

Bakit nagmahal ang bigas noong 2013? At bakit mahal pa rin? The continuing saga of rice self-sufficiency in the Philippines

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Introduction

The rice price spike experienced in the third quarter of 2013 alarmed the public. The retail price of rice shot up to PHP 36.28 in December from PHP 32.37 in June 2013, or a 12-percent increase in six months. Speculations spread about the cause of the spike, the most popular of which was the hoarding by private traders. The Department of Agriculture (DA) Secretary himself has been quoted as blaming rice cartels for price manipulation.¹ These cartels were perceived to be in connivance with rice smugglers in an unholy alliance.

It is easy to blame rice traders and smugglers for price manipulation, but it is another thing to produce evidence for this accusation. Price manipulation would entail

restriction of supply from all sources, including from outside the country, which is not exactly consistent with the problem of rampant smuggling in the imagination of the public.

This *Policy Note* is the outcome of a study on the actual state of rice supply in the country, which was conducted in line with the participation of the senior author in hearings convened by the Senate Committee on Agriculture and Food. It has been

¹ <http://www.philstar.com/business/2013/10/20/1247168/p-noy-rules-out-rice-importation>.

PIDS Policy Notes are observations/analyses written by PIDS researchers on certain policy issues. The treatise is holistic in approach and aims to provide useful inputs for decisionmaking.

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Figure 1. Monthly retail price of regular milled rice, in PHP/kg, 2011–2013



Source: Bureau of Agricultural Statistics-Philippine Statistics Authority (BAS-PSA) [2014], CountrySTAT

Box 1. Rapid appraisal of the state of competition in rice marketing

A rapid appraisal study conducted by Dela Peña (2014) finds that strong competition prevails at all levels of the rice supply chain. At the farm level, farmers can freely choose their buyer among a number of buying stations and agents present in their community. Even when they avail of loans from traders, those traders still give them the highest price possible due to the fear of “losing out to another buyer” and of “not being able to collect the loan”. In the case of millers, such as in the Intercity Industrial Estate in Bulacan, prices are very competitive; with more than a hundred mills in this big cluster, any difference in price, however small, is quickly exploited. No evidence is found to prove that one or a group of market players collude to influence the direction of the market. Consistent with this finding, marketing margins are small: at most, the margin at the wholesale level is 2 percent, while the margin is 5 percent at the retail level at most. Even if collusion exists, the ability of traders to influence the market price is negligible.

² Views expressed herein are the sole responsibility of the authors and are not to be attributed to the PIDS.

submitted as a position paper of the authors to the Committee.² The study looks into the rice price spike in 2013 by taking a different approach instead of subscribing to the notion of secret conspiracies. The alternative explanation taken by the study invokes nothing more than standard supply and demand. **It proposes that the inadequacy of supply starting from mid-2013 can be attributed to the reduction in imports due to government policy. Such reduction was neither compensated for by a commensurate increase in domestic production nor by a timely release from the buffer stock.**

Movement in price and rice supplies

The movement in price recorded starting in June 2013 is clearly unusual following the remarkable stability of retail prices in the previous two years (Figure 1). Price manipulation by traders as an explanation is too arbitrary as it cannot account for the stable prices up to May 2013.

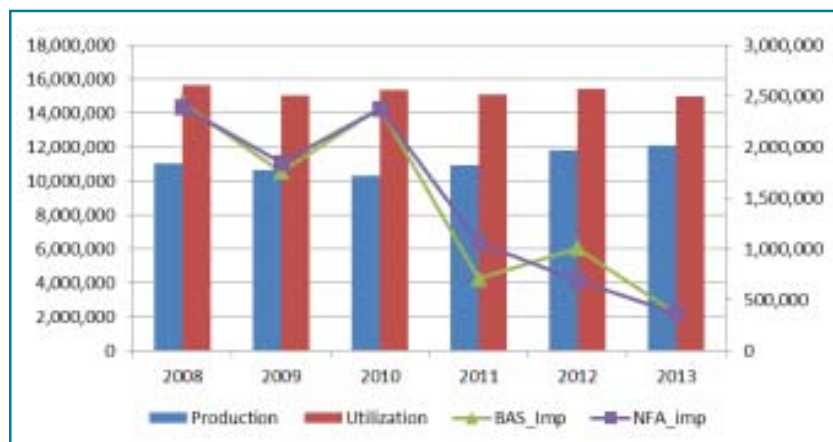
More importantly, the evidence flatly contradicts the stereotype of a cartelized rice market. Dela Peña (2014), in her rapid appraisal study, finds that the rice market is competitive along the supply chain. The chain is “multilayered with many competing players in each layer” (see Box 1 for details). This is consistent with previous literature on rice marketing reviewed by Briones (2013).

A more logical explanation for the changes in the supply of rice is the sharp drop in

imports (Figure 2). Comparing National Food Authority (NFA) and Bureau of Agricultural Statistics-Philippine Statistics Authority data for 2012, imports fell by 638,000 tons in 2013. This drop was in line with the goal of the DA's Food Staples Sufficiency Program (FSSP). This program sought a target of 100-percent rice self-sufficiency by the end of 2013 by raising domestic production and curbing imports. However, production targets were set at unreasonably high levels to achieve self-sufficiency by 2013 (Briones 2012). The palay production target for 2013 was 20 million tons of paddy from a target of 18.5 million tons in 2012. Since 2012, however, actual palay production fell far short of the target (Figure 3). While palay production did hit 18.44 million tons in 2013, up from 18.03 million tons, the increment of 439,000 tons (or an equivalent of 287,000 tons of milled rice) was not enough to counter the effects of the reduction in imports.

A closer look shows that the increment of 439,000 tons is not even an event independent of the import policy. It is very likely to be caused at least in part by the rise in domestic price. Farm gate prices in the second semester of 2013 were sharply higher than in 2011 and 2012 (Figure 4). Given import tightening from mid-2013, it is highly possible that the farmers also

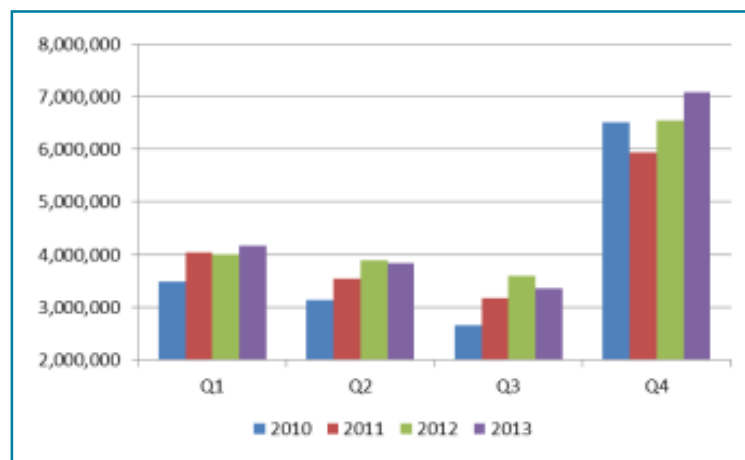
Figure 2. Production, utilization, and imports, in tons, 2008–2013



Notes on NFA importation:

1. 2008 Importation by the private sector under the minimum access volume (MAV)
 2. 2010 Import arrival inclusive of donation/relief (arrived on March 1, 2010) consisting of 10,000 tons under the East Asia Emergency Reserve Program and 7,000 tons under the Food for Progress Program of the United States
 3. 123,251.79 tons under the 2011 MAV (Omnibus Origin) that arrived in 2012
 4. 2013 Importation under the MAV Omnibus was imported by the NFA
- Source: 2008–2012, BAS-PSA (2014); 2013, authors' calculation; National Food Authority (NFA) [2013]

Figure 3. Rice production by quarter, in tons, 2010–2013



Source: BAS-PSA (2014), CountrySTAT

anticipated the price of paddy rice to rise in the last harvest season of 2013 and thus planned for a higher level of output. This could explain the clear improvement in harvest during the fourth quarter of 2013

compared to the same quarter in the previous years. The farmers made a profit from their correct forecast.

These trends were advantageous for the farmers but clearly not for the consumers

Figure 4. Monthly farm gate price of paddy, in PHP/kg, 2011–2013



Source: BAS-PSA (2014), CountrySTAT

Table 1. World vs. domestic prices (Thai Rice 25-percent broken), nominal protection rate, 2013

	World Price (PHP/kg)	Domestic Price (PHP/kg)	NPR
January	23.24	29.81	28.28
February	23.18	29.76	28.41
March	23.04	29.70	28.91
April	23.32	29.71	27.42
May	22.20	29.82	34.32
June	21.92	30.34	38.41
July	20.81	31.57	51.73
August	19.72	32.90	66.80
September	19.79	34.00	71.84
October	19.27	33.45	73.57
November	18.63	33.55	80.10
December	18.60	34.16	83.70

NPR – nominal protection rate

Sources: BAS-PSA (2014), CountrySTAT; World Bank (WB) [2014], Pink Sheet (Thai 20% fob)

who took the brunt of higher rice prices. With less imports, the country missed taking advantage of the cheap rice available in the world market. For instance, the border price of “Thai Rice 25-percent broken” was PHP 23.24 in January 2013 while the domestic price of the same rice variety was PHP 29.81 (Table 1). In January 2013, the nominal protection rate—the percentage difference between the border price and the comparable domestic price—was 28.28 percent; this increased to 83.70 percent by December 2013.

The role of NFA

The NFA is responsible for controlling imports in adherence to government policy. Even if NFA had tightened rice imports, it could still have forestalled the price spike had it offset the deficit from its buffer stock. In fact, during the first semester of 2013, NFA’s rice distribution was lowest compared with the level in the same period in 2011 and 2012 (Figure 5), while rice procurement was highest (Figure 6). Rice distribution did increase during the lean season from July to September but the amount of releases were similar to those made in the same period of 2011, when the supply situation was normal and the prices were stable year-round.

Why were NFA’s releases so inadequate?

There are several reasons for this. First, the government had a limited stock for responding effectively to the price spike. As

shown in Figure 7, the total NFA stock in June 2013 was already low to begin with. By the end of June, its amount was supposed to be equal to three months of consumption or about 950,000 tons of milled rice, but NFA only held 700,000 tons. Furthermore, NFA stock should not fall below 15 days of consumption at any time, or about 475,000 tons. The stock level had fallen to 300,000 tons by December 2013 due in part to the support to relief activities in the aftermath of Typhoon Yolanda.

Second, controls on the release of NFA rice constrained a rapid response to a price spike. NFA rice was subsidized by the government and was sold between PHP 25 and PHP 28 per kilogram. This created a temptation for traders to purchase NFA rice and mix it with regular rice sold at market prices. NFA therefore instituted a number of controls to avoid abuses. Sale was allowed only through accredited retailers and limits were placed on the size of a single transaction.

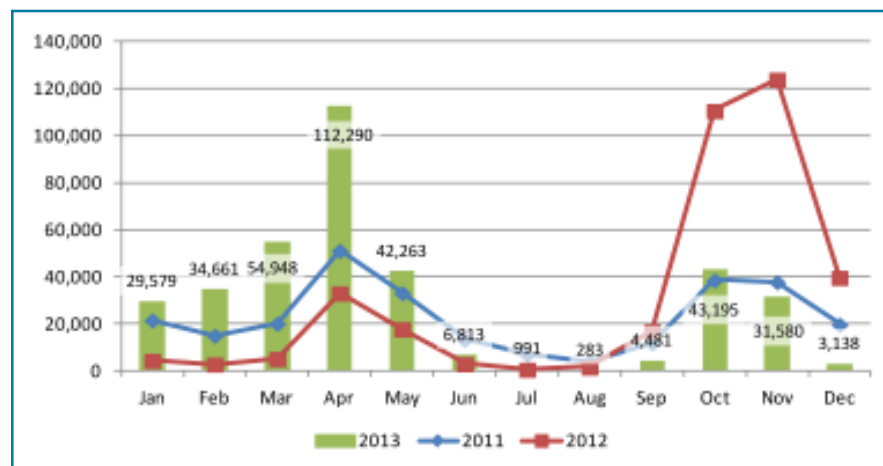
Finally, NFA is being required to reduce its liabilities and subsidy. Based on the Budget

Figure 5. Monthly distribution of NFA rice, in tons, 2011–2013



Source: NFA (2013)

Figure 6. Monthly procurement by NFA, in tons, 2011–2013



Source: NFA (2013)

of Expenditures and Sources of Financing (BESF) of the Department of Budget and Management (2013), the official data on NFA's total liabilities for fiscal year 2014 has amounted to USD 4.39 billion. The "buy high" and "sell low" business model of NFA has placed intense pressure on its finances.

Figure 7. Monthly stock of NFA rice, in thousand tons, 2011–2013



Source: BAS-PSA (2014), CountrySTAT

Given these constraints, it is easy to see why the NFA could not respond quickly enough to use its buffer stock and prevent the mid-year price spike.

Total Welfare Impact Simulator for Trade (TWIST)

To quantify the effect of the 2013 import restriction, we applied a computerized model of the rice market based on supply and demand interactions. The model can generate projections related to price, consumption, production, imports, as well as impacts on the well-being of consumers, producers, and importers. The model is called Total Welfare Impact Simulator for Trade (TWIST).

Simulations using TWIST are structured according to three scenarios: baseline, reduction in quota, and free trade. The baseline scenario represents the rice market

in 2012. (Unfortunately, official data to construct a baseline for 2013 are not yet available.) The impact of the import restriction is represented by the reduced quota scenario, which imposes the actual 2013 quota on the 2012 baseline. It answers the question, “What would have happened to the rice market in 2012 had the government imposed the tighter quota of 2013?” Meanwhile, the alternative of

free trade answers the question, “What would have happened had consumers gained access to cheaper world prices?” Two important items should be noted in the simulation:

- The baseline data for 2012 used BAS figures on imports. These figures likely incorporated smuggling, as BAS data recorded imports of 1,000,000 tons whereas NFA data (which recorded only imports covered by NFA permit) were lower by about 300,000 tons.
- In 2012, given low world prices and a strong peso, the nominal protection rate was very large (approaching 70%). Unfortunately, the simulation did not work as well for very large adjustments.

Baseline scenario

In 2012, the reference year of the baseline scenario, the monetary equivalent of benefits enjoyed by consumers from the rice

market was PHP 363.5 billion (Table 2). Producer welfare was only PHP 43.9 billion. Gross margin of importers amounted to PHP 10.7 billion. The total economic benefit amounted to PHP 418 billion.

Scenario 1: reduced import quota

Reducing the import quota by 631,000 tons would lead to a PHP 2.28/kg increase in the retail price of rice, equivalent to a 7-percent increase from the baseline price. The producer surplus would increase by PHP 6.9 billion pesos. However, consumer surplus would fall by PHP 25.6 billion. Note that despite a higher price, the importer's margin would fall by PHP 5.9 billion. Overall, the economic benefit to society would decline by PHP 24.5 billion.

Scenario 2: free trade

Under a free trade scenario, rice imports would have added nearly 3 million tons. This is admittedly an overestimate, but certainly imports at free trade prices would be dramatically larger than under a situation where quantitative restriction (QR) is imposed.

At the retail level, the price of rice would fall to just PHP 21.43/kg, which is 33 percent lower than the baseline. Hence, consumers would have benefited greatly, with their gain increasing by PHP 132 billion. Meanwhile, producer benefit would have declined by P25.6 billion. The margin enjoyed by importers would be totally eliminated. The whole economy would benefit by as much as PHP 95.7 billion.

Table 2. TWIST results

	Baseline	Changes from the Baseline	
		Reduced Quota	Free Trade
Imports (tons)	1,000,000	-631,000	2,951,865
Retail price (PHP/kg)	32.08	2.28	-10.65
Welfare measures (PHP millions)			
Consumer benefit	363,459	-25,570	132,005
Producer benefit	43,881	6,905	-25,604
Importers margin	10,653	-5,881	-10,653
Total economic benefit	417,993	-24,547	95,749

Source: Authors' calculation

Conclusions and recommendations

A short-term solution to enable NFA to respond to a rice price surge is to allow it to sell rice from its buffer stock at the market price. This way, NFA would be able to recoup its cost from palay procurement and create a space for it to maneuver during an impending rice crisis.

But this is just a stop-gap measure. **A long-lasting and permanent solution is to repeal the QR policy on imports to support the rice self-sufficiency objective.** Self-sufficiency should be pursued with more realistic targets and more cost-effective support mechanisms to rice producers (such as research and development and extension

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A more flexible policy toward imports should be adopted. **Such a policy can take the form of tariffication**, a reform that requires new legislation. Tariffication offers a level of protection to farmers while allowing automatic adjustment of import levels in response to domestic production fluctuations. Rice importation should be done by the private sector, subject to payment of import duties, and in compliance with import licensing and permits to maintain food safety and environmental health. Reforming the functions of NFA is recommended. NFA should focus on regulatory duties and management of the domestic food security stock and not on rice marketing and importation. 📄

Postscript:

In February 2013, DA Assistant Secretary Dante Delima announced the government's plan to import one million tons of rice for 2014. An initial 800,000 tons will be part of an import plan to be announced by the NFA. "The economic managers see it crucial that the volume should be imported to help stabilize prices and lower the inflation rate," Delima said (Canlas and Galvez 2014).

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