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From Remarkable Success to Troubling Present:
The Case of BULOG in Indonesia

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1. INTRODUCTION

The initial success and subsequent failure of Indonesia’s Food Logistic Agency (Bulog=Badan Urusan Logistik) parallels the rise and fall of the Indonesian agricultural sector and economy as a whole. After more than 20 years of “revolution” in the country’s economic and political system, reflected in years of instability under President Soekarno, President Soeharto introduced an entirely new approach of the economy in the late 1960s marking the New Order regime. A key element of this approach was the government’s heavy investment in the rural economy to increase production of rice, the country’s most important food staple, supported by an effective policy to stabilize the price of rice.

Bulog was established in 1967 to implement the rice price stabilization policy, which was credible, transparent, and effectively enforced:

- A floor price kept the farm-gate price of rice well above the production costs. Bulog bought rice production not absorbed by the market, especially during harvest season. The procured rice was used to build a national buffer stock. The economic rationales behind maintaining the floor price above the market-clearing level were to protect against market failure, to ensure profitability of the farmers and to procure enough rice for Bulog’s operation.

- A ceiling price made rice affordable to low-income households, especially in the urban areas. Whenever prices went above the ceiling due to drought and other natural calamities, Bulog would sell cheap rice to targeted consumers. The argument in support of such market operations was to avoid price spikes, which could trigger social unrest similar to the ones experienced by the previous regime.

This pricing policy was successful in the first 30 years of Soeharto administration, in large part because the economic policy strategy was smoothly translated into organizational and implementation policies down to local level. Bulog was highly credited as a successful government institution in achieving price stability and effectively contributing to achieving and sustaining self-sufficiency in rice. The success of Bulog was characterized by a centralized management that had strong leadership and effective organizational command to implement the policy.

However, as the Indonesian economic policy shifted towards more openness, adopting de-regulation policies in international trade, banking, and finance, the closed and centralized management system within Bulog started losing its effectiveness and acceptability. From the early 1990s, Bulog performance attracted increasing criticism. The pressures on openness and democracy during the later part of Soeharto regime raised concern for reforms in the bureaucratic structure of the public administration. (Arifin,
2003). The stabilization policy became very expensive, given its declining impact on food price, as the share of rice in consumer-spending fell significantly.

The objective of this paper is to examine the success and failure of Bulog in implementing rice price stabilization in Indonesia. The paper addresses Bulog’s legacy in the last three decades, focusing on its involvement in food and agricultural trading activities that protected farmers and consumers significantly. It explores how a changing environment in the economy and politics of the country, as well as dynamics in international trade relations, affected Indonesia’s food security situation and recovery at large. The changing organizational format of Bulog raises the serious challenge of clearly defining the balance between the commercial function and public responsibility as a stabilizing agent. Bulog’s reform process should provide important lessons for future options for Bulog and for food marketing parastatals in other developing countries.

2. BULOG LEGACY OVER THE LAST THREE DECADES

During the first two decades of its operation, Bulog has been widely cited as a success story in stabilizing rice and other food prices. Bulog established a legacy as a powerful and effective public institution contributing to achievement of political stability. This stabilization strategy was effective primarily because the support systems from production, distribution and marketing were facilitated by the national government. As this power and privilege turned into a centralistic, monopolistic food stabilization strategy, it gradually got infected with inefficiency and corruption; and with that came increasing pressure from the donors and civil society to transform Bulog into a more transparent and accountable agency. The objective of this section is to examine the contrasting evidence of Bulog’s roles in stabilizing prices, ensuring food security, as well as contributing to the country’s agricultural and economic development. It will compare and contrast the first 20 years of success with the troubling experiences of the most recent decade.

2.1 Bulog’s Formation and Successful Years

The creation of Bulog as a food marketing parastatal was one of the key components of government intervention in agricultural and rural development of Indonesia. At the beginning, the government’s objective was to develop a marketing system over which it had control, as a strategic response to preventing hunger and peoples’ unrest. With a tumultuous economic history and persisting threats of famine and hunger, a popular perception within the society was that “rice was the barometer of the economy”. Large amounts of resources were mobilized to back up this perception and gain public confidence. Soeharto’s New Order government consolidated those interests into modernizing the rice economy.

The approach had three components: (1) investment in rural infrastructures to build the foundation for a dynamic rural economy, (2) development and dissemination of technological packages of high yielding rice varieties, fertilizer, pesticides and technical advice throughout the country, and (3) implementation and enforcement of price policies
to balance the interests of rice farmers, who wanted profitable prices; of rice consumers, who wanted affordable rice; and of rice traders, by allowing them to benefit from seasonal fluctuations in prices but avoiding serious distortions and smuggling (see Timmer, 2000).

The ultimate outcome was a remarkable increase in rice production in the country. Rice production grew by 4.6 percent per year during 1969-1990 period, significantly faster than population growth of 2.1 percent. The rice yield rate grew by 2.7 percent per year. The considerable growth in land productivity was achieved by massive government expenditures, including irrigation operation and maintenance, subsidized pesticides and fertilizers, subsidized credits for rice and secondary food crops, intensification programs, and buffer stock programs (Arifin, 2001).

In general, the growth performance of Indonesian agriculture can be divided into five stages: (1) consolidation (before 1978), (2) the fast growing period (1978-1986), (3) beginning of transformation (1986-1997), (4) economic crisis (1997-2001), and (5) post-crisis (after 2001). This performance is closely associated with the performance of rice production (Figure 1). In particular, the period of 1978-1986, experienced an agricultural GDP annual growth rate of 5.7 percent. All sub-sectors of food crops, cash crops, livestock and fisheries contributed to this growth due to the favorable environment created by the government’s re-focus on putting agricultural sector as a main basis for economic development. Part of this growth was brought about by a 5.6 percent annual growth in yield, a result of the Green Revolution technology in rural areas, which offset the declining land-labor ratio. More importantly, agricultural labor productivity in this sector also increased to 4.1 percent per year, demonstrating the important role of agriculture in poverty alleviation, particularly in rural areas (see Arifin, 2003).

![Productivity Figures of Rice, 1960-2001](image)

**Figure 1.** Productivity Figures of Rice, 1960-2001 (Land productivity in ton per hectare)
The success was a show-case made possible by the package of change based on “bio-chemical” technology in the agricultural sector. The rate of land expansion and intensification continued to increase because of high growth in the agricultural labor force. Production constraints imposed by unfavorable resource endowments in backward regions were offset by the introduction and spread of new bio-chemical inputs and investment in land infrastructure (Hayami-Ruttan, 1985). Agricultural development in Indonesia demonstrated the power of the strategy to promote and distribute input packages of high-yielding varieties fertilizer, pesticides, affordable credit, and extension services such as technical information, training and visits.

These strategies contributed to technological progress and stimulated agricultural growth, particularly by sustaining food production in the country. As a result of these long-term efforts, Indonesia achieved self-sufficiency level in rice production in the 1980s. During the 1985 World Food Summit, President Soeharto received an award for successfully transforming his country from being the largest rice importer in the world to self-sufficiency. More importantly, this achievement was accompanied with greater equality among rice farmers, and between rural and urban areas, in several places in Indonesia.

Political economy had a great deal to do with the success of Bulog. The public administration system of President Soeharto’s New Order regime consisted of people with strong commitment and was well-organized, and linearly commanded all the way from national to the district and village levels. The longest serving chairman of Bulog, General Bustanil Arifin, belonged to one of the close circles of President Soeharto, and also served as the Minister of Cooperatives in the 1980s. He had a clear advantage in making critical decisions and enforcing them quickly. The government allocated massive amounts of public resources in building warehouses, food management offices, and other infrastructure. Rural cooperatives (KUD=Koperasi Unit Desa) collected rice from local farmers, especially during the harvest season, and distributed rice, including imported rice, especially during the poor planting seasons, drought and similar adverse situations. With over 2,400 grain-warehouses in the country, the government had the largest network of food storage.

In public policy debates on stabilization strategies, Bulog was very effective in gaining support from academics in Indonesian universities on the importance of state intervention on food affairs for the country. One example of this support was acceptance of the “Big Country” argument, which was used to justify state control, including monopoly, over international trade. The underlying idea was that, since Indonesia’s share in total world trade was large, its trading and distribution could affect the world market of rice, which has traditionally been very thin and volatile. To substantiate such argument, several studies were conducted over the years. A recent government estimate suggests that each additional ton of rice import could increase the world price of rice by as much as US$ 50 per ton (Silitonga et al., 1997). Support for price stabilization program in Indonesia also came from the analysis of internationally reputed economists.

Some recent studies, however, argue that the world rice markets have matured, in terms of size and reduced volatility, and is likely to stay that way in the future (Dawe 2003).
2.2 The Troubling Years

Table 1 presents production and import volumes of rice since 1990, providing insights of the troubling years during the first half of the 1990s; the period of uncertainty during the economic crisis at the end of the 1990s, and the transitional period of policy reforms in the early 21st century.

Table 1. Harvested Area, Production, Yield and Import of Rice, 1990 – 2003

<table>
<thead>
<tr>
<th>Year</th>
<th>Harvested Area (000 ha)</th>
<th>Yield (ton/ha)</th>
<th>Unhusked Rice Production (000 ton)</th>
<th>Rice Production a) (000 ton)</th>
<th>Rice Import b) (000 ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>10,502</td>
<td>4.30</td>
<td>45,179</td>
<td>29,366</td>
<td>29</td>
</tr>
<tr>
<td>1991</td>
<td>10,282</td>
<td>4.35</td>
<td>44,689</td>
<td>29,048</td>
<td>178</td>
</tr>
<tr>
<td>1992</td>
<td>11,103</td>
<td>4.34</td>
<td>48,240</td>
<td>31,356</td>
<td>634</td>
</tr>
<tr>
<td>1993</td>
<td>11,013</td>
<td>4.38</td>
<td>48,181</td>
<td>31,318</td>
<td>0</td>
</tr>
<tr>
<td>1994</td>
<td>10,734</td>
<td>4.35</td>
<td>46,641</td>
<td>30,317</td>
<td>876</td>
</tr>
<tr>
<td>1995</td>
<td>11,439</td>
<td>4.35</td>
<td>49,744</td>
<td>32,334</td>
<td>3,014</td>
</tr>
<tr>
<td>1996</td>
<td>11,569</td>
<td>4.41</td>
<td>51,101</td>
<td>33,215</td>
<td>1,090</td>
</tr>
<tr>
<td>1997</td>
<td>11,141</td>
<td>4.43</td>
<td>49,377</td>
<td>32,095</td>
<td>406</td>
</tr>
<tr>
<td>1998</td>
<td>11,613</td>
<td>4.17</td>
<td>48,472</td>
<td>30,537</td>
<td>5,765</td>
</tr>
<tr>
<td>1999</td>
<td>11,963</td>
<td>4.25</td>
<td>50,866</td>
<td>31,118</td>
<td>4,183</td>
</tr>
<tr>
<td>2000</td>
<td>11,793</td>
<td>4.40</td>
<td>51,898</td>
<td>32,345</td>
<td>1,513</td>
</tr>
<tr>
<td>2001</td>
<td>11,415</td>
<td>4.39</td>
<td>50,181</td>
<td>31,283</td>
<td>1,400</td>
</tr>
<tr>
<td>2002</td>
<td>11,521</td>
<td>4.47</td>
<td>51,379</td>
<td>32,369</td>
<td>3,100</td>
</tr>
<tr>
<td>2003</td>
<td>11,453</td>
<td>4.53</td>
<td>51,849</td>
<td>32,697</td>
<td>2,000</td>
</tr>
</tbody>
</table>

Notes:  
  a) Conversion factor is 0.65 before 1998 and 0.63 after 1998  
  b) Import data are compiled from various sources

Sources: Central Agency of Statistics (BPS), various issues

Two contrasting events—a year of surplus and a year of large deficit—contributed to the beginning of troubling years for Bulog as price stabilization agency. The first event was when the country had a surplus in 1992/1993 that was reduced by subsidizing exports, resulting in a large increase in Bulog’s costs, raising serious questions about Bulog’s long-run role in the rice economy. The cost of rice price stabilization increased significantly compared to its benefits.

The second event started during 1993/94, when rice production faced a serious decline due to a bad drought. The price level of rice had to be stabilized by import of rice from the international market. The adaptation of “self-sufficiency on trend” approach by Bulog succeeded only partially in reducing the total costs of price stabilization. Bulog acted cautiously by importing three million tons of rice in 1995, even though rice production in that year was almost back to normal. This new dependency on rice import provided a serious threat to enforcing food policy for the country, especially in the eyes of common people who were accustomed to view Bulog as the responsible agency for rice price stabilization.

In retrospect, the period between the late 1980s and early 1990s marked a transition in the performance of Indonesian agriculture. The agricultural GDP grew only
by 3.4 percent per year in 1986-1997, as the agricultural sector declined among the government’s priorities. Agriculture became to be considered just “another sector” that contributed to economic development, reinforced by the fact that the share of agriculture decreased in the economy, while manufacturing and industry registered double-digit growth levels. Other sectors in the economy such as banking, trade and service sectors also grew very rapidly, misleading many economists and policy makers to conclude that the structural transformation has been completed. Government policies tended to adopt the condition of “take-off” (using Rostow’s term); the development strategy emphasized high technology and capital-intensive industries, including aircraft, petrochemicals, etc.

The welfare effects of agriculture growth performance decreased due to reduced labor productivity growth. The slow rate of agricultural growth was associated with policy priority shifting toward the industrial sector, which included labor-intensive exporting commodities, starting from the mid 1980s. Government expenditures in the form of fertilizer subsidies declined from Rp 756 billion in 1987 to only Rp 175 billion in 1991, with real term effects that were more severe. The rice subsidy was abolished in 1986 because of the presumption of full adequacy on rice self-sufficiency, and the fertilizer subsidy was finally removed in 1998 during the peak of the economic crisis. The promotion of industrial development in Indonesia was heavily protected in that period at the expense of agricultural sector growth (Arifin, 2003).

In addition, bad seasons of drought (El-Nino) in 1997/1998 and floods (La-Nina) in 1998/1999, which occurred during the severe economic crisis, and resumption of large scale imports of rice since 1998, raised questions about Bulog’s ability and effectiveness to stabilize rice prices, even in the short run. Empirical studies show that the overall policy implementation of price stabilization was transformed into economic distortion, imbalanced market power, and abuse of market operation, especially during the economic crisis (Arifin et al., 2001). These actions caused price disparities between producer or farm-gate price and retailer’s or consumer prices. In mid-1998, the price differences between producer and consumer prices were the highest in the history of rice.

2.3 Costs and Benefits

Table 2 summarizes the benefits and the costs, which include (1) the cost of running Bulog (for example, wages, warehouse rental, and interest); (2) the deadweight, efficiency losses of not having domestic prices conform to the short-run opportunity cost of rice as reflected in world markets; (3) a lack of diversification and flexibility in the farm sector as farmers were encouraged to shift production from other crops into rice because its price was relatively stable; (4) a potential retarding-effect on the development of a private marketing sector; and (5) both direct and indirect subsidies needed to keep Bulog continue its operation.  

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2 For detailed analysis on these costs, see Pearson, 1993; and Timmer, 1996, 2001.
# Table 2. Annual Costs and Benefits of Rice Price Stabilization in Indonesia

<table>
<thead>
<tr>
<th>Development Plan (Period Year)</th>
<th>Annual cost</th>
<th>Annual benefit</th>
<th>Remarks on benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pelita I (1969-1974)</td>
<td>30</td>
<td>300</td>
<td>About 1% of GDP growth</td>
</tr>
<tr>
<td>Pelita II (1974-1979)</td>
<td>40</td>
<td>270</td>
<td>About 0.61% of GDP growth</td>
</tr>
<tr>
<td>Pelita III (1979-1984)</td>
<td>80</td>
<td>n.d.</td>
<td>Share on GDP growth must be high enough as the economy enjoyed rice self-sufficiency.</td>
</tr>
<tr>
<td>Pelita V (1989-1994)</td>
<td>90</td>
<td>180</td>
<td>About 0.19% of GDP growth. Indonesia adopts the policy of “self-sufficiency on trend”</td>
</tr>
</tbody>
</table>

1991 Million USD

Sources: Adapted from Pearson (1993) and Timmer (1996, 2001)

During the First Five-Year Development Plan (Repelita I) (1969-74), costs of rice price stabilization averaged just US$ 30 million per year (in 1991 prices). These costs rose to about US$ 40 million per year in Repelita II (1974-79). Thus, during the first ten years of price stabilization, the program generated an average added value of US$ 270-300 million per year (in 1991 prices), or about nearly one percentage point of economic growth each year. The costs of stabilization rose to roughly US$ 80 million per year during the third and fourth Repelitas and rose only to US$ 90 million during the fifth Development Plan (Repelitas V) (1989-1994). During Repelita V, which ended on March 31, 1994, the average cost of stabilization declined as Bulog brought the costs of managing large surpluses under control. These cost reductions were a direct result of its adoption of a more flexible approach to achieving food security, "self-sufficiency on trend" – instead of year-to-year absolute sufficiency. However, the cost in 1993/1994 of the price stabilization program was more than US$ 90 million, at a time when the benefits had declined only about double this amount. In order to maintain Bulog as a cost-effective agency, Indonesia had to reduce the amount of rice distributed to the Budget Groups (civil servant and military) and the market operation program for the special target group of poor consumers.

Thus, at least in the early years, the contribution of Bulog was not inconsiderable. Timmer (1997) estimated that rice price stability increased overall growth by about 16 percent during 1969-74; 14 percent for 1974-79; and four percent during 1989-91 over what would have been otherwise. The benefits become smaller and smaller, the costs became larger and larger. A policy that was cost-effective initially, gradually became cost-ineffective.

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2.4 Special Interests

The influence of special interests became obvious in the 1990s. This was reflected through a practice of interlocking mechanisms between government / political elites and private sectors; non-transparent government decisions in rice-import process; and closed appointing of rice importers. Big conglomerates such as the Salim Group and former President Soeharto’s cronies dominated rice importers and importing activities. These companies generated economic rents and excessive profits from trading fees as much as US$ 10-15 per ton, in addition to benefitting from the price differences between world market and the fixed contract price set by the government. A large amount of rice import meant large economic rents. Under these non-transparent schemes of collaboration with government officials, the favored companies controlled the distribution system (Arifin et al., 2001).

The collaboration involved 12 big companies or conglomerates obtaining special authorization from Bulog to import rice from the producing countries. About half of these companies were affiliated directly and indirectly with the Soeharto’s cronies, controlling nearly 2 millions ton of rice with a total value of contracts about US$ 800 million in the fiscal year of 1997/1998. Bulog was not open in making decisions on quantity and quality of imported rice and in appointing contractors on import. Under the non-transparent schemes of collaboration with government officials, these silent operation activities were major contributors to loss and inefficiency in the state budget.

The magnitudes and the sources of inefficiencies in Bulog were staggering (Table 3). A financial audit report was produced by Arthur Andersen covering the period of

<table>
<thead>
<tr>
<th>Itemized Activities</th>
<th>Unfair Trading Requirements</th>
<th>Illegal Practices</th>
<th>Weak Monitoring</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurements</td>
<td>2.1</td>
<td>-</td>
<td>-</td>
<td>2.1</td>
</tr>
<tr>
<td>Transportation</td>
<td>0.1</td>
<td>-</td>
<td>-</td>
<td>0.1</td>
</tr>
<tr>
<td>Warehouses</td>
<td>-</td>
<td>-</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Processing</td>
<td>0.2</td>
<td>-</td>
<td>-</td>
<td>0.2</td>
</tr>
<tr>
<td>Sales and Distribution</td>
<td>0.1</td>
<td>1.8</td>
<td>0.3</td>
<td>2.2</td>
</tr>
<tr>
<td>Supporting Services</td>
<td>0.1</td>
<td>-</td>
<td>-</td>
<td>1.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2.6</strong></td>
<td><strong>1.8</strong></td>
<td><strong>2.3</strong></td>
<td><strong>6.7</strong></td>
</tr>
</tbody>
</table>

Notes: Exchange rate: US$ 1 equals to Rp 8500

During the period of audit (April 1993-March 1998), Bulog handled several commodities other than rice, such as sugar, wheat flour, cooking oil, soybean, soymeal, garlic, etc.

Sources: Government Announcement, October 11, 1999

Table 3. Estimated Amount and Sources of Inefficiency in Bulog (Rp trillion)

April 1993 – March 1998. The audit process by an independent auditor was quite controversial because Bulog was a government agency and the audit had to follow the
standard procedures used by the state auditor. In fact, Bulog enjoyed a dual status of “in-between” public agency and private company for quite long time. If Bulog generated “profit” or a difference between the revenue and cost from its trading monopoly in several commodities, then Bulog might contribute this “profit” to the state revenue, although it included in a non-budgetary system. However, if Bulog experienced losses due to improper trading practices and poor administration system, then the state had to bear the losses. The report suggested that the total inefficiency in Bulog over the five year period (April 1993 – March 1998) was Rp 6.7 trillion or about US$ 400 million per year. The sources of inefficiency in Bulog were associated with the effects of its activities on the private sector, such as unfair trading requirements that generate losses and inefficiency to Bulog which totaled about Rp 2.6 trillion. These include almost all activities involving the private sector such as procurement, transportation, sales and distribution and supporting services. In addition, interactions with private sectors generated more losses because of illegal practices and weak monitoring performance by Bulog or Bulog’s officials across the country. Illegal practices alone contribute to Rp 1.8 trillion (US$ 212 million).

The scope of rent-seeking also arose when Bulog assigned rural cooperatives (KUDs) to take part in the state rice procurement. In this case, KUDs had to follow certain rice requirements set by Bulog—such as 14 percent water content, 5 percent broken, 5 percent unripe, standards of cleanliness, etc.— in order to be considered as a business partner in the food security business. Instead of fulfilling such requirements, farmers choose private channels as their marketing outlets. The condition became much worse during the harvest seasons, when the farm-gate price fell below the floor price due to distress sales and over-supply. Special attention should be given to these repetitive phenomena in each harvest season; farmers rarely benefited, probably because of their price-taker status in rice trading. In a fair competition, farmers as producers should have freedom to choose which marketing agents they wanted to trade with. However, most farmers developed a social dependency with the collector-traders and so they did not always exercise their options (see Arifin et al., 2001).

Bulog handled other strategic commodities such as sugar, wheat flour, cooking oil, soybean, soymeal, garlic, etc. (Garcia-Garcia, 2000). The policy formulation being used in the domestic distribution and marketing of these commodities was not open; only limited circles in politics and business had access to market information. Bulog became a “very high profile” government agency where political and business interestes misused the privileges and monopoly power possessed by Bulog.

2.5 The Future of Bulog?

The larger question then, is whether Bulog should continue to stabilize rice prices, given that the rice sector is no longer the barometer of the economy, even though it is still significant in total food consumption. Tabor and Meijerink (1997) observe that price stabilization through Bulog might not be necessary under current conditions. There are

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5 Bulog made greater profits on these other commodities, and it could be argued that, given the greater economic importance of rice, perhaps dealing in these other commodities permitted it to be more “socially responsible” than it might have otherwise been in implementing rice policy.
reasons to support such arguments. For example, rice distribution is much better than it was thirty years ago, when Bulog was created; there have been significant improvements in road and irrigation infrastructures; and the economy is more diversified now than when Bulog was created. More importantly, competition in rice trading and marketing has improved in the last ten years so that market integration – both in the flow of goods and information – has significantly expanded. Therefore, the role of government should now be focused on assuring rules and regulation to encourage local markets to be more contestable and more integrated with regional and international markets. This is not going to be an easy task, but can start by relaxing restrictions and improving private sector participation and by finding alternative institutions to ensure food security, promote agribusiness, and creating enabling environment for agricultural activities that have higher potentials for growth.

Timmer (2001) argues for a reformulated rice price policy without reliance on a parastatal. He cite two major reasons for reform: (1) the very high expense of the recent programs and (2) the very high rice prices have provided a disincentive for farmers to make the transition to growing more profitable high-value commodities, which would be directed if market forces could prevail. He argues that a long-run decline in the price of rice in world markets and significant greater stability in world prices have now sharply lowered the opportunity cost of rice to the Indonesian economy.

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• Indonesia would rely much more heavily on rice imports for its food security, providing more challenges for policy makers to make some adjustments. Perhaps Indonesia could even take the lead in forming a free trade zone for rice in East and Southeast Asia (possibly to include Bangladesh and India as well).

• Substantial investments in rural infrastructure to improve efficiency of rice marketing would be needed so that traders and farmers would buy and store nearly all of the harvest.

• Continued development of rural capital markets would also be needed to ensure that the financial liquidity traditionally provided by Bulog procurement in defense of the floor price would be available from the formal banking system at reasonable rates to farmers and traders.

• Greater variability in seasonal prices would be permitted so that farmers and traders could earn adequate returns on their investments. Such variability would not be a problem for most consumers because rice has declined to a small and manageable share of their budget expenditures.

• In the case of large increases in rice prices in world markets (much less likely with a large Asian free trade zone) or localized shortages (much less likely with a
strengthened private market), subsidies to poor consumers could be targeted through special logistical efforts such as the rice-for-the poor program.

- Variable tariffs on rice imports might also be considered as a mechanism for stabilizing rice prices without the need for a costly logistical agency.

3. REFORMS AND TRANSITIONAL COMPLEXITIES

After being in business of price stabilization and food security for three decades, Bulog enters a transitional period of change and complexity. The fall of Soeharto in 1998 and the government’s binding letter of intent to the International Monetary Fund (IMF) have changed trade policy in rice. The linear and command system adopted in the last three decades also changed as Bulog lost its monopoly power. However, the process of openness in rice trade promoted by the IMF has presented serious challenges because the liberalization strategy has failed to strengthen the institutions involved in the rice business. The liberalization in rice trade promoted by the IMF was generally accused as the main contributing factor to the failure in performance of rice production and distribution systems as Soeharto’s successor, President B.J. Habibie, faced serious problems of establishing a solid foundation for reforms, let alone providing economic linkages to increase productivity at the farm level. This section provides a brief account of the complexities that the government has confronted with reforming Bulog.

Table 4 provides a summary of the direction for reforms on food policy in the country, including experiences in liberalizing trade of rice, improving targeted market intervention for food security and price stability, and changing Bulog’s status from a regular non-ministrial government agency to a state-owned enterprise. These reforms have a common long-term objective, to strengthen the development of private trade in rice marketing in Indonesia. Clearly, it is not easy to achieve the final outcome of the reforms in the food and agricultural policy because of transitional nature of political and economic reforms in the country.
Table 4. Summarized Reforms on Food Policy during Transition Period

<table>
<thead>
<tr>
<th>Date</th>
<th>Policy Reforms</th>
<th>Objective</th>
<th>Outcome</th>
</tr>
</thead>
</table>
| 1998  | Trade liberalization in rice (Letter of Intent to the IMF) | >To increase efficiency level of rice trade  
>To remove monopoly power of Bulog | >Rice import 5.8 million ton, the highest record. It is also associated with the decline in production because of drought |
| 1999  | Removal of fertilizer subsidy (Presidential Decree 8/1998) | >To improve the health of state budget  
>To contribute to increase in efficiency in production | >Fertilizer price rose, the use drop, but it cannot be separated with declining purchasing power. |
| 2000  | Tariff protection on rice and sugar (MoF Decree 368/KMK.01/1999) | >To provide incentives for farmers to rise production  
>To restore confidence in productivity increase. | >Total import decreased but amount of unreported rice imports increased |
| 2001  | New Floor Price of Rice (President Decree No. 9/2001) | >To improve the welfare of rice farmers, after more than 5 years of old price | >Farmgate price did not fall considerably, but rice smuggling increased |
| 2002  | Rice for the poor (Raskin) (New forms of market operation) | >To sharpen the target of rice subsidy  
>To improve special market operation of rice | >Helping mostly poor household in urban areas, but database not accurate |
| 2003  | Procurement Price Policy (President Decree No. 9/2003) | >To adjust some changes in rice stabilization policy | >50 percent of farmgate price fell below reference |
| 2003  | New format of Perum Bulog (Govt Regulation No. 7/2003) | >To improve efficiency in rice distribution and trade | >Questions on efficiency and good governance; |

Sources: Compiled from several sources

3.1 Immature Trade Liberalization

Major changes in food policy took place in 1998 at the peak of the economic crisis, just after Indonesia signed a binding agreement with the IMF on economic and financial reforms. One of the conditions was that rice imports be liberalized, removing Bulog’s monopoly on rice trade. At first the reform was well-received because it indicated an end of the rent seeking from Bulog’s monopoly by Suharto’s power circle. However, public support of trade liberalization diminished when rice production and people’s welfare failed to increase significantly. This was partly attributed to the fact that the liberalization strategy was not complemented with efforts to strengthen the economic institutions involved in the rice market and food policy implementation.

Since then, the average amount of rice import has remained high, averaging over one million tons, implying that Indonesia has become more dependent on rice imports. The effects of El-Nino 1997/98 and La-Nina 1998/1999 on rice production have seemed
so strong that production has remained low and cannot meet the growing demand of rice. Rice production in 2002 was 51.4 million tons or 4.5 percent below that recorded in 1996, before trade liberalization. Between 1995 and 1997, rice imports averaged 1.5 million metric tons per year, but between 1998 and 2001, rice imports averaged 3.3 million metric tons. Rice imports were highest in 1998 and 1999, and with the resumption of good weather, fell in 2000 and 2001. The amount of rice imports reached more than 3 million tons in 2002 as a result of flooding and low producer prices. In 2003, when rice quality dropped due to a late planting season and high rainfall in the harvest season, the growing demand of rice would most likely be filled by imports, which could be around 2 million ton or more.

Indonesia faces a serious challenge to formulate food and agricultural policy. On one end, Indonesia would like to comply with regional best-practices to reform agricultural trade. But on the other end, Indonesia and other developing countries are dissatisfied with high agricultural protection in industrial countries. The public suspicion that the IMF is an agent representing the interests of developed countries has grown significantly due to the Fund being more concerned about the micro-level of domestic policy, rather than structural adjustment at macro-level. The Indonesian people observe that IMF concerns have extended to the log-export ban, sugar liberalization, palm oil reforms and other agricultural commodities. As a result, Indonesian people perceive the IMF as having a hidden agenda of forcing the interests of developed countries. The fund has even been accused of representing a new breed of imperialism for developing countries.

In addition, removal of the fertilizer subsidy to comply with trade liberalization at the peak of the economic crisis was also controversial. On one hand, Indonesia was willing to remove the ineffective fertilizer subsidy, to reduce the budget deficit, and to maintain fiscal sustainability, given that the main consumers of cheap fertilizer were not small farmers but large-scale plantations and agribusiness. On the other hand, most people in Indonesia were not so eager to remove subsidies at home once they learned that developed countries were increasing supports and subsidies for their producers. They argued that trade liberalization should be developed based on fairness and openness, under equal opportunities among countries and level playing fields among economic players.

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6 Agricultural subsidies in developed countries, especially among OECD members, are now higher than at the end of Uruguay Round, in spite of falling commodity prices. This wide variation in the rate of support and protection across commodities in the OECD countries is an important source of distortion in global commodity markets (Tabor et al, 2002). Gross farm receipts were still on average 52 per cent higher in 2000 than they would have been without any support (OECD Report, 2001). For 1998-2000 the average percentage producer subsidy equivalent was nearly 15 percent for eggs, poultry and wool, between 40 and 50 percent for wheat, coarse grains and sheep meat, and more than 50 percent for rice, sugar and milk. Sugar and milk receive the highest levels of support in each producing country. Japan, Korea and the US provide high levels of support for rice. In 1998-2000, prices received by OECD producers and paid by consumers were, on average, over twice the level of world market prices for sugar and milk and about five times higher than the world market price for rice (Tabor et al, 2002).

7 The newly launched U.S. farm bill was evidence that protectionism still exists in developed countries. In the 1990s, the U.S. government support accounted for just over a fifth of total rice producer revenues and these were being gradually reduced in line with WTO commitments. However, this trend was reversed in
Issues of unfairness in trade liberalization has emerged more significantly because the removal of fertilizer subsidy was not supported by necessary and incentives policies to increase production. If any, these policies were not comprehensive or not working properly. Mass delivery of subsidized farm credit of Rp 10.5 trillion (equivalent to US$ 1.2 billion) during President B.J. Habibie transitional administration failed to stimulate rice production. This subsidized credit program was usually criticized of not involving the banking sector directly in the policy formulation. The banks were only channeling the subsidized credit program, not executing it. In other words, the subsidized credit program failed mainly because of the lack of the infrastructure and institutions necessary to implement these credit policies.

The half-way measures of trade liberalization were seen as being responsible for the productivity decline because the low price of rice has become a disincentive among farmers to increase production and productivity. In spite of fertilizer use declining, and of the harvest area of rice in 2000 decreasing to 11.7 from 11.9 million hectare, rice production reached about 51.5 million tons of unhusked rice (equivalent to 32.4 million tons of rice). Unfortunately, lower farm revenue for the majority of farmers, resulting from a continued decline in the farmgate price of rice created mounting pressure on the government not to liberalize the rice trade, but instead to increase protection through a tariff increase.

3.2 Abolition and Re-emergence of Tariff Protection

The pressures to protect domestic rice grew significantly during President Abdurrahman Wahid administration, who was elected by the Peoples Assembly in a very democratic General Election in 1999. Because the pressures were so intense, the government restored the protection policy using an import tariff on rice, the most common protection mechanisms currently allowable under the WTO agreement.\textsuperscript{8} Import tariff for rice was set at Rp 430 per kilogram or approximately 30 percent of world price at exchange rate of Rp 9,000 per US dollar. The policy objective was to protect rice farmers from cheaper imports, and to maintain domestic rice provision at an affordable price for rice consumers, living below the poverty line.

A number of arguments in favor of protection have emerged, such as the unfeasibility for most Indonesia’s small farms of 0.5 ha or less to compete with large, well-capitalized and highly subsidized agro-business firms in the developed countries. Uneven access to information, market infrastructure, and technology are among the important factors that make the agricultural sector in Indonesia and in other developing nations incomparable to the one in developed nations. Indonesian agriculture is especially constrained by a scarcity of arable land, high rate of agricultural land conversion to other uses, and low level of human resource development. Trade liberalization has been viewed as a trigger to an import surge of several food crops and in reducing farm income and to the mid-to-late 1990s. By 2000/2001, government subsidies – largely through credit programs – accounted for two-thirds of total rice producer revenues. The total US farm subsidies for rice in 2000/2001 was $1.4 billion. By dividing this amount to US rice export of the 2.6 million tons, the average farm subsidy to rice exports was equal to approximately $530 per metric ton. (Tabor \textit{et al}, 2002).

\textsuperscript{8}The Decree of Ministry of Finance 368/KMK.01/1999 on Import Tariff of Rice and Sugar was effective on January 1 of 2000.
increasing migration of the poorest farmers and landless laborers to already over-crowded urban slums (Nainggolan, 2000).

In addition, under free trade, it was argued that variability in world rice prices would be transmitted directly to the domestic market. World rice prices have historically been much more volatile than Indonesia's domestic rice prices over the past two decades. A high degree of price risk or price instability could penalize poor consumers and complicate the management of small paddy farms. Special interest groups, particularly from urban consumers have persistently advocated a high priority to stable rice prices. But critics of urban or industrial bias in agricultural development have argued that the phenomena could not be directly related to trade liberalization, but rather to inconsistent domestic food price policies and agricultural policies in general (Arifin, 2003).

Regardless of import tariffs, however, rice imports occur even during the main harvest season and there is ample evidence that a substantial portion of the rice is being smuggled or under-invoiced to avoid the import tariff. The price disparity between the world price and the domestic retail price of rice contributes to the flow of rice imports via wide-open and huge coastal areas and ports in Indonesia. Meanwhile, in the three years since trade has been liberalized, rice production has been two percent below the levels reached prior to liberalization. On a per capita basis, the difference has been even more significant. Per capita rice production was nearly 10 percent higher in the years immediately preceding liberalization than in the three subsequent years of liberalized rice trade. Rice yields were rising at a slow pace (approximately 1 percent per year) for the decade prior to trade liberalization. Since that time, rice yields have fallen by 0.15 percent per year. However, rice area has continued to increase since 1998, suggesting that farmers have few options other than paddy production on their flooded fields, but productivity is falling. This is consistent with low rates of profitability in paddy production and declining levels of agro-input use (Tabor et al., 2002).

A field observation on the policy performance of import tariff in Belawan port in Medan and Tanjung Priok port in Jakarta confirms that under-reporting or under-invoicing in rice import occurs and can reach as high as 50 percent of actual imports (Arifin et al., 2002). Data on actual imports may need further verification, but data on rice exports to final destinations in Indonesia, compiled by The Rice Trader also suggests severe under-reporting. Although, the causality between new import tax policy and under-reporting phenomena needs to be tested more rigorously using some econometric techniques, it is now very clear that this on-site distortion has some consequences on incentive systems to the rice producers, government revenues, and the food policy in general in the country.\footnote{The field study suggests that import registration and customs management practices suffer from a number of deficiencies that could contribute to smuggling and under-estimation of rice imports. Previously, almost all rice imports were shipped into the main Jakarta or Surabaya ports. Since the new trade policies, rice has been imported into small regional ports nationwide, making it easier to avoid customs duties and import tariffs and controls. The study also found that the majority of rice importers operating out of the port of Medan were registered under false names and false addresses and a small trader cartel dominated both rice imports and wholesale trade. In additions, customs usually requires cash payments; and the administration within customs procedures in Medan were not computerized or otherwise linked to the banks. Under weak}
Domestic policy is an important determinant of trade openness in rice and other agricultural products. The policy instruments usually include a combination of trade and buffer stock policies, to maintain adequate domestic supplies, to ensure domestic price stabilization, market operations, and support to the farm sector through income transfers. Since rice demand and supply conditions are price-inelastic in Asia, small supply shocks can result in significant domestic price risks and farm income volatility. Therefore, fluctuations in domestic production due to pests, drought and flood for example can result in price risks. Equally important, disruption of international trade flows to Indonesia and other Asian rice-importing countries can destabilize the domestic economy and undermine political stability.

3.3 Rice for the Poor

Indonesia has one of the highest levels of rice consumption in the world, with the average annual consumption reaching 116 kg per capita (Data based on the National Social-Economic Survey conducted by the Central Agency of Statistics, 2002). The majority (76 percent) of Indonesia households are net consumers of rice and the rest 24 percent are net producers. In urban areas, 96 percent of households are net consumers and only 4 percent are net producers of rice; while in rural areas, 60 percent are net consumers of rice, and 40 percent are net producers of rice. Given this composition, a 10 percent increase in the price of rice would lower the purchasing power of urban households by 8.6 percent and that of rural households by 1.7 percent, which is equivalent to increase the poor population by nearly 2 million people (Ikhsan, 2001). Because of inelastic demand of rice, these poor households generally suffer the most when the rice price increases. This implies that a rice policy to alleviate poverty cannot be limited to distributing subsidized rice to poor households. Food security policy in the future should be designed to provide also income opportunities.

The special market operation of rice (OPK= Operasi Pasar Khusus), later replaced by food-for-the-poor (Raskin= Beras untuk Orang Miskin), is relevant. The program is designed to reduce the impact of severe economic crisis by providing 10-20 kilograms of medium-grade rice every month to the targeted poor households or is equivalent to a cash transfer of Rp 15,000 (about US$ 2) per household. The rice-for-the-poor program is jointly implemented by Bulog and the State Minister of Social Welfare and local governments in all of Indonesia’s 27 provinces, using a data base compiled by the National Family Planning Agency (BKKBN) to identify the neediest households. The data focus on five indicators of overall standard of living and social affairs: food-intake, housing, clothing, and medical, and religious practices. In the first six months of implementation, the program successfully provided a monthly rice ration to approximately 9 million households using more than 30,000 distribution points. The food-for-the-poor program has reached around 64 percent of poor households in Indonesia, compared to the OPK market operation program which reached only 57 institutional arrangements and poor policy enforcement, the traders might collude with the clearance agents (with relations to customs) to "expedite" document approvals and release of goods.
percent of poor households. Unfortunately, the rice-for-the-poor program has began to experience problems (see World Bank, 2003).

Even though the rice-for-the-poor program was designed as an emergency-relief measure, it has operated like an alternative to rice price stabilization. In the near future, however, the challenge is to sharpen the cost-effectiveness of the program: to concentrate more of the assistance in urban areas, tighten eligibility criteria, increase public awareness, improve beneficiary reporting, and ensure that the program is extended and placed on a financially sound footing. In order to reach the large numbers of excluded urban poor, the government plans to involve non-governmental organizations in the distribution of subsidized rice and other foodstuffs. A better public-private partnership in relief distribution could extend the outreach of food-for-the-poor program as long as standards of program accountability are well maintained. The crisis has drawn attention to the fact that assuring food security is largely an income problem, that income levels can change rapidly, and that even some of the most prosperous parts of the country have large numbers of households without food security. The experience in the program should improve food security policies in the field by providing a better design for medium-term measures providing assistance to vulnerable households in the country. These measures might include a combination of targeted food subsidies, ration shops, village granaries, food stamps, and subsidized food stalls.

Indonesia is still facing seriously low calorie and protein intakes: 56 percent of the population consume below the required level of 2,150 kilocalories, and 36 percent of population consume below the the required level of 45 grams of proteins. Using these measures, index of food adequacy in rural area is 63, which is lower than that in urban areas (Arifin, 2001). These results suggest that a poverty alleviation program should go beyond providing cheap food and adequate calory intake, it should also emphasize community empowerment, establish efficient linkages between rural and urban area to generate new employment in the country. During the current period of transition, proper policies on food security and economic recovery are very difficult to formulate and implement without a clear priority and a time-frame to solve important issues on farm structures, inefficient production and distribution systems of rice and other foodstuffs in the country.

To face these challenges, future reforms must include food policy reforms at the macro-level and operational reforms in Bulog at the micro- and business-levels. The reforms on macro food policy have faced difficult circumstances: The slow pace of research and development (R&D) and technological change to increase the production; leveling-off of production and productivity in the last decade; declining capacity of the government to provide sufficient supports for farmers; declining world prices of rice due to globalization and trade liberalization; and small size land-holding of rice farmers. The micro- and business-level reforms in Bulog should focus on eliminating its dual function between private sector and government agency in order to which is generally argued to contribute to improvement in its efficiency, transparency and public accountability.
4. NON-PARASTATAL STATUS OF BULOG: THE FINAL FORM?

Effective January 20, 2003, the National Food Logistic Agency Bulog was officially changed to a state-owned enterprise (SOE) Bulog. This change was a response to public pressures to reform Bulog and to increase transparency and accountability on food policy and government policy in general. Complying with the new state-owned enterprise law (Law 19/2003), Bulog chose to become a general company. Under the new form, Bulog has a dual function as a pure profit maximizing body and as a public agency to distribute subsidized rice for the poor. Bulog is allowed to enter into other trading activities and strategic businesses as long as the government gives the mandate.

The major issue is that the new Bulog organization has no clear boundary between private and social responsibility. On one hand, Bulog’s activities continue to be very closely associated with price stabilization of staple food and other necessary commodities. So whenever the food price fluctuates sharply, people tend to blame Bulog for poor performance in implementing its social responsibility. People are not accustomed to seeing Bulog operating as a business entity. On the other hand, Bulog is also expected to play an important role in international trade and domestic distribution, primarily to generate profits for the state. It will take a long time before Bulog is able to disassociate from its past image of power association with elite circles, monopoly, cronyism, and political scandals involving a large amount of public money.

This section examines the new non-parastatal status of Bulog by focusing on organizational reforms, the business plan and its loopholes, and by providing anecdotal evidence on some of the recent challenges that the country is facing in terms of ensuring national food security.

4.1 Organizational Reforms

It took nearly three years to materialize the initial plan of reforming Bulog from a regular non-ministerial government agency to a state-owned enterprise (SOE). The major debates during the policy formulation included an unclear boundary between private and social responsibilities of the new SOE, public worries that Bulog would resume its monopoly power in some strategic commodities, and more importantly the absence of a major agency responsible for food security in the country. There were also concerns about the rationale for reforming Bulog and the future of food policy in the country. If the reason behind reform was to build a strong private trading and marketing system for rice in Indonesia, the new format of Bulog was on the right track, as long as Bulog and other players in the rice market complied with the Law 5/1999 on fair competition and anti-monopoly. However, if the reform process was intended to develop more transparency

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11 The law acknowledges only two forms of state-owned enterprises: (1) general company (perusahaan umum=Perum) where the state owns all of the shares and (2) limited company (perseroan terbatas=PT) where public can own some of the shares in open market.
and good governance in any public agency, the new format of Bulog did not fulfill these concerns.

Under the new organizational structure, Bulog has made ambitious business plans to operate as a conglomerate. Psychologically, the belief that Bulog may resume its monopoly power on strategic commodities after its removal by the IMF in 1998, is not impossible. Bulog could obtain the legal or institutional arrangements to resume its monopoly power. According to the new release of Bulog business plan, Bulog has planned in the short-term to expend its upstream food-related business such as rice estates, pocket(bag) factories, and rice mills; and its downstream businesses such as retail businesses, franchised retailers, transportation, rebate/super stores, pest control units, and storage businesses for rice and sugar (Figure 2). In the medium and long term, Bulog would develop its upstream activities, expanding its rice estates into food estates, CPO factories, feed factories, wheat flour factories, food processing plants, modern large-scale rice mills and other manufactures. For its downstream business, Bulog would develop its trading business such as export and import, chain hyper markets and super stores, centers for logistic information, hotels and other properties, gas stations and energy-based distribution centers, domestic and foreign cargo depots, and education and consultanting services. None of these has anything to do with ensuring food security or providing social safety nets—something that Bulog has traditionally done!
Only three months after its establishment, Bulog became involved in the marketing or distribution of sugar ("tataniaga") in the domestic market due to sugar scarcity in March-April 2003. The scarcity was the outcome of a new policy to increase sugar prices in the domestic market by administering the distribution scheme, about similar to earlier tataniaga causing distorting effects in the economy. In September 2002, the government launched a ministerial decree of trade and industry, allowing registered millers or importers who have used at least 75 percent of sugarcane from the farmers and are collaborating with farmers in its localities (Decree Number 643/MPP/Kep/9/2002).
The decree implied that only state-owned enterprises of PTPN IX, X, and XI, PT Rajawali Nusantara Indonesia (RNI) and PT Perusahaan Perdagangan Indonesia (PPI) qualified to import and supply domestic needs of sugar. Also implicit in the decree was the desire to keep the price of sugar high enough to create incentives for farmers to increase their production and productivity and for sugar mills to increase their sucrose yields and efficiency. Although not formally expressed in the ministerial decree, the role of Bulog was given the role to maintain buffer stock of sugar, including market intervention, whenever necessary.

But Bulog’s intervention in the sugar sector has not resulted in higher prices at the farm level, which would have generated a higher farm income for sugarcane farmers. It has instead only caused a price hike in retail sugar markets. Decree 643/2002 used a taniaga model similar to those applied to clove, orange and other strategic commodities, involving the cronies and elites associated directly and indirectly with the Soeharto regime. The President Megawati administration did not learn from the past failure of Soeharto’s New Order. It is also questionable whether the domestic policy of sugar distribution (such as the case of taniaga above) is compatible with the spirit of openness and fair treatment which can most benefit stakeholders in the sugar economy. A policy that aimed at increasing farm gate price of sugar could not solve many problems associated with the structural problems facing the sugar agro-industry such as a very low productivity at farm level, low sugar content of sugarcane, relationship between farmers, traders, and sugar millers, and inefficient operations of sugar mills owned by the state. Heavy government intervention and Bulog’s involvement in the sugar business cannot solve the above structural problems instantly, but the way Bulog operates does not differ very much from the old style parastatals system of state intervention in marketing and distribution of strategic commodities.

A recent scandal, which appeared in the public discussion and parliamentary debates in mid 2003, reports Bulog’s involvement in the recent purchase of military equipments of Sukhoi jetfighters and helicopters from Russia. This indicates that Bulog’s reform does not guarantee a model of transparency and public accountability as it was originally hoped. The scandal started with Indonesia’s immediate need of jetfighters to strengthen the air force and the necessary defense systems. Bulog was appointed to secure the initial finance mechanism for the purchase and to proceed with the deals. In close cooperation with Ministry of Trade and Industry, on behalf of the Government of Indonesia, Bulog arranged a counter-trade mechanism with Russia. Indonesia agreed to export agricultural products such as crude palm oil, rubber, pepper, etc. in return for four Sukhoi jetfighters and helicopters from Russia.12

12 The public debates regarding the Sukhoi scandal mostly concerned the following issues: (1) non-standard procedures of using the state budget given that the purchase was never proposed nor approved in the process of budget formulation, (2) decisions of military officials, which significantly bypassed the authority of the Ministry of Finance, and (3) the scope of Bulog’s activities, which (presumably) should be limited to handling foodstuffs, not military equipments. Public criticism directed at Bulog included its negligence in performing domestic procurement of rice by purchasing the excess supply of rice at farm level, the priority given to rice and sugar imports over domestic sources, and the old way of doing business which is generally associated with alleged monopoly and non-transparent mechanism in appointing third parties and contracts related to food distribution. The Sukhoi scandal provided a clear example of the fact that Bulog’s...
Thus, in order to achieve its goals, Bulog’s biggest challenge is to transform its former paternalistic and bureaucratic culture into a corporate culture. Bulog inherited a huge amount of assets over the country, approximately Rp 840 billions (US$ 100 millions), which later were converted into initial capital from the government. To supply the down payment for the jetfighters, Bulog had to apply for commercial credit of US$ 26 millions from the Bank Bukopin, which has only accumulated an initial capital of US$ 32 millions. Not surprisingly, the public is questioning whether borrowing so much money threatens Bulog’s public responsibility of food procurement to maintain price stabilization in domestic markets.

As a state-owned enterprise, Bulog must be prepared to compete with upstream and downstream businesses. Bulog’s competitors vary from regular farmers in rural areas to the well-established domestic and foreign corporations. Private trade businesses require fair and open management, good business ethics and uphold social corporate responsibilities. Former business cultures, which rely on political patronage from elite circles, would not survive in the more open world of business. At the same time, Bulog has also to maintain its public responsibility as a stabilizing agent of food and other strategic commodities in domestic markets. This obviously requires a clear job description for the management of Bulog, business priority in the first few years and a reasonable time frame to complete its transformation into a private entity. Otherwise, Bulog will not achieve any of its objectives for privatization nor its social obligations.

4.2 The Falling Farmgate Price of Rice

The first test for the reformed Bulog, and national food policy in general, was the drop in farm-gate prices of rice in 2003, which were far below the government reference price of dry unhusked paddy. The floor price announced by the Government was probably too high to be enforced given the quality of the rice harvest, or too different from the international price parity. Since January 1 of 2003, the new floor price was announced formally (Presidential Decree (Inpres) Number 9/2003), using similar criteria as those of the last three decades (please refer to Table 4). Requirement for dry paddy to qualify for the procurement price policy was also similar (14 percent water content, 5 percent broken and unripe, 3 percent bad grain). Also included in the Decree is the reference purchase price of rice at the consumer level, and notification that Bulog is the primary responsible party in domestic procurement – supported by other line agencies such as the Ministry of Agriculture, Ministry of Trade and Industry, Ministry of Finance, Ministry of Cooperatives, State-Owned Bank, the Central Bank, and Provincial and District/City Governments across Indonesia.

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13 Such as Indofood (food industries), Matahari, Hero, Carrefour, Giants (supermarket), Pertamina, Shell, Beyond Petroleum (oil, liquefied gas), Sudarpo Corporations (Cargo forwarding), Sahid Hotel, Inna Hotel, Holiday Inn, and other chain hotels.
The perennial problems remain and reappear in every harvest season. The farm gate prices fall below floor prices, yet farmers do not deliver to procurement purchasers, as they find it more convenient to sell through private channels than going through all the hassles of fulfilling the requirements. At the same time, rice procurement makes headlines whenever Bulog puts a high priority on imported rice to fulfill the national buffer stocks, instead of domestic procurement with its high transaction cost. A further complication arises from the declining world price of rice. Under current exchange rate of Rp 8,500 per US$, an average US $ 180 per ton of world rice price of medium quality (Thai 25 percent broken) is equivalent to less than Rp 1,600 per kilogram. As has been mentioned previously, regardless the import tariff of Rp 430 per kilogram (about 30 percent of retail price), imported rice seems more profitable for rice traders, including Bulog. As anybody can apply for an official permit to become a rice importer, the import of rice could take place anywhere in the Indonesian ports.

Table 5. Farmgate and Millergate Price Compared to World Price of Rice, 2003

<table>
<thead>
<tr>
<th>Month</th>
<th>Farmgate (Rp/kg)</th>
<th>Millgate (Rp/kg)</th>
<th>Exch Rate (Rp/US$)</th>
<th>World Price (US$/ton)</th>
<th>Farmgate (US$/ton)</th>
<th>Millgate (US$/ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>1,452</td>
<td>1,576</td>
<td>8,876</td>
<td>185.3</td>
<td>163.6</td>
<td>177.6</td>
</tr>
<tr>
<td>February</td>
<td>1,471</td>
<td>1,595</td>
<td>8,905</td>
<td>182.3</td>
<td>165.2</td>
<td>179.1</td>
</tr>
<tr>
<td>March</td>
<td>1,432</td>
<td>1,556</td>
<td>8,908</td>
<td>180.3</td>
<td>160.8</td>
<td>174.7</td>
</tr>
<tr>
<td>April</td>
<td>1,373</td>
<td>1,497</td>
<td>8,675</td>
<td>178.6</td>
<td>158.3</td>
<td>172.6</td>
</tr>
<tr>
<td>May</td>
<td>1,317</td>
<td>1,441</td>
<td>8,279</td>
<td>180.8</td>
<td>159.1</td>
<td>174.1</td>
</tr>
<tr>
<td>June</td>
<td>1,357</td>
<td>1,400</td>
<td>8,285</td>
<td>186.2</td>
<td>163.8</td>
<td>169.0</td>
</tr>
<tr>
<td>July</td>
<td>1,500</td>
<td>1,510</td>
<td>8,505</td>
<td>182.3</td>
<td>176.4</td>
<td>177.5</td>
</tr>
<tr>
<td>August</td>
<td>1,700</td>
<td>1,725</td>
<td>8,547</td>
<td>178.5</td>
<td>198.9</td>
<td>201.8</td>
</tr>
<tr>
<td>September</td>
<td>1,679</td>
<td>1,702</td>
<td>8,455</td>
<td>180.0</td>
<td>198.6</td>
<td>201.3</td>
</tr>
<tr>
<td>October</td>
<td>1,595</td>
<td>1,600</td>
<td>8,489</td>
<td>181.5</td>
<td>187.9</td>
<td>188.5</td>
</tr>
<tr>
<td>November</td>
<td>1,559</td>
<td>1,572</td>
<td>8,503</td>
<td>179.5</td>
<td>183.3</td>
<td>184.9</td>
</tr>
<tr>
<td>December</td>
<td>1,530</td>
<td>1,567</td>
<td>8,458</td>
<td>180.0</td>
<td>180.9</td>
<td>185.3</td>
</tr>
</tbody>
</table>

Average 2003: 1,422 1,582 8,574 181.3 164.8 181.9

Sources: Farmgate price from BPS (Laporan Monitoring Harga Gabah, various month)
World Price FOB from the World Bank (Commodity Price Data various month)

14 At the time of writing this paper, available price data were not enough to conduct a thorough quantitative analysis on the performance of new floor price policy. Official data from the Monitoring Team of Rice Price (TMHG=Tim Monitoring Harga Gabah) show the average farmgate price of rice was about Rp 1,422 per kilogram (or US$ 164.8 per ton) and the millgate price of rice was Rp 1,582 per kilogram (or US$ 181.9 per ton), almost equivalent to world FOB price of rice (Table 5). Both farmgate and millgate price of rice were well below the government-announced floor price of unhusked dry paddy after harvest (GKP) of Rp 1,230 per kilogram and Rp. 1,500 per kilogram for unhusked dry paddy for storage (GKS). This implies that retail price of rice in Indonesia in 2003 was above the world price of rice, providing opportunities for private traders to procure domestic needs of rice from international market.
4.3 Wider Gap Between Farm Gate and Retail Prices

Since the fall of Soeharto in May 1998, the price gap between farmgate and retail has spread as large as Rp 1,000 per kilogram or US$ 0.85 per kilogram (Figure 3). This implies that the marketing margin of rice distribution has been absorbed mostly by trading and processing activities, not by the farmers who have remained weak price-takers. In the near future, rice farming could lose its attractiveness among younger farmers, hence affecting the expected profitability it could generate. The incentive issues for farmers have become even more complicated as declining profitability of rice farming should be expected to provide incentive to move toward diversification into more profitable farming practices such as horticulture, estate crops and livestock. The food-for-the-poor and similar targeted policies have benefitted rice consumers from paying a high retail price, which could prevent more absolute poverty in the country. Indonesia is in need of new comprehensive policy to speed up agricultural development, especially to maintain strong food reliance for the country regardless the organizational format of Bulog.

Figure 3. Price Disparity between Farmgate and Retail Price of Rice

Indonesian experience in implementing floor price and later procurement price policy has faced serious problems since the economic crisis. All three predecessors of President Soeharto could not implement the policy well enough to meet the food security objectives. In the era of Presiden Abdurrahman Wahid in 2000, the floor price was not effective in providing a guarantee for stabilization (Table 6). A similar situation could repeat in 2003 and years to come where most farmgate prices of rice are well below the government reference procurement price. Using the data from the rice-price monitoring team (TMHG), from about 6,367 samples, the observation suggests that 50.3 percent of farmgate price of rice fell below the reference price, mostly because of the low quality of
farmer’s rice. A one-two month delay in planting season due to a longer dry season in 2002 contributed to a high water content of 25 percent, which was far above the 14 percent level required water content, and possibly other requirements of broken, immature grain etc.

Table 6. Effectiveness of Floor Price and Procurement Price of Rice, 1997-2003

<table>
<thead>
<tr>
<th>Year</th>
<th>Floor Price Policy (Rp/kg)</th>
<th>Farmers selling below floor price (%)</th>
<th>Number of observation</th>
<th>World Price FOB (US$/ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>525</td>
<td>0.8</td>
<td>6,297</td>
<td>281.0</td>
</tr>
<tr>
<td>1998</td>
<td>1,000</td>
<td>3.8</td>
<td>6,811</td>
<td>276.0</td>
</tr>
<tr>
<td>1999</td>
<td>1,400</td>
<td>8.3</td>
<td>6,683</td>
<td>216.2</td>
</tr>
<tr>
<td>2000</td>
<td>1,400</td>
<td>48.3</td>
<td>5,455</td>
<td>173.6</td>
</tr>
<tr>
<td>2001</td>
<td>1,500</td>
<td>17.13</td>
<td>4,914</td>
<td>152.7</td>
</tr>
<tr>
<td>2002</td>
<td>1,500</td>
<td>9.61</td>
<td>4,851</td>
<td>171.8</td>
</tr>
<tr>
<td>2003</td>
<td>1,725</td>
<td>50.3</td>
<td>6,367</td>
<td>180.0</td>
</tr>
</tbody>
</table>

Notes:  
- a) In 1998, floor price was revised four times: Rp 525/kg (January), Rp 600/kg (April), Rp 1,000/kg (June) and Rp 1,400/kg (December).
- b) The percentage is simply the number of observed farmers receiving farmgate price below the referenced price announced by the Government.

Sources: Calculated from Tim Monitoring Harga Gabah BPS, the newest: February 2004

There are two possible explanations for this policy failure: first, the policy is poorly designed and implemented, and secondly the present institutions are not really compatible with the norms, values and unwritten requirements inherent within the policy. In short, food policy should not be relied on a price policy only, but should be supported by a set of related policies, such as tariff and trade policy, which are credibly enforced. Indonesia should take serious lessons from the case of half-hearted liberalization policy, undertaken to comply with the IMF’s Letter of Intent, where the institutional development necessary to implement such policies was neglected.

5. SUMMARY AND CONCLUSIONS

This paper has examined the success and failure of Bulog in implementing rice price stabilization in Indonesia, emphasizing on the past performance, recent experiences of reforms, and future directions. The process of change from marketing parastatal to private trade in food obviously requires major improvement in efficiency, transparency, and public accountability. After being praised as effective and successful government institution in food price stabilization and contributing to the progress of the Indonesian economy, Bulog has been put on public call since the 1990s. Bulog’s extensive involvement in food and agricultural trading activities evolved into centralistic decision making, with high scopes for rent seeking.

The initial reforms of Bulog organization started in the economic crisis, where the binding Letter of Intent to the International Monetary Fund (IMF) in 1998 reduced Bulog’s mandate to handle only rice, instead of wheat flour, sugar, cooking oil, soybean, etc. The Government of Indonesia maintained a certain amount of national buffer stocks of rice in Bulog storage facilities, which could be injected at appropriate time into urban
markets to ease the impacts of short-term price surges. Bulog was then appointed to focus also on targeted market operation (OPK) and food for the poor (raskin) to partially insulate the poor from changes in consumer rice prices. By raising or lowering the co-payment amount for subsidized rice, Government could inject a greater or lesser measure of price stability in the rice price to the most vulnerable groups.

Bulog lost its power in price stabilization when the government adopted trade liberalization in rice trade for about two years in 1998-2000. Adoption of trade liberalization policy in rice was generally considered to be a mistake by the Government. After some surges of sharp criticism, the Government of Indonesia revised the components of floor price in dry paddy and rice, and announced protection policy by setting an import tariff at about 30 percent of retail price in 2000. Because of declining world prices, these price levels were set too high so that the actual farm-gate price fell below the floor price for an extended time. The wide gap between FOB and CIF prices and the high capital costs and risks arising from storing rice domestically contributed to a high degree of price volatility at the peak-harvest period. Therefore, the combination of global rice price volatility and exchange rate volatility made it difficult for Indonesia’s policy makers to effectively forecast an appropriate rice floor price. The dilemma appears, once such a price is set, it becomes politically impossible to lower it. If the floor price is set above import-parity price levels, than government will be unable to defend it. This is the real challenge for reforms in food price policy.

Reform options for new organizational format of state-owned enterprises of Bulog should provide important answers to good governance, corporate efficiency and public accountability as well as the feasibility of providing price stabilization during the anticipated fall in rice prices during the main harvesting season. As the policy on rural development has been poorly defined since the economic crisis, farmers have relatively little ability to hedge this risk, other than by pre-selling the crop prior to planting (ijon system). The main thrust of macro-food policy in Indonesia, therefore, should focus on how to provide linkages between macro-economic policy, rural development and poverty alleviation policy in the country.

Problems in internal Bulog management, limited access to state budget, and ceased direct liquidity credit from the central bank have prevented Bulog from maintaining its function as a “buyer of last resort” in order to discourage an excessive fall in farm gate prices. These all have contributed to Bulog’s inability to defend floor price in the last four years, partly because the price was set well above the prevailing import-parity price. Similarly, the new approach for the Government of Indonesia and for Bulog to implement a domestic procurement price and procurement target is not expected to succeed although procurement prices were announced at the harvest period around New Year.

Transformation from parastatals into private trade in food marketing might be complemented by a high quality rural development, by a quite rapid pace of "upward diversification" from low-value paddy in Java, Bali and other parts of western Indonesia to high value products of horticulture, estate crops, inland fisheries and livestock. Otherwise, increasing production and the yield to maintain food security in the country can be achieved by expanding the cropping intensity in the existing irrigated rice system of Eastern Indonesia, to complete existing irrigation system and to expand irrigation
facilities suitable for rice in the tidal swampland regions. This becomes a real challenge for future studies to examine any effect of rice prices on the substitution of rice area for horticulture crops, inland fisheries, and floriculture or tree crops. Empirical evidence on the effects of low rice prices on crop diversification into low-risk secondary food crops has to be complemented by a thorough examination on the actual impacts of higher rice prices on allocation of higher-value agricultural activities.

Finally, lessons learned from the success and failures of Bulog in implementing food policy include that no system works forever and flexibility is very important to adjust to external and internal changes. As the external environment changes and internal pressures continue, institutions and policies that used to work properly in the past can become outdated or even dysfunctional. Indonesia shall adjust incrementally to such forces of changes, but eventually incremental change is not enough. Then, it becomes necessary for Indonesia to make a good start for bigger reforms in food policy and improve institutions involved directly and indirectly in the process – a difficult but essential process. However difficult the changes have to make, the status quo is clearly not an option.
References


Economics (PERHEPI) and the Center for Agricultural Policy Studies (CAPS) meeting, in Jakarta, June 26, 1998.


