

ANALYSIS ON RECENT BULOG'S ASSIGNMENTS FOR BOTH PRODUCER AND CONSUMER OF RICE IN INDONESIA

Kuntoro Boga Andri¹

Abstract

The objectives of this study are: 1) to review the assignments of BULOG in the recent time, 2) to understand impact of the recent BULOG policies toward consumers and farmers. This study showed that BULOG functions are weakening by the liberalization, and market share becomes smaller time by time. RASKIN program, national stock and domestic rice procurement are the government instrument by BULOG to protect consumer's wealth, farmers' income guaranty and national food security. BULOG policy also aimed to give protection to farmer and consumers and to give a guarantee in rice distribution for poor groups. Regarding farmers' observation, major problems on rice agribusiness is marketing aspect especially low and fluctuated price. Most of them expect government good policies to develop farming and to increasing income. Yet, BULOG function as a market regulator is still required.

Keywords: BULOG, rice liberalization, RASKIN program, contract marketing, price stabilization

Introduction

As result of the rapid economic growth by the early 1970's, Indonesian rice production also was rose fast. Table 1 shows rice production had been increasing at a low rate of 1.08 per cent per annum from an average of 50.10 million metric tons per annum between 1995 and 2002 to an average of 50.60 million metric tons per annum between 1998 and 2002, as a result of the 3.2 per cent per annum increase in the area harvested from an average of 11.38 million Ha from 1975 to 1997 to an average of 11.75 million Ha from 1998 to 2002. However, this was accompanied by a decrease in rice yields of 2.05 per cent per annum, dropping from an average of 4.40 Kg/Ha of dried husked rice during the period 1975 to 1997 to an average of 4.31 Kg/Ha in 1998 to 2002. More detailed figures after the 1998 recession show that the rice-growing area increased by 5.3 per cent from 11.14 million Ha in 1997, to 11.73 million Ha in 1998, while the production of unhusked rice decreased by 0.28 per cent from 49.38 tons to 49.24 million tons in the same period. In the following three years (1999 to 2001) the area cultivated with rice decreased to 11.96 million Ha, 11.79 million Ha, and 11.5 million Ha respectively, representing a total decrease of about 1.42 per

¹ Assessment Institute for Agricultural Technology (AIAT) East Java, Indonesian Agency for Agricultural Research and Development, Jl. Raya Karangploso Km-4, PO Box 188, Malang 65101, e-mail: kuntoro@gmail.com.

cent within three years. The decrease in hectare was followed by an increase in rice production from 51.87 million tons in 1999 to 51.90 million tons in 2000, a decrease to 50.6 million tons in 2001, and then an increase to 50.84 million tons in 2002 due to increases in both the area harvested and the yield. These production data until 2010 provide evidence of the broad success of Indonesian rice policy in encouraging growth of rice output (Table 1).

Table 1. Indonesian Rice Production Data, 1968-2010

Year	Area (million hectares)	Paddy production (million metric ton)	Rice production (million metric tons)	Paddy yield (tons per hectare)
1968	8.01	17.16	11.67	2.14
1970	8.14	19.33	13.14	2.38
1972	7.90	19.39	13.18	2.45
1974	8.52	22.47	15.22	2.64
1976	8.37	33.30	15.84	2.78
1978	8.93	25.77	17.53	2.89
1980	9.01	29.65	20.16	3.29
1982	9.90	33.58	22.84	3.39
1984	9.76	38.14	25.93	3.91
1986	9.90	39.39	26.78	3.98
1988	10.14	41.67	28.33	4.11
1990	10.50	45.18	29.34	4.30
1992	11.10	48.24	31.36	4.34
1994	10.73	46.64	30.32	4.35
1996	11.57	51.10	33.22	4.42
1998	11.73	49.24	30.54	4.20
2000	11.80	51.90	32.35	4.40
2002	11.53	50.84	32.37	4.46
2004	11.92	54.09	33.49	4.34
2006	11.79	54.46	34.60	4.56
2008	12.33	60.33	38.08	4.94
2010	13.25	66.47	42.43	5.02

Source: [4][6]

Over half of all rice produce in Indonesia is cultivated on Java (see Table 2), which is also where most of the population lives [5]. The months of July, August, and September are typically dry, but the lack of rain into October was beginning to cause concern in Indonesia, the world's largest rice importer. Main-season rice, harvested between January and April, usually comprises half of the total rice production. Java produces the majority of main-season rice. A delay in the onset of the rainy season is usually not a problem, but if the dryness persists through November and into December, a decrease in production is possible. West Java and East Java as the main rice producer province in the country. The

others central rice producer in Indonesia are Central Java, South Sulawesi, North Sulawesi and South Sumatra, where Bali is the highest productivity region (Table 2).

Table 2. Indonesian Rice Production and Distribution By Region and Season

Region Name	Season	Production (%)
Bali and Nusa Tenggara	January-April	3
	May-August	2
	September-December	1
Bali and Nusa Tenggara Total		5
Java	January-April	30
	May-August	19
	September-December	8
Java Total		56
Kalimantan	January-April	1
	May-August	1
	September-December	1
Kalimantan Total		
Maluku and Irian Jaya	January-April	3
	May-August	2
	September-December	1
Maluku and Irian Jaya Total		0
Sulawesi	January-April	3
	May-August	2
	September-December	1
Sulawesi Total		10
Sumatera	January-April	3
	May-August	2
	September-December	1
Sumatera Total		23
Grand Total		100

Source: Estimated from various BPS publications

To protect farmers as both rice producers and consumers, the government has developed a favorable price policy through setting the floor and ceiling price, with BULOG (Indonesian National Logistics Agency) laying an important role. During harvest time, BULOG is ready to purchase rice from farmers whenever the price falls below the floor price. On the other hand, BULOG will intervene in the market by supplying rice when the price is above the ceiling price [1][12][13]. Therefore, by 1984 Indonesia had achieved self-sufficiency in rice. Between then and 1996, the total production of rice in the country was higher than total domestic consumption. Until 1997, BULOG played the role as a dominant in the rice marketing in Indonesia. Letter of Intent (LOI) 1998 with IMF was an important

policy to open domestic rice market to international market. The policy push government to eradicate BULOG's monopoly [8][14]. As a result, from 1998 Indonesia has changed its status from rice self-sufficient country to the largest importing country with import around 1.5 MMT annually [2].

The Approach and Research Methodology

Even though weaken by the rice liberalization policy, BULOG still does some following essential assignments: 1.) contribution to price stabilization by purchasing rice and maintaining buffer stock; 2.) distribution of subsidized rice to the poor by RASKIN2) (Rice for Poor Families) program; and 3.) National logistic security management by distributes rice to the people in the disaster areas or in emergency case [2][7]. When reviewing the role of BULOG, it is necessary to examine how BULOG can complement the roles of the private sector by procurement and distribution of rice regarding its functions in the country [3][8]. The objectives of this study are: 1) to review the assignments of BULOG in the recent time, 2) to understand impact of the recent BULOG policies toward consumers and farmers.

Design of this study was based on differences between areas on and off Java as well as surplus and deficits region. Provinces of Riau, Bali and South Sulawesi were chosen as an off Java site to provide a contrast perspective comparison with surplus Province of East Java as well as South Sulawesi being the main producer's region. Bali represented a sufficient rice production region for domestic demand, while Riau in Sumatra was a rice deficits region by large demand. The study used BULOG organization (BULOG survey) as the starting point in exploring information about rice marketing chain and procurement, employing a technique of linked interview. It was followed by field survey to farmers and other agriculture institutions as well as investigation to rice traders or millers, and retailer such as village market and supermarket to could identify the actual circumstances.

Results and discussions

BULOG Reform Progress

The history of BULOG was start from the era of the New Order (Suharto's regimes) when staple food operation was managed and coordinated by Komando Logistik Nasional (Kolognas). On May 10, 1967 Kolognas was dismissed and replaced with Badan Urusan Logistik (BULOG). The existence of BULOG as a food price stabilization institution had a

special meaning in supporting the success of the New Order era and reached its culmination when the Government of Indonesia was honored with rice self-sufficiency award from Food and Agriculture Organization (FAO) in 1984. In the first Five Year Long Term Development Plan (Repelita I) on 1969, Presidential Decree was revising the organizational structure of BULOG. Its new mission was turned into a buffer stockholder and a rice supplier to government employees. Afterwards, based on the Presidential Decree on 1978 BULOG's main task from the government was broadened to include controlling and stabilizing the price of rice, paddy, wheat and other staple food commodity based on the government policy both at producer and consumer levels. In 1993 BULOG was merged with the Ministry of Food Affairs, however, the two institutions were then separated again. At the same time, BULOG employees' status was transformed into government employees [8][10].

With the outbreak of the currency and economic crises during the latter half of 1997 and the resignation of President Soeharto in the following year, BULOG's reform process started moving forward. This began with efforts to increase the stability and efficiency of the market economy by abolishing BULOG's wide range of monopolistic rights and regulations. The new government then moved on to organizational and institutional reforms. These turned out to be drastic reforms spelled out in a series of government Letters of Intent (LOIs) to the IMF which aimed at implementing reforms within a specified timeframe. Although BULOG was ultimately not privatized by these reforms, the fundamental thrust of institutional reform was toward its corporatization and privatization [10][11].

Table 3. Summary Of BULOG Reform

Institutional Aspect	Before Reforms	After Reforms
Role, functions	Monopolies in the importing of rice, wheat (including flour), sugar, soy beans, garlic; and in designating domestic dealers through the DO (order delivery) system. Establishment of the factors for its monopoly in wheat milling and domestic soybean distribution. Controlling the domestic price of rice through market operations, managing buffer stocks, food security.	Abolishment of its import monopolies, deregulation of its domestic trading, elimination of its monopolies in domestic distribution and processing. Reduction of its market operations, reduction of buffer stocks, oversight of rice floor price, responsibility for food security especially as a social safety net.
Funding, finances	Utilization of Bank Indonesia Liquidity Credit system (Kredit Likuiditas Bank Indonesia: KLBI). Costs and losses in the rice sector covered by earnings from trading in other agricultural products; profits from trading used as BULOG income.	Abolished. Food security and all other public activities funded by the national budget; profit-making activities (including trading in rice and other agricultural products) guided by its own management decisions.

Organization, governance	State agency directly under the president. State-owned trading enterprise subject to WTO oversight.	Public corporation under the State Minister for State-Owned Enterprises. Treatment the same as that of private business companies, accounting principles put into effect.
--------------------------	--	--

Source: [14]

A comparison of BULOG before reforms (circa 1997) and immediately after becoming a public corporation are summarized in Table 3. For the most part the work of reform progressed from BULOG's duties and functions to matters concerning its funds and financial affairs, then to its legal status as an organization. Before reforms, BULOG as an organization was headed by a chairman below who were five deputy chairmen who were respectively responsible for procurement, distribution, financial affairs, general business affairs, and inspection. In essence the need for reforms falls into four major areas of concern: (1) BULOG's functions, (2) adjustment to relevant laws, (3) relationship with political affairs, and (4) adjusting to globalization and other external pressures. The organizational and institutional reform of BULOG has been moving ahead since 2000, but they can be summed up as falling into these four major areas of concern [14].

Condition of Rice Procurement and Distribution By BULOG Channels

Rice accessibility is a very important matter for Indonesian people, in anyplace. In the case of rice distribution at four surveyed regions, the country has both surplus and deficit areas where also vary seasonally (Table 4). Besides free market channels handled by rice trader and private sector, BULOG reallocate by ships rice from the main harvest areas to the deficit area for food security through the means of maintaining buffer stock and releasing it onto the local market when necessary. From the study, it is noticed that BULOG in South Sulawesi and East Java, regions where holding about 25% of all national production in 2005 [6], reallocate its surplus to areas such as Riau in this case, and others region in Kalimantan or Nusa Tenggara. On the other hand, small rice deficit in Bali, had been fulfilled by inter regional trader from Java and Sulawesi, therefore BULOG in this region did not need to require rice reallocation from other places.

Table 4. Rice Balance in the Survey Regions in 2005

Region	Total Production (dry unhusked rice, ton)	Polished Rice Equivalent (ton)	Total Demand/consumption (rice, ton)	Surplus/Deficit (ton)
East Java	9,007,265	5,258,441	3,058,441	2,200,000
S. Sulawesi	3,390,397	1,948,385	884,375	1,064,010
Bali	762,684	443,386	459,263	-15,877
Riau	424,095	273,800	659,000	-385,200

Source: BULOG survey, 2006

Table 5. BULOG contract marketing circumstance at 2006

BULOG Division (Region)	Total Contractor	Total Contract Quantity (rice, Ton)	Share by contractor organization (%)		
			Cooperative	Miller Cooperatives	Non BULOG Task Unit
East Java	934	604,100	5	90	5
S. Sulawesi	362	166,850	9	81	9
Bali	26	16,255	0	12	88
Riau	5	650	0	20	80
Other regions	2,729	2,100,000	5	83	12
Total Ina	4,056	2,100,000	6	89	5

Source: BULOG survey, 2006

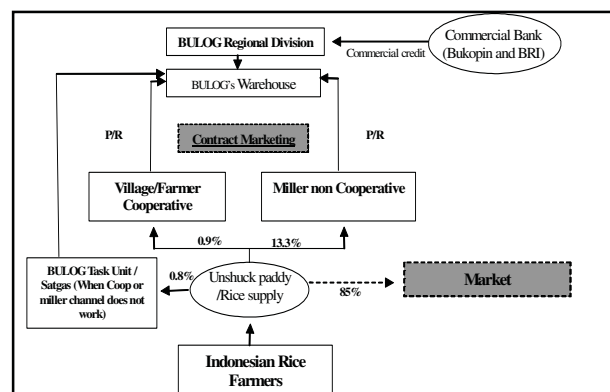


Figure 1. BULOG rice procurement and marketing scheme

Source: BULOG survey, 2006

This study found that in order to fulfill the stock requirements, BULOG in each province procured rice in its region by contract marketing system through village cooperative, farmer's cooperative or rice miller (Figure 1). Players that have interest to join the government procurement will join the bidding and qualified players will become to be BULOG's paddy or rice contractor (supplier). It was clear that rice market in Indonesia actually is a product of interaction between public sector (done by BULOG) and the actual rice market regulated by the price system (free market). Some estimation suggest that free market accounts for 80% to 90% and the remaining 10% to 20% is accounted by the market that which passes through government agencies (BULOG) and its contractors and suppliers [8].

Contract marketing of rice in this case is an agreements between BULOG as a buyer and cooperative or miller as a collector to procure rice from producers or farmers, and to set a price and outlet for a commodity before harvest. Farmers found that they have to remain fully responsible for the management decisions during the production process with limited direction from the contractor. This system is quite different with the previous model from the era of 70's to the middle 90's when Village Cooperative Unit (KUD) was mobilized BULOG's rice from farmers with incentive tools such as fertilizers and chemicals subsidy as well as credit support from government bank. Village cooperatives during that period were main partner of BULOG organization for rice procurement, but after 1999, it changed to be private sector as a core through contract marketing system. The system was changed due to reduction of subsidy policy in rice sector and cut down of government financial direct support following the monetary crisis on this country. Today, from the total of 4,056 rice BULOG's domestic contractor in Indonesia, 89% of total quantity is taken from private miller supplier, whereas farmers cooperative only occupied 6% of the remaining share. In this country, East Java region have the greatest number of contractor, and at off Java, South Sulawesi is the greatest one (Table 5). The Assignment for Price stabilizations for both producer and consumer

Rice price stabilization is very important to farmers and consumers in Indonesia [7][8]. Nevertheless, based on Figure 2, the real rice prices after the financial crisis were at least 300 percent higher than their stable trend period in 1975 to 1996. At the time when rice procurement and distribution was strictly controlled and managed by BULOG, so real domestic rice prices were remarkably stable although they did respond appropriately to local surpluses and deficits. After the financial crisis struck the country, rice prices almost

doubled, though by mid-2000 it were down somewhat from that peak, but it increased again and remains far above the previous level that was regarded as normal for more than two decades.

Actually, from the previous time Government's rice policy is always to attempt to reconcile the often-conflicting goals to guarantee as far as possible that consumers have access to ample supplies of rice at an affordable price. On the other hand, in order that farmer is protected from price serious nosedive and producers enjoy adequate production incentives, on the main harvest season in Indonesia during May to June, BULOG purchased rice harvested to build rice stocks and protect farmers from the declining rice prices (Figure 2). On the contrary, when rice production was low, BULOG sold the rice stock to the market to protect consumers from high rice prices.

To reduce affect of price fluctuation, government had regulated standard price of rice managed by BULOG as shown in Figure 3. This policy regulated the floor price of non-hulled rice and hulled rice. It is attempt to support the increasing productivity of rice farmer and national rice production by guarantee buying price as well as stabilization price for public consumer. In implementing the policy, the Chief of BULOG release decision on Januari 2003 about purchasing of paddy by contractor from farmer/groups throught contract marketing system. It fixes the price on floor price since 1 January 2003 as floor price of non-hulled rice by Bulog is Rp 1.725/per kg as well as floor price of domestic farmer's rice by Bulog is Rp 2.790per kg. Qualities of commodity are controlled based on the conditions required. In the case that farmers not be able to fulfill this requirement, peasant could not sell their product in many conditions according to this valid price.

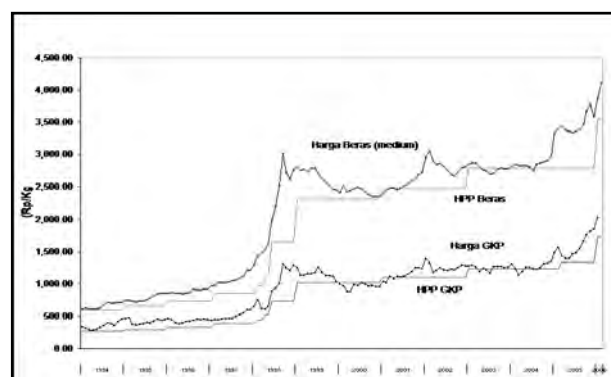


Figure 2. Market price of paddy and rice compared with BULOG buying price (1994 to 2006, in Rp.)

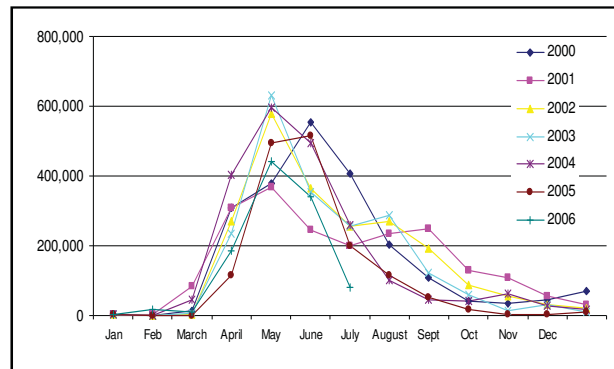


Figure 3. Total monthly domestic procurement by BULOG on harvest season (in ton)

In this study, to identify farmer’s opinions concerning the actual situation of rice farming and rice marketing circumstances, respondents in 4 survey regions were randomly interviewed. In total, 68 farmers answered six questions to able to grasp their perception on that matter. It was found as displayed in Table 6 that major problem of farmers for marketing aspect is price fluctuation (70 – 92% in each survey place). Most of them have a good respond for marketing scheme done by BULOG (10 – 70%), in comparison that the answer “don’t know”/”no comment” about this system are 4-70%. In this case, rice farmer’s respondent in 3 survey regions did not receive any support from BULOG or BULOG contractor. However, in South Sulawesi 52% of them received it, in the form of credit, fertilizer, chemical, seed and extension service. It is noticed that, most of farmers believe that marketing scheme conducted by BULOG could stabilized the price (20-60%) and offer market guarantee (10-40%).

Tabel 6. Farmers’s viewpoint on BULOG marketing scheme and rice farming chalanges

Matters	E. Java, n=25	S. Sulawesi, n=23	Bali, n=10	Riau, n=10
1. Main problem in rice marketing?				
a. Price fluctuation	92	91	70	70
b. Lack of market information				20
c. Transportation		9		10
d. There is no trader			10	
e. Others	8		20	
2. Marketing scheme by BULOG?				
a. Good	32	57	10	70
b. fair		39	20	20
c. Poor	28			
d. No Comment/Do not know	40	4	70	10

Matters	E. Java, n=25	S. Sulawesi, n=23	Bali, n=10	Riau, n=10
3. Received any supports from Bulog's contractor or BULOG?				
1. No	100	48	80	100
2. Yes.....	0	52	20	0
a. Credit		52		
b. Fertilizers		52		
c. Chemicals		43		
d. Seeds		52		
e. Extension services		39		
f. Others		0	20	
4. Advantaged of BULOG Marketing scheme?				
a. Price stabilization	40	43	20	60
b. Market guarantee	32	35	10	40
c. Credit and martial supports		22		
d. Others/ No comment	28		70	
5. To achieve higher level of income from rice farming?				
a. Seek the new technology	52	14	10	
b. Seek others marketing channels/traders	8	9		30
c. Wishing on cooperative		30		
d. Wishing on extension	32	4	50	
e. Wishing the government policy		39	40	60
f. Create their own group and actions	8	4		10
6. Condition needed for better rice farming?				
a. Credit provided	12	26	40	20
b. Materials provided			10	20
c. Good pricing and marketing	52	35	30	20
d. Good cooperative and farming organization	20	35		40
e. Infrastructures (road, irrigation system etc)	16	4	20	

Source: Field Survey, 2006

Table 6 discovered that many of farmer's respondent expected any good government policy to increase their income from rice farming (0-60%), otherwise "seek the new technology" (0-52%) and "extension service" (0-50%). Majority of farmers in the surveyed area demanded a good pricing and marketing system (20-52%) other than credit (12-40%), farming organizations (0-40%) or material support (0-20%) and infrastructure (0-20%). According to the answer's list displayed, it was clearly showed that the country had to bring about major advances in farming technology and policy to an adequate supply of food as well as guarantee of farmer's wealth.

The Assignment for Public Stocks

According to BULOG informants, the government maintains public rice stocks from 2 to 3 million metric tons annually in normal conditions as national food security and a

buffer against possible disruption in world market trade. The objectives are to fulfill rice requirement for emergency situation, social conflict, food scarcity, and price control. With just over 1,610 unit grain warehouses and more than 4 million ton rice storage capacity, the government has the largest network of food storage facilities in the country. East Java as the main rice producing region in the country holds the largest storage capacity as well as South Sulawesi as the largest one in off Java (Table 7). Before 2000, BULOG provides monthly rice rations to civil servants, police, the military and other groups. The government holds nearly 1.2 million ton in rice stocks only to meet the needs of these groups. However this obligation has been abolished since rice prices rose above the floor price in 1998 following the financial crisis and market liberalized, so that government could not collect a sufficient quantity of rice domestically and finally imported historically highest volume and about 6 million tons of rice in 1998 (see Figure 4). Most of the imported rice comes from Vietnam, Thailand, China and other countries. On the other hand, domestic procurement tends to stagnant 2 million ton rice annually since 2000.

Table 7. BULOG’s warehouse capacity

BULOG Regional Division	Warehouse unit	Capacity (000, ton)
East Java	67	1,154
South Sulawesi	204	400
Bali	22	42
Riau	24	46
Other regions	1293	2,546
Total Indonesia	1,610	4,188

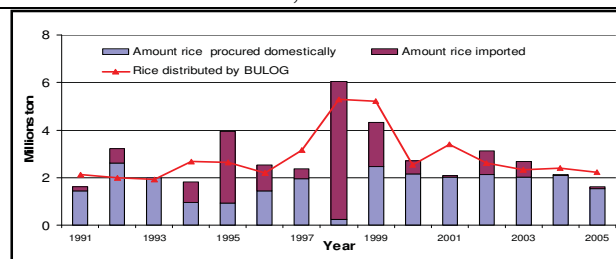


Figure 4. BULOG’s rice procured and distributed annually

Actually, the rice reserve system enables the government to be more flexible and quicker to overcome the emergency situation. In addition, public service obligations organized by BULOG before 2000 were not burdened with commercial credits. However it is changed by LOI with IMF to be using credit from commercial bank. Consequence of this policy for example, at 2005, considering the distribution of BULOG's warehouses around

the countries and regarding the logistic operational aspect, the quantity of rice reserve managed by BULOG can be more than 0.75 million ton, but with higher cost as a compensation. On 2005 government's budget, BULOG had mandate to store only 350,000 ton of rice as government rice reserve.

The Assignment for RASKIN program (Rice for Poor Families)

Indonesian government responded to the monetary crisis that struck the country with a series of agenda aimed to safeguard the welfare of poor and vulnerable families. One of these was the RASKIN Program (Rice for Poor Families), which involved the regular provision of subsidized rice of 20 kg per month at a price of Rp.1,000 per kilogram for each poor family. Between 2000 and 2005, RASKIN has distributed more than 10.4 million ton of subsidized rice, or an annual average of 1.7 million ton, through BULOG network (Table 8). Designed for 2006 fiscal year allocation, some of 17.60% of the rice distributed in East Java and the balance proportion in other parts of the Republic such as South Sulawesi (2.98%), Bali (0.76%), Riau (1.63%) and other regions (77%) (Table 9). Planned and realized distributions have been within 64 to 100 percent of one another. Although this program was designed to assist some 7-9 million families, the actual figures are more than 10-14 million families, because self-targeting by village leaders is used to reallocate program-participation rights in the villages. This implies that about 60-70 million poor people in Indonesia have actually directly benefited from the program.

Table 8. Data of National RASKIN Program Trends

Years	2000	2001	2002	2003	2004	2005
Poor Families (000, families)	16,000	15,000	15,136	15,747	15,747	15,792
Targeted families (000, families)	7,500	8,700	9,790	8,580	8,591	8,300
% of targeted families	46.88	58.00	64.68	54.49	54.56	52.56
Allocation (000, ton)	1,350	1,501	2,350	2,059	2,062	1,992
Realization (000, ton)	1,353	1,482	2,235	2,022	1,331	1,991
%of realization	100.24	98.70	95.13	98.21	64.54	99.96

Donee (000, families)	10,935	11,807	14,355	11,833	10,252	11,109
% of poor families	68.34	78.72	94.84	75.14	65.11	70.35
Years	2000	2001	2002	2003	2004	2005
Poor Families (000, families)	16,000	15,000	15,136	15,747	15,747	15,792
Targeted families (000, families)	7,500	8,700	9,790	8,580	8,591	8,300
% of targeted families	46.88	58.00	64.68	54.49	54.56	52.56
Allocation (000, ton)	1,350	1,501	2,350	2,059	2,062	1,992
Realization (000, ton)	1,353	1,482	2,235	2,022	1,331	1,991
%of realization	100.24	98.70	95.13	98.21	64.54	99.96
Donee (000, families)	10,935	11,807	14,355	11,833	10,252	11,109
% of poor families	68.34	78.72	94.84	75.14	65.11	70.35

Although expenditure poverty levels have now returned to pre-crisis levels, the program has been continued from the reason why Indonesia's nutrition situation has not improved, real wages remain below pre-crisis levels, and nearly half of the population subsists on incomes less than international poverty norms of \$2 per day [7]. There are also important benefits of RASKIN program to the economy as a whole from stimulating rice production, maintaining stable prices, and ensuring that national rice stocks are available to meet emergencies and site-specific shortfalls. It is also designed to be part of an integrated approach to rice sector policy in Indonesia. Since 2001, RASKIN program has provided the main outlet for the public rice stocks held by BULOG. This program has had a number of important institutional impacts, the most important of which is the national network connecting Government to the poor through 46,000 distribution points. However, RASKIN program now is financed using high-cost commercial credit, although it is clearly a social protection service program. Regarding BULOG, this boosts operating costs by nearly 20%. Government should explore more cost-effective ways of financing the program, either through pre-financing via the national budget, on-lending external finance, or through some form of direct credit.

Table 9. Allocation for studied areas at 2006

Province	Poor families (000)	RASKIN's Rice (000, tons)	Shared (%)
East Java	1,906	286	17.60
South Sulawesi	323	49	2.98
Bali	83	12	0.76
Riau	177	26	1.63
Others	8,341	1,251	77.03
Total	10,830	1,624	100.00

Conclusions

Rice is an essential element of Indonesian rural development. The liberalization policies pushed to eradicate BULOG market control. However, this organization still does some crucial tasks. To fulfill the requirement and does its functions, BULOG procured rice by contract marketing system through cooperative and non-cooperative organization. Formerly, village cooperative was the main partner of BULOG, and after 1999, it change to private sector. Rice market now is the place of interaction between public sector and price system (free market), where about 85% is distributed through free market and BULOG annually purchases only 15%. Since its functions are weakening by the liberalization, and market share becomes smaller time by time, BULOG could not well conducted its functions to stabilize price and control distribution. Price after liberalization greatly fluctuated and it was 30% higher than BULOG controlled period.

This study revealed that RASKIN program, national stock and domestic rice procurement are the government instrument by BULOG to protect consumer's wealth, farmers' income guaranty and national food security. Rice policy also aimed to give protection to farmer and consumers and to give a guarantee in rice distribution for poor groups. However it is seems to be difficult to do, since BULOG institutions were weaken by the liberalization. Regarding farmers' observation on the 4 studied regions, major problems on rice farming is marketing aspect especially low and fluctuated price. Most of them expect government good policies to develop farming and to increasing income. Yet, BULOG function as a market regulator is still required. Therefore partnership between BULOG, contractor and farmer is an important method to face the tough challenge in the future. BULOG revitalization is an essential and urgent agenda to accomplish for farmers, consumers and poor people in Indonesia.

References

- [1] Bappenas, 2001, Indonesia's Rice Price Policy: Floor Price or Procurement Price?", Policy Brief No. 12.
- [2] Bappenas, 2003, "Indonesian Food Policy Program, the Food Policy Agenda", Policy Brief No. 34.
- [3] Ellis, Frank, 1993, "Rice Marketing in Indonesia: Methodology and Result of A Research Study", Bulletin of Indonesian Economic Studies, Vol 29 No 1, April 1993.
- [4] FAO of the United Nations, FAO Statistical Databases Collections at <http://faostat.fao.org/>
- [5] Hafisah, M. J, and Wediyanto, A., 2004, "Startegy and Policy on Rice Production in Sub-optimal Agro-ecosystem", Paper presented in The International Seminar on rice and Prosperity, AARD, Jakarta.
- [6] Indonesian Ministry of Agriculture, Centre for Agricultural Data and Information, Agricultural Statistic database at <http://database.deptan.go.id/bdspweb/bdsp-v2.asp>
- [7] Nainggolan, Kaman, 2004, "Policy and Strategy on Food Security", Paper Presented in Seminar on Rice and Rural Prosperity, Jakarta, 7-8 December 2004.
- [8] Rashid S., et.al., 2005, "Grain Marketing Parastatals in Asia: Why Do They Have to Change Now?", International Food Policy Research Institute's Discussion Papers, Market, Trade and Institutions Division.
- [9] Revoredo Giha, Case L., et al., 2005, "Contract Marketing in the US after the 2002 Farm Act: The Case of Peanuts", Discussion paper series, Environmental Economy and Policy Research, Department of Land Economy, University of Cambridge.
- [10] Sidik, Mulyo, 2004, "Indonesia Rice Policy in View of Trade Liberalization", Paper of FAO Rice Conference, Rome, Italy, 12-13 February 2004.
- [11] Suparmoko, M., 2002, " The Impact of The WTO Agreement on Agriculture in The Rice Sector", Paper presented at the workshop on Integrated Assessment of The WTO Agreement on Agriculture in The Rice Sector, Geneva, Switzerland.
- [12] Warr, Peter and Thapa, P.J., 1999, "General Equilibrium Analysis of Rice Pricing Policy in Indonesia", Working Paper 99.01, ACIAR Indonesia Research Project.

- [13] Warr, Peter, 2005, "Food Policy and Poverty in Indonesia: A General Equilibrium Analysis, *The Australian Journal of Agricultural and Resource Economics*. 49, p. 429-451. Australian Agricultural and Resource Society Inc. and Blackwell Publishing.
- [14] Yonekura, Hitoshi, 2005, "Institutional Reform in Indonesia's Food Security Sector: The Transformation of BULOG into a Public Corporation", *The Developing Economics*, XLIII-1 (March 2005): 121-48.