

**THE ROLE OF AGRICULTURAL SECTOR TO ABSORB EMPLOYMENT
IN RESPONSE TO THE 1997 ECONOMIC CRISIS IN INDONESIA**

By

Parjiono

A THESIS

Submitted to

School of Public Policy and Management, KDI

in partial fulfillment of requirements

for the degree of

MASTER OF PUBLIC POLICY

Department of Growth and Development

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ABSTRACT

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While the initial impact of the economic crisis on employment was faced by a few sectors of the economy, the real effect gradually spread to cover almost all branches of the economy. It appears that the employment effect was not manifested in terms of persistent high unemployment, but has mostly been expressed: first, by a large movement of workers from manufacturing, construction, modern trade and other services into agriculture and possibly informal sector employment at reduced wage rates. Second, by an overall decline of real earning for virtually everyone, whether in the effected sectors or in others.

Agricultural became a key sector to absorb employment from the job losses workers caused by the crisis. However, the impact of the crisis hit through reducing real wages and increasing living standards. It is one evidence that agricultural sector has a key role in the Indonesia's macro-economy. Therefore the Government of Indonesia should more encourage and develop this sector through its policies.

There are still significant policy and institutional constraints on efficient growth and development that must be addressed. Market reform in general are needed in agriculture to reduce the public burden in the face of the economic crisis, to reduce high distribution costs and improve allocation efficiency. They can lead to increase production, higher productivity, higher rural wages and employment and improve use of natural resources.

Dedicated to my parent, Mr. & Mrs. Tjipto Widarto

and

my brother and sisters

Ris, Anto, Yum and Yanti.

.....you have been and will always be

a part of my life.

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Chapter I

Introduction

The ongoing economic crisis enveloping Indonesia has dramatically reversed of rapid economic growth, steady progress in poverty reduction, and substantial improvements in food security. Before the crisis, Indonesia was frequently cited as one of the highest performing Asian economies with per capita GDP growth in top 10 percent of all developing countries. Since the crisis began in August 1997, however, the rupiah's value has dropped by as much as 80 percent (before a partial recovery).

The crisis had economic consequences, which are still unfolding. Large numbers of rich and poor people were adversely affected. The effect on the poor operated through a contraction in demand for labor and reduced transfer from wealthier family members, on the one hand, and through increases in commodity prices, especially for internationally traded goods, on the other. These problems have apparently been more severe in Indonesia than anywhere else. However, not all poor people in Indonesia were adversely affected. Some smallholder agricultural producers whose products are exported benefited substantially from the depreciation of the national currency, the rupiah.

Related to the task on generating employment to absorb the pushed out labor caused by economic slow down, because of the crisis, actual unemployment appears to have risen by only small amounts¹. On the other hand, employment has actually risen. The reason is that labour force participation has increased and absorption in agricultural sector. The increase in the labour force has come largely from women and children. However, the most significant labour market impact of the crisis has not

¹ Peter Warr, "Indonesia's Crisis and the Agricultural Sector", Working Paper 99.07, ACIAR Indonesia research project, March 1999.

been on levels of unemployment or on labour force participation, but on real wages, which have fallen very significantly. These facts reflect the flexibility of Indonesia's labour market. A collapse in the demand for labour has been expressed primarily in a decline in its price, rather than a decline in the level of employment. Behind these aggregate data, there has been a large sector reallocation of employment away from sectors of the economy that have contracted, and towards sector which have expanded, notably agriculture.

Data from national economic survey, conducted in 1998 indicated that the rate of employment of the population aged 10 and above (labour force participation) increased from 56.3 in February 1997 to 57,4% in February 1998. This increase in labour force participation was most pronounced in urban areas. Almost all the new jobs were in agriculture. The national economic survey data also indicated that open unemployment increased from 5.1% in February 1997 to 6.4% one year later. On survey on 100 villages, it indicated that force participation for men had fallen slightly and that for women had risen. The more significant finding was large increase in hours worked for those employed. Average hours worked increased for both males and females but both the absolute increase in hours worked and the proportionate increase was significantly larger for females.

The national economic survey data also provides information on employment by sector, which again reveal large changes in the composition of employment. Employment has shifted from urban to rural areas and from formal to informal jobs. The aggregate employment increased by 5.5%, most of this was in agriculture, where it expanded by 6.8%, while employment in other sectors all declined.

Around 2.5 million workers, or 3% of the total work force displaced by the crisis in the first year. Job losses came from all sector of the economy outside

agriculture and the small transport and communication sector. Most displaced workers were employees, and men accounted for three quarters of all job losses. The manufacturing sector was easily the largest loser, accounting for nearly half of all job losses, followed by construction, and to a smaller extent by mining, trade and services. In this regard, the thesis will deeply discuss the role of agricultural sector to absorb job losses workers caused by the crisis and analyze policy issues taken by the Government of Indonesia.

Purpose and scope of the thesis

This thesis will discuss on the three objects. First, to examine the impact of the crisis on macroeconomic and employment. Second, to examine the role of agriculture sector to absorb the job losses workers from other sectors of the economy caused by the crisis. Third, to analyze some policy issues taken by the government in response to the crisis related to employment.

The organization of the thesis is as follows. Section 2 discusses the impact of the crisis on macro-economy, agricultural sector and employment. This is followed by section 3 which will discuss about job losses caused by the crisis, employment absorption in agriculture, and changing on employment, living standards and real wages. In the section 4, some policy issues will be discussed. In this section also some recommendations are drawn.

Methodology

A. An assessment of the statistical base

The main institutions producing current official labour statistics in Indonesia are the Central Bureau of Statistics (CBS) and the Ministry of Labour. CBS conducts

on a regular basis two large scale household surveys, one dealing with employment and unemployment and the other with the socio-economic characteristics of the population. CBS also conducts regular surveys of large and medium size establishments in selected sectors of the economy dealing with industrial production and wages. Recently, they have started an integrated survey of small-scale establishments.

In addition, a variety of small-scale surveys have been commissioned to CBS and other statistical agencies in the aftermath of the financial crisis by various national and international organizations to examine the impact of the crisis on the welfare and employment situation of the population.

Base on these source data, this thesis deeply analyses the impact of the 1997 crisis regarding job losses and the role of agricultural sector to absorb employment in response to it.

Apart from comparability, it is also important to distinguish the impact of a particular event/phenomenon from normal trend. A statistically significant change in an observed variable from one period to another should not be automatically attributed to an impact of the financial crisis. It may be part of a continuing trend that has been in effect for some time. For example, a decline in the male labour force participation rate from 1997 to 1998, even if statistically significant, should be assessed against its past trend as the labour force participation of men has been declining by about 0.1 percentage point a year in the last five years or so. Similarly, an increase in the female labour force participation rate from 1997 to 1998 may not necessarily reflect an “added worker” effect due to the financial crisis, as the labour force participation rate of women has been increasing by about 0.1 percentage points a year during the recent years.

B. Policy study

The thesis also analyzes the policies which have been taken by the Government of Indonesia in response to the crisis on employment and policies related to the agricultural sector. The Government of Indonesia has been alive to the worsening situation on un-and underemployment in the wake of the economic crisis, and has undertaken a number of measures aimed at job creation. The present looks at program of direct wage employment creation, self-employment generation, and for promotion of small and medium enterprises.

Chapter II

Impact of the 1997 Economic Crisis

A. Impact on Macro-economy

The impact of the crisis on Indonesian economy has been very severe in comparison to other countries in crisis. In less than a year the economic success which has been achieved by this country for the last thirty-two years of development has been torn apart very badly. This country that was previously ranked by the World Bank as the lower-middle income groups together with Thailand, Malaysia and other NIEs (Newly industrializing countries) now becomes as one of the poor country again. Some macroeconomic indicators prior to the crisis show that the country has an average high growth rate of 7 per cent per year between 1990-1996 with relative low inflation and there has been structural adjustment from agricultural based economy to industrial based economy, although there has been problems in terms of debt service ratio (DSR) and current account balances.

As there have been many problems with the economy prior to the crisis (Firdausy, 1999), the economy becomes more unstable when the crisis hit the country. The collapse of the economy can be seen not only in terms of negative economic growth (-14% in 1998), but also in terms of other macroeconomic variables (consumption, government expenditure, investment, and imports). In terms of consumption variable by GDP contribution, for instance, the crisis has made both household and government consumption growth rate becoming negatives. The growth rate of household consumption by GDP between 1997 and 1998 become negative of 4.9 per cent, whereas government consumption by GDP contribution was minus 15.3

per cent. Similarly, the growth of investment by GDP was minus 42.4 per cent, and import growth was minus 7.7 per cent. The only positive figure by GDP contribution was export variable (table 1).

Table 1.

**GDP by Consumption, Government spending, Investment, Export and Import
1997 and 1998 (at constant prices 1993)**

Description	1997 (Rp. billion)	1998 (Rp. Billion)	Percentage change 1997-1998
Consumption	173 917.4	260 368.3	-4.95
Government Spending	31 700.8	26 839.9	-15.33
Investment	139 724.8	80 525.9	-42.37
Export	121 157.9	137 487.1	13.48
Import	139 796.1	129 056.1	-7.68
Total	434 095.5	374 516.6	-13.72

Source: Calculated from National Survey of Social Economic, CBS, 1998.

Table 2

Real GDP growth by sector, 1997 and 1998 (Rp. billion at constant 1993 prices)

Description	1997	1998	Growth (%)
1. Agriculture	64 289.5	64 532.0	0.38
2. Mining	38 385.9	37 101.7	-3.38
3. Manufacturing	108 828.6	91 473.3	-15.95
4. Utilities	5 498.6	5 576.8	1.42
5. Construction	35 040.6	21 902.9	-37.49
6. Trade and hotel	73 503.6	58 330.1	-20.64
7. Transport	32 169.4	28 361.4	-11.84
8. Finance	38 730.1	31 664.5	-18.24
9. Other services	37 649.1	35 573.8	-5.51
Total	434 095.4	374 516.5	-13.72

Source: Central Bureau of Statistic, 1998.

Furthermore, In terms of the growth by economic sector at constant 1993 prices, the crisis has made all sectors of the economy experienced substantial falls in activity in 1998, with the exception of agriculture and utilities. The sectors suffering the largest collapse have been construction, and trade and hotel. The growth of

construction sector in 1998 declined to minus 37.5 per cent, while trade and hotels fell to negative 20.6 per cent (table 2).

Apart from the negative effect on macro economy of the country, the crisis also hit badly the economy at the micro level². Many firms have gone bankrupt simply because they fail to plan for an 80 per cent devaluation and a period of interest rates in excess of 100 per cent. This is because with a large collapse of the economy bankruptcies and sharp decrease in production of some firms have adverse effect on other firms, which have sound management, causing them in turn to go bankrupt.

B. Impact on Agricultural Sector

Agriculture cannot be described as a neglect sector of the Indonesia economy. Aggregate government spending as a proportion of the budget and as a proportion of the GDP are the highest in Southeast Asia and the rate of growth of yields has also been among the highest in Southeast Asia³.

Among the ongoing concerns facing agricultural policymakers is what the devaluation means for food security and what can be done to minimize the negative consequences for both food production and access to food. The devaluation's direct and indirect impacts on food consumers and producers work in opposing directions. For example, while agricultural wages represent an important cost component for food production, they are also the primary income source for many households. In part, the crisis shocks should encourage food production since drops in real wages

² Carunia Mulya Firdausy, "The Impact of Economic Crisis on Employment in Indonesia", Center for Economic and Development Studies-Indonesia Institute of Sciences, 1999.

³ Peter Warr. "Indonesia's Crisis and Agricultural Sector", Working Paper 99.07, March 1999.

reduce food production costs, increase producer profits and provide incentives to boost production further through both extensive and intensive techniques.

For wage-dependent landless workers, however, falling incomes reduce food demand, counteracting the production enhancing effects of lower production costs. Likewise, as the price of export crops increase relative to non-exported food crops, producers will shift land, labour and other inputs towards the more profitable opportunities.

It is ironic that in Indonesia, agricultural households tend to be more vulnerable to food insecurity than urban residents. Before the crisis, the average per capita expenditure of agricultural households was about 57 percent higher than the poverty line (World Bank, 1998). In contrast, average per capita expenditure among households in both manufacturing and construction was more than twice the poverty line. Unskilled agricultural wages have fallen in real terms as urban workers whose jobs are lost in construction, manufacturing, and import-dependent food processing activities migrate back to the countryside to look for work. It will be discussed that this influx of labour into the countryside is placing downward pressure on agricultural wages.

The devaluation provides increased opportunities for expanding traditional exports crops (cocoa beans, coffee, tea and fishery and forestry products), as well as exports of fruits and vegetables. As prices of vegetables increase relative to rice prices, producers will tend to substitute vegetables for rice production. The price ratio of paddy to agricultural wages has changed significantly compared with the price ratio of vegetables to agricultural wages. As the relative output prices of these two commodities continue to diverge, policymakers attempting to control rice prices

through generalized subsidies will find it increasingly difficult to compensate rice producers via input subsidies.

The increasing food prices and falling real input costs stimulate production and agricultural income, but reduce the real income, effective demand and food security situation of landless agricultural workers and consumers who depend on the market for their food supplies. For agricultural workers, declining real wages harm their ability to feed their families, to school their children, and to provide adequate health care.

The crisis exactly contributed to a significant increase in absolute poverty: (1) a fall in average real incomes, (2) a rise in urban unemployment; estimated to be as high as 15 million persons, and (3) a rise in food prices facing the poor.

The impact has long-term consequences for future income, agricultural productivity and production possibilities. Many households respond to negative economic shocks by pulling their children out of school. The World Bank estimated 17.5 million school age children (out of a total 53 million) in 1997 were reported to be out of school to earn an income. Even with the planned abolition of school fees, these numbers will undoubtedly rise as the increased opportunity cost of keeping children in school rises. The government estimates suggest that about 6 percent of primary school students and 13 percent of junior secondary school students are at risk of dropping out (approximately 1,650,000 and 1,100,000 students respectively), while an additional 400,000 primary school graduates are unlikely to continue their education (World Bank, 1998). The drop in enrolment levels raises serious medium and long term growth implications for Indonesia's economy.

C. Impact on Employment

1. Pre-crisis employment

The effects of the rapid economic growth and associated policies before the economic crisis in mid 1997 have been favorable to labor, in terms of improved welfare, security and equity across the country. As can be seen at table 3, the proportion of overall open unemployment rate declined from 4.9 % in 1996 to 4.7 in 1997. On the supply side, the growth labor force declined from 2.5% in 1996 to 1.4 percent in 1997. Similarly, the employment growth slowed down from 2.2% in 1996 to 1.6% in 1997. With GDP growth during 1990s over going 8%, average labor productivity grew at just under 6% per annum until mid 1997.

Although there was significant improvement in the structure of employment and earnings before crisis, it does not necessary mean that there are no problems with the labor markets. Even before the crisis hit Indonesia in 1997, the labor market of the country was characterized by a high degree of under employment and continued predominance of the informal sector. While significant change had taken place in the structure of employment (i.e., away from agriculture), the rate of employment growth was lower than that of labour force. And the rate of employment growth declined in 1990s. Youth unemployment, especially in the urban areas, was already a problem in Indonesia before the crisis. Manning (1998) observed that there are at least three problems, namely, a high proportion of employment in low productivity, a large traditional and mainly rural non-agricultural sector in which family and micro enterprises dominated and returns were commonly much lower than daily wages in agriculture, and a tiny modern sector, especially outside government (and military)

employment, epitomized by a very small proportion of professional and other white-collar and educated workers.

Table 3
Unemployment, Employment and Wages, 1992-1997

Indicator	1992	1993	1994	1996	1997
<u>Open unemployment</u>	-		4.4	4.9	4.7
% Labor Force	-	-	3.7	4.4	4.3
Labor Force (in Million)	5.6	5.9	5.9	5.8	5.6
Underemployment (<35 hours/week)	40.5	39.6	39.2	38.9	36.6
<u>Employment growth</u>	2.7	0.9	3.6	2.2	1.6
Labor Force Group	2.9	0.9	5.3	2.5	1.4
Population growth (age 10+)	2.5	2.1	2.8	2.2	1.9
GDP growth	7.3	9.1	7.5	8.0	4.6
Productivity growth	4.5	8.2	3.8	5.7	3.0
Real wages Growth	8.6	12.3	0.0	6.6	4.2

Source: National Labor Force Survey and National Socio-Economic Survey, CBS.

Therefore, it could be concluded that the strong economic performance before crisis was accompanied by significant gains in employment and labor income, and economic growth was employment friendly to a surprising extent. However, there are still problems associated with the labor market change before the crisis in mid 1997. Formal sector employment in the country still lagged in response to economic change. The agricultural sector still continued to absorb unskilled workers, informal sector work widespread and continued to grow in the cities and rural self-employed and family work still contributed a major share of total employment.

2. Employment during the crisis time

Employment situation in the crisis period was very much different in comparison with before the crisis. The economic crisis, in its first year, did not lead to a massive increase in open employment as was feared by many. The rate from 4.7% in 1997 to 5.4% in 1998 (CBS 1999). However, the degree of underemployment and reliance on informal sector increased. This has implications for productivity and earnings of large number of workers who had to move the formal to informal segment of the economy as well as those who were already forced to eke out their living from low productivity jobs in the latter. There was thus a reversal of gains made in term of reduced underemployment and shift in the structure of the employment (towards manufacturing and away from agriculture).

Table 4.

Number of employment by sector, 1997 and 1998 (million)

Description	1997	1998	1998 – 1997
1. Agriculture	34 789 927	39 414 765	4 624 838
2. Mining	875 280	674 597	-200 683
3. Manufacturing	11 008 951	9 933 622	-1 075 329
4. Utilities	233 237	147 849	-85 388
5. Construction	4 184 970	3 521 682	-663 288
6. Trade and hotel	16 953 006	16 814 233	-138 773
7. Transport	4 125 429	4 153 707	28 278
8. Finance	656 724	617 722	-39 002
9. Other services	12 578 005	12 394 272	-180 572
Total	85 405 529	87 672 449	2 270 081

Source: National Labour Force Survey, 1998, CBS.

From table 4, it can be seen that the crisis has given a great impact on manufacturing sector, followed by construction sector and mining sector. The agricultural and transport sectors have been able to survive. These sectors (especially agriculture) were even able to absorb the workers retrenched from other sector. This

suggests that the agricultural sector has been the important sector to absorb retrench workers from other sectors. And hence, this sector should be more developed in the future economic development in the country.

Regarding the average of hours of employment in the economic sector, on the average, it was calculated that in 1997 the average hours of Indonesian workers for a week was 40.9 hours, while in 1998 it increased to 41.08 hours per week. This suggests that in the crisis time the workers slightly worked harder than before crisis as they need to find more earnings to fulfill their daily needs which increased due to crisis (table 5).

Table 5.

Average hours per week of Employment by Sector 1997 and 1998 (Hours)

Sectors	1997	1998
1. Agriculture	40.86	40.86
2. Mining	40.81	40.69
3. Manufacturing	41.10	41.24
4. Utilities	41.17	41.27
5. Construction	41.25	41.99
6. Trade and hotel	41.04	41.27
7. Transport	41.09	41.39
8. Finance	41.23	41.54
9. Other services	41.07	41.11
Average	40.99	41.08

Source: National Accounting System Survey, 1997 and 1998, CBS.

However, although the workers have worked more hours than before the crisis, the income earnings of workers in 1998 have been relative lower than in 1997. As can be seen at table 6 the average income per employment equivalent decreased from Rp. 3.7 million in 1997 to Rp. 3.5 million in 1998, although the workers have increased their average hours of worked per week. This implies that wage of the workers decreased from Rp. 70.7 thousand per week in 1997 to Rp. 68 thousands per week in

1998. Hence, the crisis has made the workers' average incomes lower than before the crisis. The implication of this finding is that there will be a declining purchasing power of the workers in the crisis time.

Table 6.

Average Wage per Employment Equivalent per Year By Sector, 1997 and 1998

Sectors	1997 (Rp. thousand)	1998 (Rp. thousand)
1. Agriculture	2 230.55	2 058.95
2. Mining	14 304.69	18 764.44
3. Manufacturing	4 635.48	5 607.22
4. Utilities	6 114.07	7 428.51
5. Construction	5 153.93	5 799.32
6. Trade and hotel	3 824.89	4 133.66
7. Transport	3 155.38	3 212.56
8. Finance	24 315.72	21 400.19
9. Other services	3 478.37	2 833.75
Average	3 673.96	3 533.72

Source: Calculated from National Accounting System Survey, 1997 and 1998, CBS.

In addition to the adjustments in employment and wage rates, there were labor market adjustments, which have contributed to preventing the unemployment rate from escalating, have occurred⁴. This note briefly discusses some of these factors.

There has been a shift in employment from the formal to the informal sector. Table 7 shows the employment share of the informal sector in 1997 and 1998, revealing that informal sector employment share increased from 62.8 percent in 1997 to 65.4 percent in 1998. When gender is taken into account, the increase was larger for male workers, but in both years the proportion of female workers operating in the informal sector has been significantly higher than male workers. Comparing urban and rural areas, the increase in the employment share of the informal sector was larger

⁴ SMERU Indonesia, "Labor Market Adjustment as a Response to the Crisis", No. 7, 1999.

in urban areas, although throughout the whole period the proportion of workers in rural areas in the informal sector has been much higher than in urban areas.

Table 7

Employment Share of the Informal Sector (%)

	1997	1998
Total	62.8	65.4
Male	58.3	61.6
Female	70.2	71.5
Urban	42.8	45.7
Rural	73.3	75.8

Source: National Labour Force Survey 1998, CBS.

There has been a shift in sectoral employment back to agriculture. Table 8 shows the employment share of the agriculture and non-agriculture sectors in 1997 and 1998. It reveals that the proportion of those working in the agriculture sector increased substantially, from 40.8 percent in 1997 to 45 percent in 1998. On the other hand, the share of non-agriculture sectors employment shrank from 59.30 percent to 55.00 percent during the same period. This shifting pattern of sectoral employment is true for both male and female workers as well as in urban and rural areas.

Table 8

Employment Shares of the Agriculture and Non-agriculture Sectors (%)

	Agriculture		Non agriculture	
	1997	1998	1997	1998
Total	40.7	45.00	59.30	55.00
Male	40.3	44.30	59.70	55.70
Female	41.8	46.00	58.20	54.00
Urban	7.90	11.10	92.10	88.90
Rural	57.90	62.90	42.10	37.10

Source: National Labour Force Survey 1998, CBS.

It is apparent that there has been an adjustment in the number of hours that people are working. Table 9 shows the proportions of those who worked more than 35 hours per week and those who worked less than 15 hours per week in both 1997 and 1998. Those who worked more than 35 hours per week declined from 64.2 percent in 1997 to 60.9 percent in 1998, while those who worked less than 15 hours per week increased from 9.6 percent to 10.5 percent during the same period. This adjustment in working hours holds equally for both male and female workers as well as in both urban and rural areas. Falling real wages may induce workers to compensate by working longer hours. This, however, is constrained by falling labor demand. Those who worked less than 15 hours increased as absorbed in agricultural and informal sector.

Table 9

Proportions of Workers by Hours of Work (%)

	>35 hours/week		<15 hours/week	
	1997	1998	1997	1998
Total	64.2	60.9	9.6	10.5
Male	73.5	70.4	5.7	6.3
Female	49	45.6	16	17.1
Urban	79.1	75.9	5.7	6.4
Rural	56.4	53	11.6	12.7

Source: National Labour Force Survey 1998, CBS

Chapter III

Job Losses and Employment Absorption

A. Job Losses

The manufacturing sector has been amongst the hardest hit by the sharp fall in real wages. Real wages in manufacturing declined by 37.7 percent in 1998, compared with 32.2 percent in services, and 26.6 percent in agricultural sector⁵. Sharp reduction in employment has also taken place in the manufacturing sector, so that the real labour remained relatively constant.

Within the manufacturing sector, the decline in employment shows large number variation among sub-sector, with the highly import-dependent manufacturing sub-sectors the most affected. Large number of workers from these sectors have been laid off and moved to other sectors, especially to the agricultural sector and other natural resource-based sector and or regions. The agricultural sector, helped by the boom in export oriented crops such as palm oil, cocoa and coffee in various regions or island appear to have absorbed many workers dismissed from the manufacturing sector. There is evidence that regions that are resource abundant and produce export commodities have benefited from the depreciation of the real exchange rate. What seemed to be occurring in the manufacturing sector is the transition from manufactured export dependent on imported inputs to natural resource-based production. The employment impact follows the same pattern of industrial restructuring.

Job losses in manufacturing sector exceeded 1.0 million persons or nearly half of all job losses, around 60% of whom were male (table.10). Around three

⁵ ILO-Jakarta Office, "Indonesia Employment Strategy Mission", Aide Memoire, 1999.

quarters of displacement in this sector were in rural areas. The decline in manufacturing employment was not limited to the relatively industrialized provinces. This is because the majority of workers in this sector, 60%, are own account workers or family workers, many engaged in small-scale and household manufacturing, and relying on sales to the general population whose purchasing power has been greatly eroded due to inflation.

Construction is the second sector which is the most affected during the crisis. Job losses in this sector nearly 0.7 million mainly male workers, or nearly a third of all job losses (table 10). As in the case of manufacturing sector, three quarters of these job losses occurred in rural areas.

The other affected sectors were mining, trade and services, with nearly 0.2 million-job losses each. Two thirds of job losses in trade consisted of female workers, while male accounted for virtually all job losses in the service sector. In urban areas, some displaced workers from the manufacturing and construction sectors found refuge in the informal trade and service sectors, thus increasing urban employment in these sector about 0.2 million. However, this was insufficient to compensate for the 0.4 million jobs shed by the rural trade sector. As in the case of manufacturing, the decline in trade and service sector employment were quite general and have the same order of magnitude as for the country as a whole.

Table 10**Job Losses and Employment Absorption in Agriculture**

Sector	Employment Changes		By Gender (%)		By Location (%)	
	(million)	%	Male	Female	Urban	Rural
1. Agriculture	4.625	100	57	43	23	77
2. Manufacturing	-1.075	46	58	42	29	71
3. Construction	-0.663	28	98	2	27	73
4. Mining	-0.201	9	61	39	(7)	107
5. Trade and hotel	-0.139	6	37	63	(166)	266
6. Finance	-0.039	2	90	10	38	62
7. Utilities	-0.085	4	97	3	91	9
8. Transport	0.028	-1	40	60	207	(107)
9. Other Services	-0.184	8	97	3	(104)	204
Non Agriculture	-2.358	100	73	27	4	96

Source: National Labour Force Survey 1998, CBS.

Note: figure in () means job gains in non-agricultural sector

B. Employment Absorption in Agricultural Sector

While the initial impact of the economic crisis on employment was faced by a few sectors of the economy, the real effect gradually spread to cover almost all branches of the economy. It appears that the employment effect has not been manifested in terms of persistent high unemployment, but has mostly been expressed: first, by a large movement of workers from manufacturing, construction, modern trade and other services into agricultural and possibly informal sector employment at reduced wage rates. Second, by an overall decline of real earning for virtually everyone, whether in the effected sectors or in others. These features are considered to be signs of the flexibility of the labour market in Indonesia.

Employment in agriculture increased by nearly 5 million, or 6% of the workforce, most of it supply-driven. Workers displaced by the crisis from all other sectors of the economy accounted for nearly half of this growth, while the other half consisted of new entrants into the labor force. The latter in turn consisted of young,

first time labour market elements, and other, mainly women moved from housekeeping to work to cope with the crisis. Rural household formed most, nearly 80%, of the new employment in agriculture. However, urban household accounted for the remaining 20% of new employment, presumably because they sent out some of their family members to work on the farms.

In addition to displaced workers, new entrants into the labor force were mainly absorbed in agriculture. The working age grew by 3.5 million persons, or 2.6% between 1997 and 1998, a continuation of previous trends. A stable employment rate of just over 63% over the last years translates itself into over 2 million additional labour market entrants every year. This consisted for a large part of teenagers turning 15 and being officially counted in the work force for the first time. Finally, nearly 0.7 million persons outside the labour force, and previously engaged in housekeeping and other activities, also joined the work force mainly in agriculture.

Manufacturing employment, which had reached 13% of total employment in 1997, dropped back 2% to 11%, while employment in trade and services declined by 1% each (20% to 19% in trade and 15% to 14% in services). The gender ratio did not change however, because men accounted for nearly 60% of all additional employment in agriculture even though they accounted for most job losses in non-agricultural sectors. Similarly, the urban-rural shares of employment did not change, because most additional employment was located in agriculture in rural areas, compensating for most net job losses in rural areas.

The overall rise in employment of nearly 2.5 million in 1997-98 was the result of two opposite movement, namely, job losses in non-agricultural sectors of nearly 2.5 million, losses which were more than compensated by employment absorption in agriculture sector of double this magnitude at nearly 5.0 million workers

(3.0 million males, 2.0 million males). As a result, the steady decline in the share of agriculture in total employment, from 44% to 41% between 1996 and 1997, was reversed to reach 45% in 1998, while the share of virtually all non-agriculture sectors declined correspondingly (table 11).

Table 11
Structural Change in Employment

	Person (million)				%			
	1994	1996	1997	1998	1994	1996	1997	1998
By sector								
1. Agriculture	36.51	36.50	34.79	39.42	45.6	43.5	40.7	45.0
2. Non Agriculture	43.53	47.40	50.62	48.26	54.4	56.5	59.3	55.0
- Manufacturing.	10.59	10.57	11.01	9.93	13.2	12.6	12.9	11.3
- Construction	3.54	3.78	4.18	3.52	4.4	4.5	4.9	4.0
- Mining	0.72	0.75	0.87	0.67	0.9	0.9	1.0	0.8
- Trade and Hotel	13.72	15.84	16.95	16.81	17.1	18.9	19.9	19.2
- Finance	0.62	0.69	0.66	0.62	0.8	0.8	0.8	0.7
- Utilities	0.18	0.16	0.23	0.15	0.2	0.2	0.3	0.2
- Transport	3.36	3.94	4.12	4.15	4.2	4.7	4.8	4.7
- Other services	10.79	11.67	12.58	12.39	13.5	13.9	14.7	14.1
By Location								
Urban	24.04	27.43	29.35	30.30	30.0	32.7	34.4	34.6
Rural	56.02	56.47	56.05	57.37	70.0	67.3	65.6	65.4
By Gender								
Male	49.14	51.91	53.00	53.90	61.4	61.9	62.1	61.5
Female	30.90	31.99	32.40	33.77	38.6	38.1	37.9	38.5
By Status								
Wage Employment	26.79	28.70	30.28	28.80	33.5	34.2	35.5	32.9
Non-Wage Employment	53.25	55.20	55.13	58.87	66.5	65.8	64.5	67.1

Source: National Labour Force Survey, CBS.

Both wage and non-wage employment increased in agriculture. Wage employment rose by about 0.5 million, nearly all accounted for new urban workers probably employed as hired agricultural labours, and benefited equally both male and female workers. However since non-wage employment increased even faster, mostly in the self-employment category which employs occasional hired labours as well as family labour, the share of wage employment fell slightly, from 13.4% to 13.0% in this sector. Outside agriculture, wage employment fell nearly by 2 million. A third of

these each come from manufacturing and construction, while another tenth originated in the trade sector. Nearly two third of losses in wage employment originated in rural areas, where, in addition to the manufacturing and construction, the service sector accounted for a quarter of the losses in wage employment.

C. Real Wages and Living Standards.

With refer to the table 12, nominal earnings of employees increased by less than 20% in the first year of the crisis, while consumer prices for workers rose by 100% between August 1997 and August 1998. Real earnings therefore fell by 40% in this period, Subsequent wage surveys of the modern manufacturing and hotel sectors indicate that employers may have frozen pay rises between September 1998 and December 1998. Nominal wages in rural areas rose somewhat more than in urban areas, due to a more than average increase of the pay of agricultural labours. Male and female workers were equally affected in aggregate. Female workers in rural areas did not benefited from the same pay increase as their male counterparts. However, they did obtain higher pay rises in urban areas.

Wages increases varied considerably by sector of the economic activity. The table shows that agricultural earnings increased almost twice as rapidly at over 30% compared with the average rise of 17% per annum. This may in part be due to the very low, survival level earnings in this sector (US\$ 0.65 per day in 1998), which was only half of the average in earnings in sectors such as manufacturing and construction. Without substantial increases in their earnings in the face of rapid inflation in the price of good, the labours receive their wages in kind. On the other hand, the increase in the earnings of manufacturing and construction workers was below average at just 11% and 15% respectively, while service sector earnings, for males but not for females,

were slightly above average at 20% per annum.

Table 12.

Nominal Average Monthly Earnings of Employees (Rp./month)

	Rupiah/Month				Index (1997=100)			
	1998	1997	1996	1994	1998	1997	1996	1994
<u>Urban + Rural</u>	282 251	240 732	207 108	157 343	117	100	86	65
Male	314 306	266 826	230 735	176 834	118	100	86	66
Female	215 528	183 042	153 737	113 497	118	100	84	62
<u>Urban</u>	328 003	288 498	247 657	194 337	114	100	86	67
Male	365 069	322 168	276 447	219 422	113	100	86	68
Female	255 289	219 398	186 600	142 221	116	100	85	65
<u>Rural</u>	227 208	186 753	162 056	120 579	122	100	87	65
Male	255 789	207 335	182 003	136 557	123	100	88	66
Female	163 211	137 127	113 638	81 585	119	100	83	59
<u>By sectors</u>								
Agriculture	155 148	118 550	106 695	82 985	131	100	90	70
Manufacturing	253 300	228 198	191 686	141 483	111	100	84	62
Construction	279 300	242 870	211 297	165 152	115	100	87	68
Trade and Hotel	279 200	232 667	207 074	162 867	120	100	89	70
Services	333 600	282 712	237 478	183 763	118	100	84	65
Deflator (1996=100) Urban (CPI)	204.31	106.35	98.38	81.48	192	100	93	77

Source: National Labour Force Survey, CBS

Table 13.

Real Average Monthly Earnings of Employees (Rp./month)

	Rupiah/Month				Index (1997=100)			
	1998	1997	1996	1994	1998	1997	1996	1994
<u>Urban +Rural</u>	138 148	226 358	210 518	193 106	61	100	93	85
Male	153 838	250 894	234 534	217 027	61	100	93	87
Female	105 491	172 113	156 269	139 294	61	100	91	81
<u>Urban</u>	160 542	271 272	251 735	238 509	59	100	93	88
Male	178 684	302 932	280 999	269 296	59	100	93	89
Female	124 952	206 298	189 673	174 547	61	100	92	85
<u>Rural</u>	111 207	175 602	164 725	147 986	63	100	94	84
Male	125 197	194 955	185 000	167 596	64	100	95	86
Female	79 884	128 939	115 509	100 129	62	100	90	78
<u>By sectors</u>								
Agriculture	74 300	114 308	109 734	101 734	65	100	96	89
Manufacturing	121 300	216 429	194 786	170 979	56	100	90	79
Construction	133 600	230 345	211 917	198 077	58	100	92	86
Trade and Hotel	133 600	222 667	211 534	195 947	60	100	95	88
Services	159 600	270 508	243 457	221 817	59	100	90	82

Source: National Labour Force Survey, CBS.

Related to the poverty profile, according to Meno Pradhan, et al (2000), the agriculture consistently have the highest poverty incidence as well as the highest contribution to the total number of poor people. This reflect two things, first, people in the agricultural sector have always been relatively poorer than those in other sectors. Therefore, even though this sector was not hit by the crisis as hard as modern sectors, in the end the poverty incidence in this sector still the highest of all sectors. Second, the agricultural sector remain the largest sector in term of employment. In fact, during crisis many workers who were laid off in modern sectors returned to agriculture, so that between 1997 and 1998 the employment's share increased from

40.7 percent to 45 percent. This combination of these two factors explains persistence of agricultural sector as the largest contribution to the number of poor people, even though its importance has declined markedly.

Chapter IV

Policy Issues and Recommendations

A. Policy Issues

The Government of Indonesia has been alive to the worsening situation on un- and underemployment in the wake of the economic crisis, and has undertaken a number of measures aimed at job creation. The present looks at program of direct wage employment creation, self-employment generation, and for promotion of small and medium enterprises.

1. Direct wage employment creation.

Labour-intensive job creation program run measure for poverty alleviation through employment generation had been in vague in Indonesia since the early seventies and the eighties. Recently, this program had the added objective of creating social capital as well. The target beneficiaries of this labour-intensive sub programs varied from the new and the poor people, also retrenched worker as well as other unemployed.

One of the major problems that the recent package of labour-intensive programs suffered from was poor targeting, and much of the inadequacy of the program in this area stemmed from lack of conceptual clarity about objectives and poor programs design which did not take into account the ground conditions. For instance, it should have been abundantly clear that in the absence of a functioning decentralized labour market information system, it would not be easy to identify the target group of beneficiaries of labour-intensive. The near - total absence of effective community involvement would have simply aggravated the problem. Under the circumstances, the best option would have been to allow for self - targeting especially

in case of unskilled labour, so that the really impoverished ones, would self - select themselves for work, provided the work sites are chosen carefully. For such a system to work effectively, the offered wage rates need to be kept low, for otherwise, the really needy and the unemployed may be elbowed out by some who would take up labour-intensive work simply because it offers them employment at wage rates higher than what they would have been earning in their current jobs. In most successful labour-intensive public works programs, wage rates are normally kept low in order to net in the really poor and the needy, and to keep out those with higher reservation wages.

A large number of labour-intensive projects also happened to have too low a wage bill as compared to material and other costs. This is again a design problem. Even in highly capital intensive infrastructure projects there may exist a large untapped potential for increasing the labour intensity of public works programs without compromising on the quality of the works, simply by identifying activities, sometimes peripheral, but generally essential, which can deploy large quantities of labour.

The labour-intensive programs also exhibited a very low incidence of participation of women workers. Indonesian women from most parts, are generally not involved in construction activities, so that construction labour-intensive programs have registered very little women's involvement. However a range of activities, especially in the area of social capital, can be identified which can be highly women intensive. Thus by careful planning and design, many of the shortcomings of the recent labour-intensive programs could have been revoked.

2. Self-employment generation and the role of micro finance

The lower end of the self - employment sector in Indonesia has over the years absorbed the surplus manpower from agriculture that has not been able to get into the fast growing modern sector. Yet there has been little official recognition of the shock - absorbing and self-adjusting role the informal sector has played in the process of transition of the national economy. On the contrary, a range of policy interventions, including fiscal and regulatory measures have been systematically geared against the interests of the self - employed segments at the bottom ends of the market. Regulatory monopolies affecting the production and trade in a large range of agricultural commodities for instance have generally worked against the interests of the self - employed. Faulty pricing and fiscal policies have virtually decimated small producers and traders in some markets, as in the case of cane products. Indiscriminate taxes and levies rose by local governments, ad hoc regulations on local trade and transport, and a range of statutory licensing requirements and restrictions on production and marketing of products have posed serious problems for the small producer and businessman.

Lack of access to working capital is recognized to be the major constraint for this category of the workforce. Experience from the world over suggests that this also happens to be an area, which is readily amenable to a successful micro - intervention strategy. It is therefore necessary to develop a comprehensive policy on micro finance as an essential component of the promotion of self - employment strategy for the poor.

The rural credit sector in Indonesia over the last couple of decades has evolved in response to financial policy reforms and has undergone rapid changes that have swept through the sector during the recent crisis. By and large, most credit instruments are not accessible to the assetless poor since most require collaterals, or

are geared to those who have access to regular incomes. The self - employed at the lower rungs of income scales continue to depend heavily on informal credit sources. However there are a number of micro finance instruments outside the informal credit market, which do cater to the credit needs of the poor self - employed in different regions of Indonesia. One salient feature of all these micro credit instruments is that they all carry high interest rates.

The existing micro finance programs in the country illustrate that while government or donors need to provide initial subsidies, such programs, if properly managed, have the capability of breaking even within a few years and go on to provide a valuable service to low income households. By proper designing and institution of measures such as provision of incentives for staff and clients, repayment rates can be kept high even with high interest rates. In fact, such programs have demonstrated that contrary to popular belief, subsidized credit is not required, nor even recommended for strong financial performance. Provision of subsidized credit, which is often extended under political consideration, may in fact undermine the healthy functioning of these institutions. With the help of a contingent of field staff, these programs can reach clients in remote and relatively inaccessible areas. One of the major strengths of these programs is also the considerable outreach it has among women borrowers in low income households. These programs have been providing them with the much needed working capital, primarily for petty trading activities, at high but affordable rates – much lower still than the implicit rates charged in informal credit markets.

There is therefore an urgent need to rationalize the existing programs and develop a comprehensive national micro finance policy.

3. Promoting small and medium enterprises (SMEs).

At the moment, there is a plethora of programs. Technical programs can be divided into five broad categories: i) assistance with marketing; ii) assistance with inputs; iii) assistance with manufacturing/processing; iv) assistance with the regulatory environment; and v) assistance with linkages to other firms.

A more detailed review of policies and many government programs show a great deal of duplication and overlap. Such duplication represents waste in scarce resources and leads to inter-agency inefficiencies. More importantly, over the last thirty years a complex legal and regulatory system has developed and this places a great burden on SMEs. This high cost of doing business is particularly heavy on SMEs when the inefficiencies are in the form of fixed costs. SMEs generally pay a large proportion of their income in fixed regulatory costs—the burden of taxation and licensing requirements in all forms falls most heavily on them. At present Indonesia has a complex set of overlapping laws, rules, regulations, licenses and fees that constrain SME development.

For promoting the growth of SMEs, both macro and sector-specific policy reforms in trade, fiscal, monetary and regulatory frameworks and regimes should be emphasized over specific targeted programs. More significantly, programs that favor SMEs should not be used to compensate for existing or remaining policy distortions, rather any policies causing the distortions first should be reformed. This is in keeping with an increasing reliance on market mechanisms but also with the principal of putting in place complementary sets of public policy initiatives that can encourage the better functioning of market mechanisms while also trying to compensate for any market failures.

A second strategic orientation therefore should be the design and implementation of appropriate institutional packages to focus on four fundamental

area of need and support to SMEs: i) developing conducive policy, legal, regulatory, competition, business and trading environment in each sector; ii) developing better access to credit and financial services; iii) developing access to the most appropriate range of general and sector and locality-specific business services; and iv) developing innovative links between urban and rural markets, relevant inter-sectoral linkages, and backward and forward production and trade linkages among large and small domestic firms and between domestic and international firms to stimulate demand. These four policy thrusts can be useful and beneficial particularly if certain strategic conditions are observed in their prioritization and implementation.

B. Recommendations.

There are still significant policy and institutional constraints on efficient growth and development that must be addressed especially related to agricultural sector. Market reform in general is needed in agriculture to reduce the public burden in the face of the economic crisis, to reduce high distribution costs and improve allocation efficiency. They can lead to increase production, higher productivity, higher rural wages and employment and improve using of natural resources.

The crisis gives at least five tasks to agricultural sector: (i) by compensating industrial sector which is predicted to have negative growth, (ii) to generate employment to absorb the pushed out labour caused by economic slowdown, (iii) food supplier, (iv) foreign exchange generator, and (v) poverty alleviator. In this regard, agriculture based labour intensive industry in particular, hold central position for several reason. In this thesis has been deeply discussed as evidence, that agricultural sector's role specifically to absorb employment during the crisis time. So

that in the future this sector really need to be developed and emphasized in the economic policies. Some reasons recommend here:

1. Comparative advantages. Widely accepted international trade theory says that two countries will gain a mutual benefit if they trade their products that use their abundant resource endowment intensively. If this theory is true, Indonesia should give more attention to labor intensive and agricultural based industry since it has abundance endowment of its required resources. Recent depreciation gives greater opportunity for Indonesia to boost export. There is no reason to be afraid that by concentrating on simple technology industries, Indonesia will be locked on its simple technology and easily dictated by developed countries. Comparative advantage is a dynamic process which changes over time in line with the change of the structure of resource endowment. On the contrary, trading based on its comparative advantages will lessen the risk of retaliation from other countries that may be worsen off by a protective trade policies.
2. Narrowing economic or income gaps, both individual and regional. Indonesian last three decades development program unexpectedly led to imbalance structural economic transformation. The decrease of agricultural sector's share on GDP does not proportionally accompanied by the decrease of employment. This implies agricultural income decrease relative to that of industry. In addition, increasing agricultural land conversion to non-agriculture worsen the situation, creating rural unemployment either disguised, semi, or even open unemployment. Rural agricultural industry may fill the gap. Furthermore, the increase of rural economy will also increase urban economy, not the other way

around. Concentrated economic activities in urban area will lead to urbanization problems and other social disharmonies.

3. Its positive backward linkage effects. Agriculture based rural industry will increase agricultural sector activities, the sector where majority Indonesian people relied on, as input supplier. Actually, Indonesian labor-intensive industries, such as textile and its products, and foot-ware manufacturing industries, have increased significantly. However, this type of industries has less backward linkage to agriculture. These industries, which are coming through foreign direct investment, are usually relocated industries which are already losing their comparative advantages in their countries of origins.
4. It strengthens the fundamental of the economy. The industries which consists of many small scale industries will have stronger economic fundamental compared to that of the economy relied on few conglomerates, leading to a great difficulty in doing economic reform when they have political influences.

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