authority, 2017). The same survey also found that on average, Filipinos consume 109.87 kilograms of rice per year or 2.11 kilograms per week. At the national level, the majority (90 percent) of Filipino households buy the rice they consume, and regional estimates showed that almost all or 99 percent of consumers in the National Capital Region by the rice they consume.

Since rice is a staple food and commonly bought by Filipino households, it is necessary for the government to ensure that its price is stable. On average, Filipino families spend around 11.7 percent of their income for bread and cereals expenditure in which rice is included. If we disaggregate the data by income level, this share of bread and cereal expenditure becomes much higher especially for lower-income families accounting for at least 25 percent of their income. Therefore, we can say that poor household are the most vulnerable if the price of rice surges since they spend a significant portion of their income for it. This statistic and finding need a close observation by the officials involved in the rice production, storage and distribution in a country.

Given the vital role of rice in the Philippine economy, the government, through the years, has looked for efficient ways to provide a sustainable supply of rice, maintain its prices and balance trade in the market. However, it was not an easy task to do so, given the external factors affecting the rice industry in the country and around the world. It is also true that the major grain traders play a vital role in deciding the stock level and price status of rice not only in the Philippines but also in various developing and underdeveloped countries.

Rice has played a significant role since it provides calorie source for the majority of the population and generates employment and income for a wide range of people. This is applicable to all rice eating population and their countries. Hence, food security and price stability continue can be seen as two simultaneous priorities of the Philippine Government in recent years (Intal and Garcia, 2005).

## 2. Causes of Failure to Meet Domestic Consumption Needs

#### Low productivity caused by geographic disadvantage and low investment -

Over the years, the Philippines' revealed comparative disadvantage for agriculture continued to decline vis-à-vis its neighboring countries (Balisacan *et al.*, 2008). Although this decline in comparative advantage may be attributed to the decrease in employment and investment in the agriculture industry, the actual reason for this is much more fundamental. The productive environment is more important for any industry to enhance its productivity. The Philippines' mountainous islands are not easy to irrigate than rice export country. Those countries located in mainland of Southeast Asia such as Viet Nam and Thailand have a better environment for cultivating rice than the Philippines due to its extensive river network and flat land (Dawe, 2014). This better environment enables them to have an abundant supply of water and smoother corridor for the transport of goods. Therefore, irrigation and transportation costs are less costly in these countries.

Table 2. Growth rates of palay production, harvested area of palay, and employment in agriculture in the Philippines, 1991-2016(%)

Items	1991-2000	2001-2010	2011-2016
Palay production	3.9	2.5	2.0
Harvested area of palay	2.5	0.8	0.8
Employment in agriculture	0.6	1.6	-1.3

Source: Philippine Statistics Authority (Various Years)

*Notes:* Author's own computation

Another factor contributing to the low level of productivity in the rice sector is the low level of investment for agricultural research and development. The past efforts during the Green Revolution were unfortunately not sustained in the Philippines. It is quite ironic that the Philippines was one of the leaders in agricultural research yet now it has the lowest research intensity ratio (ratio of research expenditure to GDP) among its neighboring countries (Intal and Garcia, 2008). This alarming situation of rice production in the Philippines should be given priority in the policy-making process and progressive policies need to be taken by the Government and other agencies. Although various technologies have already been developed

and adapted to increase the yield potential of rice, these efforts were still not enough to achieve maximum yield potential in rice production (Balisacan *et al.*, 2008).

#### Unsuccessful land reform -

Several studies have shown that a redistributive land reform enhances productivity in the rice industry (Jeon and Kim, 2000). The Philippines for its part had its fair share of attempts of land reform over the past few decades. However, despite these numerous attempts, the agricultural industry did not develop substantially. According to Borras in 2007 (Borras, 2007), land reform in the Philippines was unsuccessful because there was no real transfer of wealth and power from the landlords to the landless farmers. He found evidence that even though records showed that there was a redistribution of land, landlords were able to find loopholes with the land reform program and in some way were able to acquire ownership of the redistributed lands. Some of the schemes cited include the declaration of "dummy" beneficiaries, "uninstalling" land reform beneficiaries, leaseback schemes with unfavorable conditionalities to the farmers, overpricing of lands to be acquired by the government, and collusion with government officials. Further, land reform is failed because of a poor targeting-system. For instance, provinces with a high concentration of land ownership, but were not prioritized in the redistribution efforts (Ballesteros *et al.*, 2017).

#### Weak institutional capability -

Some argue that the slow development of agriculture industry in the Philippines does not stem heavily from low productivity of the industry but rather from the poor policy and institutional environment the industry operates within (Habito and Briones, 2005). The main government agency tasked to oversee the agricultural industry in the Philippines is the Department of Agriculture (DA). Its mandate is to promote "agricultural development by providing the policy framework, public investments, and support services needed for domestic and export-oriented business enterprises" (Department of Agriculture, no date). Unfortunately, the performance of DA was subpar and it was unable to effectively accomplish the mandate it was given to Tolentino in 2002a (Tolentino, 2002a). It was noted that bureaucratic instability and weak governance within the DA negatively affected the development of the agriculture industry most especially for the rice industry. The situation has to be viewed seriously by the policymakers and appropriate efforts are to be taken to revive the favorable situation. This paper has provided more explanations and illustrations for policymakers of the Philippines. To illustrate, from 1971 to 2011, the DA changed its leadership 11 times, with a secretary averaging 33-month in service which falls short of its intended length of service (6 years or 72 months). During these years, the longest term for the DA secretary was for 162 months while the shortest was only for a month. As a result of these frequent changes in leadership, the overall agenda of the DA also changed. For almost every new term, there was a restructuring within the Department which resulted in the fragmented, uncoordinated and weak bureaucracy.

In addition, the Department lacked continuity since programs were either 1) abolished because it was the previous appointee's initiative or 2) re-designed or renamed to be labeled as the new appointee's own program even though the objectives are still the same as the previous ones. Seemingly unrealistic goals, agenda, and programs without proper deliberation of its feasibility were announced due to the political pressure to produce results (Tolentino, 2002a). As a consequence, there was an emphasis on short-term goals that lacked the substantial impact to develop the agriculture industry in the long run which resulted to the underdeveloped status of this industry that the country is currently experiencing.

Apart from man-made damages to rice production, nature is adding fuel to fire by demonstrating unfavorable climatic conditions. Further, due to adverse effects of climate events on agriculture, rice production in the Philippines is predicted to become more uncertain. Inaccurate prediction in rice production generates incorrect volume and ill-timing of rice imports, which underspin wasting resources of the government and harming consumers (Reyes *et al.*, 2009).

## Poor management of the National Food Authority -

The National Food Authority (NFA) was created "to ensure national food security and stabilize supply and prices of staple cereals both in the farm and consumer levels" (National Food Authority, no date). The NFA intervenes in the rice market through its price support mechanism wherein they "buy high" from farmers and "sell low" to consumers (Tolentino, 2002b). The rationale behind this is that the government wants to maintain a high price of rice to ensure the income of farmers and at the same time provide a low price for the benefit of consumers. It was already noted by David in 2003 (David, 2003) that these two opposing objectives of NFA cannot be achieved simultaneously yet NFA has continued this practice. As a result, NFA has consistently incurred losses for the government since 1999 (OECD, 2017).

Contrary to its intended purpose, NFA's protectionist policy resulted to more market distortions such as the increase in the domestic price of rice, a decrease in social welfare of producers and consumers, and lower level of investment from the private sector (Balisacan and Ravago, 2003). A study by Roumasset in 2000 (as cited in David, 2003) found that NFA's protectionist policy resulted in a deadweight loss for the Philippine economy during 1999. NFA's preference for price protection rather than import quota, resulted for the consumer price to be higher and producer price to be lower from the optimal level had imports been allowed. As a result, consumers had to pay more and producers received less. Consumer paying more for a product, rice, and producer getting a very less price will certainly affect the performance of rice production in any nation. This decision of NFA was costly as it was estimated that total economic loss amounted to 49 billion pesos due to the forgone tax revenues and loss in both producer and consumer surplus.

Crisis and price rise are two sides of a coin. Further, during the 2007-2008 food crisis, NFA's actions contributed to the increase in the price of rice both in domestic and international markets. In an attempt to secure a steady supply of rice, NFA pursued numerous rice trades with various countries (Thailand, USA, Japan) and offered a series of very high tenders to Viet Nam (Slayton, 2009). This decision of NFA to "hoard" rice sent a signal to the international market that the Philippines was willing to pay almost any amount to purchase rice. As a result, a "speculative bubble" was created that encouraged several players in the rice market to hoard rice which further jacked up the prices. This abnormal decision of NFA to hoard rice was speculated to be motivated by the rent-seeking behavior of government officials rather than being a response to the food crisis as discrepancies can be found in the buying and selling price of imported rice from Viet Nam (Fang, 2016).

#### Negative effect of agricultural trade liberalization to domestic markets -

There is a common view that the international rice market is unstable because of its relatively thin and segmented market which makes the price of rice volatile (Muthayya *et al.*, 2014). Many economists argue that this unstable rice market stems from the protectionist policies of countries participating in rice trade and the removal of such policies would result in greater economic efficiency and food security for the global economy. However, for developing countries, agriculture and food production serve as a base for their societal structure, as such liberalizing the market for the said sectors can cause drastic changes in the country (Phillips, 2000). Therefore, the promise of increased economic efficiency and food security by trade liberalization may not be gained by some countries.

It is argued that far from creating ideal market conditions in which prices reflect the real cost of production, agricultural trade liberalization distorts the market by creating unequal competition between highly developed nations and developing nations (Batausa, 2003). This is because highly developed nations have better means of productions through their large-scale and capital-intensive systems compared to a developing nations' labor-intensive means of production. As such, seeing that they cannot compete against these highly developed nations, there is a tendency for developing nations to forego investment in domestic production and will just rely on international trade to meet their consumption needs. In addition, proponents of agricultural trade liberalization have pushed for a reduction in agricultural subsidies by the government

(Eagleton, 2001). This reduction of state subsidies and investment on agriculture industry diminishes the developing countries' ability to maintain agricultural production and thus only increased their reliance on imported food. Likewise, the underinvestment in agricultural industry has contributed to the slow growth in production of food crops which ultimately led to agricultural prices rising in the world market (Mittal, 2008).

Further, it is assumed that importation of agricultural products will promote competition and efficiency in the domestic market which will lead to greater food security. However, to introduce more efficient production methods, profits from the current production of farmers must exist (Phillips, 2000). The entry of imported goods in the domestic market would result in the loss of income for farmers as their share in the domestic market would decrease, more so if the imported good is cheaper. Thus, innovation would be impossible, and poverty might even increase due to the decrease in income. This situation is where the Government of Philippines should address the issue in order to protect the people of its country. Policy-making bodies should review the situation periodically and take necessary steps to solve the existing and emerging problems. In addition, because agricultural production has become less profitable, farmers are forced to look for better employment opportunities. This lower employment in the agriculture industry translates to a lower productivity which will further hinder the industry's development. This is what happened in Nigeria as the continued rice imports have been attributed to the declining employment in the rice industry (Ezedinma, 2008).

## Lack of international cooperation and rice market -

Due to the instability of the rice market, countries have pushed for protectionist policies such as price control, price subsidies and trade restrictions in order to reduce the risk of food insecurity. These actions are understandable since governments just want to protect the welfare of its citizens. However, often there is a gap in such a decision since the Philippines' government do not take into account the effect of such policies internationally (Freedman, 2013). Ideally, the solution to this dilemma is for greater cooperation among countries, however, that itself is difficult to achieve due to the lack of leadership; imperfect information; a lack of regular mechanisms for designing agreements; and variation in the level of interest from states cooperating on any given issues (Freedman, 2013).

The 2007-2008 rice crisis illustrates the cost of not having an active cooperation among countries. Slayton (2009) noted that what triggered the surge in world market price of rice during the 2007-2008 food crisis was due to the policy decision of India, Viet Nam, and the Philippines to ensure rice security in their respective countries. During those years, world rice production and the stock were estimated to be within the desired level to meet global demand for rice (Slayton and Dawe, 2012). At that time also, the price of rice increased although this was caused by the price increase in the secondary market not because of a shortage in supply. However, this increase in the price of rice was interpreted wrongly by the governments and without proper coordination among other countries, each on their own started to secure their own supply by either increasing imports or restricting exports. The individual actions of each country resulted in a chain reaction in the global economy which propelled the prices higher. As a result, everybody suffered due to the individualistic behavior of each country.

#### 3. Conclusion

Aside from geographical disadvantage and agricultural support, institutional and policy reforms must be undertaken to reduce inconsistencies and uncoordinated activities between the government and rice-industry players. The government needs to have eyes on middleman of rice dealing business. Lastly, the Philippines should strengthen and sustain regional cooperation efforts to safeguard the country from rice supply shocks. Strategic approaches for rice production and keeping the rice reserves need to be domestically addressed by the governing authorities of Philippines. This has already been done through the emergency rice reserve systems such as the

# ASEAN Plus Three Emergency Rice Reserve (APTERR) from 2012. **References**

- Balisacan, A. M., Cuthberston, S., Sombilla, M. A. and Corbishley, J. (2008). *Philippines policy linkages scoping study*. Australian Centre for International Agricultural Research. Retrieved March 10, 2018, from <a href="http://aciar.gov.au/files/node/7051/Final%20report%20PLIA-2005-151.pdf">http://aciar.gov.au/files/node/7051/Final%20report%20PLIA-2005-151.pdf</a>.
- Balisacan, A. M., and Ravago, M. L. V. (2003). The rice problem in the Philippines: Trends, constraints, and policy imperatives. MPRA Paper No. 24865. Retrieved March 11, 2018, from <a href="https://mpra.ub.uni-muenchen.de/24865/1/MPRA\_paper\_24865.pdf">https://mpra.ub.uni-muenchen.de/24865/1/MPRA\_paper\_24865.pdf</a>.
- Ballesteros, M., Ancheta, J. and Ramos, T. (2017). The comprehensive agrarian reform program after 30 years: Accomplishments and forward options. PIDS Discussion Paper Series 2017-34. Retrieved March 5, 2018, from <a href="https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps1734.pdf">https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps1734.pdf</a>.
- Batausa, H. R. (2003). The Philippine rice industry in the impending trade liberalization program: A political economy approach. *Philippine Quarterly of Culture and Society*, 31 (3), 255-268.
- Borras, S. (2007). *Pro-poor land reform: a critique*. Ottawa: University of Ottawa Press.
- David, C. C. (2003). Agriculture. In A. M. Balisacan & H. Hill (Eds.), *The Philippine Economy: Development, Policies, and Challenges*, pp. 175-218. New York: Oxford University Press.
- Dawe, D. (2014). Rice self-sufficiency: Nature vs. nurture. In Dawe, D., Jaffee, S. & Santos, N., *Rice in the shadow of skyscrapers: Policy Choices in a Dynamic East and Southeast Asian Setting*, pp. 16-22. Rome: Food and Agriculture Organization.
- Dawe, D. (2010). *The Rice Crisis: Markets, Policies, and Food Security*. Rome: Food and Agriculture Organization.
- Dawe, D. C., Moya, P. F. and Casiwan, C. B. (2006). Why does the Philippines import rice? Meeting the challenge of trade liberalization. Los Baños, Laguna: International Rice Research Institute.
- Department of Agriculture (2012). Food Staples Sufficiency Program: Enhancing Agricultural Productivity and Competitiveness 2011-2016. Quezon City: Department of Agriculture.
- Department of Agriculture. (2017, March 14). DA targets rice-sufficiency by 2020, intensifies the promotion of rice hybridization. Retrieved March 21, 2018, from <a href="http://www.da.gov.ph/da-targets-rice-sufficiency-by-2020-intensifies-the-promotion-of-rice-hybridization/">http://www.da.gov.ph/da-targets-rice-sufficiency-by-2020-intensifies-the-promotion-of-rice-hybridization/</a>.
- Department of Agriculture (no date). *Mandate, vision, & mission*. Retrieved March 11, 2018, from http://www.da.gov.ph/mandate-vision-mission/.
- Eagleton, D. (2001). The international rice market: a background study. Oxfam GB.
- Ezedinma, C. (2008). Impact of trade on domestic rice production and the challenge of self-sufficiency in Nigeria. *Rice Policy and Food Security in sub-Saharan Africa*, 141.
- Fang, A. H. (2016). The linkage between rural voters and politicians: Effects on rice policies in the Philippines and Thailand. *Asia & the Pacific Policy Studies*, *3*(3), 505-517.
- FAOSTAT (2018). Harvested are, yield, and production of paddy rice in the Philippines and Viet Nam. Retrieved 5 June 2018, from <a href="http://www.fao.org/faostat/en/#data/QC">http://www.fao.org/faostat/en/#data/QC</a>.
- Freedman, A. (2013). Rice security in Southeast Asia: beggar thy neighbor or cooperation? *The Pacific Review*, 26(5), 433-454.
- Habito, C., and Briones, R. (2005). *Philippine agriculture over the years: Performance, policies, and pitfalls*. Paper Presented at the Conference on "Policies to Strengthen Productivity in the Philippines". Sponsored by the Asia-Europe Meeting (ASEM) Trust Fund, Asian Institute of Management Policy Center, Foreign Investment Advisory Service, Philippines Institute of Development Studies and the World Bank, Makati City, Philippines.
- Intal Jr, P. S., and Garcia, M. C. (2008). Rice and Philippine Politics. PIDS Discussion Paper Series 2005-13. Retrieved March 5, 2018, from <a href="https://dirp4.pids.gov.ph/ris/dps/pidsdps0513.pdf">https://dirp4.pids.gov.ph/ris/dps/pidsdps0513.pdf</a>.
- International Rice Research Institute (Various Years). *World Rice Statistics*. Retrieved March 16, 2018, from <a href="http://ricestat.irri.org:8080/wrsv3/entrypoint.htm">http://ricestat.irri.org:8080/wrsv3/entrypoint.htm</a>.
- International Rice Research Institute (no date). *Our history*. Retrieved March 15, 2018, from <a href="http://irri.org/about-us/our-history">http://irri.org/about-us/our-history</a>.

- Jeon, Y. D. and Kim, Y. Y. (2000). Land reform, income redistribution, and agricultural production in Korea. *Economic Development and Cultural Change*, 48(2), 253-268.
- Mittal, A. (2009). *The 2008 food price crisis: Rethinking food security policies*. G-24 Discussion Paper Series No. 56. United Nations Conference on Trade and Development. Retrieved March 25, 2018, from <a href="https://www.g24.org/wp-content/uploads/2016/01/56.pdf">https://www.g24.org/wp-content/uploads/2016/01/56.pdf</a>.
- Muthayya, S., Sugimoto, J. D., Montgomery, S., and Maberly, G. F. (2014). An overview of global rice production, supply, trade, and consumption. *Annals of the New York Academy of Sciences*, 1324(1), 7-14.
- National Food Authority (no date). *Mandate, vision, & mission and core functions*. Retrieved March 11, 2018, from <a href="http://nfa.gov.ph/about-us-2/mission-vision-and-mandate">http://nfa.gov.ph/about-us-2/mission-vision-and-mandate</a>.
- OECD (2017). *Agricultural Policies in the Philippines*. Paris: OECD Publishing. <a href="http://dx.doi.org/10.1787/9789264269088-en.">http://dx.doi.org/10.1787/9789264269088-en.</a>
- Philippines Statistics Authority (2017). *Consumption of Selected Agricultural Commodities in the Philippines. Philippines Statistics Authority*. Quezon City. Retrieved March 20, 2018, from <a href="https://psa.gov.ph/sites/default/files/2015-2016%20CSAC%20Vol1.pdf">https://psa.gov.ph/sites/default/files/2015-2016%20CSAC%20Vol1.pdf</a>.
- Philippines Statistics Authority. (2015). 2015 Family Income and Expenditure Survey. Quezon City. Retrieved March 20, 2018, from <a href="https://psa.gov.ph/sites/default/files/attachments/hsd/article/TABLE%209%20%20Total%20Annua1%20Family%20%20Expenditure%20by%20Major%20Expenditure%20Group%2C%20by%20Income%20Class%20and%20by%20Region%202015.pdf.</a>
- Philippines Statistics Authority (Various Years). *CountryStat Philippines*. Quezon City. Retrieved March 20, 2018, from <a href="http://countrystat.psa.gov.ph/">http://countrystat.psa.gov.ph/</a>.
- Phillips, W. (2000). Food security: A first step toward more fair trade. World Vision Canada. Retrieved March 24, 2018, from <a href="http://www.ccic.ca/files/en/what\_we\_do/002">http://www.ccic.ca/files/en/what\_we\_do/002</a> trade food security first step towards more fair trade.pdf.
- Reyes, C., Mina, C., Crean, J., Guzman, R. D. and Parton, K. (2009). Incorporating regional rice production models in rice importation simulation model: A stochastic programming approach. Discussion Paper Series No. 2009-28. Philippine Institute for Development Studies, September 2009.
- Reyes, R. A. (2016, February 22). Marcos' Green Revolution. *The Manila Times*. Retrieved March 18, 2018, from http://www.manilatimes.net/marcos-green-revolution/246377/.
- Slayton, T. (2009). Rice crisis forensics: How Asian governments carelessly set the world rice market on fire. Working Paper. Washington D.C.: Center for Global Development.
- Slayton, T., and Dawe, D. (2012). The World Rice Market Crisis of 2007–2008. In Dawe, D. *The Rice Crisis*, pp. 15-52. Routledge.
- Tolentino, V. B. J. (2002a). Governance constraints to sustainable rice productivity in the Philippines. In M. Sombilla, M. Hossain & H. B. (Eds.), *Developments in the Asian Rice Economy*, pp. 153–172. Los Baños, Laguna: International Rice Research Institute.
- Tolentino, V. B. J. (2002b). The globalization of food security: rice policy reforms in the Philippines. *Philippine Journal of Development*, 29(2), 27.