



**WORKING PAPER 99.03**

**CRISIS-INDUCED POLICY REFORMS AND  
AGRICULTURAL LIBERALIZATION IN INDONESIA**

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Tahlim Sudaryanto and Sjaiful Bahri**

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**between**

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**CASER/CSIS/CIES/ANU  
joint research project on**



## **Policy analysis of linkages between Indonesia's agricultural production, trade and environment**

Rapid economic growth in Indonesia has been accompanied by significant structural changes, including for its agricultural sector and its unique natural environment. Recently questions have been raised about the impact of Indonesia's agricultural, industrial, trade and environmental policies on sustainable rural development. The nature of interactions between the economic activities of different sectors and the environment are such that an intersectoral, system-wide perspective is essential for assessing them. An international perspective also is needed to assess the impact on Indonesia of major shocks abroad, such as the implementation of the Uruguay Round agreements, APEC initiatives, or reforms in former centrally planned economies. There is increasing pressure on supporters of liberal trade to demonstrate that trade reforms at home or abroad affecting countries such as Indonesia will not add to global environmental problems (e.g., deforestation, reduced biodiversity). Again, this requires system-wide quantitative models of the economy and ecology, because typically there are both positive and negative effects at work, so the sign of the net effects ultimately has to be determined empirically.

To begin to address these issues, the Australian Centre for International Agricultural Research (ACIAR) has generously provided funds for a collaborative 3-year project (to mid-1999) involving the University of Adelaide's Centre for International Economic Studies (CIES) as the lead institution, Bogor's Centre for Agro-Socioeconomic Research (CASER) which is affiliated with the Ministry of Agriculture, Jakarta's independent Centre for Strategic and International Studies (CSIS), and the Economics Division of the Research School of Pacific and Asian Studies (RSPAS) at the Australian National University in Canberra. Being based on Indonesia with its rich diversity of environmental resources (and on which there are relatively good data) and its rapid economic growth, the project could also serve as a prototype for similar studies of other developing countries in Southeast Asia and elsewhere.

The key objective of the project is to assess the production, consumption, trade, income distributional, regional, environmental, and welfare effects of structural and policy changes at home and abroad particularly as they will or could affect Indonesia's agricultural sector over the next 5-10 years. Among other things, the analysis will focus both on the effects of economic changes on the environment, and on the impacts on Indonesia's agricultural production and trade of resource and environmental policy changes. The implications of regional and multilateral trade liberalization initiatives and Indonesia's ongoing unilateral trade reforms will be analysed, along with other potential domestic policy changes and significant external shocks such as the entry of China and Taiwan into the World Trade Organization. The analysis will draw on and adapt computable general equilibrium (CGE) models such as the national INDOGEM Model (built as part of an earlier ACIAR project) and the global GTAP Model.

The project is being undertaken in close collaboration with the Indonesian Ministry of Agriculture and ministries involved in trade, planning, and the environment. A Research Advisory Committee has been established to encourage close collaboration of representatives from those and other ministries.

**ACIAR INDONESIA RESEARCH PROJECT**

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## **ABSTRACT**

Indonesia is currently in deep crisis: financial, economic and political. The crisis has led to massive policy reforms, including agricultural liberalization. National Logistic Agency (BULOG), the main source of market distortion in agricultural in many years, is being deregulated. Import tariffs in almost all agricultural commodities have been reduced to zero or maximum 5 per cent. It is only for rice, the main staple food, the government remains intervene its market. The impacts of these massive agricultural reforms on welfare, trade and sectoral distribution is unclear. Some argue that it is not the right time to massively reform the sector due to the potential of social unrest. Price of food commodities has doubled within one year, which benefited farmers but hurt consumers. But the government has not much choice, not only due to external pressure but also the lack of its capability to finance the market intervention resulting from financial crisis. The objective of this paper is to identify major policy reforms in agriculture as part of the whole economic reforms, and to measure the current and potential impacts on the sector performance and the Indonesian economy in general.

# CRISIS INDUCED POLICY REFORMS AND AGRICULTURAL LIBERALIZATION IN INDONESIA

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## Introduction

Indonesia is in deep crisis. In one year of 1997, its currency fall in value by 80 percent, inflation soar to over 50 percent, unemployment climb rapidly, the stock exchange lose much of its value, and the economy swing from rapid growth to rapid contraction. Foreign creditors have withdrawn, and investors have retreated. The crisis has been intensified by the worst drought and the decline in oil price. Social unrest has erupted and shaken to the political stability of the nation. In 1998, the economy is predicted to contract by 10-15 percent, inflation could exceed 80 percent, and the number of poor could double.

The World Bank (1998) divides the process of monetary crisis into five stages, as follows:

- The first stage covers the period of mid July to mid October 1997, the time when the GOI invited the International Monetary Fund (IMF) to assist. At the end of this period the value of rupiah has been around Rp 3,000/US\$, and depreciated much faster since then. It was mainly triggered by unhedged Indonesian corporates covering their short-term external debt obligation. When the exchange rate band was widened, the potential foreign exchange losses arising from these unhedged borrowing become obvious, and several corporates began to buy foreign exchange to hedge their future liabilities. This tended to further weaken the rupiah. At that time many creditors were reluctant to lend to Indonesian corporate borrowers. On October 13, the GOI invited the assistance from IMF.
- The second stage covers the period of November to the first week of December 1997, following the announcement of the IMF package which began with the closing of 16 private banks. The action led to a loss of confidence in the rest of banking system. There was increasing number of cash withdrawals from banks as was the lack of deposit insurance scheme, sending the value of rupiah to Rp 4,000/US\$. Foreign exchange dealers continued to short the rupiah, bringing further downward pressure on the currency.

- The third stage started on December 9, 1997, when the rupiah suddenly began to depreciate much faster which was mainly due to the cancellation of the President Suharto's trip to Kuala Lumpur on grounds of poor health. Combined with the up coming general election, the crisis was getting worse by a widespread capital flight. During the first three weeks of January 1998, the exchange rate depreciated from Rp 4,850 to Rp 13,600 and even at one point has touched Rp 17,000 per US\$.
- The fourth stage started on 27 January 1998 when the GOI made two announcement that began restoring confidence. The first announcement was a plan to restructure the troubled banks, and the second was an initiative to deal with the overhang of private corporate debt. In addition, the announcement of an IMF package on April 1998 with comprehensive coverage of all major issues, financial and social, had positive effect on the foreign exchange market. The rate appreciated between Rp 7,500 to Rp 8,500 at that time.
- The fifth stage started in May 1998 when protest against Suharto regime and massive demonstration led to the fall of Suharto and his cabinet and eventually escalated to widespread riots and looting. The exchange rate collapsed from Rp 8,000 in early May to Rp 16,000 in mid June 1998.

### **Causes of the Crisis**

Tentative conclusions on causes of the crisis are urgently needed to support the formulation of policies for nurturing the economy and shaping international financial support for Indonesia. In addition to external factors triggered by Thai's crisis, the World Bank (1998) came into a conclusion of four key microeconomic factors sending Indonesia into deep crisis.

The first was the rapid build-up of private external debt in recent years. Between 1992 and July 1997, about 85 percent of the increase in external debt was due to private sector borrowing resulting from good macroeconomic management that attracted foreign creditors. Unfortunately, the average maturity of the credit declined sharply in the last few years, and by December 1997, US\$20.8 billion had to be paid back in one year or less. Such a large external debt at such short maturities made Indonesian corporates particularly vulnerable to changes to outside sentiments. Corporates could have protected themselves if they had hedged their foreign debts. But they chose not to do so to save costs and earn higher profits.

The second was that Indonesia's banking system went into the crisis with several well recognized flaws even as credit growth was rapid. The practice of classifying loans by repayment performance rather than collectability masked the actual condition of loan portfolios. Accounting and provisioning rules had not kept pace with the increased sophistication of the banking system and did not provide important early warning signals on the true financial health of the banks. Inadequate enforcement of central bank regulations meant that rules covering intra-group lending, loan concentration, and creditworthiness criteria were consistently violated with impunity. The legal framework did not support contract enforcement when borrowers failed to repay. Not surprisingly, numerous banks were seriously undercapitalized, and some even insolvent, well before the crisis began. So when the currency began to depreciate, banks were poorly positioned to absorb further deterioration in their portfolio. In early November 1997, the central bank closed 16 banks that were completely insolvent and in particular bad financial condition. But rather than instilling fresh confidence in banking system, it caused panic withdrawals of deposits from most private national banks.

The third factor was the question of governance, related to the issues of corruption, collusion and insider trading, which was not a new concern. In addition, Indonesia's weak legal system, the arbitrariness and lack of transparency in government's decision making. In some sense, this crisis of confidence has been the most damaging of all Indonesia's crises, because it postponed the return of private financial flows and slowed the provision of interim official funding.

The fourth was the unfortunate political juncture at which the crisis hit the country. The deteriorating economic situation, increases in food and fuel prices, and calls for President's resignation and political reforms, culminating in two days mass violence and looting in cities throughout Indonesia. The political situation remains fluid and uncertain, its fragility vulnerable to a further worsening in economic conditions.

### **Macroeconomic Policy Reforms**

Not long after the monetary crisis hit the economy, the government turned to the IMF and the World Bank to cope with the crisis and stabilize the economy. The IMF and World Bank mobilized commitments for a total stabilization package amounted to some US\$ 43 billion. In exchange for these extraordinary loans, the donors insisted that Indonesia undertake macroeconomic and structural policy reforms to ensure that the economy would be managed in a more competitive and transparent way. The IMF came with conditional aid as stated in the GOI -IMF Letter of Intent signed by two parties

on 15 January 1998. Up to date, the letter of intent has been supplemented by three additional memorandum signed on 9 April, 25 June, and 15 November 1998.

The IMF policy advices are basically aimed at responding to the four major policy challenges, namely: (a) restructuring the corporate debt overhang, (b) reforming and strengthening the banking system, (c) improving governance, and (d) maintaining macroeconomic stability through the transition with appropriate fiscal, monetary, investment and trade policies. Each of these is necessary for restoring stability, regaining the confidence of foreign investors, trading partners and resuming growth. The scope and focus of policy reforms, however, slightly differ between one letter of intent to another.

One of the conditions that the IMF insisted on, as a part of the November 3, 1997 deregulation package and structural transformation included in the 15 January 1998 letter of intent, was that BULOG's operation and monopoly be limited to rice and that subsidies on other food and essential goods be scaled-back sharply. Domestic agricultural trade and trade regulation were deregulated including the eliminations of BPPC's clove buffer stock and regulation on wholesaler and retailer. Import of garlic, wheat, and soybean were liberalized by allowing general importers to import those commodities. Foreign investment was encouraged, and by February 1998, formal and informal barriers of investment in palm oil industry.

Much more progressive reforms on trade and investment were found in supplementary memorandum of the GOI -IMF Letter of Intent signed on April 9, 1998. Import tariffs for most of 500 agricultural items were agreed to be reduced to the maximum of 5 percent (Table xx). Ban on crude palm oil (CPO) export was removed and replaced by export tax of 40 percent and raised in July to 60 percent. Local content requirement on milk products and BPPC's monopoly on clove were abolished. Some of proposed reforms listed in January's letter of intent were restated including the removal of regulation limiting foreign investment on palm oil, wholesales and retails, as establishment the negative investment list. On the 2<sup>nd</sup> July 1998, the government unilaterally announced list of business sectors closed for investment. Indonesia is embarking in more open investment policy as all other business sectors not mentioned in the list are open for investment.

Appendix Table 8. Agricultural product Import Tariff in 96/97 and 97/98.

(HS)	Group I items	Import tariff in 96/97 (%)	Import tariff in 97/98 (%)
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01	Live animal	0 – 30	0 – 5
02	Edible meat	15 – 20	5
03	Fish and shrimps	0 – 20	0 – 5
04	Milk products, poultry eggs, natural honey, Inedible animal products	5 – 25	5
05	Animal products	0 – 20	0 – 15
06	Live trees, roots, cut flowers and ornamental leaf	0 – 25	0 – 10
07	Vegetables, and edible roots	0 – 25	5
08	Fruits and other edible shelled fruits	5 – 25	5
09	Coffee, tea, spices	0 – 25	0 – 5
10	Cereals and flours	0 – 15	0 – 5
11	Milling products, essence	0 – 15	0 – 5
12	Oil contained seed and fruit, herbs	0 – 25	0 – 5
13	Resin, and other vegetable fat	0 – 5	0 – 5
14	Plait material, plants essence	0 – 5	0 – 5
15	Animal oil and fat and other products	5 – 20	0 – 10
16	Meat and fish products	15 – 25	5
17	Sugar and candy	0 – 25	0 – 5
18	Cacao and cacao products	5 – 15	5
19	Wheat and its products	5 – 25	5
20	Processed vegetables, fruits and nuts	15 – 25	5
21	Various edible processed food	5 – 25	5
22	Beverage, liquor	0 – 170	0 – 170
23	By products of processed food	0 – 5	0 – 5
24	Tobacco and its products	5 – 25	5
33	Atsiri oil, fragrance, cosmetics	5 – 20	5 – 15
40	Rubber and its products	5 – 15	5 – 10
41	Raw Leather and processed leather	0 – 15	0 – 10
43	Leather products	10 – 15	5 – 10
52	Cotton	0 – 5	0 – 5
53	Textile fibber, yarn	5	5
71	Pearl and gems	25	25

Source: Agency of Agribusiness, MOA, 1998b

In addition to fiscal and monetary policy reforms, and debt restructuring efforts, the additional memorandum to the GOI -IMF letter of intent signed on June 25 1998 reemphasized on the structural policy reforms. In this memorandum, the GOI was requested to keep its commitment in doing the previously structural reforms including the BULOG demonopolization in marketing and distribution, and the use of international standard auditing in the financial system of BULOG, the electricity State company (PLN), the State Oil Company (Pertamina), and the reforestation funds. The transparency in the process of privatization of the state owned companies (BUMN) is requested and the GOI together with Asian Development Bank and the World Bank will prepare the Master Plan of the BUMN reforms by September 1998.

## **Agricultural Sector Adjustment Policies**

Agriculture has played a critical role in reducing rural poverty over the last two decades. In the context of the crisis, strong agricultural growth can also play an important role in mitigating some of the worst poverty effects. The strong agriculture growth will raise the incomes of some of Indonesia's poor. This will also provide a safety net for newly unemployed urban workers by providing earnings opportunities to return migrants until broader economic conditions improve. The more rapid the agricultural growth, the stronger the anti-poverty benefits. It is thus essential to provide an agricultural policy environment that fosters strong growth, particularly among smallholders.

Indonesia has undertaken massive policy reforms in agriculture, including: (i) eliminating BULOG import monopoly over wheat, wheat flour, sugar, soybeans, garlic, and quite recently rice, (ii) reducing tariff rates on all food items to maximum of 5 percent and abolishing local content regulations, (iii) removing restrictive trade and marketing arrangements for a number of commodities including local content requirement, and (iv) deregulating trade in agricultural products across district and provincial boundaries including those for cloves, oranges, and livestock. It is expected that consistent implementation of these reforms will restore investor confidence and to allow for more efficient and productive investment. Moreover, these reforms will benefit smallholder producers and thus reduce the incidence of poverty.

There are several other key areas where providing a supportive policy environment will strengthen the poverty-reducing capacity of the agricultural and natural resource sectors.

- Ensuring adequate incentives to rice farmers. There are clear trade-offs between keeping rice prices low for consumers and providing adequate production incentives to farmers. In medium term, it will be important to move rice prices towards the world market price on trend to ensure an appropriate supply response, to avoid smuggling overseas, and to provide appropriate earning opportunities to farmers
- Reforming the role of government in the marketing and distribution of food commodities. This includes further deregulation of trade in food crops (except for rice), possibly replacing administrative mechanism for food security and price stabilization with financial instrument.
- Improving trade and price policies affecting rural sectors. Reducing non-tariff barriers to constraining agricultural markets, including export restrictions on low quality agricultural commodities will provides better earnings opportunities to smallholder producers. Other policies are also essential to increase competitiveness, productivity and efficiency in

agriculture such as liberalizing trade in fertilizer, agro chemicals, and seeds and privatizing state owned fertilizer and seed enterprises.

- Increasing the efficiency of irrigation management to improve efficiency and productivity in agriculture. This can be achieved by increasing efficiency of existing irrigation scheme and by instituting and effective irrigation options and maintenance program.

A more agricultural specific policy reforms which is in line with supplementary memorandum to the GOI-IMF Letter of Intent signed on 15 November 1998, poured in what the so called "The Agricultural Sector Adjustment Loan (Agsal)", listing necessary policy reforms required by IMF as a condition for loan disbursement. There are three objectives of the reforms, namely: (1) *maintain food security in a more efficient and effective manner*, (2) *improve the efficiency of key farm level factor markets*, and (3) *enhance the knowledge base to improve agricultural performance*. The summary of proposed Agsal is presented in Table xx.

The *first* objective is grounding from the question of the ability of Indonesia to adequately feed its population. Since the crisis hit the Indonesian economy, food prices have risen dramatically and adequate quantities of food are out of reach of approximately the bottom quarter of the population. It is estimated that as many as 70 million person have an income below the poverty line. The objective will be achieved by; (a) relying foodstuff on market mechanism, (b) protecting the food insecure households through well-targeted food subsidy programs, and (c) restructuring BULOG.

The *second* objective is set based on the consideration that markets of the main farm inputs are heavily distorted. The crisis has revealed underlying structural flaws in the operation of agro-input markets. The fertilizer and seed markets, for examples, are dominated by public sector companies which operate in non-competitive and inefficient ways. The lack of competition or a commercial orientation within the fertilizer and food seed industry raises the cost of providing essential agro-inputs and reduces the responsiveness of the agro-inputs producers to farmer demands. Technological innovation is stifled and growth is far less than what it could be. For fertilizer, the GOI has maintained heavy subsidies for Urea, TSP, ZA and KCl. At present level, close to two-third of the sale price of fertilizer is accounted for by direct budgetary subsidy. In addition, the domestic fertilizer factories are provided natural gas at subsidized prices. Based on the above consideration, the second objective is to be achieved by (a) *Improving the fertilizer market*, (b) *Improving the seed market*, and (c) *Reorienting cooperatives*.

The *third* objective is set based on the believe that competition in agricultural production and factor markets will only spur an agricultural recovery if the public sector can provide an enabling environment for agricultural growth and development. Good quality economic infrastructure, solid investment in rural human resources, clear right in rural property, an effective legal framework for rural business activity, an ample supply of suitable technology, well-functioning rural financial markets, and the information and awareness of technological and market opportunities is necessary to sustain the dynamic of rural prosperity and structural change. This objective is to be achieved by undertaking joint consultations and reviews of public programs and priorities in agriculture with the World Bank, interested government agencies (central and local), NGO's, and other technical experts on an annual basis to improve the efficiency of sectoral spending. Such review will examine, inter alia, agricultural research, extension, rural credit, village infrastructure, rural industrialization, rural education, and rural health care.

### **The 1<sup>st</sup> December 1998 Policy Reforms**

Government policies on food have mainly focused on rice self-sufficiency. The policies were based on the principles of encouraging farmers to produce adequate cheap rice for all Indonesian, and ensuring distribution of rice to all regions and stabilizing price all the time. These policies were implemented through: (a) subsidizing production inputs such as fertilizer and seed aimed at maintaining low production cost which leads to low selling price of rice, (b) subsidizing working capital to encourage farmers to implement recommended package of technologies, (c) setting floor price of paddy to ensure reasonable price of paddy received by farmers especially during the harvesting period, (d) undertaking stock management through domestic procurement and import as well as conducting market operation to stabilize consumer prices of rice. The above policies were also supported with non-price policies, including huge public investments in the development, maintance and rehabilitation of irrigation, rural infrastructures, agricultural research and extension.

The implementation of the above policies has successfully increased domestic rice supply and led the country in 1984 to be rice self-sufficient. The policies have also been successful in stabilizing rice prices and providing adequate cheap rice. These were creating conducive environment for manufacturing industries to grow as they lead to cheap labor. On the other side, these policies have resulted in huge amount of subsidies which gave not only heavy burden on government budget but also negatively affected allocative

efficiency of resources. The low price policy on rice in fact provided insufficient incentives for farmers to grow rice.

Considering the above negative impacts, combined with strong pressures from global market, on the 1<sup>st</sup> December 1998, the government eliminated fertilizer subsidies and let fertilizer and rice prices be determined by market mechanism. The reform package, which is actually a realization of the Agsal proposal mentioned above, includes the following measures:

- Liberalized rice market and let price be determined by market mechanism. General importers, including BULOG, are allowed to import rice
- Support price system (e.g. floor price policy) of rice will no longer be implemented in national based system, but regionally based. The objective of the policy is to help farmers from price drops at the grand harvest periods.
- Government purchase price is at least the same as price agreement when market price is below the agreed price, and at market price when it is above the agreed price. The agreed price is compromistically determined by economics agents at the respective regions.
- Special (cheap) market operation at the scarcity time is targeted to food unsecured people with inviting the participation of local institutions.
- Fertilizer subsidies (Urea, SP 36, and KCI) are eliminated while pesticides are persistently determined by market mechanism.

Along with the above measures, the non-price production incentives are to be implemented in the forms of, among others: (a) simple procedure farm credit to ensure the implementation of package of technology, (b) adequate fund for national seed systems to operate, and (c) adequate fund to undertake applied research and extension services. The implementation of the above re-oriented policies is expected to have the following impacts:

- Rice price will fluctuate following domestic harvest fluctuation and exchange rate compared to the price under BULOG era of policies.
- Rice price will be higher compared to current price as it may adjust in line with the parity prices and market prices of other commodities, and the production cost will increase due to input subsidies elimination.
- Non-price policy will increase efficiency and give incentives to farmers, and at the same time reduce cost of production. This is also expected to prevent the excessive increase of price.

- As rice price increases, per capita rice consumption is expected to decline and food diversification is expected to accelerate.
- Reduce burden on government budget for input subsidies and market operation expenditures.

The fertilizer subsidy removal has increased credit price per kg of Urea, ZA, SP-36, and KCl to Rp. 1,115, Rp. 1,000, Rp. 1,600 and Rp. 1,650, or increased with the rates of 147 percent, 53 percent, 146 percent and 94 percent from previous credit prices, respectively. To compensate the increase of fertilizer prices, the floor price of unhusked rice was increased to Rp. 1,500 per kg or increased by 50 percent from previous floor price, and credit interest rate reduced to 10.5 percent from the previous rate of 14.0 percent. Although the increase of fertilizer price will increase production cost per hectare by Rp. 310,187, as the price of product also increased and the share of fertilizer to total cost is only 18.6 percent, the farmers will gain additional income.

In fact, since August 1997, the floor price of rice (unhusked) has been changed three times. Before the crisis the floor price was Rp. 600 per kg. In early August 1997 it changed to Rp. 700 and changed again in early June 1998 to become Rp. 1000. The main objective of these policy changes are to assure sufficient domestic production of rice to meet domestic demand as well as to ameliorate severe impacts of the crisis on farmers' income. The Rp. 1000 which is equivalent to Rp. 1,650 per kg of rice, however, is still below the imported rice price which is Rp. 3,200 per kg (using the exchange rate of Rp. 10,000/US\$).

In term of fertilizer, in June 1998 the Maximum Retail Price (MRP) of KCl was set at Rp. 850 per kg, increased from Rp. 600 previously set. As the floor price of rice has increased from Rp. 700 to Rp. 1,000 the ratio of fertilizer to rice price decreased, and even more for other unchanged fertilizers. This is to enhance farmers to use more fertilizer. It is, however, being subsidized by around Rp. 1,250 per kg of KCl, looking at its import parity price of Rp. 2,500.

This policy reform is now, however, considered to be timely inappropriate. Negative reaction was spread out not long after the policy was announced, which was close to fertilizing time. At that time, farmers have no cash to purchase fertilizer which has already been much more expensive and, unfortunately, fertilizers accidentally disappears from the markets. Speculators were blamed hoarding the fertilizers. Many people suggested that subsidy elimination should be done gradually.

### **Self-Reliance Movements on Agriculture**

The self-reliance movements (Gerakan Mandiri-GEMA) are aimed at increasing productive capacity on agriculture to cope with the economic crisis and to save Indonesian society in general by giving adequate supply of food, foreign exchanges, and employment opportunities for rural people. They are based on the following principles:

- Optimizing the use of domestic resources (land, water, bio-diversity, labor, capital, and technology)
- Broadening the spectrum of agricultural development through diversification on technology, resources, production and consumption
- Implementing a dynamic locally specific agricultural technologies
- Improving the efficiency of agribusiness system to increase agricultural production and to give equal opportunities to both consumers and farmers to increase their welfares

### **The current Economic Situation**

The massive rupiah depreciation has serious implications on domestic demand, the banking system, corporate balance sheets, inflation, trade and the balance of payments, government finances, and eventually growth, incomes, employment, welfare, and poverty.

The most immediate effect of the exchange rate depreciation was a collapse in domestic demand: -2.5 percent in the last quarter of 1997, -7.9 percent and -17.6 percent in the first and second quarters of 1998. Investment was hit particularly hard. As shown in Table xx, construction and real estate were the first and the hardest to be hit, but other non-tradables such as transport and domestic trade followed.

Table xx. Approved Investment Projects By Sectors, 1993-1998

Periode	Agriculture	Mining	Manufac- turing	Construction	Hotel	Transpor- tation
Domestic (Rp Billion)						
1993	3.092,5	69,2	24.032,1	186,6	3.051,3	3.827,4
1994	7.401,1	112,4	31.921,8	731,1	4.341,9	3.119,8
1995	10.096,9	205,1	43.341,9	847,7	3.792,5	3.965,9
1996	16.071,5	460,1	59.217,7	1.550,0	5.019,3	3.065,7
1997	14.807,7	126,3	79.334,3	877,0	2.587,9	4.649,4
1998	4.284,9	116,4	31.389,0	1.583,1	926,4	3.239,7
Foreign (US\$ Million)						
1993	160,1	-	3.421,4	96,9	394,4	85,4
1994	729,8	-	18.738,8	76,5	343,6	145,1
1995	1.384,2	-	26.892,1	205,8	998,8	5.539,5
1996	1.521,5	1.696,7	16.072,2	296,8	1.716,5	694,6
1997	463,7	1,6	23.017,3	306,6	462,6	5.900,0
1998	848,1	0,3	7.845,8	157,8	409,3	70,7

Source: Bank Indonesia. Statistik Ekonomi Keuangan Indonesia (Nov 1998)

The collapse of domestic demand overwhelmed producers of import substitutes who might otherwise have benefited from the exchange rate depreciation. Exporters of manufacturing products have been handicapped by a shortage in trade finance due to lack of confidence among the trading partners. The main gainers were exporters, especially those exporting agricultural and natural resource based products. As presented in Table xx, the values of agricultural exports during the first two quarters in 1998 were much higher than that of the previous year. But, this is not the case for mining of which its export values during the first two quarters were smaller than that of the previous year.

Table xx. Indonesia's Export Values by Industries  
(excluding petroleum and gas)

Million US\$

Year	Agriculture	Manufac- turing	Mining	Others	Total
1995	2,888.3	29,328.2	2,690.9	46.0	34,953.4
1996	2,912.7	32,124.8	3,019.8	35.6	38,092.9
QRT 1	587.0	7,164.0	671.7	9.7	8,462.4
QRT 2	686.7	8,035.3	862.6	8.7	9,593.3
QRT 3	824.5	8,341.8	716.4	7.7	9,890.4
QRT 4	784.5	8,583.7	769.1	9.5	10,146.8
1997	3,132.6	34,985.2	3,107.1	596.1	41,821.0
QRT 1	600.8	7,779.4	718.5	52.5	9,151.2
QRT 2	720.2	8,501.3	878.0	261.5	10,361.0
QRT 3	931.4	9,340.0	782.4	258.1	11,311.9
QRT 4	880.2	9,364.5	728.2	24.0	10,996.9
1998					
QRT 1	807.3	8,814.3	613.0	7.4	10,242.0
QRT 2	907.5	8,751.4	606.8	6.2	10,271.9

Source: BPS, Economic Indicator (Nov 1998 & August 1997).

The exchange rate depreciation has soared inflation. By the end of June 1998, inflation over the past 12 month had reached 59 percent. The bulk of this increase was caused by a rise in the price of tradables, especially food and clothing. This has serious implication on the welfare of the poors. Agricultural supply shocks due to weather problem combined with the high inflation have sharply reduced consumer purchasing power and triggered an alarming rise in the number of food insecure families. A large number of families with incomes

marginally above the poverty line in 1996 have found that their incomes no longer keep pace with the rapidly rising prices of essential goods.

Tabor, et al. (1998) estimated the poverty incidence and number of persons classified as severely food insecure in 1998. They argue that the absolute poverty incidence has increased because of: (1) the fall in real incomes, (2) the rise in urban unemployment, as it is estimated to be as high as 15 million persons, and (3) the rise in food prices facing the poor at a rate faster than the rate of price inflation. Using the income distribution and poverty line measures prevailing in 1996, the 1998's estimates of the income fall, and higher real prices facing the poor and middle classes, they suggest that the crisis would cause an increase of 8 million urban poor and 23 million rural poor (Table xx). They also suggest that there would be approximately 9.6 million urban and 24.3 million rural food-insecure individuals in mid-1998.

Table xx. Poverty Incidence, 1976-1996

Year	Millions			Percentage		
	Urban	Rural	Total	Urban	Rural	Total
1976	10	44.2	54.2	38.8	40.4	40.1
1980	9.5	32.8	42.3	29.0	28.4	28.6
1990	9.4	17.2	25.9	16.8	14.3	15.1
1996	7.2	15.3	22.5	9.7	12.3	11.3
1998 (est.)	15	32	53	20	30	26
1998 Severely food insecure	9.6	24.3	32			

Source: BPS (1998) and Tabor, et al., (1998). Note: 1976-1996 were BPS statistics while the 1998 values were estimated by Tabor et al.

The crisis also hit the external payments. The problem lies mainly with the capital account. The capital account deteriorated because of the decline in new private capital inflows, the reluctance of foreign creditors to rollover bank and corporate external short term debt, and the repatriation of portfolio investments. The World Bank (1998) indicated that, despite a boost of US\$4 billion from the IMF, gross reserves of Bank Indonesia fell to US\$19 billion by end of June 1998, down from US\$29 billion a year earlier.

The government budget is under tremendous strain, stemming from the impact of weaker economic activity, lower oil prices, and increased subsidies as a result of the rupiah depreciation and higher inflation. The 1998/99 budget has turned to a deficit of 8.5 percent of GDP. All these factors combined to lower GDP growth significantly. By the first half of 1998, GDP had

contracted by 12.2 percent causing a number of lay-offs. Total unemployment has climbed sharply to an estimated figure of 14 million or 15 percent of the workforce by the end of the year. Many claimed that this is just the beginning. Economic conditions are likely to get worse before they get better.

Table xx presents the estimated figures of crisis induced unemployment quoted from three sources namely the Ministry of Manpower (MoM), BAPPENAS and ILO's Task Force (ILO, 1998). In estimating unemployment, the MoM assumes 0 percent economic growth in 1998 and uses reported dismissal, BAPPENAS assumes 10 percent contraction in 1998 and uses sectoral elasticities, and Task Forces assumes 30 percent contraction in 1998 and uses wage employment elasticities. Their estimates are as the table below.

Table xx. Estimates of Crisis-induced Unemployment in 1998

	Persons (million)		
	MoM	BAPPENAS	Task Force (ILO)
Backlog 1997	5.80	5.80	2.48
New entrances 1998	2.70	2.80	1.40
Sub-total job seekers	8.50	8.60	3.88
Displaced workers	5.20	3.84	5.41
Total unemployment	13.70	12.44	9.29

Source: ILO, 1998

Note: MoM stands for Ministry of Manpower

### Macroeconomic Outlook

The World Bank projection shows that GDP to fall by 10-15 percent in FY98/99 and remain stagnant in FY99/2000. Domestic demand has plunged due to a sharp decline in investment, the collapse of banks and corporates, and dwindling real incomes. Even export growth appears to be slowing as trade finance becomes increasingly scarce, Indonesian exporters cannot maintain delivery deadlines, and export orders are plunging.

The balance of payments is projected to record a current account surplus for at least the next two years, about 1.8 percent of GDP for FY98/99 and 2.3 percent of GDP for FY99/2000. Oil and exports are hard hit by a decline in the oil price. Exports are likely to grow relatively slowly owing to limited access to trade finance, the depletion of input stocks, lack of buyer confidence, and prolonged uncertainty and social unrest. In this respect, Imports are expected

to shrink substantially, suppressed by the severe contraction in domestic demand and a major increase in import costs.

Economic compression will result in rapidly rising unemployment, a decline in social welfare, and a doubling in incidence and depth of poverty. Despite of this worse near-term outlook, there remain potential source of economic growth. Agriculture, for example, is expected to recover gradually with the fading of El Nino, adding to local incomes and demand and re-energizing off-farm activities. This would complement the expansionary fiscal stance of Government, which will inject new purchasing power into the domestic economy reversing a vicious circle of decreased demand and production.

Exports of labor intensive manufactures also hold considerable potential, especially if the problem of trade finance can be resolved. Export earnings from tree crops, which are relatively unaffected by El Nino, could rise significantly in the near future.

## Agricultural Sector Performance

### Food Crops Production

Table xx. Production of Food Crops 1995-1998 (1000 Ton)

Year /Period	Paddy	Maize	Soybeans	Cassava
1995	49,744	8,246	1,680	15,441
Jan-Apr	23,524	4,811	539	2,443
May-Agt	16,476	1,946	689	6,228
Sep-Dec	9,744	1,489	452	6,770
1996	51,101	9,307	1,517	17,002
Jan-Apr	26,345	5,203	502	3,289
May-Agt	15,302	2,153	625	8,149
Sep-Dec	9,454	1,951	390	5,564
1997	49,377	8,771	1,357	15,134
Jan-Apr	26,742	5,312	469	2,680
May-Agt	14,694	2,404	550	7,770
Sep-Dec	7,941	1,055	338	4,684
1998				
Jan-Apr	21,621	5,593	380	1,952
May-Agt	15,625	2,059	510	6,119

Source: BPS. Economic Indicators (Nov 1998)

Table xx. Exports of Agricultural Products (million US\$)

Year	Rubber	Coffee	Shrimps	Tea	Cocoa	Fish	Others	Total
1996	46,0	588,8	1.015,7	109,3	263,0	675,4	254,5	2.952,7
QRT 1	17,0	90,5	228,0	24,0	50,2	75,8	131,5	617,0
2	11,8	143,1	226,9	21,6	75,2	93,9	114,2	686,7
3	6,5	199,6	279,9	29,4	66,9	108,6	133,6	824,5
4	10,7	155,6	280,9	34,3	70,7	97,1	135,2	784,5
1997	31,8	503,5	1.007,9	84,6	295,1	381,4	828,3	3.132,6
QRT 1	6,7	91,7	232,7	31,9	45,5	60,6	131,7	600,8
2	9,4	156,8	220,1	31,0	59,8	99,3	143,8	720,2
3	6,8	165,2	291,1	15,6	95,0	98,5	259,2	931,4
4	8,9	89,8	264,0	6,1	94,8	123,0	293,6	880,2
1998								
QRT 1	4,4	100,0	230,2	31,1	45,4	97,7	298,5	807,3
2	5,1	113,2	307,7	28,8	102,0	98,5	252,2	907,5

Source: BPS, Economic Indicator (Nov 1998 & August 1997).

## Conclusion and Policy Implication

The economic crisis provide strong justification to focus attention on agriculture, rural and resource based development. A resource-based recovery provides the best chance to stimulate sustainable growth that addresses food security, poverty and income distribution concern.

(xx) Despite of this worse near-term outlook, there remain potential source of economic growth. Agriculture, for example, is expected to recover gradually with the fading of El Nino, adding to local incomes and demand and re-energizing off-farm activities. This would complement the expansionary fiscal stance of Government, which will inject new purchasing power into the domestic economy reversing a vicious circle of decreased demand and production.

(xx) Exports of labor intensive manufactures also hold considerable potential, especially if the problem of trade finance can be resolved. Export earnings from tree crops, which are relatively unaffected by El Nino, could rise significantly in the near future.

(xx) Many displaced workers will be forced to work in the informal sector because they can not afford to remain unemployed for very long, especially casual and unskilled labor. They will join those already in self-employment and family enterprises in major cities, small town or in their home villages, where entry barriers are low. These movement will lead to less work and lower earnings for all in the informal sectors.

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Box 1 Summary of Indonesia's Policy Matrix For The Agricultural Sector Adjustment Loan (AGSAL)		
Objectives and Proposed reform	Action to be completed by	Executor agency
<b>To maintain food security in a more efficient and effective manner:</b>		
<b>1. Rely on market mechanism for food stuffs :</b>		
a. Maintain no general consumer price subsidies for sugar, soybean, soybean meal, wheat flour, dairy products, and fishmeal	Sept. 8, 1998	MTI , BULOG
b. Phase down general consumer price subsidies for rice	Sept. 8, 1998	BULOG
c. Open foodstuff imports to general importers	Pre- negotiation	MTI
d. Remove (do not re-impose) import monopolies	Sept.12, 1998	DG Customs
e. Remove preferential exchange rate for BULOG and other essential importers	Pre- negotiation	MF
<b>2. Protect the food insecure households through well-targeted food subsidy programs :</b>		
a. Target food program to be expanded to include the majority of food insecure households	Ongoing	MFH
b. Ensure that the poor urban migrant families can participate in the program	Ongoing	MFH
c. Phase in an increase in the rations amount to program beneficiaries	Pre- negotiation	MFH
d. Establish a monitoring program for the implementation of the targeted food program	Pre- negotiation	MFH BULOG
e. Increase involvement of civil society organization (LSM's) in planning, distribution, implementation and monitoring of the targeted food program.	Pre- negotiation	MFH BULOG

Box 5 (continued)

Objectives and Proposed reform	Action to be completed by	Executor agency
<p><b>3. Restructure BULOG to improve food security :</b></p> <p>a. BULOG will undertake domestic procurement during the harvest time when prices usually collapse</p> <p>b. When the food situation improves, rice rations to some budget groups will be phased out</p> <p>c. Phase in financial instruments to help stabilize consumer rice prices</p> <p>d. Prepare a plan to make BULOG an institution appropriate for the food security functions it is now assigned</p>	<p>Pre-board</p> <p>Oct. 1999</p> <p>Pre-board</p> <p>Pre-negotiation</p>	<p>BULOG</p> <p>MF</p> <p>BULOG</p> <p>BULOG</p>
<p>To improve the efficiency of key farm level factor markets</p>		
<p><b>1. Improve the fertilizer market:</b></p> <p>a. Price subsidy differentials between fertilizer used on food crops and fertilizer used on tree crops will be removed</p> <p>b. Phase out fertilizer subsidies over three years, including gas subsidies to fertilizer factories</p> <p>c. Eliminate the distribution monopoly so that any trader may distribute fertilizer</p> <p>d. Eliminate the fertilizer holding company established in 1997</p> <p>e. Remove export quotas</p> <p>f. Remove fertilizer import controls</p> <p>g. Prepare a time-bound plan acceptable to EKUIN for the divestiture of fertilizer companies</p> <p><b>2. To improve the seed market by opening to competition:</b></p> <p>a. Alter phytosanitary regulation to recognize seed certification from proven jurisdictions</p> <p>b. Prepare a time-bound plan acceptable to EKUIN for the divestiture of seed companies and their seed gardens</p>	<p>Pre-negotiation</p> <p>Pre-board</p> <p>Oct. 1999</p> <p>Oct. 1999</p> <p>Oct. 1999</p> <p>Oct. 1999</p> <p>Oct. 1999</p> <p>Pre-board</p> <p>Pre-board</p>	<p>MF</p> <p>MF</p> <p>MTI</p> <p>MSOER</p> <p>MTI</p> <p>MTI</p> <p>MSOER</p> <p>MA</p> <p>MSOER</p>

Box 5 (continued)

Objectives and Proposed reform	Action to be completed by	Executor agency
<p><b>3. To re-orient cooperatives:</b></p> <p>a. Cooperatives role will be oriented toward business, and program monopolies such as KUT, fertilizer and food distribution, will be phase out</p> <p>b. Commission a study by an international panel of experts to advise the government of the role of cooperatives in society. The panel will, inter alia, examine: the role of cooperatives in modern society; the cooperative law and regulations establishing cooperatives in Indonesia, and its strengths and weaknesses; the role and function of the Ministry of Cooperatives; and alternative forms of business organization.</p> <p>To enhance the knowledge base to improve agricultural performance</p> <p>1. To undertake joint consultation and reviews of public programs and priorities in agriculture with World Bank, interested government agencies (central and local), NGO's, and other technical experts on an annual basis to improve the efficiency of sectoral spending. Such reviews will examine, inter alia, agricultural research, extension, rural credit, village infrastructure, rural industrialization, rural education, and rural health care.</p>	<p>Pre-board</p> <p>Pre-board</p> <p>Oct. 1999</p> <p>Pre-board</p>	<p>EKUI N MC EKUI N</p> <p>BAPPENAS EKUI N MA</p>

Table xx. Trend of Indonesia's Exports and Imports  
(excluding petroleum and gas)

million US\$

Year	Export	Import
1996	38.093,9	39.338,9
QRT 1	8.462,4	8.703,2
QRT 2	9.593,3	10.822,9
QRT 3	9.890,4	9.945,7
QRT 4	10.146,8	9.867,1
1997	41.821,0	37.775,7
QRT 1	9.151,2	9.459,7
QRT 2	10.361,0	9.915,4
QRT 3	11.311,9	9.463,1
QRT 4	10.996,9	8.917,4
1998		
QRT 1	10.242,0	6.217,1
QRT 2	10.271,9	5.636,4

Source: BPS, Economic Indicator (Nov 1998 & August 1997).