

DESIGNS AND IMPLEMENTATION OF INDONESIAN SOCIAL SAFETY NET PROGRAMS

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I. INTRODUCTION

BEGINNING in mid-1997 Indonesia was struck by a currency crisis which by the first half of 1998 had already developed into a full blown economic and political crisis. During this crisis period, the Indonesian people witnessed the fall of their currency to as low as 15 per cent of its pre-crisis value in less than one year, an economic contraction by an unprecedented magnitude of 13.7 per cent in 1998, skyrocketing domestic prices particularly for food,¹ mass rioting in the capital Jakarta and a few other cities, and finally in May 1998 the fall of the New Order government which had been in power since the mid-1960s.

The social impact of the crisis has been substantial and is still evolving four years after the crisis started.² One estimate indicates that the national poverty rate increased from 15.7 per cent in February 1996 to 27.1 per cent in February 1999.³ During the period, the number of urban poor doubled, while the rural poor increased by 75 per cent. Another study which tracked the poverty rate over the course of the crisis shows that the rate increased by 164 per cent from the onset of the crisis in mid-1997 to its peak at the end of 1998.⁴ In the labor market, even though the open unemployment rate increased only slightly from 4.7 per cent in August 1997 to 5.5 per cent in August 1998, and the underemployment rate increased only from 35.8 per cent to 39.1 per cent,⁵ real wages fell by around one-third during the same

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¹ The general inflation rate was 78 per cent in 1998, while food prices escalated by 118 per cent.

² Studies on the social impact of the Indonesian crisis include, but are not limited to, Frankenberg, Thomas, and Beggle (1999), Papanek and Handoko (1999), Poppele, Sumarto, and Pritchett (1998), Skoufias, Suryahadi, and Sumarto (2000), and Sumarto, Wetterberg, and Pritchett (1998).

³ See Pradhan et al. (2000).

⁴ See Suryahadi et al. (2000).

⁵ Here underemployment is defined as those who work less than thirty-five hours per week.

period.⁶ One year later, real wage growth had turned positive in most sectors, but the unemployment rate continued climbing to 6.4 per cent in 1999.⁷

To mitigate the social impact of the crisis, the government of Indonesia established a series of new and expanded social safety net programs. These programs—which are widely known as the “JPS” programs (standing for *jaring pengaman sosial* or “social safety net”)—were launched in early 1998, but many of the programs did not start until the second half of the year. It was hoped that through the implementation of these programs, the worst impacts of the crisis, such as widespread hunger, malnutrition, poverty, unemployment, and children dropping out of schools, could be prevented or at least reduced.⁸

This study is an evaluation on how effective various Indonesian social safety net programs have been in reaching their intended target, i.e., the traditionally poor and the newly poor due to the crisis.⁹ This is done by assessing the coverage of the programs among the poor as well as how the benefits of the programs have been distributed between the poor and the nonpoor. The remainder of the paper is organized as follows. Section II reviews the new social safety net programs established in response to the crisis. Section III briefly explains the method and the source of the data used in evaluating the implementation of the programs. Section IV discusses the main findings of this study, namely the coverage of the programs and their targeting. Finally, Section V provides conclusions.

II. THE INDONESIAN SOCIAL SAFETY NET PROGRAMS

A. *Overview of Indonesia’s Social Safety Net Prior to the Crisis*

Prior to the crisis, Indonesia was one of the most rapidly growing economies in the world. Between 1986 and 1996, the average GDP growth rate was around 7 per cent per year. Such rapid economic growth had broad based benefits and was accompanied by a significant improvement in the living standard of the population. For example, poverty—by any standard—fell dramatically. Between 1970 and 1996, the proportion of population living below the official poverty line fell by around 50 percentage points. Indonesia was considered one of the most successful countries in reducing poverty. Other social indicators were also encouraging: life expectancy

⁶ See Feridhanusetyawan (1999) and Manning (2000).

⁷ See Suryahadi (2001).

⁸ The funding for these social safety net programs came from the state budget as well as loans provided by the World Bank, Asian Development Bank, and bilateral donors, either directly through project support or indirectly through program loans which provided budget support.

⁹ These two groups of poor, however, cannot be distinguished in the data used in this study. To be able to distinguish them requires the use of panel data which cover both the pre- and post-crisis periods. For an example of such an analysis in the context of Indonesian social safety net programs, see Sumarto, Suryahadi, and Pritchett (2000).

increased, infant mortality fell, and the rate of school enrollment rose (see Appendix Table I). In addition, the provision of basic infrastructure—water supplies, roads, electricity, schools, and health facilities—rose significantly.

Meanwhile, the Indonesian people never relied heavily on government run safety net programs. The country has had neither the economic apparatus nor the political mechanism necessary to deliver large-scale and widespread transfer programs. Instead, government social spending was largely focused towards “social services” such as health and education, while the family and communities providing “social insurance.” There was some subsidized health care and a compulsory social security program for formal sector employees,¹⁰ but Indonesia did not have a social safety net system like there is now. Establishing the social safety net programs in Indonesia in 1998 was, therefore, more of casting a new net rather than merely expanding an existing one.

B. *Social Safety Net Programs as a Response to the Crisis*

At the onset of the Indonesian crisis, an important concern was raised over whether achievements that had been made in the social sectors and poverty reduction over the previous decades could be sustained. Furthermore, there were some warnings about the looming severe social impacts of the crisis.¹¹ This prompted the Indonesian government to react rapidly and instituted a number of interventions aimed at safeguarding real incomes as well as access to social services for the poor.

There were several new social safety net programs launched, widely known as the “JPS” programs.¹² These programs were intended to help protect the traditional poor as well as the new crisis-created poor through four strategies: (i) ensuring the availability of food at affordable prices, (ii) supplementing purchasing power among poor households through employment creation, (iii) preserving access to critical social services, particularly health and education, and (iv) sustaining local economic activity through regional block grant programs and extension of small-scale credit. Table I recapitulates the areas and major programs of the newly established Indonesian social safety net.

The programs launched were designed by the central government and were intended to have the following characteristics: quick disbursement, direct financing to beneficiaries, transparency, accountability, and encouraging participation of the society in monitoring the implementation of the programs.¹³ A brief description of

¹⁰ The social security program was made compulsory for all formal sector employees by the 1992 law on Workers’ Social Security (McLeod 1993).

¹¹ Poppele, Sumarto, and Pritchett (1998) argue that some of the predictions on catastrophic social impacts of the crisis were not well founded.

¹² See Suryahadi, Suharso, and Sumarto (1999).

¹³ At least as shown by some anecdotal evidence, these intended characteristics were not always achieved. See for example Tim Dampak Krisis SMERU (2000).

TABLE I
AREAS AND MAJOR PROGRAMS OF INDONESIA'S SOCIAL SAFETY NET

| Safety Net Area | Programs |
|---------------------|--|
| Food security | OPK program: sale of subsidized rice to targeted households |
| Employment creation | <i>Padat karya</i> : a loose, uncoordinated, collection of several "labor-intensive" programs in a variety of government departments PDM-DKE: a "community fund" program that provides block grants directly to villages for either public works or revolving fund for credit |
| Education | Scholarships and block grants: provides <ul style="list-style-type: none"> • Scholarships directly to elementary (SD), lower secondary (SLTP), and upper secondary (SMU) students • Block grants to selected schools |
| Health | JPS-BK: a program providing subsidies for <ul style="list-style-type: none"> • Medical services • Operational support for health centers • Medicine and imported medical equipment • Family planning services • Nutrition (supplemental food) • Midwife services |

each specific major program is discussed below.¹⁴ This is followed by a discussion on the targeting methods of the programs in the next subsection.

1. *Sale of subsidized rice*

This program has been the main component of the government's effort to maintain food security, particularly for the traditional poor and the crisis-induced new poor who have suffered from both falling real income and food price escalation. This program is popularly called the "OPK" program, which stands for Operasi Pasar Khusus, meaning "special market operation."¹⁵ Under this program, each eligible household is allowed to purchase 10 kilograms of rice per month at the highly subsidized price of Rp 1,000/kg.¹⁶ By comparison, the average market price for medium quality rice in the second half of 1998 was around Rp 3,000/kg.¹⁷ Originally, only households classified in the lowest official category of poverty were

¹⁴ There were some changes in the social safety net programs across fiscal years.

¹⁵ The program was introduced in July 1998 in the Jakarta area and then expanded all over the country.

¹⁶ The benefit was later increased to twenty kilograms in April 1999 and then changed again to between ten and twenty kilograms in April 2000.

¹⁷ See "Recent Volatility in the Rice Market: Results of a SMERU Rapid Appraisal in Central and East Java," *SMERU Newsletter*, No. 01, November 1998.

eligible to participate in the program.¹⁸ But coverage was expanded during the course of the year to include the second lowest category. The target of this program was around 7.4 million households or around 15 per cent of all households in the country.

Since this program has tried to ensure that the poor can afford to buy rice, which is the staple food of most Indonesians, it is probably the most critical component of the JPS programs. One impact of the crisis was a shooting up of prices, particularly those for food, which put basic necessities practically out of the reach of the poor, at least in the initial short run before their nominal incomes could expand to keep pace. These provisions of cheap rice for the poor, therefore, was deemed essential for avoiding widespread hunger, which might exacerbate the already chaotic political and economic situation of the country at that time.¹⁹

2. *Employment creation*

This program is popularly known as the *padat karya* (which as an adjective means “labor-intensive”) program. This actually is not a single program but a large set of activities under the category of employment creation. These programs were created as a response to the threat of burgeoning unemployment because of economic contraction which had forced many firms to either lay off workers or shutdown completely. In accordance with the urban nature of the crisis, the initial geographical targets for the first round of *padat karya* “crash programs” in fiscal year 1997/98 were directed mainly at urban areas, but some rural areas which experienced harvest failures were also included.²⁰

In the wake of these “crash programs,” in fiscal year 1998/99 there was a proliferation of *padat karya* programs with 16 different programs which fell into the “employment creation” category.²¹ These programs can be classified into four types. First, some programs were a redesigning of ongoing investment and infrastructure projects into more labor-intensive type projects and modes of contract. Second, other programs gave block grants to local communities (such as the Kecamatan Development Program (PPK), the Village Infrastructure Project (IDT), and the Regional Empowerment to Overcome the Impact of Economic Crisis (PDM-DKE) Program). These funds were directed at poorer areas, and had “menus” for the uti-

¹⁸ The official classification was created by the National Family Planning Coordinating Agency (Badan Koordinasi Keluarga Berencana Nasional, BKKBN) and is discussed in the next subsection.

¹⁹ Since the amount of subsidized rice was substantially below total consumption, in practice the program served as the equivalent to an income transfer. However, since the price was fixed in nominal terms, the magnitude of the income transfer was scaled to the needs for food. In this sense the program can be seen as a combination of income transfer and food security.

²⁰ These “crash programs” were launched in December 1997 and lasted until the end of the fiscal year in March 1998.

²¹ In fiscal year 1999/2000, however, *padat karya* programs were cut back to only two: the “Public Work Sector Padat Karya Program” and the “Special Initiative for Unemployed Women Program.”

lization of the funds that included the possibility of public works which had a labor creating effect. The third set were special labor-intensive undertakings carried out by sectoral ministries (e.g., forestry, rural-urban, and retraining of laid off workers carried out by the Ministry of Manpower). In addition, there was a fourth type of program made up of “food for work” activities which were typically launched by international donors and NGOs in drought stricken areas.

3. *Scholarships and block grants to schools*

Early in the crisis there was a worry that it would force parents to withdraw their children from school in response to falling incomes and rising costs, hence triggering a large increase in school dropout rates. This rightly alarmed the government, which led it to establish an education funding support program. The program was started in the academic year 1998/99 and there is a plan to end the program in the year 2003.

This program has two components, one is scholarships for students from poor families to enable them to stay in school, and the other is block grants to schools to help them continue operating. The scholarships provide cash of Rp 10,000, Rp 20,000, and Rp 30,000 per month for primary, lower secondary, and upper secondary school students respectively. These amounts generally cover the cost of school fees and can be used for that purpose or to cover other expenses.

This program was intended to reach at most 6 per cent of primary school students, 17 per cent of lower secondary school students, and 10 per cent of upper secondary school students nationwide, including students from religious schools. Since the program has been targeted, the expectation has been for coverage to be higher in some districts and lower in others. Meanwhile, 60 per cent of schools were targeted to receive the block grants in each district. The schools selected have been those located in the poorest communities within each district.

4. *Health*

There was a concern early in the crisis that falling real income and increasing costs of medical services due to the crisis might force poor and newly poor households to abandon modern medical services, even when there were family members who fell sick and urgently need medical treatment. This would cause the general society’s health condition to deteriorate, reversing improvements in this area accumulated during the previous decades.

To forestall this, the government established social safety net programs in the health sector, known as JPS-BK (JPS Bidang Kesehatan or “health sector JPS”) programs. Through these programs it was hoped that the poor would not be forced to stop using modern medical services because they could not afford them anymore. Various programs were specifically established to achieve this health objective by providing subsidies for medicines and imported medical equipment, opera-

tional support funds for community health centers, free medical and family planning services, and supplemental food for pregnant women and children under three years old.

C. *Method of Targeting*

In general, the targeting for the Indonesian social safety net programs was based on a combination of geographic and household targeting. Table II summarizes the targeting of the major social safety net programs. The targeting for some programs used a household classification created by the National Family Planning Coordinating Agency (Badan Koordinasi Keluarga Berencana Nasional, BKKBN). In this classification, households are grouped into four socioeconomic categories: “preprosperous households” (*keluarga pra-sejahtera* or KPS),²² “prosperous I households” (*keluarga sejahtera I* or KS I), KS II, and KS III.²³ Originally, eligible recipients for some programs were KPS card holders only, but for some programs eligibility was extended to include KS I households as well (e.g., the OPK program). The sale of subsidized rice (OPK) and health (JPS-BK) programs explicitly used this BKKBN household classification for their targeting methods. The selection of recipients in the scholarship programs was also supposed to take into account their BKKBN household status.²⁴

The *padat karya* programs, meanwhile, consisted of quite diverse programs and although specific programs were targeted to areas (e.g., drought), the lack of coordination meant there was little or no systematic geographic targeting of the set of programs overall. Within programs there were a variety of disagreements about desired characteristics of intended participants, but typically the beneficiaries were not chosen according to any fixed administrative criteria. Hence, to the extent there was targeting, it was primarily through self-selection. Only those who were willing to work should have been able to receive the benefits. This self-selection mechanism has the advantage over administrative criteria of allowing individuals to choose

²² A household is defined as a “pre-prosperous” household if it fails to satisfy one of the following five conditions: (i) all household members are able to practice their religious principles, (ii) all household members are able to eat at least twice a day, (iii) all household members have different sets of clothing for home, work, school, and visits, (iv) the largest floor area of the house is not made of earth, and (v) the household is able to seek modern medical assistance for sick children and family planning services for contraceptive users.

²³ Suryahadi, Suharso, and Sumarto (1999) found that there is a lack of correlation between this official classification and the consumption based measure of poverty. They found that while only 15 per cent of the “prosperous” households were “poor,” 75 per cent of the “pre-prosperous” households were “nonpoor.” On the other hand, 46 per cent of the “nonpoor” households were “pre-prosperous” and 38 per cent of the “poor” households were “prosperous.”

²⁴ It is important to note that the BKKBN classification of households were originally created for BKKBN’s own family planning purposes. It was never meant to be used for targeting in social safety net or poverty reduction programs. It was selected to be used for targeting in the social safety net programs simply because it was the only database available which recorded almost all households in Indonesia.

TABLE II
TARGETING MECHANISM IN THE INDONESIAN SOCIAL SAFETY NET PROGRAMS

| Programs | Targeting | Fiscal Year 1998/99 | Fiscal Year 1999/00 |
|---|-------------------------|---|--|
| OPK | Geographic Household | None BKKBN list | None BKKBN list with flexibility |
| PDM-DKE | Geographic Household | Pre-crisis (1997) data on poverty rate by district Local decision making | Updated with BAPPENAS ^a regional data Local decision making |
| <i>Padat karya</i> | Geographic Household | None, various ministries (e.g., manpower, for- estry, public works) Weak self selection (ar- bitrary wage rate) | Urban areas, based on unem- ployment rate Self selection (wage rate set below minimum wage) |
| Scholarships and block grants to schools | Geographic Household | Data on enrollment in 1997 School committees fol- lowing criteria | Poverty data updated to 1998 School committees following criteria |
| JPS-BK | Geographic Household | BKKBN pre-prosperous rates BKKBN list | Updated pre-prosperous esti- mates to 1999 BKKBN list with flexibility |

^a Badan Perencanaan Pembangunan Nasional (National Development Planning Agency).

to participate or not and creates the possibility of being more flexible to unobserved household shocks than administrative criteria.

Although there were a variety of *padat karya* programs, all were established with the hope that the wages would be paid as a benefit to the poor and those newly unemployed due to mass layoffs and declining economic activities during the crisis. While these programs should be available only for those who are already unemployed and are willing to receive the lower level wages, it is well known that the level of the wage is critical for achieving good targeting outcomes in employment programs.²⁵ If this target is achieved, most, if not all, of the jobs will go to the poor.

In the scholarship program, scholarship funds were first allocated to schools so that schools in poorer areas received proportionally more scholarships. In each school, the scholarships were then allocated to individual students by a school committee which consisted of the principal, a teacher representative, a student representative, the head of the parent's association as the representative of the community, and the village head. The scholarship recipients were selected based on a combination of administrative criteria (which included a number of factors, such as

²⁵ Ferreira, Prenzushi, and Ravallion (1999) argue that a relatively low wage rate ensures that only those in need apply, and that as many people as possible can be employed. A low wage rate also protects the incentive to take up regular work when available.

household data from school records, the family BKKBN status, the size of the family, and the likelihood of the student to drop out) and the committee decision.²⁶

School students in all but the lowest three grades of primary school officially were eligible for the scholarships. In principle, students selected to receive the scholarships were supposed to be from the poorest backgrounds. As a guideline, scholarships were to be allocated first to children from households in the two lowest BKKBN rankings. If there were a large number of eligible students such that not all of the poor students could receive a scholarship, then additional indicators were used to identify the neediest students. These additional indicators included living far from school, having physical handicaps, and those coming from large or single parent families. Also, a minimum of 50 per cent of scholarships, if at all possible, were to be allocated to girls.

In the health programs, meanwhile, the free medical and family planning services program was implemented by giving "health cards" to eligible households. The eligibility for this program was also based on the "welfare" official household status. A health card given to a household can be used by all members of the household to obtain free services from designated hospitals, clinics, and health care centers for medical and family planning purposes, including pregnancy check up and birth delivery.

III. METHODS AND DATA

A. *Methods: Coverage and Targeting Effectiveness*

In a program using targeted intervention, the success and failure of the program in meeting its objective is determined very much by the accuracy of the targeting that actually occurs in practice. A simple measure of targeting outcomes is illustrated in Table III. This shows that for a program which provides benefits targeted to a certain group in the population, there are two possible successful outcomes and two possible negative outcomes. The successful outcomes are when the target population participates in the program, and when the non-target population does not participate in the program. Conversely the negative outcomes arise when the target population does not participate in the program (an exclusion error), and when the non-target population participates in the program (an inclusion error).

The framework of analysis illustrated in Table III can be used as the basis for calculating various program performance indicators, such as the "implementation ratio," "targeting expenditure ratio," "leakage ratio," and "coverage ratio." Implementation ratio (IR) is the ratio of the actual total coverage to the target population.

²⁶ Extensive monitoring that has been done on the program finds, however, that the parent representative played only a minor role in validating the implementation of the criteria and decision of the school officials.

TABLE III
EVALUATING TARGETING OUTCOMES

| | | Population | | Total |
|--------------------------|------------------|---------------------------------------|--|-----------------------------|
| | | Target | Non-target | |
| Participation in program | Participants | Success (A) | Type II (inclusion) error (B) | (E) = (A) + (B) |
| | Non-participants | Type I (exclusion) error (C) | Success (D) | (F) = (C) + (D) |
| | Total | (G) = (A) + (C) | (H) = (B) + (D) | (I) = (A) + (B) + (C) + (D) |

In the example in Table III, a program has a target population which is (G), but actual total coverage was (E). Then $IR = (E)/(G) = ((A) + (B))/((A) + (C))$. Targeting expenditure ratio (TER) is the fraction of beneficiaries which are the target population. In Table III, $TER = (A)/(E) = (A)/((A) + (B))$. Leakage ratio (LR), on the other hand, refers to the fraction of program beneficiaries which are the non-target population. Hence, $LR = 1 - TER = (B)/(E) = (B)/((A) + (B))$. Meanwhile, coverage ratio (CR) is the fraction of the target population who are actually covered by a program. In Table III, $CR = (A)/(G) = (A)/((A) + (C))$. It can be established that $CR = IR \times TER$ since $(A)/(G) = (E)/(G) \times (A)/(E)$.

The focus of this study is the coverage and targeting effectiveness of seven major Indonesian social safety net programs in reaching the poor.²⁷ Instead of using the absolute poverty measure based on the absolute poverty line, the analysis in this study is based on a relative poverty measure using a quintile approach. The reason for this is because the estimates of the absolute poverty line in Indonesia are only available at the province level differentiated by urban and rural areas.²⁸ In the current analysis, the samples in each district are grouped into quintiles of per capita expenditure. The first quintile (Q1) is classified as the poor, while the second to fifth quintiles (Q2–Q5) as the nonpoor. This is equivalent to using a relative poverty line of the twentieth percentile of per capita expenditure in each district.²⁹

Grouping households by quintiles of nominal per capita expenditure in each dis-

²⁷ Targeting should be given an important role in any effort to help the poor in Indonesia. This is emphasized, for example, by Bidani and Ravallion (1993).

²⁸ See Pradhan et al. (2000) and Sutanto and Irawan (2000).

²⁹ The official estimate of the poverty rate in February 1999 is 23.6 per cent (Sutanto and Irawan 2000). This implies that there is a large overlapping between the first quintile and the absolute poor.

trict has two advantages. First, it makes the results of this study on program participation consistent with a large and growing literature on benefit incidence, which typically uses income or consumption expenditure quintiles.³⁰ Second, this study does not attempt to capture differences in poverty across districts in the sample. Instead, the focus is only on the targeting within a district by asking the question of whether the households which are relatively poor within the district (i.e., the bottom 20 per cent) receive the benefits in that district.

B. *Data: JPS Module of SUSENAS*

The data analyzed in this study were collected in a special social safety net module of the February 1999 SUSENAS by Statistics Indonesia (Badan Pusat Statistik, BPS). SUSENAS (National Socio-Economic Household Survey) is a nationally representative household survey, covering all areas of the country. A part of SUSENAS is conducted every year, collecting information on the characteristics of over 200,000 households and over 800,000 individuals, including information on aggregated values of household consumption expenditures. This part of SUSENAS is known as the “Core” SUSENAS. Another part of SUSENAS is conducted every three years, specifically collecting information on very detailed consumption expenditures from around 65,000 households.³¹ This consumption module part of SUSENAS is known as the “Module” SUSENAS. In addition, other modules on special topics are also conducted as parts of SUSENAS on an occasional basis. The social safety net module SUSENAS, conducted in February 1999, is an example of special topic modules of SUSENAS. The sample of this social safety net module is the same as the sample of the February 1999 Core SUSENAS.

To carry out the method of analysis outlined in the previous subsection, the data on program participation from the social safety net module SUSENAS need to be combined with data on household consumption expenditures from the Core SUSENAS. The household consumption expenditure data in the February 1999 Core SUSENAS, however, contain a problem which originates in the way the data were collected. This is due to the fact that the Core SUSENAS sample actually consists of two different groups of samples: those which are and are not included in the Consumption Module SUSENAS sample.

Out of a total of around 200,000 households which are randomly selected to be included as a sample in the Core SUSENAS, a subset of around 65,000 households are further randomly selected to be included as a sample in the Consumption Module SUSENAS. Although both surveys ask about household consumption expenditures, the Consumption Module SUSENAS uses a detailed questionnaire that contains 339 goods with recall period of one week for food and one month or one year

³⁰ See Baker (2000), Grosh (1994), and Ravallion (1992).

³¹ They are a subset of the 200,000 households in the Core SUSENAS sample of the same year.

for nonfood, while the Core SUSENAS uses an aggregated questionnaire of consumption expenditures that contains only 23 goods with the same recall period as the detailed questionnaire.

Theoretically, all households sampled in the Core SUSENAS should be asked to fill out the same questionnaire. However, a test shown in Appendix Table II clearly points out that for the households sampled in the Core SUSENAS which were also sampled in the Consumption Module SUSENAS, their answers in the aggregated consumption expenditure questionnaire were copied from the detailed consumption expenditure questionnaire. This caused an instrument bias due to the fact that there are two groups of households in the sample which were asked different consumption expenditure questionnaires.

The first three columns in Appendix Table II take information from households which were sampled in both the Core SUSENAS and Consumption Module SUSENAS. The first column presents the average household expenditures in the Core SUSENAS data by areas and education level, while the second column presents the same information but obtained from the Consumption Module SUSENAS data. The third column on the difference between the two shows that the levels of expenditures in both Core SUSENAS and Consumption Module SUSENAS data for this sample are practically the same. This indicates that the expenditure data in the aggregated questionnaire were copied from the detailed questionnaire.

The last three columns in Appendix Table II compare the level of expenditures between the two groups of households in the sample of the Core SUSENAS data. The comparison clearly shows that the level of expenditures of households which were sampled in the Core SUSENAS only is substantially lower than those households which were sampled in both the Core SUSENAS and Consumption Module SUSENAS. The difference is 14 per cent in rural areas and 18 per cent in urban areas. This difference in expenditure levels does not reflect the actual difference in standard of living of the two groups of households, but has arisen merely due to the difference in the instruments used for the data collection. The detailed consumption module questionnaire produces higher levels of expenditures than the aggregated core questionnaire.

This creates a problem in grouping households into quintiles of expenditures if all households in the Core SUSENAS sample are treated as one sample. Households which were sampled in the Core SUSENAS only will tend to be grouped in lower quintiles of per capita expenditure, while households which were sampled in both the Core SUSENAS and Consumption Module SUSENAS will tend to be grouped in the higher quintiles of per capita expenditure.

Hence, to overcome this problem, the grouping of households into quintiles of expenditures are done within each group of households. Households which were sampled in the Core SUSENAS only are grouped into five quintiles of per capita expenditure. Likewise, households which were sampled in both the Core SUSENAS

and Consumption Module SUSENAS are grouped into five quintiles of per capita expenditure. Since the households in the two groups of samples were randomly selected, the same quintile of per capita expenditure of both groups can be treated as a single group of households with similar living standard.

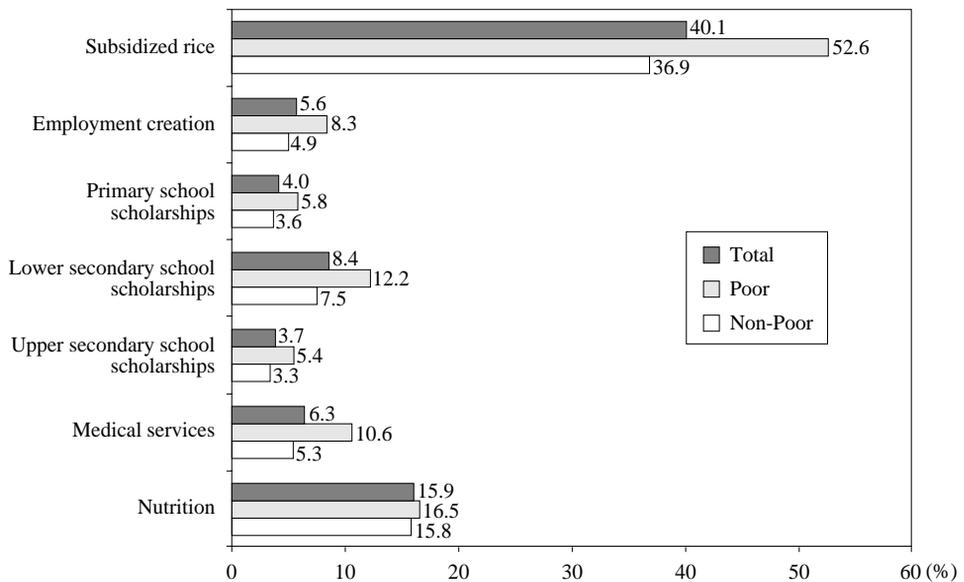
IV. PROGRAM COVERAGE AND TARGETING

This section discusses the results of our analysis on coverage and targeting effectiveness of seven major social safety net programs implemented in fiscal year 1998/99 using the methods and data outlined in the previous section. The programs evaluated here are those for the sale of subsidized rice (OPK), employment creation (*padat karya*), primary, lower secondary, and upper secondary school scholarships, free medical services, and nutrition (supplemental food). The period evaluated in the survey is that of the six months before the time of the survey in February 1999, except for the medical services program which is the three-month period before the survey. The basic results of the analysis on the coverage of these social safety net programs by quintiles of per capita expenditures are shown in Appendix Table III.

A. Program Coverage

Based on the results from Appendix Table III, Figure 1 shows the coverage for the total population, the poor, and the nonpoor of the social safety net programs

Fig. 1. Coverage of Various Social Safety Net Programs



analyzed in this study. The sale of subsidized rice program stands out as the one with the highest level of coverage which was 40 per cent of the total households. More than a half of all poor (Q1) households in Indonesia reported receiving the benefits of this program, while more than a third of nonpoor (Q2–Q5) households also reported receiving the benefits. The second highest coverage is found in the nutrition program. Around 16 per cent of both poor and nonpoor households reported receiving the benefits of this program.

Meanwhile, two programs with the lowest coverage are the primary and upper secondary school scholarship programs. In both programs, only around 5 per cent of poor students reported receiving the scholarships. The coverage among the poor for the other programs range between 8 and 12 per cent, far below the coverage of the sale of subsidized rice program. Hence, overall these results indicate a large degree of undercoverage in the social safety net programs, i.e., there were a large number of poor households which were not covered by the programs.

Furthermore, the coverage of the sale of subsidized rice program indicates that nationally 40 per cent of over 50 million households all over the country are estimated to have received the benefits of this program during the six-month evaluation period. The implied number of households which reported to have received the benefits of the sale of subsidized rice program is around 20.2 million households. This is double the number of the officially reported beneficiaries of this program, which is around 10.4 million households in February 1999.

This discrepancy indicates two things. First, while the official report indicates the number of beneficiaries in a certain month, the SUSENAS data indicate the total number of households which ever received the program benefits during the six-month evaluation period. The data show that almost a half of the recipients reported that they only bought rice once or twice under the program, indicating irregular delivery of benefits in most areas. Second, and more importantly, while the official report reflects more the number of eligible households, the SUSENAS data reflects the actual number of beneficiaries. The implication of this is that while the rice allocated to an area was based on the number of eligible households, it had to be allocated to a much higher number of households, implying a lower amount of rice for each recipient than stipulated in the program guidelines.³²

In the employment creation programs, the data indicate that 5.6 per cent of households have at least one member who participated in a *padat karya* program. Program coverage among poor households is 8.3 per cent compared to 4.9 per cent among nonpoor households. On average, each participating households claimed to have spent 27 man-days in *padat karya* programs during the six-month evaluation period, or an average of 4.5 man-days per month. The type of activity done was mostly repairing roads, with 64 per cent of program participants reporting to have

³² This is confirmed by the qualitative findings in Tim Dampak Krisis SMERU (2000).

been involved in this activity. Other activities included repairing irrigation systems, which was done by 35 per cent of participants, cultivating idle land by 14 per cent of participants, repairing flood plains by 12 per cent of participants, and other activities by 16 per cent of participants; many participants were involved in more than one activity.

The significant participation of nonpoor households in *padat karya* programs probably has to do with the level of wages offered by these programs. The average daily wages received by the participants of *padat karya* programs was Rp 6,073. This is comparable to the daily wages in the food crop sector which averaged Rp 6,350 according to the 1999 National Labor Force Survey (SAKERNAS). The level of wages received and the average working day of participating households imply that each program participant on average received benefits of around Rp 27,500 per month from this program.

For the scholarship program, as mentioned in the second section, the targeted coverage of this program was 6 per cent for primary level, 17 per cent for lower secondary, and 10 per cent for upper secondary. If the 6 per cent target of coverage at the primary level were achieved and all the scholarship recipients are students from poor households, then we would expect a 30 per cent program coverage among the poor and zero coverage among the nonpoor. The data indicate that nationally 4 per cent of all primary school students in the country received the scholarships.³³ This means only 67 per cent of the 6 per cent target was achieved. Furthermore, the figure shows that the program coverage among the poor students was only 5.8 per cent, far less than the 30 per cent target with perfect targeting. This is compared to 3.6 per cent coverage among the nonpoor students.

For the lower secondary school scholarship program, if the 17 per cent target of this program were achieved and all recipients were students from poor households only, then we would expect an 85 per cent program coverage among poor students while none of nonpoor students would receive a scholarship. The data show that in reality the national coverage of this scholarship program was 8.4 per cent, which was only about a half of the 17 per cent target. The actual program coverage among the poor students was only 12.2 per cent, far below the 85 per cent target with perfect targeting. The coverage among the nonpoor students, meanwhile, was 7.5 per cent.

For the upper secondary school scholarship program, if the 10 per cent target of this scholarship program were achieved with perfect targeting, then we would expect a 50 per cent program coverage among poor students and none among nonpoor

³³ The program guidelines stipulate that students in the lowest three grades of primary school are not eligible for the scholarships. The data on primary school scholarship recipients, however, show that the proportion of the first to third graders who received the scholarships is very significant and only slightly less than the proportion of the fourth to sixth graders who received the scholarships. Therefore, the analysis of the primary school scholarship program in this study is based on all students.

students. The data show that the national coverage of this scholarship program was only 3.7 per cent, much less than the 10 per cent target. Meanwhile, the program coverage among poor students was only 5.4 per cent, only around a tenth of the 50 per cent target with perfect targeting. The coverage among the nonpoor students for this program was 3.3 per cent.

In terms of the amount of scholarships, the data indicate that 78 per cent of the primary school scholarship recipients reported receiving the exact amount of Rp 10,000 per month as stipulated. Six per cent of the recipients claimed to have received less than Rp 10,000 per month, which may indicate that the schools already deducted school fees from the scholarships of these students. However, 16 per cent of the recipients reported receiving scholarships of more than Rp 10,000 per month. This may indicate two things. First, schools gave the scholarships to a smaller number of students than the scholarship allocation, so that each student received a higher amount than stipulated. Second, some of these students received scholarships from more than one source. Unfortunately, this cannot be verified from the data.

Similar to the primary school scholarship program, 77 per cent of the lower secondary school scholarship recipients reported receiving the exact amount of money stipulated, i.e., Rp 20,000 per month. Those who claimed to have received less were 11 per cent, while those who claimed to have received more were 12 per cent. Differing from the primary and lower secondary scholarships, 85 per cent of the upper secondary scholarship recipients claimed to have received less than the stipulated amount of Rp 30,000 per month. Only 6 per cent recipients reported receiving the exact amount, while the remaining 9 per cent claimed to have received higher amounts.

The medical services program, as explained in the second section, is implemented through the distribution of health cards to eligible households. The card can be used by all members of an eligible household to obtain free services from designated public hospitals, community health centers, or village clinics for medical or family planning purposes, including pregnancy check up and birth delivery. However, households which possessed health cards did not always use the cards when a household member visited a designated provider. The data show that 11 per cent of population were given health cards, among whom 31 per cent experienced an illness in the three months prior to the survey, but only 50 per cent of them sought medical care.³⁴ Of those who went to public hospitals, only 60 per cent used their health cards, while for community health centers the proportion was 52 per cent, for village midwives 12 per cent, and for other health facilities 31 per cent.

³⁴ Even though the health card was meant only for the poor, only 35 per cent of all the health cards distributed were given to the poor (Saadah, Pradhan, and Sparrow 2000). This means that only around 19 per cent of poor households possessed health cards, while there were around 9 per cent of nonpoor households which also had health cards.

One possible reason for the nonuse of health cards is to obtain better service from the providers. Among those who have health cards and who sought medical services in public hospitals, the average out-of-pocket expenses paid by those who used the health cards was around Rp 41,300 per person per sickness incidence, while those who chose not to use their health cards on average spent around Rp 3 million per person per sickness incidence. This indicates a very large potential saving from using a health card. Hence, there must be a strong reason for not using the card even though they possess one. Seeking better service—for example, because of the seriousness of the illness—is a plausible reason as the cost for those who chose not to use their health cards were even higher than the cost for those who did not have health cards and who sought medical services in public hospitals, which averaged around Rp 2.6 million per person per sickness incidence.³⁵

Due to the prevalent nonuse of health cards, the calculation of coverage of this program is only applied to individuals who had illnesses, visited a provider to treat their illnesses, and used their health card in the past three months.³⁶ The data indicate that of all the people who underwent medical treatments, 6.3 per cent of them used health cards to obtain free services. Among poor people only, the proportion of those who used health cards was 10.6 per cent, while among nonpoor people 5.3 per cent used health cards to get the benefits of this program.

Meanwhile, the coverage of supplemental food for pregnant women and children under three years of age was 15.9 per cent. There were 16.5 per cent of poor pregnant women and children under three who received the benefits of this program, while the coverage among nonpoor was only slightly lower at 15.8 per cent.³⁷ Of those who received supplemental food, 55 per cent reported receiving both food and vitamins, 31 per cent reported receiving food only, while the remaining 14 per cent claimed to have received vitamins only.

B. *Program Targeting*

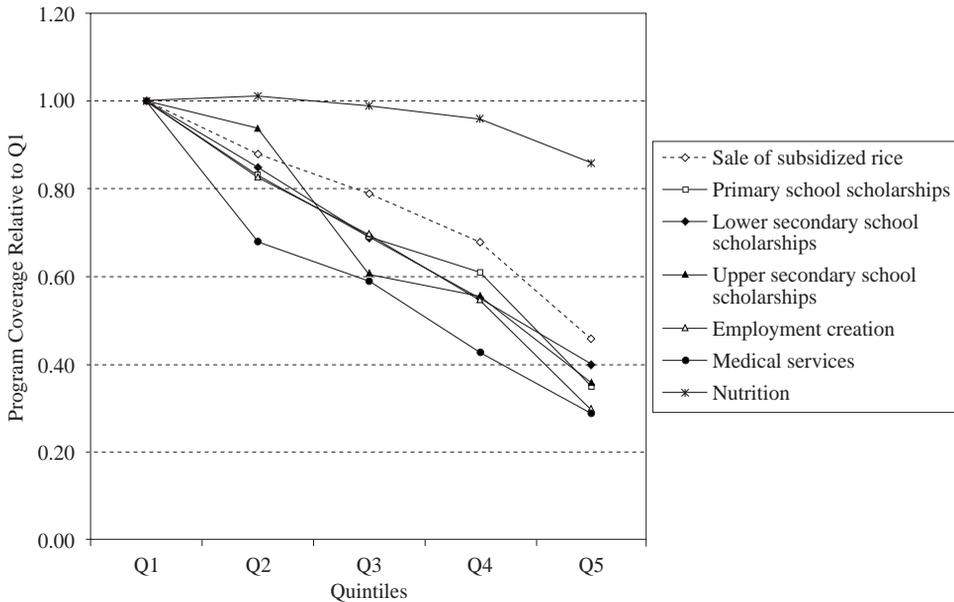
In terms of targeting, Figure 2 shows the coverage of the social safety net programs across quintiles of per capita expenditure relative to the level of coverage at the poorest quintile. Hence, a steeper curve indicates a sharper targeting across per

³⁵ Saadah, Pradhan, and Sparrow (2000) hypothesize that another possibility of the large degree of nonuse of health cards is that because some health providers refused to honor the free services for health card owners. The reason is because the providers were not reimbursed based on the number of actual services performed, but instead received an advance lump sum payment based on a predicted demand for services.

³⁶ The treatments include those for both inpatients and outpatients. The calculation of this program coverage, however, does not include the use of health cards for family planning and birth delivery services.

³⁷ It seems that there is no relationship between receiving supplemental food and possession of a health card. Of those who received supplemental food, only 17 per cent reported having a health card.

Fig. 2. Coverage of Various Social Safety Net Programs by Quintiles of per Capita Expenditure Relative to Q1



capita expenditure. It turns out that the best and worst targeting are both found in the health programs. The medical services program has the sharpest targeting, while the nutrition program has the least targeting. In the medical services program, coverage dropped sharply in the second quintile and then dropped gradually from the third to the richest quintile. Actually, the coverage of the employment creation program at the richest quintile was almost as low as that in the medical services program, but the drops in program coverage across quintiles were more gradual. Meanwhile, there was also a notable drop in the coverage of the upper secondary school scholarships program from the second to the third quintile.

In the sale of subsidized rice program, coverage at the highest quintile is still quite high, almost a quarter of households in the richest group still receive the program benefits, which is almost a half of the level of coverage at the poorest quintile.³⁸ Meanwhile, the proportion of households at the richest quintile which participated in an employment creation program is 30 per cent of the participation at the poorest quintile. For other programs, coverage at the highest quintile relative to that at the lowest quintile is 35 per cent for primary school scholarships, 40 per

³⁸ This indicates strong pressures from the communities for a more equal distribution of program benefits across all households (Sumarto, Suryahadi, and Pritchett 2000).

cent for lower secondary school scholarships, 37 per cent for upper secondary school scholarships, 29 per cent for medical services, and 86 per cent for the nutrition program.

C. Overall Program Performance

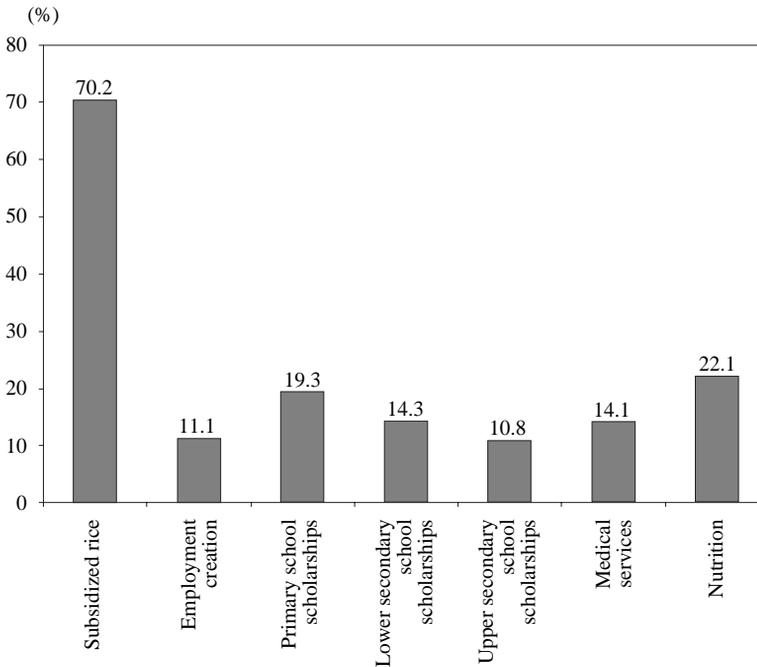
Based on the results in Appendix Table III, Table IV calculates the implementation ratio (IR), targeting expenditure ratio (TER), and coverage ratio (CR) of the Indonesian social safety net programs. Columns (a) to (c) of Table IV calculate the number of program beneficiaries as a proportion of the total population. For example, in the subsidized rice program, the program coverage among the poor is 52.64 per cent, and the poor make up 20 per cent of population. This means that the program beneficiaries who were poor made up $52.64 \times 0.2 = 10.53$ per cent of total population. The fraction of the population targeted by this program, as explained in Section II, was 15 per cent, i.e., 7.4 million “pre-prosperous” category households out of the total 50 million households. The figures for the scholarship programs are also obtained from Section II. The rest of the programs, however, did not have explicit numerical targets. Hence, for these programs the fraction of the population targeted is set as 15 per cent, i.e., the same as the target population of the subsidized rice program, which is based on the number of “pre-prosperous” households.

The IR, TER, and CR indicators are then calculated using the method explained in Section III. Figure 3 depicts the coverage ratio obtained from Table IV. The figure shows that apart from the subsidized rice program, most of the Indonesian social safety net programs have relatively low coverage ratios. The subsidized rice

TABLE IV
CALCULATION OF THE IMPLEMENTATION RATIO, TARGETING EXPENDITURE RATIO, AND
COVERAGE RATIO OF THE SOCIAL SAFETY NET PROGRAMS

| Programs | Program Beneficiaries (% of total population) | | | % of Population Targeted (d) | Implemen- tation Ratio (e)=(c)/(d) | Targeting Expenditure Ratio (f)=(a)/(c) | Coverage Ratio (g)=(e)×(f) |
|--|--|---------|-------------|---------------------------------------|---|--|----------------------------------|
| | Poor | Nonpoor | Total | | | | |
| | (a) | (b) | (c)=(a)+(b) | | | | |
| Subsidized rice | 10.53 | 29.52 | 40.09 | 15 | 267.27 | 26.26 | 70.19 |
| Employment creation | 1.66 | 3.95 | 5.61 | 15 | 37.40 | 29.63 | 11.08 |
| Primary school scholarships | 1.16 | 2.88 | 4.03 | 6 | 67.17 | 28.78 | 19.33 |
| Lower secondary school scholarships | 2.43 | 6.02 | 8.42 | 17 | 49.53 | 28.86 | 14.29 |
| Upper secondary school scholarships | 1.08 | 2.66 | 3.71 | 10 | 37.10 | 29.11 | 10.80 |
| Medical services | 2.12 | 4.22 | 6.33 | 15 | 42.20 | 33.49 | 14.13 |
| Nutrition | 3.31 | 12.63 | 15.94 | 15 | 106.27 | 20.75 | 22.05 |

Fig. 3. Coverage Ratio (CR) of Various Social Safety Net Programs



program has a CR of 70 per cent,³⁹ but the other programs have CR's range only from 11 to 22 per cent. Furthermore, Table IV shows that the reason for this low coverage ratio is that all programs have a low targeting expenditure ratio, range from 20 to 33 per cent. In addition, some programs also have a low implementation ratio. In particular, the employment creation, upper secondary school scholarships, and medical services programs have IR's of less than 50 per cent.

D. Multiple Coverage

As there are many social safety net programs in place at the same time, the multiple participation of households in different programs needs to be assessed. Table V shows the distribution of households by the number of social safety net programs in which they participated.⁴⁰ The table shows that even though there are relatively many social safety net programs established by the government, they still entirely left out 32 per cent of households in the poorest quintile. On the other hand, the programs have given some benefits to 21 per cent of households in the richest quintile.

³⁹ However, it is important to note that most beneficiaries of this program received benefits which were less than stipulated due to much broader distribution of benefits than the targeted population.

⁴⁰ The programs are limited only to the seven programs evaluated in this study.

TABLE V
DISTRIBUTION OF HOUSEHOLDS BY THE NUMBER OF SOCIAL SAFETY NET PROGRAMS
PARTICIPATION AND QUINTILE OF PER CAPITA EXPENDITURE

| Number of Programs | Q1 | Q2 | Q3 | Q4 | Q5 | Total |
|--------------------|------|------|------|------|------|-------|
| 0 | 32.1 | 42.4 | 51.6 | 62.5 | 78.7 | 53.5 |
| 1 | 47.2 | 43.8 | 38.7 | 32.1 | 19.3 | 36.2 |
| 2 | 16.9 | 11.8 | 8.7 | 5.0 | 1.9 | 8.8 |
| 3 | 3.4 | 1.8 | 0.9 | 0.4 | 0.1 | 1.3 |
| 4 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 |
| 5 | 0.0 | 0.0 | 0.0 | — | — | 0.0 |
| 6 | 0.0 | 0.0 | — | — | — | 0.0 |
| 7 | — | — | — | — | — | — |

Among households which participated in the social safety net programs, the large majority participated in only one program. Very few households participated in more than three programs and none participated in all seven programs. Among the poorest 20 per cent of households, 17 per cent received benefits from two programs and 3.4 per cent received benefits from three programs. Meanwhile, among the richest quintile households, those which received benefits from the social safety net programs mostly participated in one program, and less than 2 per cent participated in more than one program. However, among the second richest quintile households, a substantial proportion received benefits from more than one program, i.e., more than 5 per cent.

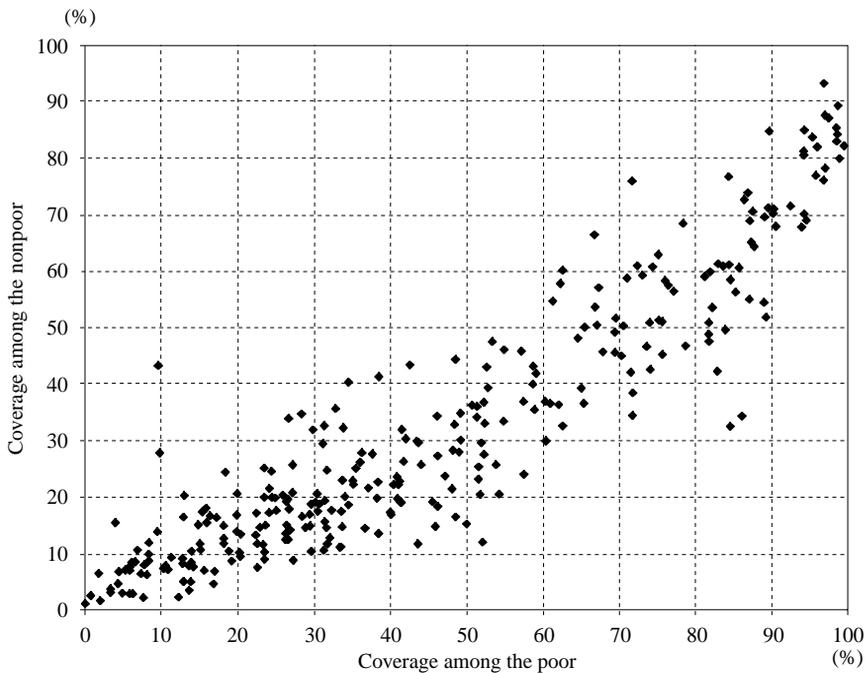
E. *Regional Heterogeneity*

Over the last thirty years Indonesia has been administered through a heavily centralized form of government. As a result, all of the key social safety net programs have also been designed by the central government. Even when the programs allowed for local decision making, the structure and scope of those local decisions were carefully specified in centrally drafted program guidelines. Despite this, there have been huge variations across regions in how widely and how well the programs have been implemented.⁴¹

This subsection contrasts the estimates of district level coverage among the poor as well as the nonpoor of two social safety net programs. Figure 4 represents the coverage of the subsidized rice program, i.e., the program which has the highest coverage. Figure 5 presents the coverage of medical services program, i.e., the program which has the sharpest targeting. Each dot in Figures 4 and 5 represents a district, of which there are more than 350 throughout Indonesia.

⁴¹ These regional variations in performance are certain to grow as the policy of expenditure decentralization, which began in January 2001, allows for greater autonomy at the district level.

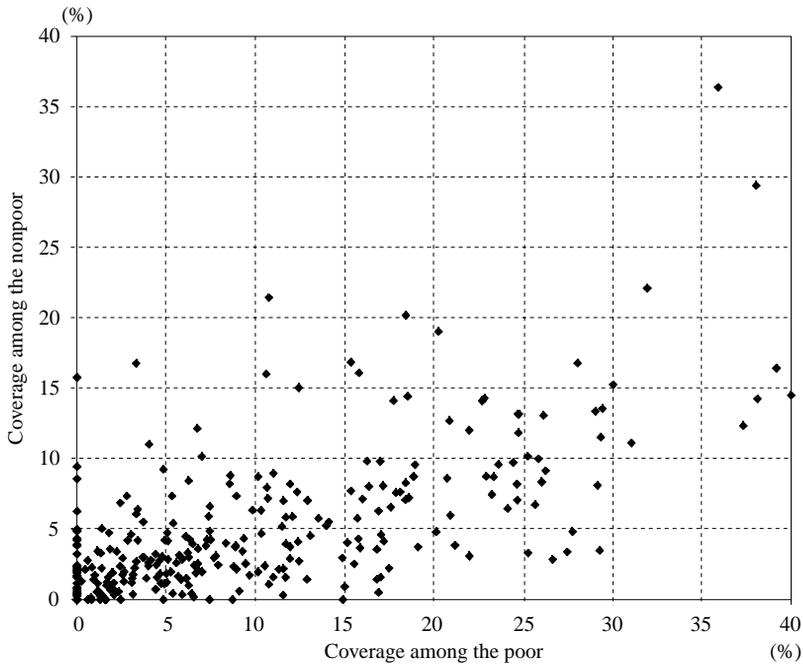
Fig. 4. Coverage of the Subsidized Rice Program at the District Level



From Figure 4, two conclusions immediately emerge about the district level coverage of the subsidized rice program. First, coverage among the nonpoor is highly positively correlated with coverage among the poor (the correlation is 0.92). Districts which have low coverage among the poor also have low coverage among the nonpoor, and vice versa. Only very few districts specifically favor the poor in the distribution of OPK rice. This means that no conspicuous differences between regions are observed, probably due to the low targeting expenditure ratio. Second, the range in the level of coverage across districts is very wide, running from near zero to almost 100 per cent coverage. This suggests that the resources distributed through this program have varied widely across districts. Some districts have received a lot of resources, while others have received very little.

Meanwhile, Figure 5 indicates that the medical services program also faced difficulties in reaching out to the majority of the poor. Most districts have achieved coverage among the poor of less than 10 per cent, and very few districts have coverage among the poor of higher than 20 per cent. In this program, however, differences across regions are large. Furthermore, compared to the other programs, the program on the whole has achieved better targeting. In most districts, coverage among the nonpoor remains under 10 per cent, even in those districts where coverage among the poor reached up to 30 per cent.

Fig. 5. Coverage of the Medical Services Program at the District Level



F. Budget for the Social Safety Net Programs

Implementing the social safety net programs was a costly exercise, particularly for a country suffering from an economic crisis. On the one hand, the government faced shrinking revenues as the tax base was eroded by the crisis. On the other, it had to deal with the severe social impact of the crisis. However, the government had no alternative as the social costs from doing nothing to lessen the impending social impact of the crisis were anticipated to outweigh the financial costs of the social safety net programs. Hence, the government implemented the social safety net programs with a budget that was partly supported by foreign loans.

Table VI shows the budget allocation of the social safety net programs during the fiscal year 1998/99 to 2000. The total budget continued to decline over time both in terms of the absolute amount as well as in terms of the proportion from the total budget. This reflects three things. First, the financing constraints continued to be a major problem in implementing these large-scale programs. Second, over the course of time it became apparent that the social impact of the crisis was not as catastrophic as earlier predicted. Hence, the government could afford to downsize the overall program. Third, as lessons were learned, the government became more se-

TABLE VI
BUDGET ALLOCATION OF THE SOCIAL SAFETY NET PROGRAMS

| Programs | (Rp Billion) | | |
|--|--------------|---------|-------------------|
| | 1998/99 | 1999/00 | 2000 ^a |
| Sale of subsidized rice | 5,450 | 6,235 | 2,232 |
| Scholarships and school block grants | 1,138 | 1,251 | 667 |
| Employment creation | 2,066 | 1,000 | 441 |
| Health (JPS-BK) | 1,043 | 1,030 | 867 |
| Other programs | 5,123 | 2,357 | 1,255 |
| Total social safety net programs | 14,820 | 11,873 | 5,462 |
| Total government budget | 263,888 | 212,699 | 183,069 |
| Percentage of social safety net budget | 5.62 | 5.58 | 2.98 |

^a In the year 2000 the government changed its fiscal calendar from April–March to January–December. Hence the transitional fiscal year 2000 was only for a nine-month period from April to December.

lective in choosing the programs it wanted to continue and dropped the ones that were considered nonessential or ineffective.

As indicated by the budget allocation, the sale of subsidized rice continued to be the program that was deemed as the most essential program by the government. When in the fiscal year 1999/2000 the overall budget for the social safety net program was reduced from Rp 14.8 to 11.9 trillion, the budget allocated to the program for subsidized rice was in fact increased from Rp 5.5 to 6.2 trillion. Hence, the proportion of budgeting allocated to this program increased from 37 to 53 per cent from the total budget of the social safety net programs. Similarly, the budget allocation also indicates that the government viewed the scholarship program and the health program as essential. On the other hand, the employment creation program, which received a relatively large budget in the first year, was downsized substantially in the subsequent years.

V. CONCLUSION

In early 1998, in anticipation of the adverse social impact of the economic crisis, the government of Indonesia established social safety net programs. The programs were intended to protect both the traditional poor and newly poor due to the crisis, as it was feared these groups would not be able to cope with the impact of the crisis without outside help. The programs were created based on four strategies: ensuring the availability of food at affordable prices for the poor, supplementing purchasing power among poor households through employment creation, preserving access to critical social services, particularly health and education, and sustaining local eco-

conomic activity through regional block grant programs and extension of small scale credits.

The findings of this study, unfortunately, point out that in many cases the target groups have been largely missed by the programs, both in terms of low coverage and being only loosely targeted in practice. The programs are plagued by problems in targeting the beneficiaries and delivering benefits to intended target groups. Except for the sale of subsidized rice program, the programs have suffered from the problem of undercoverage, i.e., there have been a large number of the poor who have not been covered by the programs. At the same time, all of the programs have faced the problem of leakage, i.e., there have been a large proportion of program benefits going to the nonpoor. The findings of this study indicate that the leakage is due to the fact that all programs suffer from bad targeting. In addition, some programs also suffer from inadequate implementation.

Nevertheless, it should be emphasized that effectiveness of the programs varies across programs and regions. Some programs in some districts have both high coverage among the poor and show some reasonable amounts of targeting. Nationally, the sale of subsidized rice program has the highest coverage, while the upper secondary school scholarship program has the lowest coverage. In terms of targeting, the medical services program has the sharpest targeting, while the nutrition program has the least targeting. It is also important to note that the findings of this study refer to a certain period of time. Program performance may change—either improve or worsen—across time.

One notable feature of the coverage and targeting of various social safety net programs is the heterogeneity of performance both across programs as well as across regions. Three factors presumably contribute to this heterogeneity in performance: program designs, budget allocations across programs and regions, and regional capabilities in program implementations. In addition, some other factors may also influence the performance of a certain program, such as active monitoring and supervision by communities may enhance the performance of a program in a particular region.

The findings of this study point to some things that need to be done in the future. Firstly, when the crisis occurred, Indonesia was not prepared to deal with its social impact. This indicates that the country needs to have a formal social safety net system in place as a buffer. The maintained system should be small in scale but capable of quick expansion whenever needs arise. The system should be well prepared not only for dealing with the impact of social, economic, or political crises, but also with the impact of natural disasters which occurred relatively frequently in Indonesia.

Secondly, sharper targeting and higher coverage of beneficiaries in the social safety net programs have been hampered by the unavailability of reliable and up-to-date data, both at geographic and household levels. The use of the BKKBN

classification of households as the basis for targeting was apparently problematic. However, this is not to suggest that the BKKBN data is at fault, since it was never meant for targeting in social safety net or poverty reduction programs in the first place. Instead, this suggests that there is clearly a need for Indonesia to develop and maintain a database which is specifically designed for this purpose.

Thirdly, one of the main reasons for the large degree of leakage in the social safety net programs has been the pressures from communities to distribute program benefits more uniformly. This indicates that such programs need to have an effective public education component, so that the people can understand why the program benefits should be prioritized for the needy and the poor.

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APPENDIX TABLE I
SOCIAL INDICATORS IN INDONESIA, 1975 AND 1995

| Indicators | 1975 | 1995 |
|--|------|------|
| Headcount poverty rate (%) | 64.3 | 11.4 |
| Life expectancy at birth (years) | 47.9 | 63.7 |
| Infant mortality rate (per 1,000 births) | 118 | 51 |
| Primary school net enrollment (%) | 76 | 99 |
| Secondary school net enrollment (%) | 13 | 55 |

Source: World Bank (2001).

APPENDIX TABLE II
COMPARISON OF MEAN PER CAPITA EXPENDITURES IN CORE SUSENAS AND
CONSUMPTION MODULE SUSENAS

| Area/Educational Level | (Rp/month) | | | | | |
|------------------------------|--|------------------------------------|---------------------|---|------------------------------------|---------------------|
| | Sample in Both Core and Consumption Module | | | Expenditures of the Two Sample Groups in the Core | | |
| | Core Expenditure | Module Expenditure | Per cent Difference | Core Only | Core and Module | Per cent Difference |
| Urban: | | | | | | |
| Not completed primary school | 139,120 (82,509) | 139,991 (82,936) | 0.63 | 121,906 (70,258) | 139,120 (82,059) | 14.12 |
| Primary school | 156,959 (109,019) | 156,622 (102,299) | -0.21 | 130,601 (79,911) | 156,959 (109,019) | 20.18 |
| Junior secondary | 188,470 (118,353) | 188,710 (117,444) | 0.13 | 160,173 (105,663) | 188,470 (118,353) | 17.67 |
| Senior secondary | 237,082 (164,350) | 236,921 (160,495) | -0.07 | 197,914 (138,015) | 237,082 (164,350) | 19.79 |
| Tertiary | 336,757 (279,675) | 333,792 (248,442) | -0.88 | 276,825 (284,280) | 336,757 (279,675) | 21.65 |
| Total | 196,773 (157,344) | 196,523 (149,370) | -0.13 | 166,942 (140,155) | 196,773 (157,344) | 17.87 |
| Rural: | | | | | | |
| Not completed primary school | 106,163 (51,324) | 106,789 (52,465) | 0.59 | 95,998 (50,602) | 106,163 (51,324) | 10.59 |
| Primary school | 113,234 (61,124) | 113,774 (61,058) | 0.48 | 98,118 (52,493) | 113,234 (61,124) | 15.41 |
| Junior secondary | 133,027 (77,077) | 134,394 (99,958) | 1.03 | 110,944 (63,386) | 133,027 (77,077) | 19.91 |
| Senior secondary | 158,588 (92,072) | 159,410 (91,615) | 0.52 | 131,093 (81,378) | 158,588 (92,072) | 20.97 |
| Tertiary | 201,152 (108,746) | 202,011 (106,807) | 0.43 | 158,171 (93,127) | 201,152 (108,746) | 27.17 |
| Total | 116,294 (65,651) | 116,955 (68,472) | 0.57 | 101,575 (57,195) | 116,294 (65,651) | 14.49 |

Note: Numbers in parentheses are standard deviations.

APPENDIX TABLE III

COVERAGE OF VARIOUS SOCIAL SAFETY NET PROGRAMS BY QUINTILES OF PER CAPITA EXPENDITURES

| Programs | No. of Eligible Recipients | Program Coverage (%) | | | | | | Total Q1-Q5 |
|-------------------------------------|----------------------------|----------------------|---------|-------|-------|-------|-------------|-------------|
| | | Poor | Nonpoor | | | | | |
| | | Q1 | Q2 | Q3 | Q4 | Q5 | Total Q2-Q5 | |
| Subsidized rice | 50,385,444 | 52.64 | 46.24 | 41.71 | 35.76 | 24.33 | 36.90 | 40.09 |
| Employment creation | 50,385,444 | 8.31 | 6.89 | 5.79 | 4.58 | 2.53 | 4.94 | 5.61 |
| Primary school scholarships | 29,745,369 | 5.80 | 4.84 | 4.02 | 3.52 | 2.04 | 3.60 | 4.03 |
| Lower secondary school scholarships | 10,394,621 | 12.15 | 10.31 | 8.34 | 6.73 | 4.85 | 7.53 | 8.42 |
| Upper secondary school scholarships | 6,430,146 | 5.40 | 5.06 | 3.32 | 3.04 | 1.96 | 3.32 | 3.71 |
| Medical services | 27,567,138 | 10.60 | 7.24 | 6.30 | 4.52 | 3.09 | 5.28 | 6.33 |
| Nutrition | 19,970,948 | 16.54 | 16.64 | 16.38 | 15.94 | 14.24 | 15.79 | 15.94 |

Note: The quintiles are calculated at the district level.