POLICY BRIEF NO. 8

RICE PRICES AND FARMERS DISCONTENT

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OCTOBER 2000

Rice Prices and Farmer Discontent

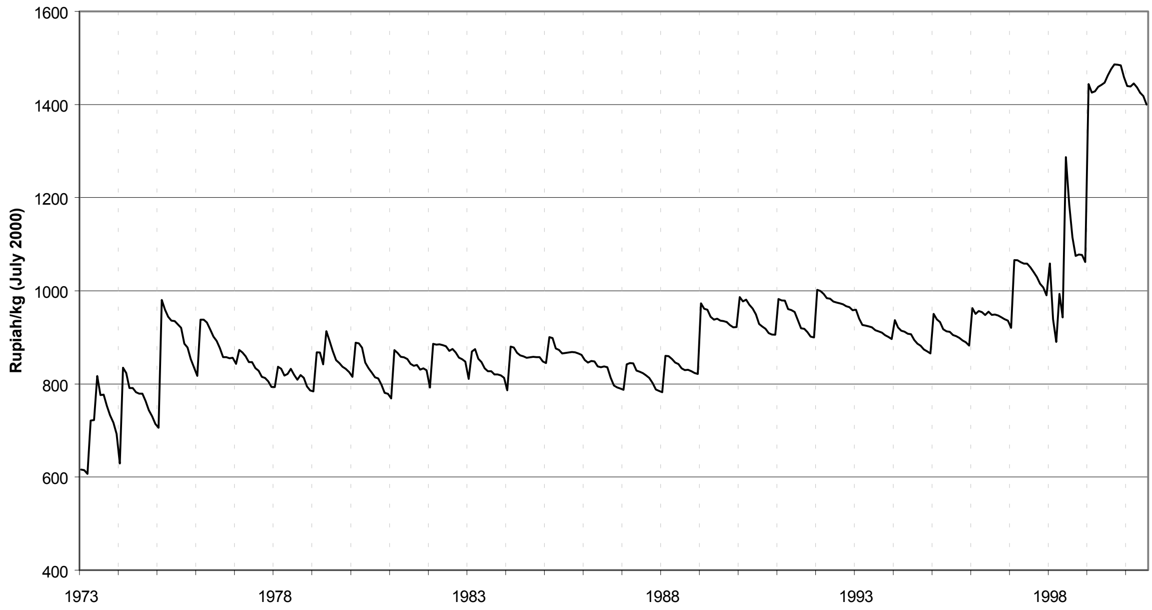
Over the past three weeks the media has been filled with articles related to the growing anger of the farming community. The main target has been low *gabah* prices, as it was during the time of the main harvest, but several commentators have attempted to link all agrarian problems to inaction on the part of the government. While the myths abound, rice prices are low and the underlying causes require sorting out before policies that may sound good but be ineffective are adopted.

Myth 1: The Terms of Trade have been against the farming community for a long time.

This is a simplistic argument that misses the point but continues to be put forward by the media and by various experts. Over the long term, it is clearly the case that farmer welfare has improved, in large part because of government policies. From 1970 to 1995, agricultural GDP grew at an annual rate of 5 percent, real incomes of rice producers tripled, and Indonesia's production of rice tripled as well. Because rice still provides about one-half of all calories and more than 50 percent of all protein in Indonesia, the major advance in food production contributed directly to improved human nutrition. The growth of the rural economy was the foundation of Indonesia's enviable record of decreasing overall poverty rates from about 65 percent of the total population at the beginning of the 1970s to 12 percent by 1996.

Figure 1 on the following page highlights this point by showing how the real floor price of rice has been rising slowly over the past twenty-five years. Clearly, government policy was supportive of rice farmers. But the purpose of this policy was to encourage farmers to adopt new technology to improve their productivity. It was improvements in productivity that generated the substantial growth in real incomes over that period. Unfortunately, productivity growth in agriculture and food production began to decline in the early 1990s. The agro-industrial transformation which characterized economic development in most East Asian economies became distorted in Indonesia as rice producers were slow to diversify into other, higher value commodities, largely because of structural weaknesses in industrial and trade policy, as it affected agriculture. The sector increasingly suffered from reliance on non-market mechanisms (monopolies, price and trade controls, and parastatal domination of commercial agricultural industries) and policy favoritism toward political cronies.

Figure 1. Real Floor Price (GKG Terms)
1973 - 2000



The data in Figure 1 also point out a significant fact: the increase in the floor price in December 1998 was so large that it moved the real floor price well out of line with its historical level. Such a large increase in the real floor price should have, and did, create two problems. First, it became very difficult, if not impossible for Bulog to defend the floor price. Second, it encouraged farmers to substantially increase production. Clearly, some of today's problems stem from the expectations that were created around an indefensible price. Ultimately, the government should be seeking to bring the floor back into line with historical trends. The proposal that has been made in other memoranda that the government should abolish the floor price and establish a viable procurement price, would be a step in the right direction.

Myth 2: Real domestic rice prices have been low for sometime[1]

Beginning in the second half of 1997, the Indonesian rice economy entered a period of crisis due to unfavorable weather patterns, financial market disruptions, and political uncertainty. Low productivity combined with a rice floor price that deteriorated significantly in early 1998, significantly lowered farmer real income in the early months of the crisis. However, by mid-1998, when Bulog lost control of the rice market, rice prices rose rapidly and

[1] This issue has been more completely addressed in "Rice Price Policy Options in the Short Term," Sept 1, 2000.

returns to rice farming increased tremendously in both nominal and real terms. For instance, BPS's survey of the cost structure of paddy and secondary crops in 1996, the last survey prior to the crisis, indicated that the average producer of paddy in Indonesia received Rp. 1.94 million per hectare for his crop and had costs of Rp. 0.57 million. Thus the farmer received Rp. 1.37 million per hectare for his labor, management, and land. For the period from September 1998 to August 1999, the same average Indonesian farmer received Rp. 5.11 million per hectare for his crop and had costs of Rp. 1.32 million. Thus the farmer in 1998-99 received Rp. 3.79 million per hectare for his labor, management, and land.

There are a number of ways to compare the excess of revenues over direct costs for the two period in real terms. The easiest is to use the change in the CPI over that period. On that basis, farmers in 1998-99 were 33% better off than they were in 1996. The problem with that comparison is that it is based on an urban price deflator. If one uses the deflator for farmer household expenditures (KRT) from the farmers terms of trade, the real increase is substantially smaller, on the order of 5% depending on the provincial data used to deflate the data, but is still up in real terms.

This positive result for farmers was due to the relatively high average nominal price of Rp. 1216/kg of paddy that was received during 1998-99. Since then record or near record harvests combined with an inability of Bulog to defend the floor price have depressed domestic rice prices deteriorating the returns to rice farming.

Myth 3: The decline in rice prices this year represents a failure of the market

News reports on rice this year have been dominated by reports that farmers are receiving prices of Rp. 700-800/kg[2] or less for *gabah* that "should" be purchased for the floor price of Rp. 1020/kg. Some observers have suggested that this proves that the market is not working.[3] In fact, the story of *gabah* prices in Indonesia in 2000 is a perfect example of the problems that excessive government intervention can cause.

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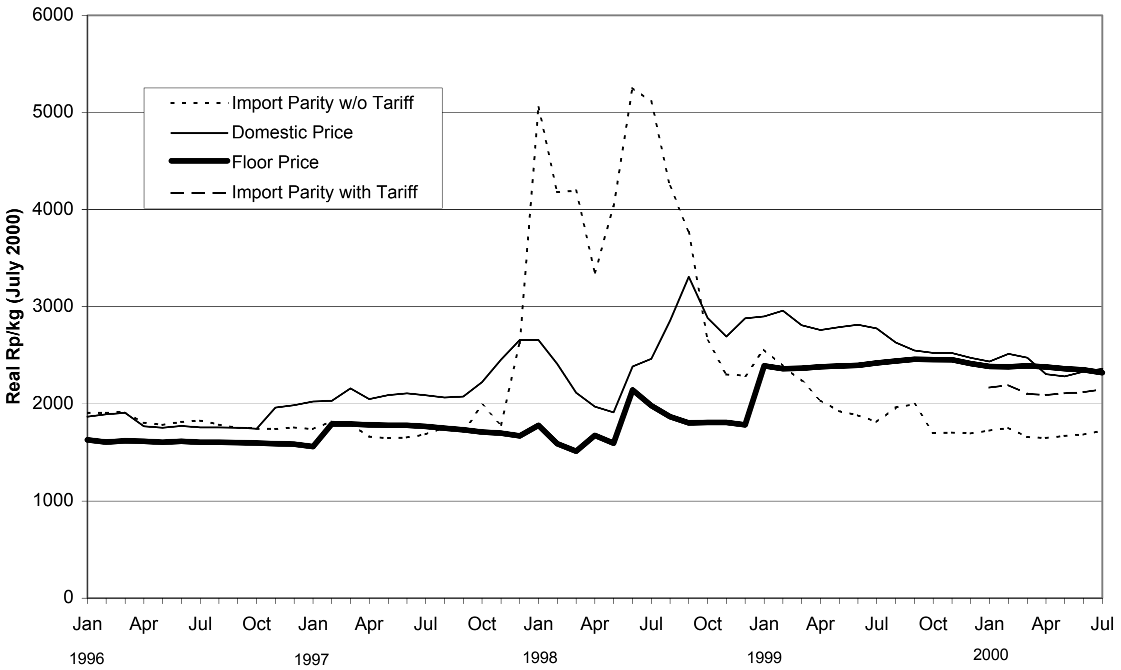
[2] The Ministry of Agriculture has recently surveyed *gabah* prices in various areas of the country. Very low prices have been concentrated in South Sulawesi. That area generally has a very large surplus this time of year and has been exporting small volumes of rice to other countries.

[3] Most of the experts quoted in the papers on the issue of low *gabah* prices treat the *gabah* price as if it is simply a supply-side problem: the price of *gabah* must be high so that we can produce more rice. If one viewed this from the demand side, one might wonder why low prices are bad. Nearly all of the commentators ignore the fact that only a small part of the population of the country are net rice producers. The majority of the population that are net rice consumers benefit from lower prices. Moreover, given the large share of rice in poor people's expenditures, falling rice prices actually lower poverty.

As noted above, real rice prices collapsed in early 1998 as domestic inflation took off and the rupiah sank. When Bulog lost control of rice prices in mid-1998, the nominal price rose dramatically in both the final and farm-gate markets but price instability continued through the rest of the year. In early 1999, however, a process of smooth transition began, and the rice economy is now well on its way to a renewed period of stability. The world price of rice in real domestic currency equivalent terms has been stable for nearly a year at

Figure 2. Real Rice Prices Adjusted to the Wholesale Level in Jakarta
Jan. 1996 - July 2000



the same level that prevailed in 1996. (World prices in dollars for rice have fallen, but depreciation of the exchange rate has provided protection to farmers and fully offset the fall in the world rice price.) Although the domestic wholesale price for rice is still substantially above the import parity price, it is on a steady transition toward realignment with trend world prices – as was the case for most of the 1980s and 1990s.

Throughout the period of crisis, real domestic rice prices never fell below the levels that prevailed in the earlier part of the decade, see Figure 2 above. For a full year (August 1998 to July 1999), domestic rice prices were nearly 60% above the average price in 1996. After reaching a peak in the second half of 1998, real rice prices have steadily declined toward import parity levels. Farmers are still protected, however, as domestic rice prices are about 40% higher than comparable world rice prices. This continued gap is due to a specific tariff of Rp. 430/kg and the uncertainty that continues to surround the exchange rate, which imposes risk on traders and provides a degree of natural protection to farmers.

There are three major factors putting downward pressure on current domestic rice prices. First, world rice price remain low. Today, Vietnamese 3rd quality rice can be shipped to Jakarta and Surabaya wholesale markets at $180/MT CIF or Rp. 2014/kg wholesale (inclusive of tariff) and at Rp. 8800/$. Given standard margins between the wholesale market and the farm-gate, as well as the fact that most *gabah* sold by farmers must be dried by the purchaser, a wholesale price of around Rp. 2000/kg is consistent with a farm-gate *gabah* price (GKP) of about Rp. 1025/kg.

Second, domestic rice stocks are relatively high; private stocks are unknown but Bulog currently has approximately 1.73 MMT in storage (including poor quality rice). High stocks make it risky for traders to purchase additional rice during the harvest period. Reduced purchases during harvests then depress prices.

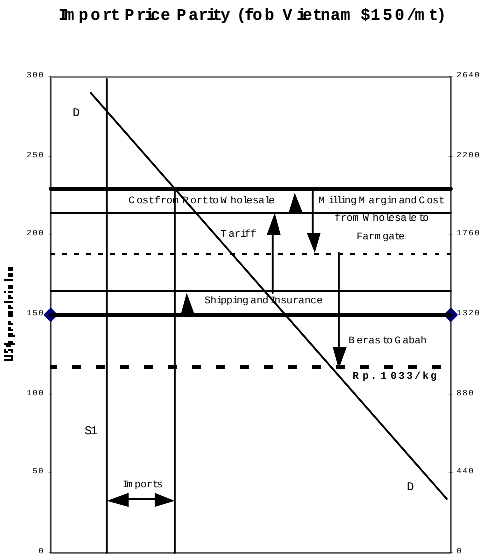
A third factor, never mentioned in the press articles, is that Indonesia is enjoying what will likely be the largest harvest ever during this calendar year. BPS recently revised upward their forecast of this crop to be 50.7 MMT (dried gabah) terms; sources in the private trade believe this figure will be 53 MMT. Given the high level of stocks, this may well mean that Indonesia has more rice than it needs to meet its domestic demand. Such a situation should lead to one of two outcomes. Either traders should begin exporting or the domestic price should fall to encourage additional consumption.[4]

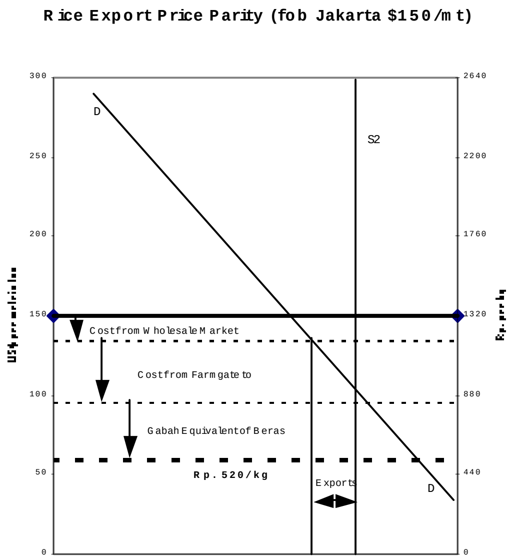
What evidence do we have that excess supply may be weighing on the market. The most obvious evidence is that the wholesale price for rice is now at about Rp. 1800-1850/kg in Jakarta and Surabaya. This is substantially below import parity if the tariff is being paid. One reason that prices may be low is that not all importers are paying the tariff. While some smuggling is certainly going on, the KaBulog and current Menko, Dr. Rizal Ramli believes that smuggling of rice into Java has been minimized. Most knowledgeable traders in the Jakarta and Surabaya markets share this view. This suggests that the low price of rice may be more of an issue of domestic supply than smuggling.

[4] A fourth factor depressing rice prices during some periods has been problems within Bulog itself. A large rice trader has documented for us how Dolog buying during the April/May period this year basically added a tax on farmers. Thus, while allegedly purchasing at the GKG floor price of Rp. 1400/kg = Rp. 1,020 GKP (farm gate), an average Rp.200/kg "tax" had the effect of moving the farm price close to where the real market price was (Rp. 850-1000) during that period.

How does this work? The key point is that a tariff only raises the price to producers if demand exceeds supply. In that case, the marginal source of supply of rice is the world market and the tariff-adjusted world price sets the market price. (See the left panel of the figure below.) However, if supply exceeds demand, then domestic market factors set the price of rice and the price of rice falls below the import parity price. (Se the left panel of the figure below.) In fact, it continues to fall until the export parity price is reached. In the example set out above, the export parity price is around Rp. 520/kg,[5] somewhat below the low prices that are being reported in some regions.

What can be done to raise prices if the problem is an excess of supply over demand? The only way to raise prices in such a situation is to increase demand at a higher price by significantly subsidizing exports. This could be done if Bulog were to purchase a few million tons of rice (*beras*) at Rp. 1400/kg and then sell it into the world market at approximately \$150/mt. The implicit subsidy to the export would be approximately \$130/mt. Therefore, a





market intervention amounting to 2 million tons would cost \$260 million or nearly Rp. 2.3 trillion. Whether such a market intervention would raise the domestic cost of rice is unclear, but it is clear that if such a program were announced, the incentives for smuggling would increase substantially and the government would almost certainly wind up having little net im-

[5] The Rp. 520/kg figure is obtained by taking the world price for Indonesian quality rice as \$150/mt and assuming that an exporter could receive that price fob Jakarta or Surabaya. From that price is subtracted \$15/mt for costs of moving rice from the wholesale market through the port. At Rp. 8800/US\$, this results in a wholesale price of Rp. 1188/kg. Assuming a margin of Rp. 350/kg between the market and the farm-gate and a *beras*-to-*gabah* conversion factor of 1.61, one derives a farm-gate price of Rp. 520.

pact on the domestic supply of rice.[6] Moreover, export subsidies are prohibited under the Uruguay Round agreements and any attempt to sell subsidized rice would almost certainly attract objections from rice exporting countries.

Myth 4: Imports are flooding Indonesia

A constant refrain in the news articles on the rice situation is the claim that imports are flooding the market. The data on rice imports support the proposition that some rice continues to be imported, but the level is not sufficiently large to be having a significant impact on the market.

Table 1 INDONESIA: Jan-Sep Imports by Grade, 2000 (Tons)

Quality	Imports
High Quality	
Fragrant	13,386
100%B	3,000
5%	97,351
Medium Quality	
10%	128,813
15%	298,874
Low Quality	
25%	636,820
35%	500
Brokens	11,015
Glutinous	87,418
Unknown	15,967
Total	1,293,144

At the beginning of the year, the overhang of 1999 imports undoubtedly had an impact on prices. Total imports for Year 2000 by grade are shown in Table 1 below. This total, through September of 1.293 MMT is almost equally divided between Bulog and private importers. The total for the year is not expected to surpass 1.5 MMT and may be less. At 1.5 MMT, this would represent only 4.5 percent of total rice available for the year. This does not

[6] There is recent evidence that this sort of behavior does happen. During April-August, 1999 Bulog/Dologs purchased 1.6 MMT of rice, an all-time record for that time of the year. Unfortunately, the vast majority of that rice, although procured at the floor price of Rp. 1400 (GKG), turned out to be imported rice from Vietnam and China. Thus Bulog's attempt to defend the floor price only contributed to setting a floor price for foreign rice farmers. The 400,000 MT of poor quality rice Bulog is currently attempting to auction domestically (which will mostly go to noodle factories) is from this stock.

represent "the flooding if imported rice" now taken as conventional wisdom by Jakarta-based pundits.

A theme running through much of the commentary on the rice economy today is that rice traders are speculators who are impoverishing rice farmers for their own gain. While those traders who are smuggling rice into Indonesia are criminals who should be prosecuted, the CASER field studies indicate that marketing margins from the farm-gate to wholesale markets are reasonable and suggest that the market for these services is competitive.[7] Targeting capricious rice traders as speculators and culprits totally misses this point.

Conclusion

There is certainly evidence that farm-gate prices are low and in some cases may be well below the posted floor price. However, with a record or near record harvest in 2000 here in Indonesia, significant stocks of rice, and low world prices, there is little that can be done to force prices well above world prices. The current tariff offers some protection to rice farmers and should be vigorously enforced. At the same time, Bulog should probably be attempting to sell of that portion of its stockpile that will not be needed for the OPK program, the remaining budget groups, and minimum stocking levels between now and the main harvest in order to enable it to purchase more rice in March and April. This may require it to export rice at a loss. At the same time, Bulog should publicly announce that it will no longer import rice. All of Bulog's purchases should be in the domestic market at an announced procurement price during the major harvest periods. This should give some certainty to the market.

That having been said, it is time for the government to recognize that the current low levels of domestic rice prices reflect long-term trends in the world rice price. To raise prices much beyond current levels will be costly to the government and will only send the wrong signals to our farmers. The current floor price is out of line with world prices and the historical series of real floor prices. Raising the floor price even higher, which Bulog would be even less able to defend, will only infuriate farmers.

Recognizing that the government can no longer micro-manage the rice market does not mean that it should abandon any role in the rice economy. There remains an important role for the government in supporting research into ways to increase farmer productivity, par-

[7] However, this is limited to the 5 regions where they are gathering data. There is a need to more systematically carry out a proper market integration study which documents, in the aftermath of the crises, how major regional markets are working today.

ticularly through the introduction of new rice varieties, that may well cause rice farmer incomes to increase significantly in the long-term. However, in the short term, the government should focus on enforcing the existing tariff and encouraging Bulog to prepare itself to purchase a significant quantity of rice during the main harvest next March and April.