

Designs and Implementation  
of the Indonesian Social  
Safety Net Programs:  
Evidence from the  
JPS Module in the 1999  
SUSENAS

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For further information, please contact SMERU, Phone: 62-21-336336;  
Fax: 62-21-330850; E-mail: [smeru@smeru.or.id](mailto:smeru@smeru.or.id); Web: [www.smeru.or.id](http://www.smeru.or.id)

**Sudarno Sumarto**

**Asep Suryahadi**

**Wenefrida Widyanti**

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## TABLE OF CONTENTS

Abstract .....	1
I. Introduction .....	2
II. The Indonesian Social Safety Net Prior to the Crisis .....	4
Overview of the Indonesian Social Safety Net Prior to the Crisis .....	4
Social Safety Net Programs as a Response to the Crisis.....	5
OPK: Sale of Subsidized Rice.....	6
Padat Karya: Employment Creation .....	8
Scholarships and Block Grants to Schools.....	9
Health .....	9
Method of Targeting.....	10
III. Methodology and Data Sources.....	14
Method: Coverage and Targeting Effectiveness.....	14
Data: The SUSENAS JPS Module.....	15
IV. Program Coverage and Targeting .....	19
Sale of Subsidized Rice (OPK) .....	19
Employment Creation Programs.....	23
Scholarship Programs.....	26
Primary School Scholarship.....	27
Lower Secondary School Scholarship .....	29
Upper Secondary School Scholarship .....	32
Health Program.....	36
Medical Services Program.....	36
Nutrition Program.....	39
V. Recapitulation.....	43
VI. Conclusion .....	48
References .....	50
Appendix.....	53

# **Designs and Implementation of the Indonesian Social Safety Net Programs: Evidence from the JPS Module in the 1999 SUSENAS**

**Sudarno Sumarto, Asep Suryahadi, Wenefrida Widyanti\***

## *Abstract*

Designing and implementing social safety net programs in 1998 was a new experience for Indonesia. The severe social impacts of the crisis, which began in mid 1997, forced the government to act rapidly to safeguard real incomes and access to social services for the poor by instituting new and expanded programs. The findings of this study indicate that implementation of the programs was plagued by problems of targeting beneficiaries and delivering benefits to intended target groups. The programs suffered from the problem of undercoverage, with a large number of the poor not being reached by the programs. At the same time, all of the programs faced the problem of leakage, as a large proportion of program benefits went to the non-poor. These problems point to the difficulties in designing and implementing any program that provides cash or in-kind transfers in a developing country as large and diverse as Indonesia.

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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 developed into a full-blown economic and political crisis. During this period, the Indonesian people witnessed the value of their currency fall to as low as 15 percent of its pre-crisis level, an economic contraction by an unprecedented magnitude of 13.7 percent in 1998, skyrocketing domestic prices particularly for food (the general inflation rate was 78 percent in 1998 while food prices escalated by 118 percent), mass rioting in the capital Jakarta and several other cities, and ultimately 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 was still evolving three years after it began. According to our own estimates the national poverty rate increased from 15.7 percent in February 1996 to 27.1 percent in February 1999. During that period, the number of urban poor doubled, while the rural poor increased by 75 percent.<sup>1</sup> In another study which tracked the poverty rate over the course of the crisis, we have revealed that the poverty rate increased by 164 percent from the onset of the crisis in mid 1997 to its peak at the end of 1998.<sup>2</sup> In the labor market, even though the open unemployment rate only slightly increased from 4.7 percent in August 1997 to 5.5 percent in August 1998, real wages fell by around one third during the same period.<sup>3</sup> One year later, real wage growth has turned positive in most sectors, but the unemployment rate has continued to climb reaching 6.4 percent in 1999.<sup>4</sup>

To mitigate the social impact of the crisis, the government of Indonesia established a series of new and expanded programs. These programs — which are widely known as the

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<sup>1</sup> See Pradhan *et al.*, 2000.

<sup>2</sup> See Suryahadi *et al.*, 2000.

<sup>3</sup> See Feridhanusetyawan (1999) and Manning (2000).

<sup>4</sup> Other studies on the social impact of the Indonesian crisis include Frankenberg *et al.* (1999), Papanek and Handoko (1999), Poppele *et al.* (1999), Skoufias *et al.* (2000), and Sumarto *et al.* (1998).

JPS programs (an acronym of *Jaring Pengaman Sosial* or ‘Social Safety Net’) — were launched in early 1998, but many of the programs did not really begin until the second half of the year. It was hoped that through the implementation of these social safety net programs, the worst effects of the crisis such as widespread hunger, malnutrition, poverty, unemployment, and children dropping out of school could be prevented or at least significantly reduced.<sup>5</sup>

This study is an evaluation of how effective various JPS programs have been in reaching their intended beneficiaries, i.e. the poor and newly poor. The study assesses the coverage of the programs among the poor as well the distribution of the benefits of the programs between the poor and the non-poor.

Section two of this paper provides a brief overview of those social safety net programs introduced as a response to the crisis. Section three explains the method used to evaluate the implementation of the programs and the source of the data. Section four discusses the main findings of the study concerning coverage (how many of the poor participated) and targeting (how much of the benefits went to the poor). Section five recapitulates the main findings discussed in section four and compares relative performances across programs. Finally, section six presents some key conclusions.

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<sup>5</sup> The funding for these social safety net programs came from the state budget as well as in the form of loans provided by The World Bank, Asian Development Bank, and various bilateral donors, either directly through project support or indirectly through program loans which provide budget support.

## II. The Indonesian Social Safety Net Programs

### *Overview of the Indonesian Social Safety Net Prior to the Crisis*

Before the crisis, Indonesia was one of the most rapidly growing economies in the world. Between 1986 and 1996, average annual GDP growth was around 7 percent. That rapid economic growth had broad based benefits and was accompanied by a significant improvement in living standards. For example, poverty — by any standard — fell dramatically. Between 1970 and 1996, the proportion of the population living below the official poverty line fell by almost 50 percentage points (from 60 to 11 percent). In fact, as far as poverty reduction was concerned, Indonesia was considered to be one of the most successful countries in the developing world. Other indicators were also encouraging: infant mortality rates fell, school enrollment rates rose, and the provision of basic infrastructure — water supplies, roads, electricity, schools, and health facilities — expanded throughout the country.

However, the Indonesian people have never relied to any significant extent on government safety net programs. The country has neither the economic apparatus nor the political mechanisms that are required to deliver large scale transfer programs all over the archipelago. Social spending was largely focussed on the provision of ‘social services’ such as health and education, with the family and communities providing ‘social insurance’ in times of difficulty. There was some subsidized health care and a compulsory social security program for formal sector employees, but Indonesia has never had a social safety net system like the present program. Consequently, establishing this program in Indonesia in 1998 involved the casting of a new net rather than merely expanding an existing one.

### ***Social Safety Net Programs as a Response to the Crisis***

In the early months of 1998 there was real concern about whether the achievements that had been made in the social sectors and in poverty reduction over the previous decades could be sustained. Fears about the looming severe social impact of the crisis prompted the Indonesian government to react rapidly to safeguard real incomes as well as access to social services for the poor.

Several new programs were launched. These JPS programs were intended to help protect the traditionally poor as well as those who had recently become poor because of the crisis 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 of the poor to essential social services, particularly health and education, and (iv) sustaining local economic activity through regional block grant programs and the extension of small scale credit. Table 1 recapitulates the areas and major programs of this Indonesian social safety net program.

**Table 1. Areas and Major Programs of the Indonesian Social Safety Net**

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

The programs were intended to have the following characteristics: quick disbursement of benefits, direct financing to the beneficiaries, transparency, accountability, and community participation.<sup>6</sup> Each major program is described briefly below,<sup>7</sup> with a discussion of the targeting methods of each in the following sub-section.

#### OPK: Sale of Subsidized Rice

This program is the main component of the government’s effort to maintain food security, particularly for the poor and the newly poor, which had been affected by both falling real incomes and rising food prices. This program was widely known as ‘the cheap rice’ program but it was officially called the OPK program (an acronym of *Operasi Pasar*

<sup>6</sup> As later revealed by several field surveys, these intended characteristics were not always achieved.

<sup>7</sup> There are some changes in JPS programs across fiscal years.



*Khusus* which literally means ‘special market operation’).<sup>8</sup> Under this program, each eligible household was initially allowed to purchase 10 kilograms of rice per month at the highly subsidized price of Rp. 1,000/kg.<sup>9</sup> As a point of comparison, the average market price for medium quality rice in the second half of 1998 was around Rp. 3,000/kg.<sup>10</sup> Initially, only those households which were recorded as pre-welfare families ( *Keluarga Pra-Sejahtera* – KPS), the lowest category of official classification, were eligible to participate in the program.<sup>11</sup> But coverage was later expanded to include those households in the second lowest category (KS D) during the course of the year.

Since the aim of the OPK program was to ensure that the poor could afford to buy rice, the staple food of most Indonesians, it has been one of the most critical components of the JPS program. One impact of the crisis was a rapid rise in prices, particularly food prices, putting many basic necessities practically out of reach of the poor, at least in the short run until their nominal incomes could expand to keep pace. The government believed that the provision of cheap rice for the poor was essential to prevent widespread food shortages and possible malnutrition, since that would only exacerbate the already chaotic political and economic situation of the country at that time.<sup>12</sup>

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<sup>8</sup> The program was introduced in July 1998 in the Jakarta area and was then expanded throughout the country during the following five months.

<sup>9</sup> The benefit was later increased to 20 kilograms in April 1999 and then changed again to between 10 and 20 kilograms April 2000.

<sup>10</sup> See ‘Recent Volatility in the Rice Market: Results of a SMERU Rapid Appraisal in Central and East Java’, *SMERU Newsletter*, No. 01, November 1998.

<sup>11</sup> This official classification of family “welfare” status is conducted by the national family planning organization (BKKBN) and is discussed below.

<sup>12</sup> Since the amount of rice made available is substantially below total consumption, in practice the program served as 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 both an income transfer and food security measure.

### Padat Karya: Employment Creation

These initiatives, popularly known as *padat karya* (meaning 'labor intensive'), were 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 first round of 'crash programs' in fiscal year 1997/98 were directed to urban areas except for a few rural areas which had experienced recent harvest failures.<sup>13</sup>

Following on from these 'crash programs', in fiscal year 1998/99 there was a proliferation of Padat Karya programs, with sixteen different programs in the 'employment creation' category.<sup>14</sup> These programs can be classified into four types. Firstly, some programs were based on on-going investment and infrastructure projects which were redesigned as labor intensive projects. Secondly, other programs gave block grants to local communities (such as the Kecamatan Development Program, the Village Infrastructure Program, and the PDM-DKE Program). These programs were directed to poorer areas, and had 'menus' that included the possibility of using the funds for public works with a labor creating effect. A third set of programs were special labor intensive carried out by sectoral ministries (e.g. forestry, rural-urban, and a program to retrain retrenched workers carried out by the Manpower Ministry). In addition, a fourth type of program, was launched by some international donors and NGOs in drought stricken areas as 'food for work' initiatives.

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<sup>13</sup> These 'crash programs' were launched in December 1997 and operated until the end of the fiscal year in March 1998.

<sup>14</sup> In the fiscal year 1999/2000, however, the number of padat karya programs was cut drastically, replaced by only two programs: the Public Works Sector Padat Karya Program and the Special Initiative for Unemployed Women Program.

### Scholarships and Block Grants to Schools

At the beginning of the crisis it was feared that the crisis may force many parents to withdraw their children from schools as a way of coping with falling incomes and rising costs, hence triggering a large increase in school drop-out rates. This rightly alarmed the government, prompting it to establish an education funding support program. The program, which began in the 1998/99 academic year, is to end in 2003.

This program has two components, scholarships for students from poor families to enable them to stay in schools, and 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 charges and can also be used for that purpose or for any other expenses.

The program was intended to reach at most 6 percent of primary school students, 17 percent of lower secondary school students, and 10 percent of upper secondary school students nationwide, including students from private and religious schools. Since the program was targeted, it is expected that the coverage will be higher in some districts than in others. Meanwhile, 60 percent of the poorest schools in each district were targeted to receive the block grants.

### Health

There was also concern that falling real incomes and increasing costs of medical services might force poor households to abandon modern medical services, even when these were clearly needed, thus contributing to a decline in public health and reversing all the improvements in this sector over recent decades.

To anticipate this, the government established JPS programs in the health sector, known collectively as the JPS-BK (*Bidang Kesehatan* or ‘Health Sector’) program. Through these programs it was hoped that the poor would continue to use modern medical services. Various initiatives were specifically established to achieve this objective, including subsidies for medicines and imported medical equipment, operational support funds for community health centers, free medical and family planning services, and supplementary food for pregnant women and children under three years old.

### ***Method of Targeting***

In general, the targeting for JPS programs has been based on a combination of household and geographic targeting. Table 2 summarizes the targeting of the major JPS programs. The targeting for some programs is based on a household ‘welfare’ classification created by the National Family Planning Coordinating Agency (BKKBN). According to this classification, households are grouped into four socio-economic categories: ‘pre-prosperous households’ (*keluarga pra-sejahtera* or KPS), ‘prosperous I households’ (*keluarga sejahtera I* or KS I), KS II, and KS III (The KS I to KS III categories are often lumped together as the KS category).<sup>15</sup> Originally, eligible recipients for some JPS programs were only KPS card holders, but for some programs eligibility was eventually extended to include KS I households as well (e.g. the OPK program). The sale of subsidized rice (OPK) and the health program (JPS-BK)

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<sup>15</sup> A household is defined as a ‘pre-prosperous’ household if it fails to satisfy one of the following 5 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 house is not made of dirt, and (v) the household is able to seek modern medical assistance for sick children and family planning services for contraceptive users. Suryahadi *et al.* (1999) find that there is a lack of correlation between this official classification and consumption based measure of poverty. They find that while only 15 percent of the ‘prosperous’ households were ‘poor’, 75 percent of the ‘pre-prosperous’ households were ‘non-poor’. On the other hand, 46 percent of the ‘non-poor’ households were ‘pre-prosperous’ and 38 percent of the ‘poor’ households were ‘prosperous’.

explicitly used this BKKBN household classification for their targeting procedures. The selection of recipients in the scholarship program was also supposed to take into account their BKKBN household status.

**Table 2. Targeting Mechanism in JPS Programs**

<b>Program</b>	<b>Targeting</b>	<b>Fiscal Year 1998/99</b>	<b>Fiscal Year 1999/00</b>
OPK	Geographic	None	None
	Household	BKKBN list	BKKBN list with flexibility
PDM-DKE	Geographic	Pre-crisis data	Updated with Bappenas regional data
	Household	Local decision making	Local decision making
Padat Karya programs	Geographic	None, various ministries	Urban areas, based on employment
	Household	Weak self selection	Self selection
Scholarships and block grants to schools	Geographic	Old data on enrollments	Poverty data updated to 1998
	Household	School committees using various criteria	School committees using various criteria
JPS-BK	Geographic	BKKBN pre-prosperous rates	Updated pre-prosperous estimates to 1999
	Household	BKKBN list	BKKBN list with flexibility

Unlike the OPK program, the Padat Karya programs were quite diverse 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 these programs overall. Within programs there were many disagreements about the desired characteristics of intended participants but typically the beneficiaries were not chosen according to any fixed administrative criteria. Hence, to the extent there was any targeting, this was primarily through self-selection. Only those willing to work should have received the benefits of the program. Such a self-selection mechanism has the advantage over administrative criteria of allowing individuals to choose to

participate or not and is more flexible to unobserved household shocks than the application of formal administrative criteria.

Despite the variety of Padat Karya programs, all were established with the hope that the wages would be paid as a benefit to the poor and the recently unemployed as a result of the crisis. While such programs should be available only to those who are already unemployed and are willing to receive the specified wage rate, it is well known that the actual level of the wage offered is a critical factor for achieving good targeting outcomes in such employment programs.<sup>16</sup> If effective targeting 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 “poorer” schools received proportionally more scholarships. In each school, the scholarships were then allocated to individual students by a school committee, consisting of the principal, a teacher representative, a student representative, the head of parent’s association (BP3) as the representative of the local community, and the village head. The scholarship recipients were selected according to various administrative criteria (including factors such as household data from school records, the family BKKBN status, the size of the family, the likelihood of a student dropping out) and the committee decision.<sup>17</sup>

School students in all but the lowest three grades of primary school were officially eligible. In principle, students selected to receive the scholarships were supposed to be from the poorest backgrounds, and as a guide those from households in the two lowest BKKBN rankings. If the number of eligible students was too large then additional indicators were

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<sup>16</sup> Ferreira *et al* (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 guarantees that the incentive remains to take up regular work when this becomes available.

<sup>17</sup> However, the extensive monitoring of this program reveals that parent’s association representatives played only a minor role in validating the implementation of the criteria and the decisions of school officials.

used to identify the neediest students, including distance from home to school, physical disabilities, and those children from large or single parent families. Also, a minimum of 50 percent of scholarships, were to be allocated to girls.

In the health programs, the free medical and family planning services program was implemented by giving 'health cards' to eligible households. Eligibility in this program was also based on BKKBN household status. The health card given to any household was able to 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 ups and child birth services.

### III. Methodology and Data Sources

#### *Method: Coverage and Targeting Effectiveness*

In this study, we focus on *the coverage* (i.e. how many of the poor have participated in a program) and *the targeting effectiveness* (i.e. what fraction of program benefits went to the poor) of seven JPS programs.<sup>18</sup> This is achieved through three steps. Firstly, the samples in each district (kabupaten/kota) are grouped into quintiles of per capita expenditure, where the first quintile (Q<sub>1</sub>) is classified as the poor, while the second to fifth quintiles (Q<sub>2</sub>-Q<sub>5</sub>) are classified as non-poor.<sup>19</sup> Secondly, program coverage is calculated for each quintile, i.e. the proportion of households in each quintile which received the benefits of the program. Thirdly, targeting effectiveness is calculated for each program as the ratio of participation of the non-poor in a program compared to the fraction of non-poor in the sample.

The targeting ratio (TR) is defined as:  $TR = B_n/P_n$ , where  $B_n$  is the fraction of the participants in the program who are non-poor and  $P_n$  is the fraction of the overall population non-poor in the sample. If all the recipients of a program are poor households, indicating that the program has achieved perfect targeting, then the value of this targeting ratio will be zero (since  $B_n = 0$ ). On the other hand, if all the recipients of the program are non-poor households, indicating that the program has missed its target completely, and since non-poor households are by definition 80 percent of population, then the value of the targeting ratio will be equal to 1.25 (since  $B_n = 1$  divided by  $P_n = 0.8$ ). Meanwhile, if the distribution of program beneficiaries is the same as the distribution of the population in the sample, indicating that the

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<sup>18</sup> The importance of targeting in any effort to help the poor in Indonesia is emphasized by Bidani and Ravallion (1993). They estimate that the cost of assuring that everyone can afford the poverty food bundle without targeting is about 100 times the cost with perfect targeting.

<sup>19</sup> Pradhan *et al.* (2000) estimates the poverty rate in Indonesia in February 1999 to be 27.1 percent, compared with the official BPS estimate of 23.6 percent (Sutanto and Irawan, 2000).



program has no targeting (i.e. it reaches poor and non-poor in equal proportions), then the value of the targeting ratio will be equal to 1 (since  $B_n = P_n$ ).

Grouping households by quintiles of nominal per capita expenditure in each district has two advantages. First, it makes our findings on program participation consistent with the large and growing literature on benefit incidence, which typically uses income or consumption expenditure quintiles.<sup>20</sup> Second, in this study we do not attempt to capture differences in poverty across districts in the sample. Instead, we focus here only on the targeting within each district by asking whether the households which are relatively poor within the district (i.e. the bottom 20 percent) have received the benefits of the program in that district.

#### ***Data: The SUSENAS JPS Module***

The data analyzed in this study were collected in a special JPS module as part of the February 1999 SUSENAS conducted by Statistics Indonesia (BPS). SUSENAS (the National Socio-Economic Survey) is a nationally representative household survey, covering all areas of the country. One part of the SUSENAS is conducted annually, collecting information on the characteristics of over 200,000 households and over 800,000 individuals, including information about aggregated values of household consumption expenditure. This is known as the “Core” SUSENAS. Another part of the SUSENAS is conducted once every three years, specifically to collect detailed information on consumption expenditure from around 65,000 households.<sup>21</sup> This is known as the “Module” SUSENAS. In addition, other modules on special topics are also conducted as part of the SUSENAS on an occasional basis. The SUSENAS JPS Module, conducted in February 1999, is an example of one of these special

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<sup>20</sup> See Baker (2000), Grosh (1994), and Ravallion (1992).

<sup>21</sup> They are a subset of the 200,000 household Core SUSENAS sample of the same year.

topic modules. This JPS module was based on the same sample as the February 1999 Core SUSENAS.

To carry out the method of analysis outlined in the previous section, the data on JPS participation obtained from the SUSENAS JPS Module had to be combined with data on household expenditure from the Core SUSENAS. However, these household expenditure data present a problem which derives from the way the data were originally collected. This is due to the fact that the Core SUSENAS sample is actually obtained from two different groups of samples: one group which was included in the Consumption Module SUSENAS sample and one which was not.

Out of a total of around 200,000 randomly selected households in the Core SUSENAS, a subset of around 65,000 households were further randomly selected as the sample in the Consumption Module SUSENAS. Although both surveys ask about household consumption expenditure, the SUSENAS Consumption Module uses a detailed questionnaire that contains 339 goods with a recall period of one week for food items and one month or one year for non-food items. The Core SUSENAS, however, uses an aggregated questionnaire on consumption expenditure that contains only 23 items with the same recall period as the detailed questionnaire.

Theoretically, all households in the Core SUSENAS should complete the same questionnaire. However, Table Appendix 1 reveals that for those households in the Core SUSENAS which are also sampled in the SUSENAS Consumption Module, their answers in the aggregated consumption expenditure questionnaire were actually copied from the detailed consumption expenditure questionnaire. This has created an instrument bias due to the fact that the two groups of households in the sample were asked to respond to different consumption expenditure questionnaires.

The first three columns in Table Appendix 1 take information from those households which were sampled in both the Core SUSENAS and the SUSENAS Consumption Module. The first column presents the average household expenditure in the Core SUSENAS data by areas and education levels, while the second column presents the same information from the SUSENAS Consumption Module data. The third column notes the percentage difference between the two sets of data and shows that the results 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 Table Appendix 1, meanwhile, compare the level of expenditure between the two groups of households in the sample of the Core SUSENAS data. The comparison clearly shows that the level of expenditure 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 the SUSENAS Consumption Module. There is a 14 percent difference in rural areas and an 18 percent difference in urban areas. This difference in expenditure levels does not reflect the actual difference in living standards between 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 a higher level of expenditure 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 a single sample. Households which were sampled in the Core SUSENAS only will tend to be grouped in the lower quintiles of per capita expenditure, while households which were sampled in both the Core SUSENAS and the SUSENAS Consumption Module will tend to be grouped in the higher quintiles of per capita expenditure.

To overcome this problem, the households in both sets have been grouped separately into quintiles of expenditure. Those households which were sampled in only the Core SUSENAS are grouped into five quintiles of per capita expenditure. Likewise, those households which were sampled in both the Core SUSENAS and the SUSENAS Consumption Module are grouped into five quintiles of per capita expenditure. Since the two sets of household samples were randomly selected, then the same quintile of per capita expenditure from both can be treated as a single group of households with similar living standards.

#### IV. Program Coverage and Targeting

In this section we present the results of an analysis of the coverage and the targeting effectiveness of the following seven major social safety net programs implemented in fiscal year 1998/99 using the methods and data outlined in the previous section: subsidized rice (OPK), employment creation (*padat karya*), primary, lower secondary, and upper secondary school scholarships, free medical services, and the nutrition (supplementary food) program.

##### *Sale of Subsidized Rice (OPK)*

To evaluate household participation in this program, every household in the survey was asked whether any amount of rice or other basic necessities had been purchased or received through the JPS program in the previous six months, that is from August or September 1998 to the time the survey was conducted in February 1999.

Table Appendix 2 shows the coverage — the proportion of households which received the benefits — of each of the social safety net programs by quintiles of per capita expenditure at the national level.<sup>22</sup> The ratio of non-poor to poor is obtained by dividing the total percentage of the non-poor (Total  $Q_2$ - $Q_5$ ) by the percentage of the poor ( $Q_1$ ). Meanwhile, the targeting ratio — as explained in the previous section — is obtained by dividing the proportion of non-poor recipients column by 0.8, which by definition is the proportion of non-poor ( $Q_2$ - $Q_5$ ) in the sample.

For the subsidized rice program, Table Appendix 2 shows that nationally 40 percent of over 50 million households all over the country are estimated to have received the benefits of

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<sup>22</sup> In this table, the national level quintiles of households are the summation of households in the same quintiles across districts. Hence, they are not the same as within country quintiles. This also means that coverage in a certain quintile at the national level is the same as the weighted average of coverage in that quintile across districts.

this program during the six month evaluation period.<sup>23</sup> However, the distribution of benefits of this program does not seem to be specifically directed toward the poor. The coverage of this program among the poor ( $Q_1$ ) was 52.6 percent, while the coverage among the non-poor ( $Q_2$ - $Q_5$ ) was quite high at 36.9 percent. This means that three quarters of the total number of recipients are estimated to be non-poor households, resulting in a targeting ratio of 0.92. This indicates that, in practice, this program had near random targeting, resulting in almost proportionate distribution of program benefits between poor and non-poor households.

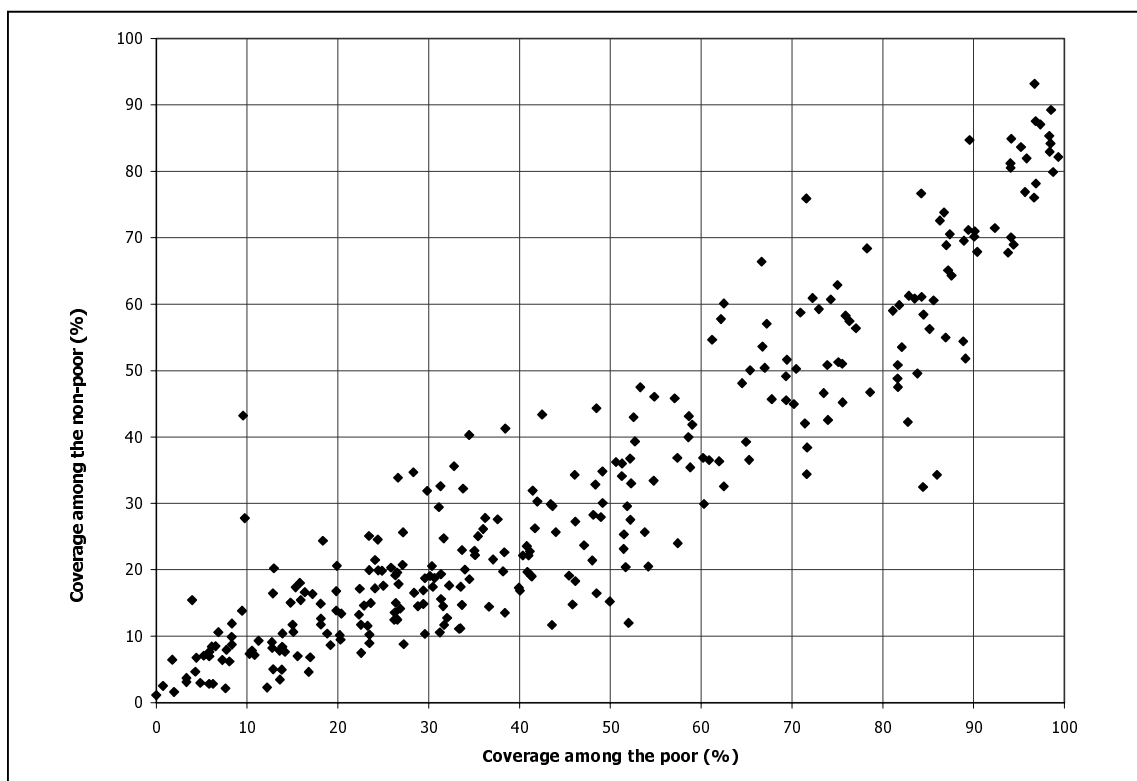
Since only 52.6 percent of all poor households received the benefits of this program, the 47.4 percent of poor households who were not covered represent the extent of ‘undercoverage’ within this program. Meanwhile, three quarters of all recipients were non-poor households. This number indicates the extent of program ‘leakage’ — the proportion of benefits which went to the non-poor .

Nevertheless, the program coverage across quintiles of per capita expenditure still suggests some degree of targeting. Table Appendix 2 reveals that, at the national level, the higher the quintile of per capita expenditure, the lower the program coverage. Even so, coverage at the highest quintile is still quite high, almost a quarter of households in the richest group still received program benefits, which is almost a half of the level of coverage at the poorest quintile.

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<sup>23</sup> The implied number of households which are reported to have received the benefits of the subsidized rice program is 20,200,235. This is double the number of beneficiaries in the official report on this program (10,354,445 households in February 1999). Further investigation indicates that the large discrepancy between the Susenas data and the official report is widespread across provinces. This discrepancy indicates two things. Firstly, while the official report indicates the number of beneficiaries in a certain month, the Susenas data indicates the total number of households which received the program benefits during the entire six month evaluation period, and reveals that almost half the recipients reported only purchasing OPK rice once or twice, indicating irregular delivery of benefits in most areas. Secondly, and more importantly, while the official report reflects the number of eligible households, the Susenas data reflects the actual number of beneficiaries. The conclusion to be drawn from this is that while the rice allocated to an area was based on the number of eligible households, it was actually distributed to a much larger number of households, implying a smaller amount of rice for each recipient.

The national level coverage reported in Table Appendix 2 is aggregated from the district level coverage, derived from the 294 districts included in the survey. Figure 1 summarizes the differences in program coverage across districts by plotting the program coverage among the poor in the horizontal axis against program coverage among the non-poor in the vertical axis. The diagram shows that the levels of coverage among the poor of this subsidized rice program across districts span almost continuously from near zero to almost 100 percent coverage. Almost a half of the districts, however, have coverage among the poor of less than 40 percent, indicating a large degree of “under coverage” of this program in these particular districts.



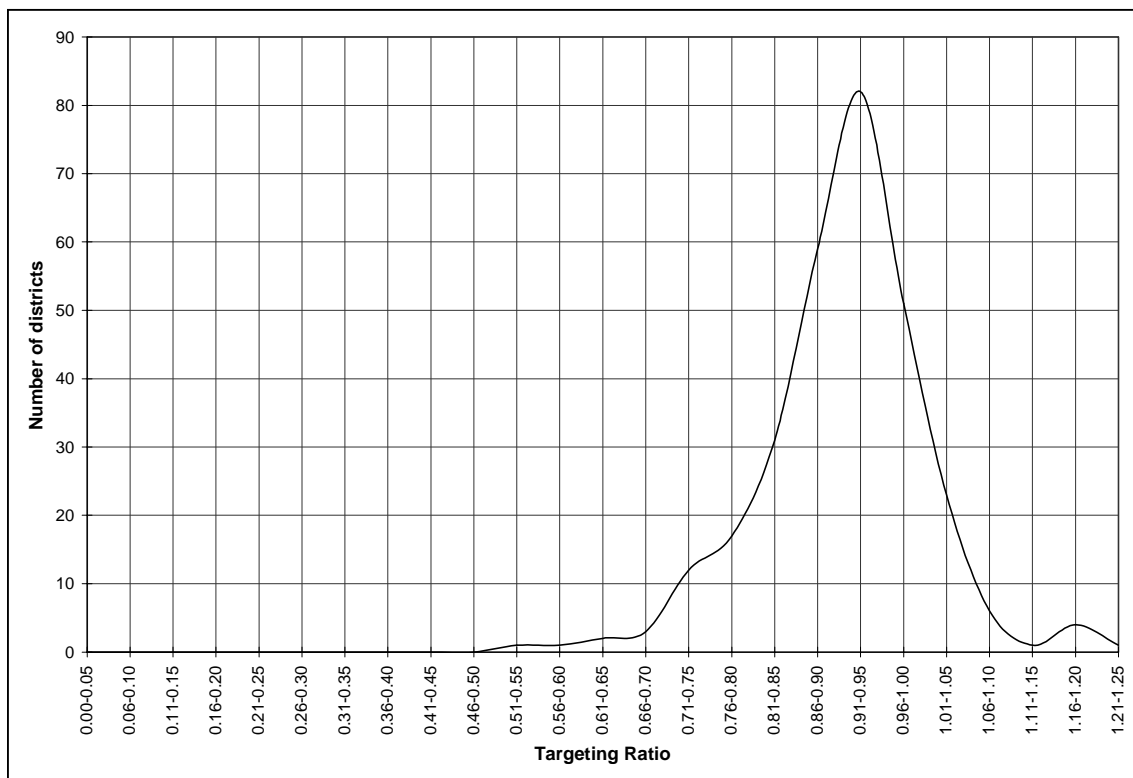
Note: Each dot represents a single district

**Figure 1. Coverage of the Subsidized Rice Program by District**

Furthermore, Figure 1 reveals that there is a strong positive relationship between coverage among the poor and coverage among the non-poor within districts. Correlation between the two is very high at 0.92. This means that those districts which had low program coverage among the poor tended to also have low program coverage among the non-poor. On the other hand, the districts with a high program coverage among the poor were more likely to also have a high program coverage among the non-poor.

Figure 2 shows the distribution of districts by the values of their targeting ratio. This clearly reveals that most districts have targeting ratios very close to one, indicating the random nature of the targeting of this program in most districts, and suggesting that at the district level, contrary to the program's guidelines, the benefits of this program were distributed almost proportionately between poor and non-poor households.





**Figure 2. Targeting Ratio of the Subsidized Rice Program by District**

### *Employment Creation Programs*

The evaluation period for Padat Karya programs is also between August 1998 and February 1999. The question in the survey simply asks whether there any member of the household participated in a Padat Karya program in the previous six months.<sup>24</sup> The survey does not identify which household member participated or the particular Padat Karya program, but it does identify the number of participating household members by gender.<sup>25</sup>

<sup>24</sup> The most common type of Padat Karya activity was repairing roads, where 64 percent program participants reported to have been involved in this activity. Other activities included repairing irrigation systems (35 percent), cultivating unused land (14 percent), repairing flood plain (12 percent), and other activities (16 percent). Many participants were involved in more than one activities.

<sup>25</sup> The results indicate a clear tendency for Padat Karya programs to be male-dominated: 81 percent of participants were male and only 19 percent were female.

Nationally, Table Appendix 2 shows that 5.6 percent of households had at least one member who participated in a Padat Karya program.<sup>26</sup> Program coverage among poor households was 8.3 percent compared to 4.9 percent among non-poor households. Since 70 percent of participating households were non-poor, the value of the targeting ratio in the programs is 0.88, indicating a near random nature of the targeting in these programs.<sup>27</sup>

Program participation across quintiles of per capita expenditure, however, still indicates some degree of targeting. Although program coverage falls off with higher quintiles of per capita expenditure, but participation at higher quintiles is still significant. The proportion of households at the richest quintile who participated in a Padat Karya program is still 30 percent of the participation at the poorest quintile.<sup>28</sup>

Figure 3 summarizes the district level information on the coverage of Padat Karya programs among poor and non-poor households. In 70 percent of districts, the coverage of this program among the poor is less than 10 percent, while only 11 percent of districts have a program coverage among the poor that is higher than 20 percent. This indicates that despite the record number of Padat Karya programs in fiscal year 1998/99, the total coverage of these programs among the poor remained low, indicating a large degree of undercoverage in these programs.<sup>29</sup>

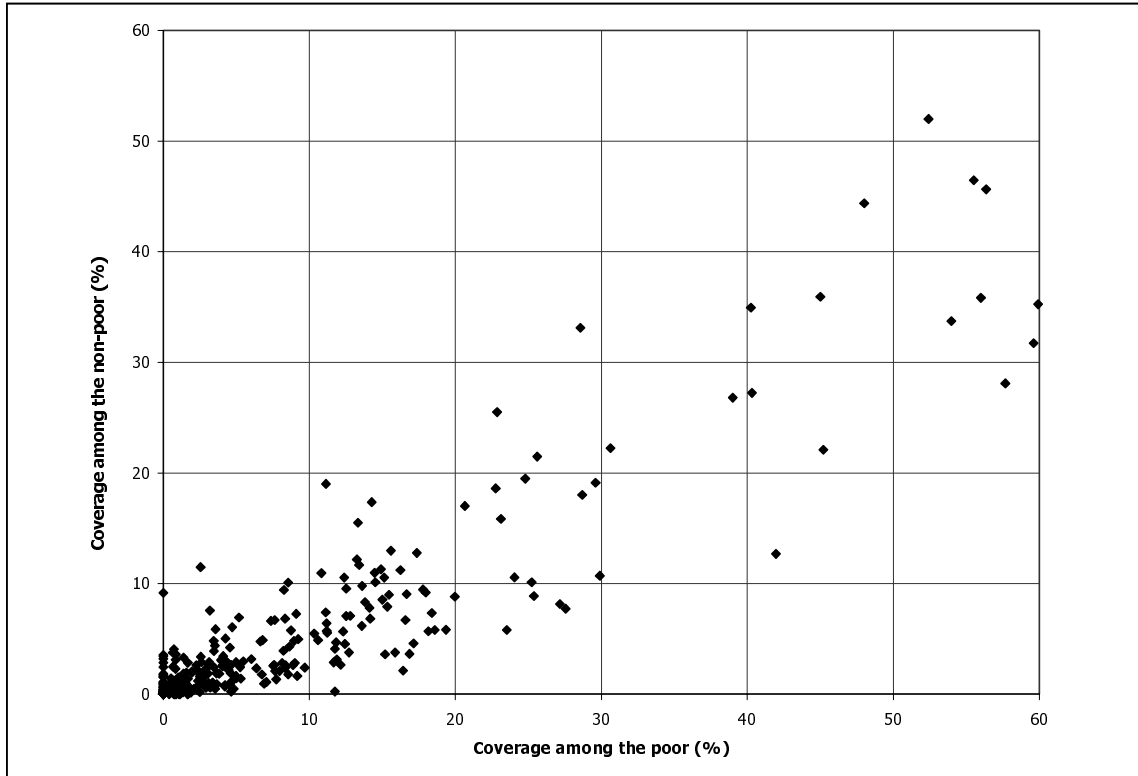
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<sup>26</sup> On average, each participating household claimed to have spent 27 man-days in Padat Karya programs during the 6 month evaluation period, or an average of 4.5 man-days per month.

<sup>27</sup> The significant participation of non-poor households in Padat Karya programs probably reflects the level of wages offered by these programs. The average daily wages received by the participants of Padat Karya programs was Rp. 6,073. While this is much lower than the average daily wages in the construction sector, which according to the 1999 National Labor Force Survey (SAKERNAS) averaged Rp. 13,755, it was comparable to the average daily wages in the food crop sector which averaged Rp. 6,350.

<sup>28</sup> A panel data study, however, indicates that the self-selection nature of targeting in Padat Karya programs makes the selection of beneficiaries does not only have some degree of responses to the level of per capita expenditure, but also to the level of shocks to expenditures (see Sumarto *et al.*, 2000).

<sup>29</sup> Among those who did not participate in any Padat Karya program, 59 percent claimed to have not known about the existence of the programs. It is possible that there were no Padat Karya programs exist in these villages



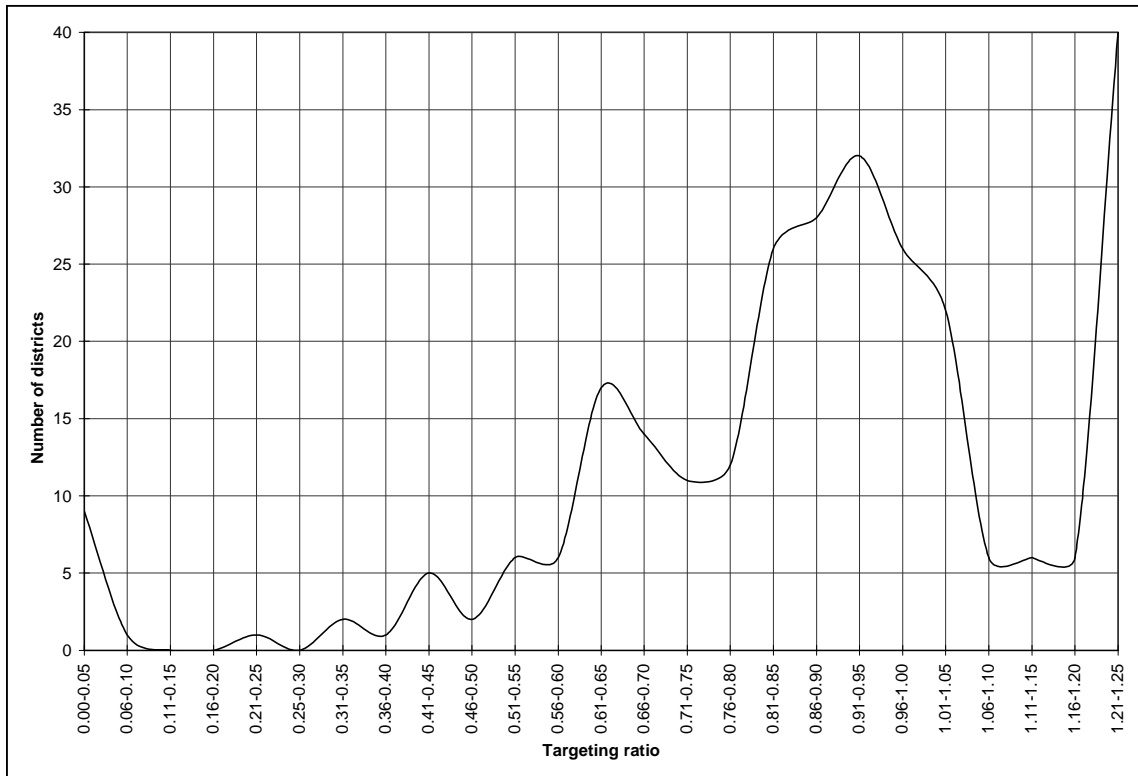
Note: Each dot represents a single district

**Figure 3. Coverage of Padat Karya Programs by District**

Meanwhile, Figure 4 shows the distribution of districts by the values of their targeting ratio. The performance of districts in the targeting of these Padat Karya programs seems to exhibit a remarkable variation. There are 40 districts with the maximum targeting ratio of 1.25, indicating that in these particular districts the participants of Padat Karya programs were all from non-poor households. On the other hand, nine districts have a zero targeting ratio, indicating a preference in these districts to give the benefits of these programs to poor households exclusively.

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or, if there was, the information did not reach them. Meanwhile, of the remainder who did not participate 20 percent reported that they did not need the programs, 15 percent reported as having enlisted but were not selected by the program implementers, 2 percent complained about too heavy a workload, 2 percent complained that the work locations were too far from their homes, and only 1 percent complained about the low level of wages.



**Figure 4. Targeting Ratio of Padat Karya Programs by District**

### *Scholarship Programs*

To evaluate participation in the scholarship program, the survey asked individuals respondents who were enrolled in schools, from primary to upper secondary level, whether they had received a JPS scholarship in the 1998/99 academic year. Since the targeted coverage of this scholarship program is differentiated by the level of schooling, discussions of the findings on the implementation of this program are grouped accordingly.<sup>30</sup>

<sup>30</sup> As mentioned in earlier, the targeted coverage of this program is 6 percent for primary level, 17 percent for lower secondary, and 10 percent for upper secondary.

### Primary School Scholarship

If the 6 percent target of coverage at the primary level had been achieved and all the scholarship recipients were students from poor households, then we should expect a 30 percent program coverage among the poor and zero coverage among the non-poor. Table Appendix 2 shows that nationally 4 percent of all primary school students in the country received the scholarships.<sup>31</sup> This means only 67 percent of the 6 percent target was achieved. Furthermore, the table shows that the program coverage among poor students was only 5.8 percent, far less than the perfect targeting figure of 30 percent. This compares with 3.6 percent coverage among non-poor students, which resulted in 71 percent of the scholarship recipients being non-poor students. With a targeting ratio for this program of 0.89, it is evident is that the scholarships were distributed using near random targeting.<sup>32</sup>

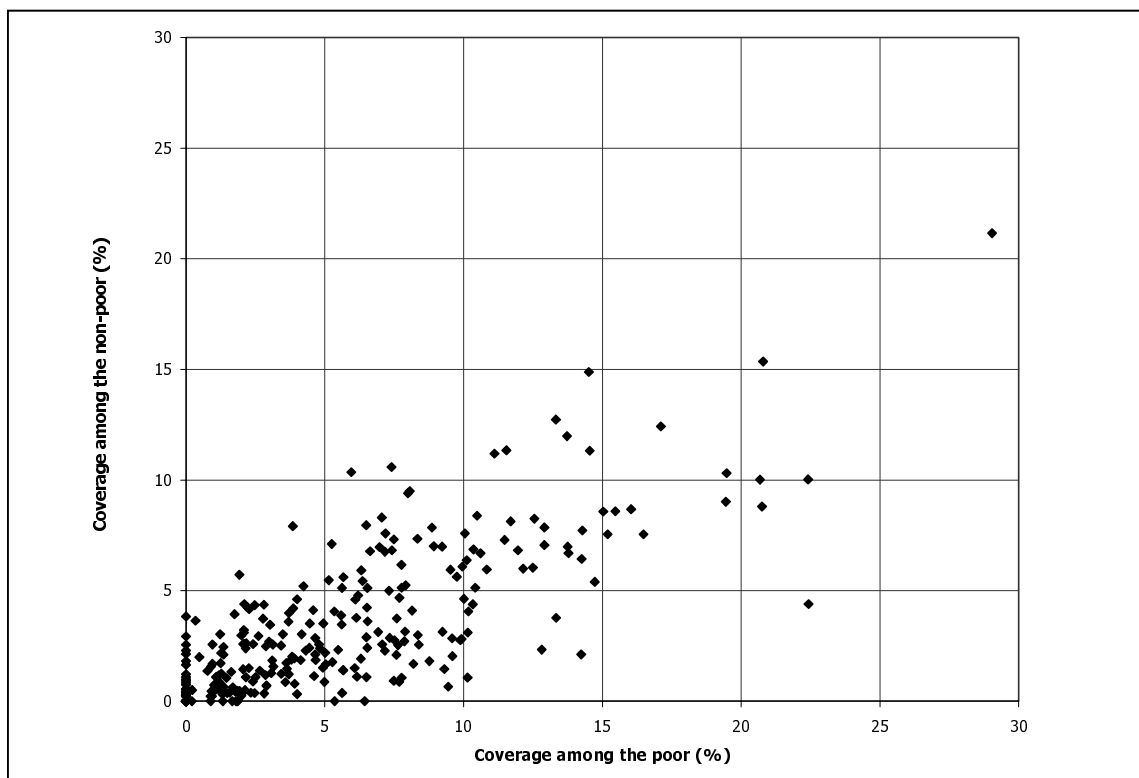
Program coverage across quintiles of per capita expenditure, however, still shows some degree of targeting. The higher the quintile, the lower the program coverage. However, with 2 percent of students from the richest group of households still receiving scholarships, the program coverage at the highest quintile is still 35 percent of the coverage at the lowest quintile.

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<sup>31</sup> 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 reveals, however, that the proportion of the children in these grades who received the scholarships is significant and only slightly less than the proportion of fourth to sixth graders who received the scholarships. Therefore, the analysis of the primary school scholarship program in this study is based on all primary school students.

<sup>32</sup> The data indicate that 78 percent of the recipients received the exact amount of Rp. 10,000 per month as stipulated, While 6 percent of recipients claimed to have received less than Rp. 10,000 per month, suggesting that the schools had already deducted school fees from the scholarships. However, 16 percent recipients reported receiving more than Rp. 10,000 per month. This may indicate two possibilities: firstly, schools may have given the scholarships to smaller number of students than their total allocation, so that each student received a higher amount than stipulated; secondly, some of these students received scholarships from more than one source. Unfortunately, neither can be verified from the available data.

The district level information on coverage in the primary school scholarships program is summarized in Figure 5. This indicates that most districts (55 percent) have a program coverage among the poor of less than 5 percent and only 18 percent of districts have a program coverage among the poor of more than 10 percent. This level of coverage is substantially less than the target of 30 percent coverage among poor students if perfect targeting had been achieved. This implies that the undercoverage in this program seems to be widespread across most districts.

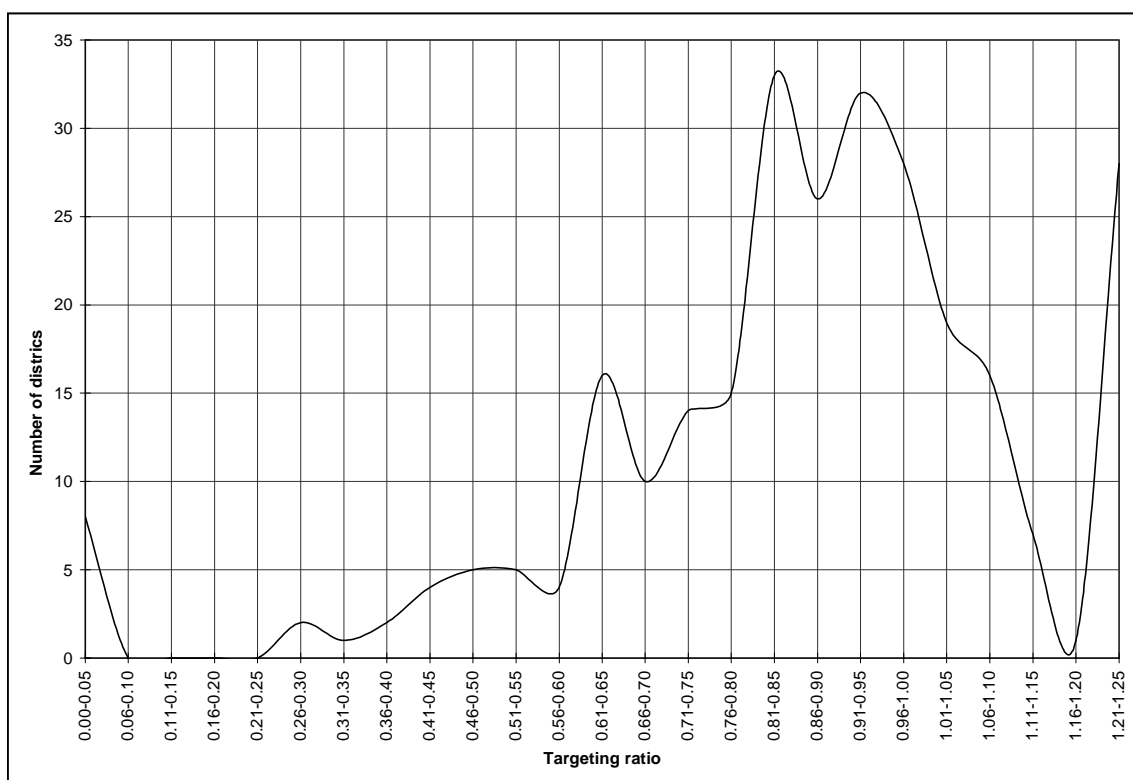


Note: Each dot represents a single district

**Figure 5. Coverage of the Primary School Scholarships Program by District**

The information on the distribution of program benefits between the poor and non-poor at the district level is summarized in Figure 6. It demonstrates that many districts have a targeting ratio of between 0.8 and 1.0, indicating that most have near random targeting. Hence

program benefits have been distributed almost proportionately between poor and non-poor students. There are 22 districts with a targeting ratio of less than 0.5, indicating that these particular districts have specifically favored the poor in the distribution of scholarships. On the other hand, 28 districts have the maximum targeting ratio value of 1.25, indicating that in these districts the non-poor have received all the scholarships, while poor students have been entirely excluded.



**Figure 6. Targeting Ratio of the Primary School Scholarships Program by District**

Lower Secondary School Scholarships

If the 17 percent target coverage of this program had been achieved and all recipients were students from poor households, then we should expect an 85 percent program coverage among poor students and zero coverage among non-poor students. Table Appendix 2 shows that in reality the national coverage of this scholarship program is 8.4 percent, only about a

half of the 17 percent target figure.<sup>33</sup> The actual program coverage among poor students is only 12.2 percent, far below the 85 percent target with perfect targeting. One of the reasons of this low coverage among poor students is that 71 percent of the scholarship recipients were students from non-poor households. With a targeting ratio value of 0.89, the same as the targeting ratio in the primary school scholarship program, this program is also characterized by near random targeting.

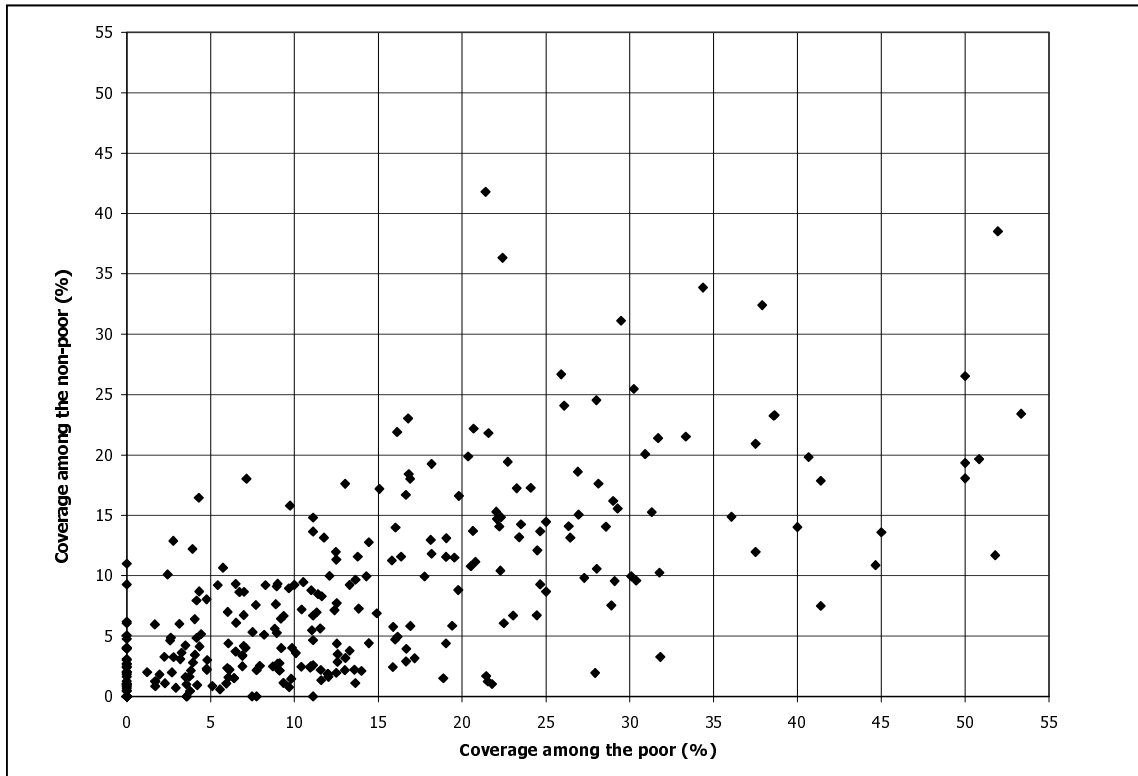
Nevertheless, program coverage across quintiles of per capita expenditure also shows some degree of targeting. The higher the quintiles of per capita expenditure, the lower the program coverage. However, with 4.9 percent of students from the richest group of households recorded as scholarship recipients, program coverage at the highest quintile is almost 40 percent of program coverage at the lowest quintile.

The district level information on coverage among poor and non-poor students is summarized in Figure 7, reveals that most districts (63.6 percent) have a program coverage among the poor of less than 15 percent while only 11 percent of districts have a program coverage among the poor of more than 30 percent. Hence, similar to the primary school scholarship program, the undercoverage in this lower secondary school scholarship program is also widespread across almost all districts.

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<sup>33</sup> Similar to the primary scholarship program, 77 percent of the recipients reported receiving the exact amount of the scholarship as stipulated, i.e. Rp. 20,000 per month, while 11 percent claimed to have received less, and 12 percent claimed to have received a larger amount.

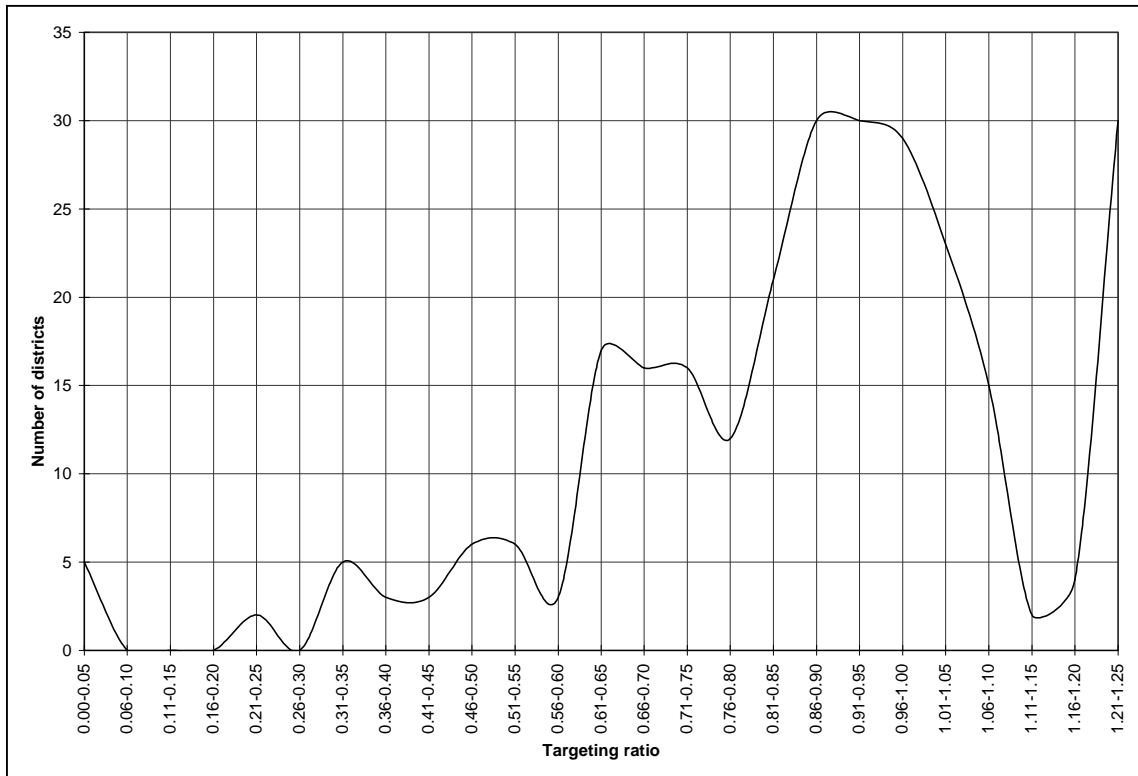




Note: Each dot represents a single district

**Figure 7. Coverage of the Lower Secondary School Scholarships Program by District**

The distribution of districts according to their targeting ratio in this scholarship program is summarized in Figure 8. Also similar to the primary school scholarship program, most districts have targeting ratio values of around 1, indicating that most have near random targeting. Significantly 30 districts gave all the available lower secondary school scholarships to non-poor students omitting poor students entirely. On the other hand, there are only 5 districts with a zero targeting ratio, indicating that these districts gave all the available scholarships to students from poor households.



**Figure 8. Targeting Ratio of the Lower Secondary School Scholarships Program by District**

### Upper Secondary School Scholarships

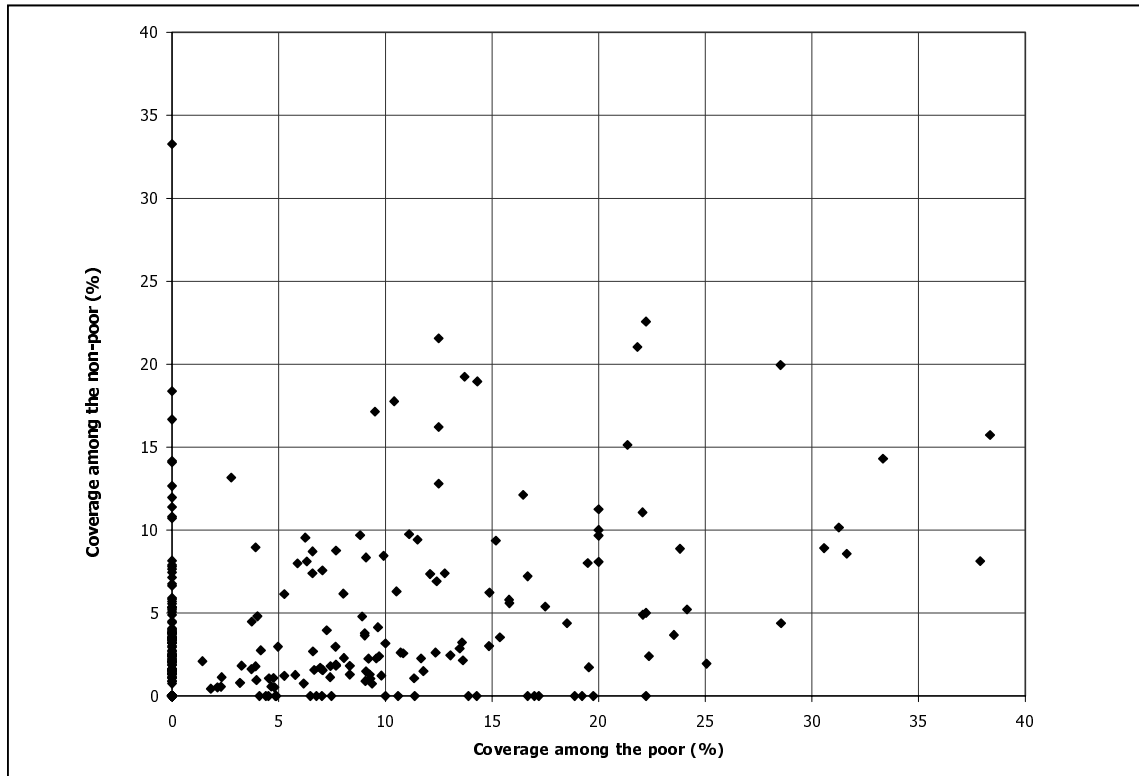
If the 10 percent target coverage of this program had been achieved, then we should expect a 50 percent program coverage among poor students and none among non-poor students. Table Appendix 2 shows that the national coverage of this scholarship program was only 3.7 percent, much less than the 10 percent target.<sup>34</sup> Meanwhile, the program coverage among poor students was only 5.4 percent, only around a tenth of the 50 percent figure with perfect targeting.

<sup>34</sup> In comparison with both the primary and lower secondary scholarships, 85 percent of the recipients of upper secondary scholarships claimed to have received less than the stipulated amount, of Rp. 30,000 per month. Only 6 percent of recipients reported receiving the correct amount, while the remaining 9 percent claimed to have received more.

Since 71 percent of the scholarship recipients were non-poor students, the targeting ratio in this program is 0.9, very close to the targeting ratio values of the two other scholarship programs. This indicates that the scholarship programs in each of the three levels of schooling have near random targeting, distributing the benefits of the programs between poor and non-poor students almost proportionately.

As with the other two scholarship programs, program coverage across quintiles of per capita expenditure reveals some degree of targeting. Higher quintiles of per capita expenditure are associated with lower proportions of scholarship recipients. Nevertheless, with 2 percent of students from the richest group of households receiving scholarships, the program coverage at the richest quintile is still 37 percent of the coverage at the poorest quintile.

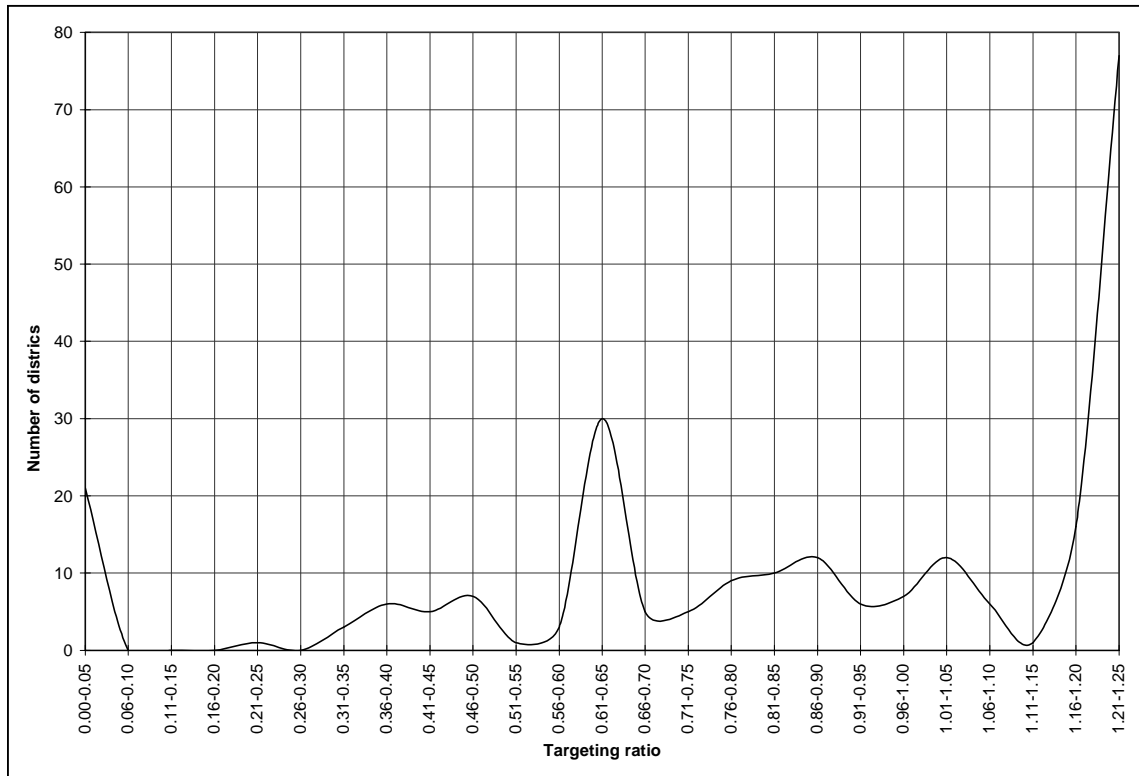
The district-level information on coverage in the upper secondary school scholarship program is summarized in Figure 9, revealing that most districts (73 percent) have program coverage among the poor of less than 10 percent and only 11 percent of districts have a program coverage among the poor of better than 20 percent. Hence, as in the primary and lower secondary school scholarship programs, the undercoverage in this upper secondary school scholarship program is also widespread across almost all districts.



Note: Each dot represents a single district

**Figure 9. Coverage of the Upper Secondary School Scholarships Program by District**

The distribution of districts according to their targeting ratio is summarized in Figure 10. The performance of districts in terms of targeting seems to be divided into two extremes. On the one hand, 77 districts gave all the available scholarships to non-poor students, omitting poor students entirely. These are the districts which are plotted on the vertical axis of Figure 9. In Figure 10, these are the districts with a maximum targeting ratio of 1.25. On the other hand, there are 21 districts which gave all of the scholarships to poor students. These are the districts which are plotted on or near the horizontal axis of Figure 9, while in Figure 10 these are the district which have zero targeting ratio.



**Figure 10. Targeting Ratio of the Upper Secondary School Scholarships Program by District**

These findings on coverage and targeting in the scholarship programs raise a very complex issue, since the student recipients in these programs were chosen directly by school-level committees made up of school officials as well as parent and community representatives. Indications that the recipients do not match ‘poverty’ as it is typically measured using consumption expenditure from household surveys suggest either that the survey criteria are an inadequate means of identifying the needy while the local committees using local knowledge were most effective; or it could mean that the local targeting procedures were either not followed or were insufficient to reach the most needy. Which of these alternative explanations is correct cannot be distinguished from the data. This obviously highlights the difficulties of *ex post* evaluation of programs, which must be conducted both on process and on outcomes. Moreover, this suggests the need for caution in over emphasizing the importance of any single

piece of evidence. Instead we must rather take into all evidence into account, from both qualitative and quantitative sources, in any assessment of program performance.

## ***Health Program***

### Medical Services Program

As explained in earlier, the medical services program 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-ups and child birth services. The data reveals, however, that those households with health cards have not always used their cards when household members have visited hospitals or clinics.<sup>35</sup> We do not know the exact reasons but one possible explanation for this may be attempts to obtain higher quality services from the health care provider.<sup>36</sup>

The calculation of program coverage has only been applied to those in the sample who had experienced illness and visited a health care provider to treat the illness in the previous

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<sup>35</sup> According to the data, 11 percent of the population were given health cards. Of this group 31 percent had experienced illness in the 3 months prior to the survey, but only 50 percent of these respondents had sought medical care. Of a those who visited a public hospital, only 60 percent used their health cards. For community health centers the proportion was 52 percent, for visits to the village midwife 12 percent, and for other health care facilities 31 percent.

<sup>36</sup> Among those who have health cards and have sought medical services in public hospitals, the average total expenditure by those who used their health cards was Rp. 41,312, while those who chose not to use their health cards on average spent Rp. 2,972,338. This indicates that there is a very large potential saving from the use of a health card. Hence, there must be a strong reason why those who possess health cards do not use them. Seeking better services — for example due to serious illness — is one plausible reason, since amount spent by those who chose not to use their health cards was even higher than the amount spent by those who did not own health cards and sought medical services in public hospitals, which averaged Rp. 2,561,291.

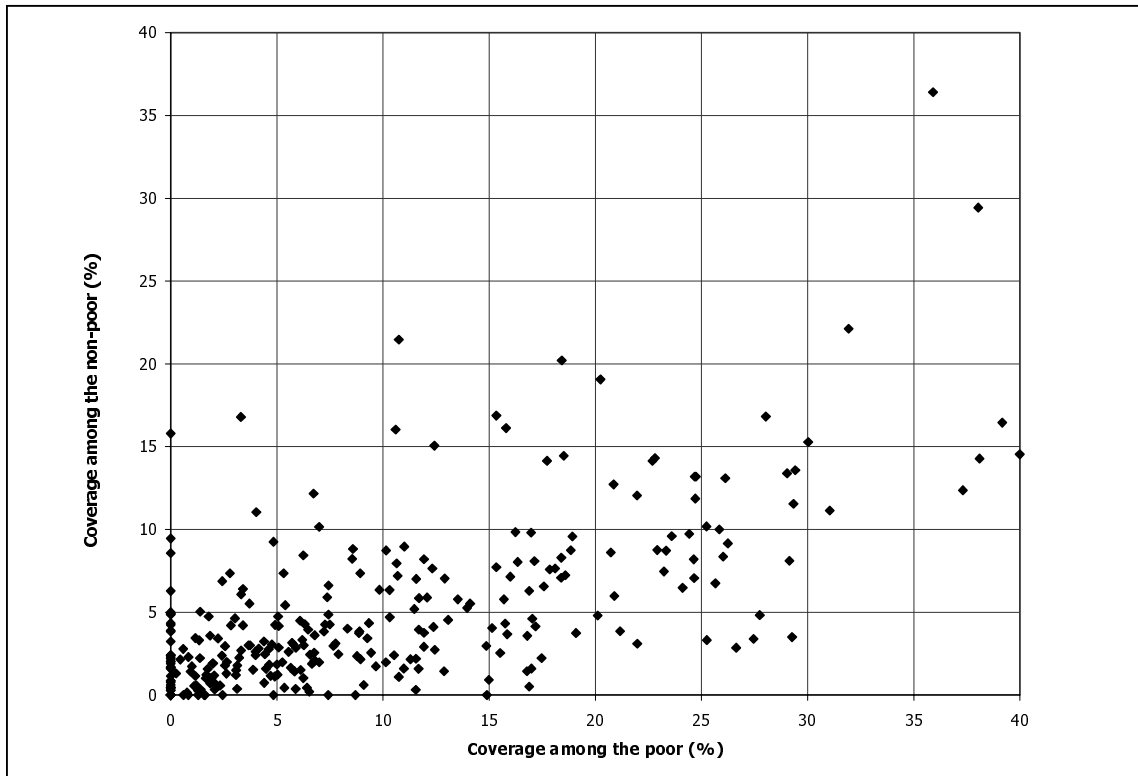
three months. The beneficiaries of the program are those who did use their health cards.<sup>37</sup> Table Appendix 2 shows the coverage of this program by quintiles of per capita expenditure, revealing that of all those who underwent medical treatment, 6.3 percent of them used their health cards to obtain free services. Among the poor only, the proportion of those who used health cards is 10.6 percent, while among the non-poor 5.3 percent also used health cards to obtain the benefits from this program. With 67 percent of the program beneficiaries who were non-poor, the targeting ratio in this program is 0.83, indicating near random targeting, but lower than the targeting ratios of other programs.

Program participation across quintiles indicates some degree of targeting, since participation falls off with higher quintiles of expenditure. However, participation at higher quintiles is still significant. The proportion of households at the richest quintile who participated in this program is 29 percent of the participation at the poorest quintile, which is the lowest across all JPS programs evaluated here.

Figure 11 summarizes the district level information on the coverage of the medical services program among the poor and non-poor. It reveals that in 60 percent of the districts the coverage of this program among the poor was less than 10 percent and only 16 percent of all districts have a program coverage among the poor that was higher than 20 percent.

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<sup>37</sup> Treatment includes both in-patient and out-patient services. Calculation of program coverage, however, does not include the use of health cards for family planning and birth delivery services.

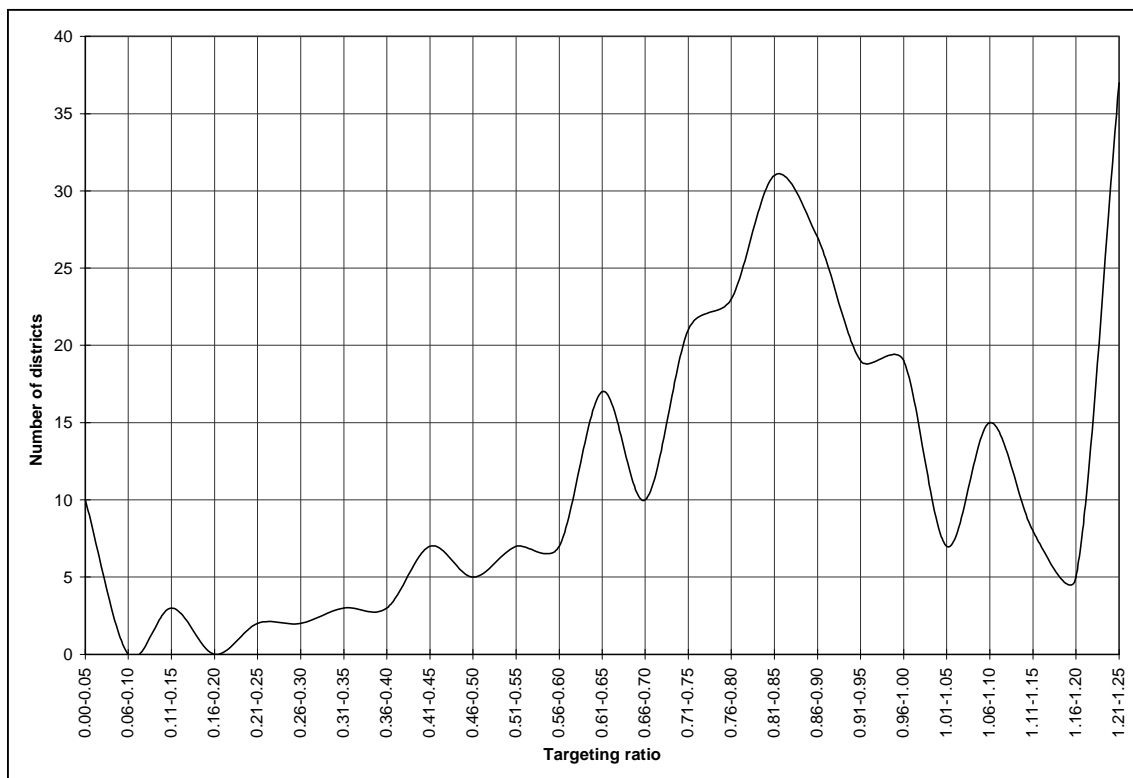


Note : Each dot represents a single district

**Figure 11. Coverage of the Medical Services Program by District**

Figure 12 shows the distribution of districts according to their targeting ratio. The targeting performance of districts seems to be quite varied. There are 37 districts with the maximum targeting ratio of 1.25, indicating that in these particular districts participants program were all from non-poor households. On the other hand, there are 10 districts which have zero targeting ratio values, indicating a preference that all program benefits in these districts went only to poor households.





**Figure 12. Targeting Ratio of the Medical Services Program by District**

### Nutrition Program

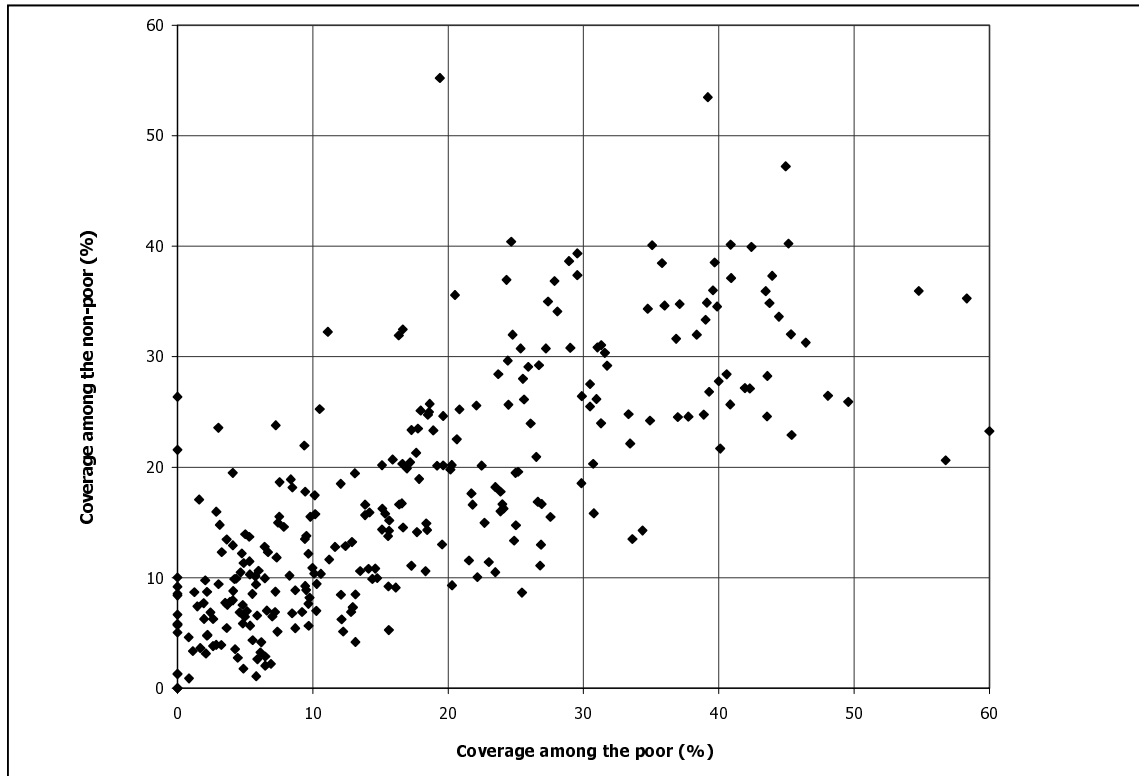
The period covered by the data dates from September 1998 to the time of the survey in February 1999. Table Appendix 2 shows that the coverage of this program among all pregnant women and children under three is 15.9 percent.<sup>38</sup> 16.5 percent of poor pregnant women and children under three received the benefits of this program, while the coverage among non-poor is only less than one percentage point lower at 15.8 percent.<sup>39</sup> With 79 percent of the beneficiaries of this program from non-poor households, the targeting ratio in this program is 0.99, indicating completely random targeting.

<sup>38</sup> Of those who received supplementary food, 55 percent reported receiving both food and vitamins, 31 percent reported only receiving food, while the rest 14 percent claimed to have received only vitamins.

<sup>39</sup> It seems that there is no relationship between receiving supplemental food and ownership of health card. Of those who received supplemental food, only 17 percent reported owning a health card.

In contrast to other programs, participation across quintiles does not indicate targeting in the selection of beneficiaries of the nutrition program. Participation at the second quintile was in fact slightly higher than participation at the lowest quintile, and participation at higher quintiles did not fall off significantly either. For example, the proportion of pregnant women and children under three in the richest quintile who received the benefits of this program was 86 percent of the proportion of the beneficiaries in the poorest quintile.

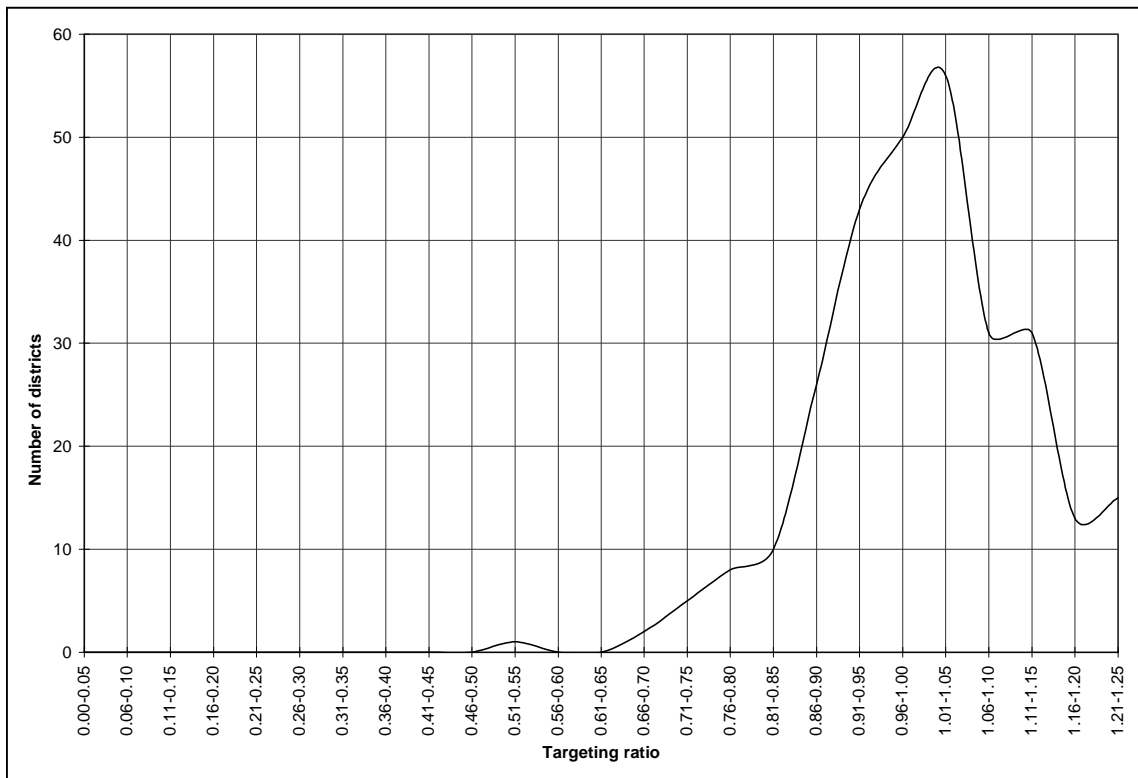
Figure 13 summarizes the district level information on the coverage of the nutrition program among the poor and non-poor. This reveals that in one half of the districts, the coverage of this program among the poor is less than 15 percent, while in the other half coverage is much higher. In about 10 percent of all districts, coverage of this program among the poor is more than 40 percent. Another feature of this program — similar to the *OPK* subsidized rice program — is that coverage among the non-poor correlates positively with coverage among the poor (correlation = 0.77).



Note: Each dot represents a single district

**Figure 13. Coverage of the Nutrition Program by District**

This high correlation between coverage among the poor and the non-poor is also reflected in Figure 14, which shows the distribution of districts according to their targeting ratio values. It indicates that most districts have a targeting ratio of close to one, indicating the random nature of targeting in this program. This probably reflects a continuation of the widespread past practice of service delivery at the *posyandu*, which is the point of distribution for most of the benefits of this program.<sup>40</sup> A *posyandu* is a post or particular location in each neighborhood where babies and pregnant women attend to receive free health care and nutritional services on a regular basis. Usually, everybody from the local neighborhood is welcome at the *posyandu*.



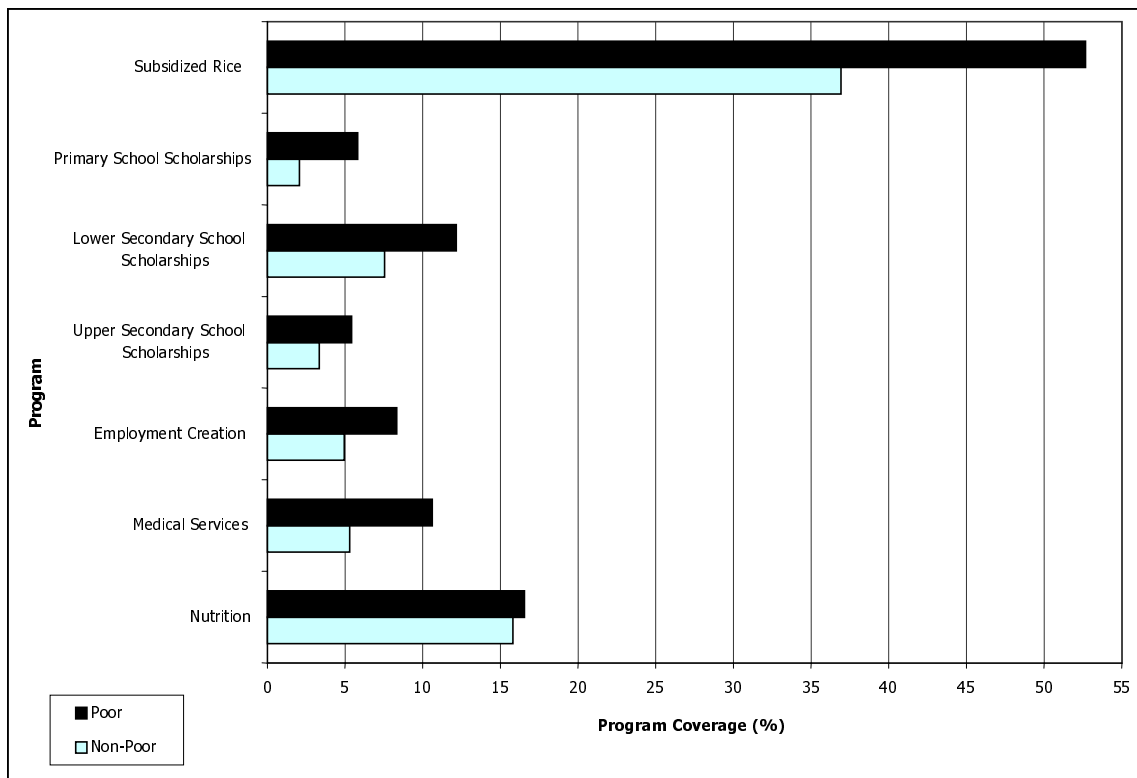
**Figure 14. Targeting Ratio of the Nutrition Program by District**

<sup>40</sup> Almost 87 percent of the beneficiaries of this program claimed to have received supplementary food through a *posyandu* or other similar locations. The remainder received the program benefits through community health centers and village clinics.

## V. Recapitulation

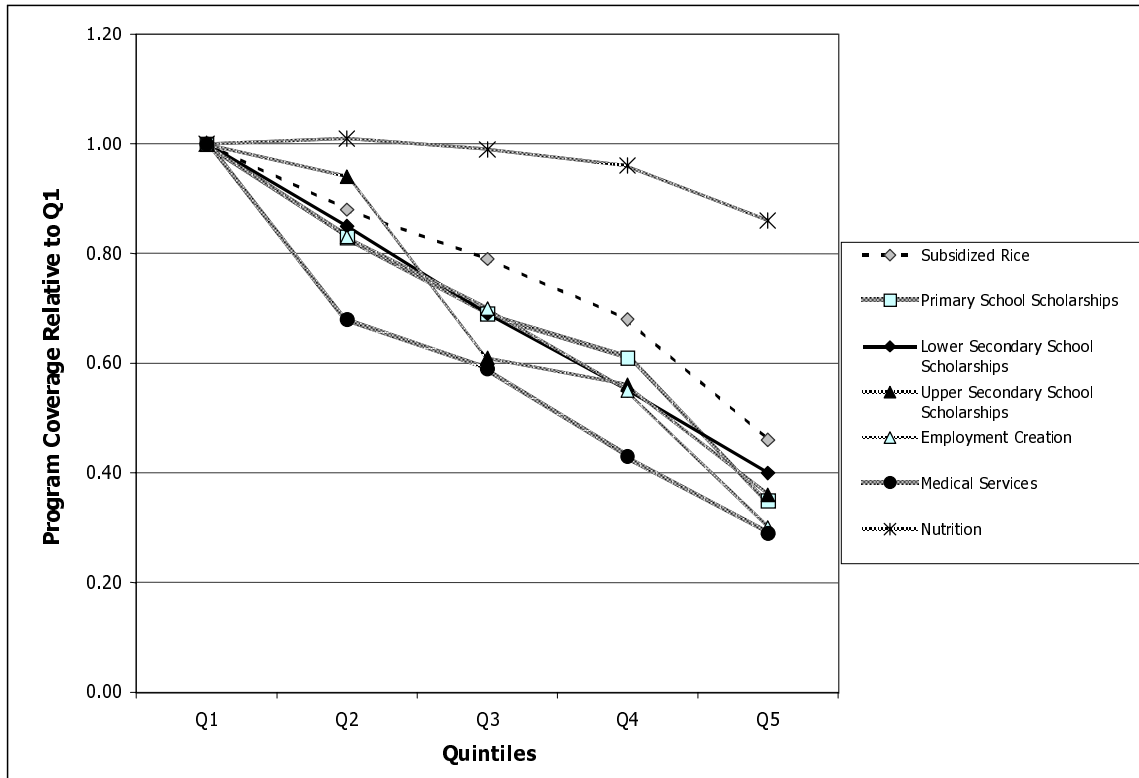
One notable feature of the coverage and targeting of the various JPS programs analyzed in the previous section is the heterogeneity of performance both across programs as well as across regions. It appears that three factors have contributed to this heterogeneity in performance: program design, budget allocations across programs and regions, and regional capacity in program implementation. In addition, other factors may also influence the performance of certain programs, such as the extent and effectiveness of monitoring and supervision by local communities in a particular region.

Figure 15 summarizes the national level coverage among the poor and non-poor of all the programs analyzed in this study. The subsidized rice program stands out as the program with the highest level of coverage. More than a half of all poor households in Indonesia reported receiving the benefits of this program, while more than a third of non-poor households also reported receiving the benefits. The second highest coverage is found in the nutrition program, with around 16 percent of both poor and non-poor households reported as having received the benefits of this program. Meanwhile, the two programs with the lowest coverage are the primary and upper secondary school scholarship programs. In both, only around 5 percent of poor students reported receiving scholarships. Overall, these results indicate both a high degree of undercoverage and a high degree of leakage in the JPS programs.



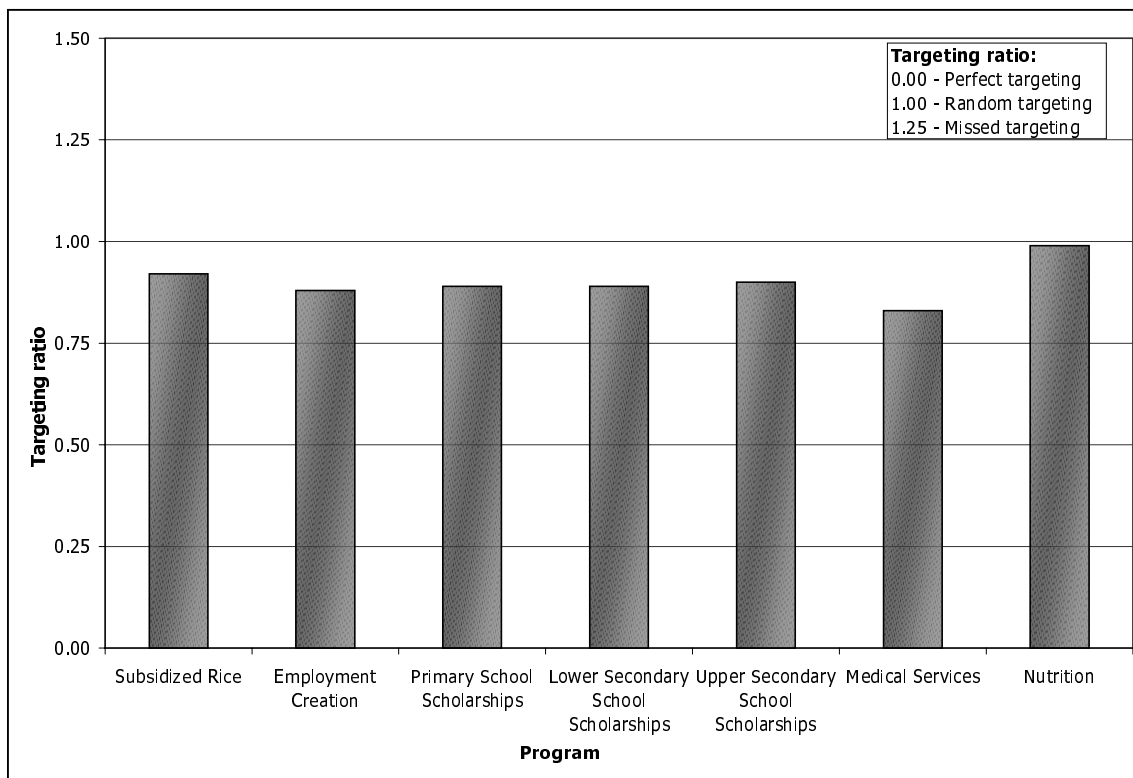
**Figure 15. National Coverage of Various JPS Programs**

In terms of targeting at the national level, Figure 16 shows the coverage of the programs across quintiles of per capita expenditure relative to the level of coverage at the poorest quintile. Hence, a steeper curve indicates sharper targeting across per capita expenditure. It appears that both the best and the worst targeting are in the health sector programs, where the medical services program has the sharpest targeting, while the nutrition program has the least effective targeting. In the medical services program, coverage dropped sharply in the second quintile and then declined 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 decline in program coverage across quintiles was more gradual. Meanwhile, there was also a notable drop in the coverage of upper secondary scholarship program from the second to the third quintile.



**Figure 16. Program Coverage of Various JPS Programs Relative to Q1**

Meanwhile, the national level targeting ratio across programs is shown in Figure 17. The figure shows that all programs have targeting ratios which are close to one. This implies that although the distributions of program benefits were not pro non-poor, they were not exactly pro poor either. Instead, most of the programs had a near random targeting, except for the nutrition program which had completely random targeting. As indicated by the distribution of program coverage across quintiles of per capita expenditure in Figure 16, the medical services program had the lowest targeting ratio and hence the most pro poor targeting.



**Figure 17. Targeting Ratio of Various JPS programs**

As there were many social safety net programs in place at the same time, household multiple participation in different programs also needs to be assessed. Table 3 shows the distribution of households according to the number of social safety net programs they participated. The programs are limited to those seven programs evaluated in this study. The table reveals that even though many social safety net programs were established by the government, 32 percent of households in the poorest quintile were still missed entirely. On the other hand, 21 percent of households in the richest quintile have received program benefits.



**Table 3. Distribution of Households by the Number of JPS Program Participation and Quintile of Per Capita Expenditure**

<b>Number of Programs</b>	<b>QI</b>	<b>QII</b>	<b>QIII</b>	<b>QIV</b>	<b>QV</b>	<b>Total</b>
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 only participated in a single program. Very few households participated in more than three programs and none participated in all seven programs. Among households in the poorest quintile, 17 percent received benefits from two programs and 3.4 percent received benefits from three programs. Meanwhile, among households in the richest quintile, those which received benefits from the social safety net program mostly participated in one program and only less than two percent participated in more than one program. However, among households in the second richest quintile, the proportion of those who received benefits from more than one programs is still substantial at more than five percent.

## VI. Conclusion

In anticipation of the social impact of the Indonesian crisis, in early 1998 the government of Indonesia established a number of social safety net programs intended to protect both the traditionally poor and the newly poor as a result of the crisis. It was widely believed that sections of society not be able to cope with the impact of the crisis without outside assistance. 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 economic activity through regional block grant programs and extension of small scale credits.

Unfortunately the findings of this study, reveal that in many cases the intended target groups have been largely missed by the programs, both as a result of low coverage and loose targeting in practice. The programs were plagued by problems in targeting the beneficiaries and delivering benefits to intended target groups. Except for the subsidized rice program, all programs suffered from the problem of undercoverage, since a large number of the poor were actually not covered by the programs. At the same time, all programs faced the problem of leakage, as a large proportion of program benefits were directed to the non-poor.

Nevertheless, it should be emphasized that effectiveness of the programs varies across programs and across regions. Some programs in some districts have both a high coverage among the poor and demonstrate reasonable levels of accurate targeting. Nationally, the 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 effective targeting. It is also important to note that the findings of this study refer to a given period of time. Program performance may change — either for the worse or the better — across time.

The findings of this study point to some matters that need to be addressed in the future. For example, regional variability in program performance raises an interesting avenue for further study as some districts appear to be much better than others in implementing common national programs, and it would be very helpful to be able to identify the factors that account for these differences. Meanwhile, targeting of program beneficiaries has been hampered by the lack unavailability of reliable and up-to-date data, both at geographic and household levels. There is an urgent real need for Indonesia to have access to such data for more effective planning in the future.

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**Table Appendix 1. Mean per Capita Expenditures in the Core SUSENAS and the SUSENAS Consumption Module (Rp/month)**

Area, Education level	Sample in Both Core and Consumption Module			Expenditures of Two Groups of Sample in Core		
	Core Expenditure	Module Expenditure	% Difference	Core Only	Core & Module	% Difference
<b>URBAN:</b>						
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
T o t a l	196,773 (157,344)	196,523 (149,370)	-0.13	166,942 (140,155)	196,773 (157,344)	17.87
<b>RURAL:</b>						
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
T o t a l	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

**Table Appendix 2. Coverage and Targeting of Various Social Safety Net Programs**

Program	Eligible recipients	Program Coverage (%)								Program Targeting	
		Poor	Non-Poor					Total Q <sub>1</sub> - Q <sub>5</sub>	Ratio non-poor to Poor	Proportion of non-poor recipients	Targeting ratio
		Q <sub>1</sub>	Q <sub>2</sub>	Q <sub>3</sub>	Q <sub>4</sub>	Q <sub>5</sub>	Total Q <sub>2</sub> - Q <sub>5</sub>				
Subsidized Rice	50,385,444	52.64	46.24	41.71	35.76	24.33	36.90	40.09	0.70	0.74	0.92
Employment Creation	50,385,444	8.31	6.89	5.79	4.58	2.53	4.94	5.61	0.59	0.70	0.88
Primary School Scholarships	29,745,369	5.80	4.84	4.02	3.52	2.04	3.60	4.03	0.62	0.71	0.89
Lower Secondary School Scholarships	10,394,621	12.15	10.31	8.34	6.73	4.85	7.53	8.42	0.62	0.71	0.89
Upper Secondary School Scholarships	6,430,146	5.40	5.06	3.32	3.04	1.96	3.32	3.71	0.62	0.71	0.90
Medical Services	27,567,138	10.60	7.24	6.30	4.52	3.09	5.28	6.33	0.50	0.67	0.83
Nutrition	19,970,948	16.54	16.64	16.38	15.94	14.24	15.79	15.94	0.95	0.79	0.99