

Original Article

Food and nutrition security and the economic crisis in Indonesia

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Indonesia has been afflicted by an economic crisis since July 1997. The economic crisis was preceded by a long drought associated with El Nino. The result has been a decline in food production, especially rice. In the eastern part of the country, especially in Irian Jaya, there was food insecurity during the early stages of the economic crisis. When the crisis escalated to become an economic, social and political crisis in 1998, food insecurity spread to other provinces, especially to urban areas in Java. The crisis led to increasingly high inflation, unemployment, poverty, food insecurity and malnutrition. The official figures indicate that poverty in Indonesia increased from 22.5 million (11.3%) in 1996 to 36.5 million (17.9%) in 1998. Food production decreased by 20–30% in some parts of the country. Compared with prices in January 1998, food prices had escalated 1.5- to threefold by August/November 1998 when acute food shortages occurred, especially in urban Java. Coupled with a drop in purchasing power, the higher food prices worsened health, nutritional status and education of children of urban poor and unemployed families. Despite social and political uncertainties, the Indonesian Government has taken prompt action to prevent a worsening of the situation by massive imports of rice, instituting food price subsidies for the poor and launching social safety net programmes to cope with food shortages and malnutrition. The present paper attempts to highlight the impact of the economic crisis on food insecurity and malnutrition in Indonesia.

Key words: crisis, food, nutrition, poverty, social.

Introduction

For more than two decades, starting in the 1970s, Indonesia witnessed a success story in its development. From 1987 to 1996, Indonesia had sustained annual economic growth of 7–8%, per capita income increased from US\$561 in 1990 to US\$1155 in 1996, poverty was significantly reduced from 87 million people in 1970 to 22 million people in 1995, there was self-sufficiency in rice over the period 1984–1993 and the country enjoyed social and political stability. From a food security point of view, there was optimism that Indonesia was achieving universal food security as defined by the Indonesian food law: ‘... a condition in which every household has access to adequate food in quantity and quality, safe and affordable.’¹

The situation suddenly changed when the Asian economic crisis began to affect Indonesia in the late 1990s. First hit by the El Nino-induced draught in 1997 in the Eastern region of the country, Indonesia witnessed declining food availability and accessibility. There were signs of a threat to food security. Meanwhile, the economic crisis expanded to become a political and social crisis that lead to a chaotic situation, especially in the first 8 months of 1998. The chaotic situation in some big cities, such as Jakarta, was triggered primarily by the worsening food crisis, with the disappearance of rice and other basic foods (sugar, cooking oils, soybean, baby foods etc.) and escalating food prices, coupled with weakened purchasing power, mass lay-offs and unemployment. The escalating number of poor people became a great concern.

Except in the agricultural sector, there was a general decline in employment during the crisis (1997–1998). According to the Central Bureau of Statistics,² the number of people

in Indonesia living in poverty increased from 22.5 million (11.3%) in 1996 to 36.5 million (17.9%) in 1998 (Table 1).

The present paper attempts to describe how the crisis has affected food security and nutritional status, the causes of the crisis, the government response and the lessons that have been learned with regard to the nutrition programme in Indonesia.

Threat to food security

The drought induced by El Nino, which preceded the crisis in Indonesia, caused a decline in food production and availability between 1997 and 1998. Rice production dropped 8.8% in 1998, the biggest fall in a single year over 20 years.³ The first troublesome effect of the food shortage, experienced primarily by urban households, was soaring food prices. Rice virtually disappeared from the market, so rice prices were especially affected.

This phenomenon reminded many people of the situation in the 1960s when the country was still very poor and just recovering from the nightmare of the communist coup in 1965.

The threat to food security during the crisis also arose because of the breakdown of the food distribution system. The riots and burning in May 1998 in Jakarta and other cities caused the collapse of the public and commercial transportation system. This situation continued for several months.

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Table 1. Poverty trends in Indonesia from 1976 to 1998

	Urban		Rural		Total (million)	% Total population
	No. (million)	Per capita/month	No. (million)	Per capita/month		
1976	10.0	4522	44.2	2849	54.2	40.2
1978	8.3	4969	38.9	2981	47.2	33.4
1980	9.5	6831	32.8	4449	42.3	28.7
1981	9.3	9777	31.3	5877	40.6	26.9
1984	9.3	13 731	25.7	7746	35.0	21.9
1987	9.7	17 381	20.3	10 294	30.0	17.7
1990	9.4	20 614	17.8	13 295	27.2	15.1
1993	8.7	27 905	17.2	18 244	25.9	13.6
1996	7.2	38 246	15.3	27 413	22.5	11.3
1998*	11.6	85 518	24.9	67 734	36.5	17.9

*Data from Puguh and Romdiati.¹²

Thus, while stocks of food were abundant in some locations, surplus food could not be transported to needy areas.

How poor households coped with the crisis

As shown in Fig. 1, households affected by the crisis tried to cope by increasing the proportion of household income spent on staples, such as rice and oil, and by decreasing the allocations on important food items, such as meat and vegetables, as well as on health care, education, household goods, housing and recreation. Despite the increased percentage allocation to foods (Fig. 2), families actually still get much less food for their money because the prices of many basic foods have increased substantially. Helen Keller International data from Central Java validate the observation that some households have reduced their consumption of protein from animal sources.⁴

Effect on nutritional status

Surprisingly, analysis of the prevalence of underweight children on the basis of aggregate data provided by the National Social and Economic Survey (SUSENAS) does not indicate that the nutritional status of children aged under 5 years in 1998 was declining. Disaggregated data by age nevertheless show a significant increase in the prevalence of underweight children aged 6–24 months between 1996 and 1998. Figure 3 shows how the prevalence of underweight children under 5 years of age changed between 1989 and 1998. Figure 4 shows changes in the prevalence of underweight children aged 6–17 months over the same period.

In rural areas, the situation of children aged 6–17 months worsened between 1995 and 1998. Throughout 1998 and 1999, Indonesian newspapers reported almost daily on the incidence of marasmic kwashiorkor. Various studies on the re-emergence of marasmic kwashiorkor cases in hospitals, nutrition clinics and the community have confirmed the cases reported by the press.^{4–6} Figure 5 illustrates the increasing rates of severe malnutrition in East Java among paediatric admissions to one physician, reflecting the impact of the crisis. Figure 6 shows how the number of visits related to severe malnutrition recorded by the nutrition clinic at Puslitbang Gizi, Bogor, West Java, varied between 1997 and 1998.

Studies also reveal that micronutrient malnutrition has been exacerbated by the crisis. For example, the prevalence of low haemoglobin values indicative of iron deficiency has

tripled in infants aged 4–5 months in Central Java. Across all age groups in the critical first 3 years of life, the percentage of children with anaemia has increased from the already high precrisis levels. Among children aged between 6 and 23 months, the level has risen from 50 to above 70%.

Impact of the crisis on Indonesia

The factors that caused the current setback in Indonesia have been the subject of economic analysis and may be summarized as follows.⁷ In the 1980s, Indonesia began a process of massive economic deregulation. While this led to strong macroeconomic performance, it was not supported by a strong microeconomic foundation. The strong macroeconomic performance led to high expectations for future income. The financial deregulation enacted in 1988 fuelled massive capital inflow and a strong currency, but also created a trend towards a large current account deficit. The weak microeconomic foundation consisted of policy, legal and institutional failures on the part of the government and the private sector. Examples of legal and institutional failures include the weakness of the legal system due to poor enforcement, the unsupervised banking system and the generally weak and inefficient financial sectors. The combination of these failures led to the excesses of corruption, collusion and nepotism in Indonesia, known as *Korupsi, Kolusi, Nepotisme* (KKN). The economy was damaged by a severe misallocation of resources. The crisis had become more complicated, leading to a complex crisis or a 'total' crisis as some Indonesians called it.

Government response to food insecurity

With the aim of ensuring food security, the initial policy was to maintain market control and keep food prices low through food trade deregulation, encouraging local food production and subsidizing the poor by means of a rice price subsidy operating a special market for rice for the poor and providing subsidies for agricultural inputs.

The deregulation policy allows for free trade in basic food commodities, thereby abolishing the food import monopoly of the National Logistic Agency, namely, Badan Urusaan Logistik (BULOG). Under the new policy, the domestic decline in food production was partly offset by food imports, including rice. Food imports, especially rice (Table 2) and wheat, increased dramatically in 1997 and 1998.

As a result of higher food imports, the per capita per annum availability of cereals in 1998 was relatively stable. As shown in Table 3, this is 175 kg and the availability of energy per capita per day is approximately 10 500 kJ. Compared with 1995, the reduction in availability of cereals per capita per annum in 1998 was only 14 kg, while the decreased energy availability per capita per day in 1998 was only approximately 966 kJ.

These data are supported by other evidence,⁸ of the availability of 10 500 kJ of energy per capita per day in 1997 and 1998. This level is well above the levels of energy availability historically associated with widespread hunger in Indonesia (i.e. 6300 kJ per capita per day in the 1890s, the 1920s, the 1940s and the early 1960s). This probably explains why, despite the economic and political turmoil during the early months of the crisis in 1998, including threats to food security, there has been no widespread overt hunger and starvation, except in Irian Jaya in early 1997, because of El Nino.

The goal of the government social safety net is to protect the poor or those who are impoverished because of the crisis by ensuring food security, creating employment, developing small and medium-sized enterprises and providing basic social services in health, nutrition and education.

To reduce the risk of malnutrition, three main nutrition activities are being implemented as part of the social safety

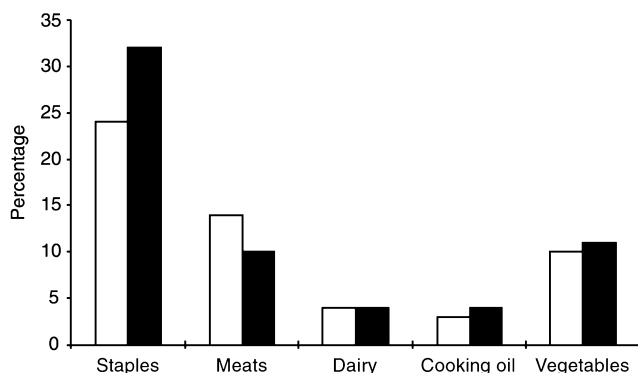


Figure 1. Percentage of household expenditure on food in Indonesia in 1997 and 1998. Data from Frankenberg *et al.*¹¹

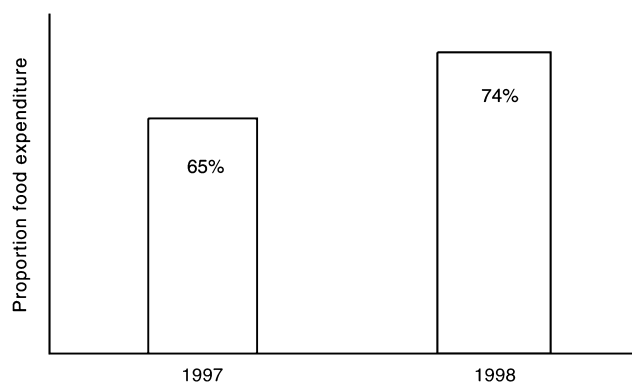


Figure 2. Proportion of household food expenditure in Indonesia in 1997 and 1998. Data from Frankenberg *et al.*¹¹

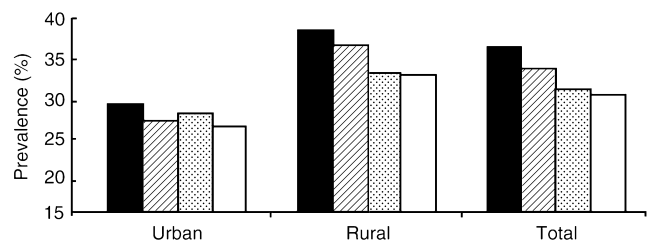


Figure 3. Prevalence of underweight children under 5 years of age in Indonesia from 1989 to 1998. (■), 1989; (▨), 1992; (▩), 1995; (□), 1998. Data from Jahari *et al.*⁶

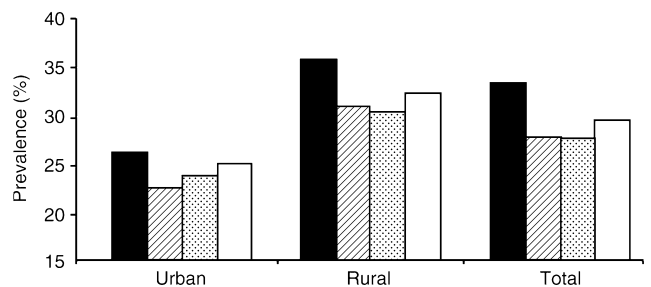


Figure 4. Prevalence of underweight children aged 6–17 months in Indonesia from 1989 to 1998. (■), 1989; (▨), 1992; (▩), 1995; (□), 1998. Data from Jahari *et al.*⁶

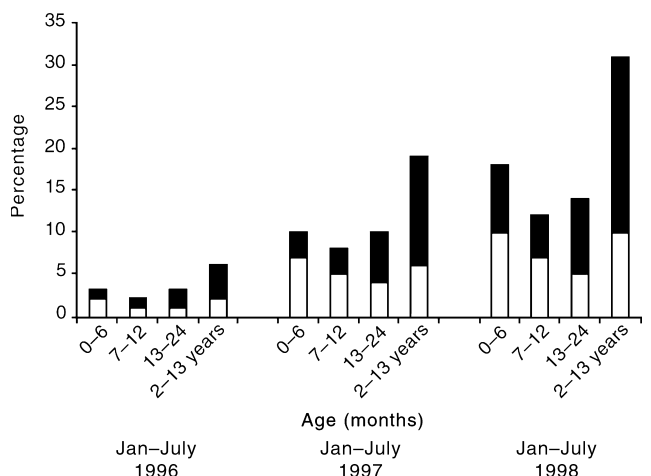


Figure 5. Rates of severe malnutrition among paediatric admissions to Dr Soetomo Hospital, Surabaya, East Java, from 1996 to 1998. (□), males; (■), females. Data from United Nations International Children's Fund (UNICEF Jakarta, pers. comm., 1998).

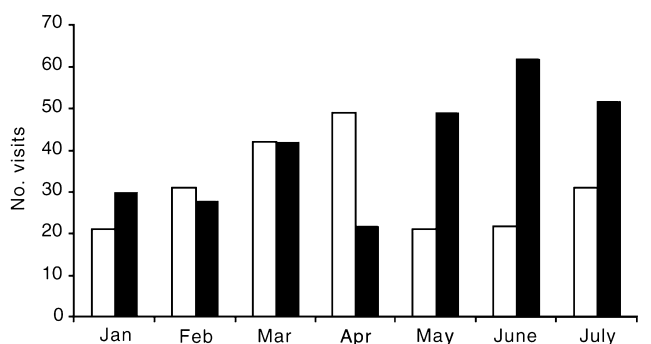


Figure 6. Visits for severe malnutrition to the nutrition clinic in Puslitbang Gizi, Bogor, West Java, in 1997 (□) and 1998 (■). Data from Puslitbang Gizi. (Centre for Research and Development in Nutrition, Bogor, 1998, pers. comm.).

Table 2. Rice imports to Indonesia from 1985 to 1998

	Import (tons)	Export (tons)	Export – Imports (tons)
1985	33 800	403 123	+371 332
1986	27 800	240 691	+212 691
1987	55 000	118 641	+63 641
1993	24 317	564 000	+539 663
1994	633 048	233 000	–400 048
1995	1 807 875		
1996	2 149 810		
1997	2 500 000*		
1998	3 100 000 (planned)*		

Data from Himpunan Kerukunan Tani Indonesia/Kompas (9 June 1998). * Badan Urusan Logistik (BULOG) Estimates: 1997, 3582 tons; 1998, 4200 tons.⁸ Actual imports in 1998 by BULOG: 5782 tons (Sawit H. Seminar Lokakarya Penyusunan Kebijakan Perberasan, IPB-Department of Agriculture, Bogor, Indonesia, 2000).

Table 3. Availability of cereals (rice, wheat, corn) in Indonesia from 1970 to 1998

	kg/capita per year	kJ/capita per day
1970	123	7661
1995	189	11 474
1998	175	10 500

Data from Tabor *et al.*⁸

net: (i) the provision of supplementary feeding to children aged 0–24 months and anaemic mothers; (ii) revitalizing the village nutrition centres (posyandu); and (iii) revitalizing the nutrition surveillance system.

The specific objectives of these activities are to prevent increasing trends in the prevalence of malnutrition among poor people due to the crisis, to reduce the prevalence of low birth weight, wasting and stunting in children and micro-nutrient deficiencies in children and mothers (particularly iron, vitamin A and zinc) and to educate mothers on good infant feeding practices using either local or home-made supplementary foods or industry products.

The current situation

In 1999, the macroeconomic indicators were positive. The rupiah exchange rate was strengthening, food prices were back to levels before the crisis, inflation had gone down to single digits, the contraction in GDP growth was getting smaller and some analysts were optimistic that it could reach zero or even positive growth in 2000. The GDP Indonesia in 2000 (the third quarter) was 5.1% (Economic Data. Far Eastern Economic Review 2001; 1). Unfortunately, macro-economic progress was still fragile because of political uncertainty, especially after the Bali Bank scandal was disclosed in July 1999 and after the result of the East Timor referendum was announced in August 1999.

The fragility of macroeconomic progress in 1999 is indicated by the persistent and increasing incidence of marasmus and kwashiorkor among children found in certain groups of people in various provinces and districts in Indonesia.

In August 1999, the press was still reporting that a number of infants and young children were dying from severe

malnutrition. While that extreme is at least debatable, there is no doubt that a significant number of people in Indonesia are still struggling to secure their right to adequate food.

Lessons learned from the crisis in Indonesia

The unexpected re-emergence of marasmus and kwashiorkor during the crisis is to be regretted. In the 1980s, Indonesia developed a nutrition surveillance system to continually monitor the probability of the occurrence of food crises and the incidence of severe malnutrition, such as marasmic kwashiorkor.⁹ In addition, Indonesia's successful development of a community nutrition institution at grassroots level called 'posyandu', was recognized by United Nations International Children's Emergency Fund and the World Health Organization. Posyandu empowers local women and the community to prevent malnutrition among children under 5 years of age and their mothers using local resources. Unfortunately, since the early 1990s, neither the nutrition surveillance nor posyandu have functioned properly. In some cases, they have been abandoned and, thus, the village community has no institutional mechanism to protect young children from the threat of food insecurity arising from an emergency such as the economic crisis.

The re-emergence of marasmus and kwashiorkor during the economic crisis has been caused more by bureaucratic, structural and functional problems at the grassroots level than by problems of availability and accessibility of food. For example, since 1993 there has been less of a role for the community and more of a top-down bureaucratic approach in the nutrition programme in Indonesia. This has led to a decreased role for posyandu in protecting children from malnutrition. The economic crisis is believed to have acted as a trigger in worsening the nutritional status of children.

From the above, it has been argued¹⁰ that existing traditional nutrition interventions, such as providing supplementary feeding, are enough to deal with crisis-induced malnutrition. Many institutional aspects of community empowerment should have preceded nutrition intervention. Therefore, it is clear that traditional nutrition intervention is necessary but not sufficient to ensure food and nutrition security at a time of total crisis as has been experienced in Indonesia.

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