DETERMINANTS OF ACCESS TO SOCIAL ASSISTANCE PROGRAMMES IN INDONESIA: EMPIRICAL EVIDENCE FROM THE INDONESIAN FAMILY LIFE SURVEY EAST 2012

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Determinants of Access to Social Assistance Programmes in Indonesia: Empirical evidence from the Indonesian Family Life Survey East 2012

Jan Priebe, Fiona Howell and Paulina Pankowska[1]

ABSTRACT

In the past 15 years, the Government of Indonesia has implemented a variety of social assistance programmes intended to improve the lives of the poor and help them escape poverty. Many of these programmes are now operating at a national scale and cover millions of Indonesians.

Using a new household survey dataset that covers the eastern areas of Indonesia (Indonesian Family Life Survey East 2012), this paper investigates the household-level determinants of access to social assistance programmes. The analysis reveals that social assistance programmes are relatively more available in poorer provinces and that poorer households—all things being equal—are more likely to access social assistance programmes than nonpoor households, which suggests that social assistance programmes in eastern Indonesia are successful in their efforts to target the poor (poverty targeting), both across regions and households. However, poverty targeting still has scope for improvement in terms of accuracy.

Besides the poverty status (as measured in per capita consumption expenditures), the authors found that several other factors influence programme access. Having a disabled household member or having a household head who is a widow(er) appears to increase the likelihood of receiving social assistance programmes. Likewise, the level of trust and conflict in a community affects access to social assistance programmes. Particularly in the case of Raskin, we found that the programme is distributed more widely among those communities that are characterized by higher levels of conflict and lower levels of trust. The authors did not find that poor access to infrastructure and remoteness influences household access to social assistance programmes once they controlled for province fixed effects in the regression framework. Furthermore, the findings suggest that possession of a local 'poverty letter' strongly improves household access to social assistance programmes, even after controlling for a wide set of socioeconomic characteristics. In general, determinants of programme access differ significantly among provinces and between rural and urban areas.

Keywords: social assistance, Indonesia, poverty, targeting, welfare.

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Abbreviations

ASLUT   *Asistensi Sosial Usia Lanjut* (Social Assistance for Older Persons)

ASODKB   *Asistensi Sosial untuk Orang Dengan Kecacatan Berat* (Social Assistance for Severely Disabled People)

BLT   *Bantuan Langsung Tunai* (Unconditional Cash Transfer)

BPS   *Badan Pusat Statistik* (Central Bureau of Statistics)

BSM   *Bantuan Siswa Miskin* (Social Assistance for Poor Students)

HH   household

IFLS   Indonesian Family Life Survey

Jamkesda   *Jaminan Kesehatan Daerah* (Regional Health Insurance)

Jamkesmas   *Jaminan Kesehatan Masyarakat* (Health Insurance for the Poor)

NTT   Nusa Tenggara Timur

PKH   *Program Keluarga Harapan* (Family Hope Programme)

PKSA   *Program Kesejahteraan Sosial Anak* (Child Social Welfare Programme)

Raskin   Beras Miskin (Rice for Poor Households)

Rp   Rupiahs

SKTM   *Surat Keterangan Tidak Mampu* (poverty letter)

Susenas   *Survey Sosial dan Ekonomi Nasional* (National Social and Economic Survey)

1. Introduction

Despite strong economic growth and falling poverty in the past decade, many households continue to live on the edge of poverty in Indonesia. Although poverty rates have fallen from 23.4 percent in 1999 to 11.37 percent in 2013, much of Indonesia's population is clustered just above the poverty line (Central Bureau of Statistics 2013). According to the World Bank (2012g and 2012e), around 24 percent of Indonesians lived below the official Indonesian near-poor poverty line in 2011 (1.2 times the normal poverty line), whereas about 38 percent of the population lived below 1.5 times the poverty line.

Due to the high poverty levels during the 1997/1998 economic and financial crises as well as in the context of fuel subsidy cuts in 2005, the Government of Indonesia introduced a variety of social assistance programmes intended to fight poverty and break intergenerational transmission of poverty in the country.[1] The largest social assistance programmes include the following:

- Social Assistance for Poor Students (Bantuan Siswa Miskin or BSM)
- Rice for Poor Households (Beras Miskin or Raskin)
- Health Insurance for the Poor (Jaminan Kesehatan Masyarakat or Jamkesmas)
- Regional Health Insurance (Jaminan Kesehatan Daerah or Jamkesda)

These larger programmes have been supplemented by smaller social assistance programmes that are increasingly operating at a larger, even national, scale. For example, these include:

- Social Assistance for Older Persons (Asistensi Sosial Usia Lanjut or ASLUT)
- Social Assistance for Severely Disabled People (Asistensi Sosial untuk Orang Dengan Kecacatan Berat or ASODKB)
- Child Social Welfare Programme (Program Kesejahteraan Sosial Anak or PKSA)
- Family Hope Programme (Program Keluarga Harapan or PKH)

All the social assistance programmes provide important benefits to their recipients. However, many of the social assistance programmes suffer from targeting problems, that is, not covering all the poor or wrongly including rich households (World Bank 2012g and 2012e). Empirical evidence is limited on the factors that determine a household's access to or inclusion in social assistance programmes, especially for poor households and groups vulnerable to poverty in eastern Indonesia.

The objective of this paper is therefore to shed light on the targeting accuracy of social assistance programmes in eastern Indonesia and to provide a better understanding of how these programmes operate at the local level, especially regarding the factors that influence household access to social assistance programmes.

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[1] Social assistance is defined in this report as cash or in-kind social transfers, subsidies, or fee waivers designed for low-income/vulnerable groups, noncontributory, and funded from general taxation.

In order to address the objective, we made use of the first round of the Indonesian Family Life Survey (IFLS) for the eastern areas of Indonesia (IFLS East 2012), collected in 2012 by SurveyMETER on behalf of TNP2K. Using this new dataset programme has several advantages:

- Compared with other surveys in Indonesia, the IFLS East 2012 collects more detailed information on social assistance programmes and on factors that affect the allocation of these programmes. For instance, the IFLS East 2012 covers information on the Unconditional Cash Transfer (Bantuan Langsung Tunai or BLT), BSM, Jamkesmas, Dana Sehat (Health Fund, a prepaid health scheme operating at the community level), and Raskin programmes in more detail than the National Social and Economic Survey (Survey Sosial dan Ekonomi Nasional or Susenas) rounds conducted by the Central Bureau of Statistics (Badan Pusat Statistik or BPS).
- Likewise, the IFLS East 2012 captures information on many important background variables—such as access to infrastructure (e. g., access to electricity or shorter distance to health centres) and the level of conflict and trust within the local community—which are likely to influence the way social assistance programmes operate and are implemented at the local level.
- The IFLS East 2012 can be considered to be a dataset of very high quality; its questionnaire design, training of enumerators, and sampling strategy closely follow those in IFLS rounds in 1993, 1997, 2000, and 2006, the results of which have been used in many academic studies. Survey-METER worked with the Rand Corporation in designing and implementing the IFLS rounds from 2000 and 2006 and followed the same standards in implementing IFLS East 2012.

The remainder of this paper is organised as follows: section 2 describes the IFLS East 2012 dataset, and section 3 presents descriptive statistics on coverage rates of various social assistance programmes at the provincial level and in rural/urban areas, along with wealth status. Section 4 presents and discusses a multivariate analysis on access to social assistance programmes. Section 5 investigates the subsidised rice programme for the poor, Raskin, in more detail, in particular allocation of kilograms, range of prices, and programme quality. Section 6 analyses the role of SKTM in accessing social assistance programmes in Indonesia. Section 7 summarizes the report's results.

2. Data Description

This paper uses data from the Indonesian Family Life Survey East 2012. The IFLS East 2012 follows the same survey structure (sampling, questionnaires, and enumerator training) of IFLS rounds in 1993, 1997, 2000, and 2006. In contrast, however, the IFLS East 2012 focuses exclusively on the eastern part of Indonesia and covers seven provinces:, Kalimantan Timur, Maluku, Maluku Utara, Nusa Tenggara Timur (NTT), Papua Barat, Papua, and Sulawesi Tenggara.

In each of these provinces, 14 villages—both rural and urban (desa and kelurahan) were randomly selected for inclusion in the survey[2]. Subsequently, a pre-determined number of households in each village was randomly selected (20 households in each urban village and 30 households in each rural village)[3]. Overall, about 3,150 households were interviewed, spread across 99 villages. However, complete interviews were conducted in 2,547 households, which constitute the overall sample of this study. Figure 1 shows the distribution of surveyed households across the provinces.

Figure 1: Number (Unweighted) of Households Surveyed in IFLS East 2012 by Province

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[2] The sampling frame for the selection of villages was based on the villages included in the Susenas July 2010 round. Therefore, only a sub-sample of all villages in Indonesia constitutes the sampling frame.
[3] In cases of household refusal to participate in the survey or failure to contact the households, replacement households were randomly selected until the target had been reached.

3. Overview of Social Assistance Programmes in Eastern Indonesia

Coverage Rates of Selected Social Assistance Programmes

The IFLS East 2012 collected detailed information on individual/household access and coverage of some of Indonesia's major social assistance programmes—most notably Raskin, Health Card or Kartu Sehat (Jamkesmas)[4], Dana Sehat, BLT, BSM, ASLUT, Disability Benefits, PKSA, and the Troubled Youth Programme[5]. The IFLS East 2012 also asked questions about whether a household possesses a poverty letter (surat keterangan tidak mampu or SKTM)[6].

Because some of the programmes (ASLUT, Disability Benefits, PKSA, and the Troubled Youth Programme) are characterised by very low coverage rates in the seven IFLS East 2012 provinces, they were not included in the main analysis[7].

Table 1 and figure 2 present coverage rates for each of the social assistance programmes[8]. The data show that Raskin has the highest coverage rates: about 54 percent of households report having received Raskin within the preceding 12 months. As expected, coverage rates vary a great deal across provinces: Kalimantan Timur shows the lowest (24.95 percent) and Maluku (74.67 percent) the highest coverage rates. The Kartu Sehat programme (Jamkesmas/Jamkesda) has the second highest coverage rates (34.43 percent); its provincial coverage rates range from 12.76 percent in Kalimantan Timur to 59.38 percent in Nusa Tenggara Timur. The Kartu Sehat is followed by BLT (20.64 percent), BSM (5.97 percent), and Dana Sehat (3.1 percent). The provincial coverage rates for BLT range from 7.63 percent (Kalimantan Timur) to 34.55 percent (Nusa Tenggara Timur), for BSM from 1.45 percent (Papua) to 12.4 percent (Papua Barat), and for Dana Sehat from 0.63 percent (Maluku) to 4.00 percent (Kalimantan Timur). Furthermore, about 14.21 percent of surveyed households stated they possessed an SKTM, ranging from 6.99 percent in Maluku Utara to 19.8 percent in NTT.

Noteworthy regional variations exist in the coverage of social assistance programmes. NTT, for example, has high coverage rates for social assistance programmes compared with all other eastern provinces, except for the Dana Sehat program. This is a positive result because NTT has the lowest average real expenditures per capita among all seven provinces surveyed in the IFLS East 2012, while it has one of the highest poverty rates in Indonesia (see table 1 and figure 3). Likewise, Kalimantan Timur, which has one of the lowest poverty rates in Indonesia, has relatively low overall coverage rates with social assistance programmes.

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[4] If the household has the Jamkesda card, it is also likely to be included in the Kartu Sehat programme.

[5] In Indonesia, the Disability Benefits and Troubled Youth programmes are referred to respectively as Program Jaminan Sosial Penyandang Cacat or PJSPC, and Program Bantuan Santunan Anak Muda Bermasalah. Questions on PKH were not included in the IFLS East 2012 because, in 2012, PKH operated only in a very limited number of areas that were part of the IFLS East 2012.

[6] The possession of an SKTM can give households access to a variety of social assistance programmes (including some of the programmes not covered in the IFLS East 2012). Ownership of an SKTM can function as a general proxy for access to social assistance programmes at the local level. Therefore, we included the SKTM in our list of social assistance programmes.

[7] See table A.1 in the appendix for the coverage rates of all the social assistance programmes for which data were collected in the IFLS East 2012.

[8] See table A.2 in the appendix for the coverage rates per province and wealth level.

Table 1: Coverage Rates of Social Assistance Programmes, Poverty Rates, and Expenditure by Province

Province	Raskin (%)	Kartu Sehat (%)	Dana Sehat (%)	BLT Card (%)	BSM (%)	SKTM (%)	Expenditures per capita (thousands Rp)	Poverty Rate (%)
NTT	72.83	59.38	2.89	34.55	12.16	19.80	805.95	20.41
Kalimantan Timur	24.95	12.76	4.00	7.63	1.95	11.91	1,156.67	6.38
Sulawesi Tenggara	71.90	37.65	3.19	17.77	4.55	13.98	1,247.20	13.06
Maluku	74.67	31.54	0.63	27.57	10.02	9.79	829.37	20.76
Maluku Utara	46.88	15.02	2.25	10.78	4.79	6.99	1,346.00	8.06
Papua Barat	54.35	42.60	2.32	29.76	12.40	9.68	1,084.17	27.04
Papua	48.55	31.93	3.55	18.84	1.45	14.77	1,539.49	30.66
All provinces	54.12	34.43	3.10	20.64	5.97	14.21	1,140.70	–

Note: Poverty rate refers to the official BPS poverty rate for September 2012. Expenditures per capita were obtained by dividing average monthly household expenditures by household size and adjusting for spatial price differences by using BPS's official poverty lines for September 2012 (rural and urban province-specific poverty lines). Survey weights applied.

Figure 2: Coverage Rates of Social Assistance Programmes Poverty Rates and Expenditure by Province
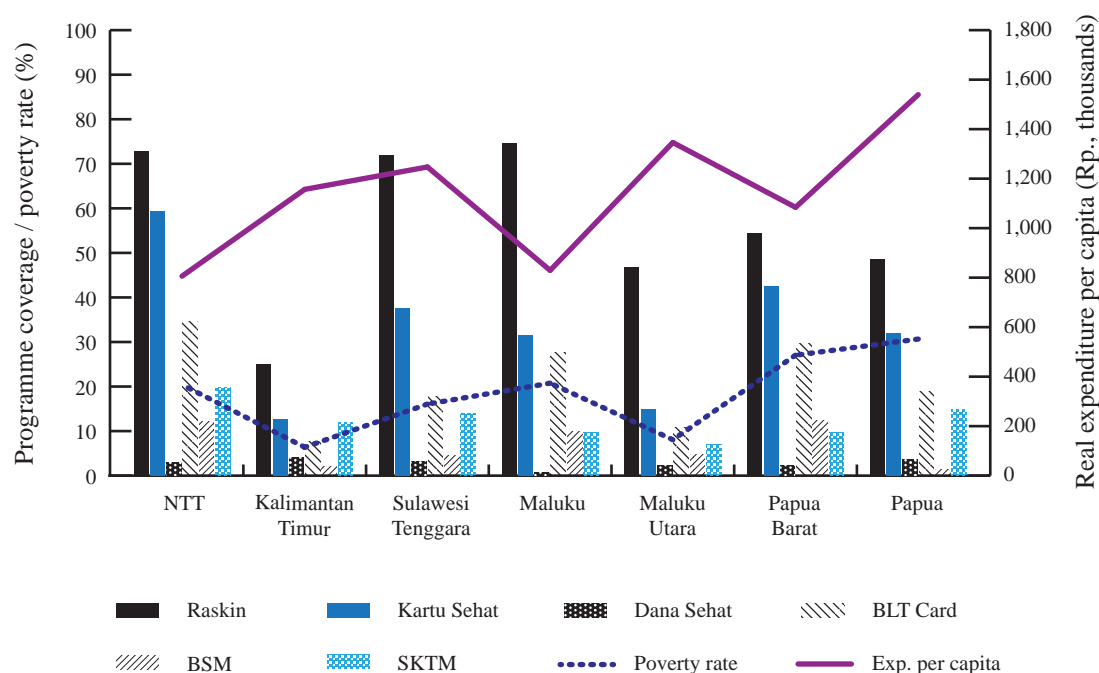
In general, social assistance programmes in eastern Indonesia appear to be relatively more available in areas where poverty rates are higher, which suggests that social assistance programmes are targeted towards poor regions. However, the observed relationship between poverty rates and coverage by social assistance programmes is not perfect. Based on IFLS East 2012 data, one would expect some provinces to have higher or lower coverage rates when benchmarked against the official province poverty rates.

Coverage Rates by Wealth Levels

There is a debate in Indonesia on how well social assistance programmes are targeted towards the poor and how to improve targeting (Olken 2006, Alatas et al. 2013a, Alatas et al. 2013b)[9]. To assess targeting effectiveness for the different social assistance programmes, we classified households into deciles, ranging from poor (1st decile) to rich (10th decile), based on household expenditures per capita[10] information.

Table 2 and figure 3 depict coverage rates for each of the social assistance programmes by household expenditure data. Apart from BSM and Dana Sehat, most programmes appear to show continuously declining coverage rates along the wealth distribution (from poor to rich)[11].

The results show that Raskin has the highest coverage rates across all deciles, ranging from 30.69 percent in the 10th (richest) decile to 77.12 percent in the 1st (poorest) decile.

However, all of these programmes provide a substantial share of their benefits to households in richer deciles, undermining the poverty targeting efficiency. Although all programmes face this problem, the leakage of benefits in Raskin is the strongest[12]; a very large share of non-poor and richer households receive Raskin. The negative slope of Raskin coverage rates (figure 4) implies that the likelihood of receiving Raskin decreases substantially with higher wealth levels. The slopes of the other programmes, such as BSM and SKTM, are much flatter, indicating that they are marginally less able to distinguish between the poor and the nonpoor.

In order to check for robustness and consistency of the findings described above, we contrasted the results using an asset index rather than per capita expenditures as a wealth proxy[13]. Table 3 and figure 4 present the results obtained using an asset index, which largely confirm the previous findings when using expenditure per capita as a measure of welfare.

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[9] It is important to note that, when analysing coverage rates across deciles, the targeting accuracy of a programme tends to look slightly worse compared with its true accuracy. This is because the statistics are calculated over a household's wealth status after receiving the programme (ex post), while ideally an assessment of the targeting accuracy of a programme is based on a household's wealth status before receiving the programme (ex ante).

[10] The nominal expenditure values provided in IFLS East 2012 were adjusted using the ratio of BPS poverty lines for September 2012 as a spatial price deflator in order to derive real expenditure values.

[11] In the case of BSM, coverage rates only start to show declining trends for higher wealth levels (deciles 9 and 10). Dana Sehat, however, does not exhibit any clear relationship between wealth levels and coverage rates.

[12] Leakage refers to share of benefits received by non-poor households.

[13] The asset index is based on principal component analysis (Filmer and Pritchett 2001). The following variables were used in order to create the asset index: whether the household owns the house/apartment in which the household lives (dummy variable); whether the household owns any additional houses/apartments apart from the one the household is living in (dummy variable); whether the household owns any vehicles, that is, cars, boats, bicycles, or motorbikes (dummy variable); whether the household owns any household appliances (dummy variable); whether the household has furniture (dummy variable); whether the house has a kitchen inside (dummy variable); whether the house has access to electricity (dummy variable); whether the toilet is inside the dwelling area (dummy variable); the size of the housing area in square meters (continuous variable); number of rooms in the house (continuous variable); main material of the floor of the house (ordinal variable); material used in outer walls of the house (ordinal variable); materials used for roof of the house (ordinal variable); the household's main source of drinking water (ordinal variable); type of sewage disposal in the house (ordinal variable); and type of garbage disposal in the house (ordinal variable). See table A.4 in the appendix for a structured description of all variables used.

Table 2: Coverage Rates of Selected Social Assistance Programmes by Expenditure Decile

Expenditure Decile	Raskin (%)	Kartu Sehat (%)	Dana Sehat (%)	BLT Card (%)	BSM (%)	SKTM (%)
1	77.12	59.54	2.39	40.75	12.37	21.89
2	73.60	53.96	5.14	33.82	4.59	20.45
3	67.46	50.01	3.97	23.64	7.84	12.29
4	65.47	39.37	3.80	24.68	10.78	17.75
5	62.04	38.76	2.17	21.54	4.80	15.06
6	52.85	32.99	1.49	16.50	8.46	14.60
7	47.28	30.83	2.10	15.85	5.87	13.12
8	41.93	21.87	2.26	14.26	4.00	15.08
9	36.13	16.32	4.78	12.61	2.38	6.48
10	30.69	16.49	3.86	6.76	0.63	8.18
All deciles	54.12	34.43	3.10	20.64	5.97	14.21

Note: Expenditures per capita were obtained by dividing average monthly household expenditures by household size and adjusting for spatial price differences by using BPS's official poverty lines. Survey weights applied.

Figure 3: Coverage Rates of Selected Social Assistance Programmes by Expenditure Decile

Table 3: Coverage Rates of Selected Social Assistance Programmes by Asset Index Decile

Asset Decile	Raskin (%)	Kartu Sehat (%)	Dana Sehat (%)	BLT Card (%)	BSM (%)	SKTM (%)
1	76.69	54.99	5.21	36.28	15.28	24.32
2	69.03	47.75	3.49	31.09	9.89	22.41
3	65.96	41.00	7.14	25.70	6.21	21.15
4	61.48	34.43	2.82	18.98	8.44	14.63
5	53.66	39.00	2.72	21.01	7.30	15.93
6	45.98	26.37	3.74	16.84	7.47	14.14
7	51.07	31.86	1.56	20.86	3.81	8.31
8	54.91	32.20	1.01	16.46	2.39	13.37
9	44.55	28.75	1.76	17.03	2.07	6.30
10	33.32	20.26	3.03	11.32	1.25	5.13
All deciles	76.69	54.99	5.21	36.28	15.28	24.32

Note: Expenditures per capita were obtained by dividing average monthly household expenditures by household size and adjusting for spatial price differences by using BPS's official poverty lines. Survey weights applied.

Figure 4: Coverage Rates of Selected Social Assistance Programmes by Asset Index Decile
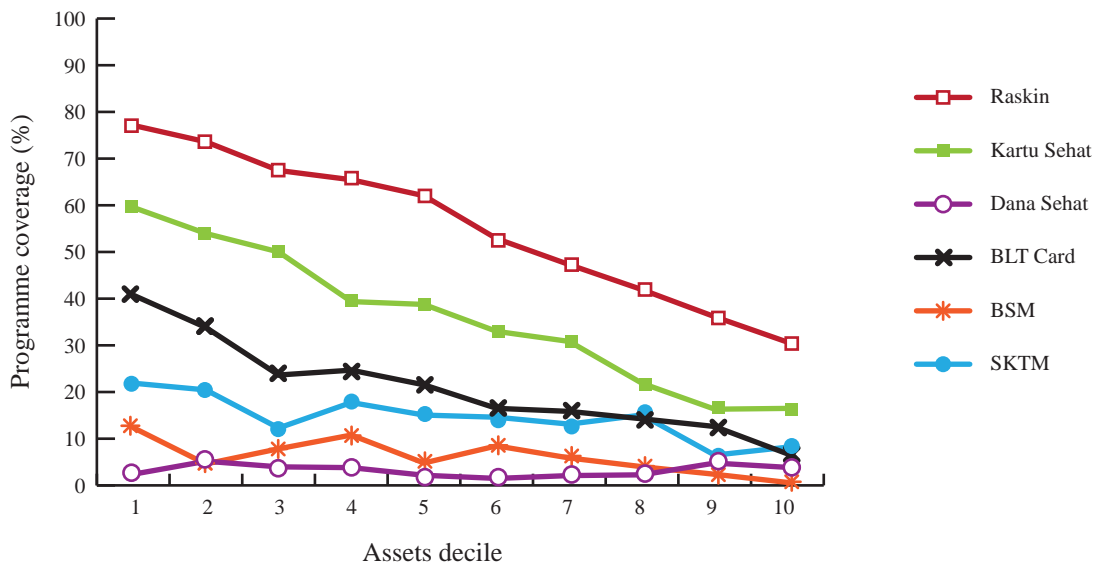
Coverage Rates by Wealth Levels of Vulnerable Groups

Social assistance programmes should, by design, be targeted towards the poor. The previous section showed that the poorer the household, the more likely it is to be included in a particular programme. Besides the poverty criteria, policy makers are also concerned with the inclusion of particular vulnerable groups in society whose poverty rates are significantly higher than among the general population and who might face informal restrictions in accessing social assistance programmes. Because nearly none of the Indonesian social assistance programmes considered here mentioned particular vulnerable sub-groups as their specific target beneficiaries, it is ultimately an empirical question to assess whether being part of a particular vulnerable group affects programme access and, if so, whether vulnerable groups receive preferential access to social assistance programmes or face more difficulties in accessing them.

The subsequent analysis focuses on three different vulnerable groups: households with a disabled person, households whose head is a widow(er), and households whose head is a woman.

Disability

Table 4 shows coverage rates (percentage) of social assistance programmes by wealth level and by whether a household has a person with a disability or not[14]. Our descriptive results suggest that disability is an important factor in accessing Raskin, Kartu Sehat, BLT, and to a smaller extent, BSM. On the one hand, among these four programmes, households with a member with a disability are more likely to receive social assistance programmes across all wealth deciles than households who do not have a household member with a disability. On the other hand, disability does not seem to play a role as a criterion for access to the Dana Sehat and SKTM programmes.

Household Head Is Widow(er)

Table 5 presents results on coverage rates (percentage) of social assistance programmes by wealth level and by whether the household head is a widow(er). We found that households with a widow(er) appear to have higher coverage rates across all wealth levels for the Raskin, Kartu Sehat, BLT, and BSM programmes, although for Dana Sehat and SKTM, fewer differences exist in coverage rates between widow(er) and non-widow(er) households.

Women as Household Head

The Government of Indonesia has recently initiated the Empowering Women for Poverty Reduction (Maju Perempuan Indonesia untuk Penanggulangan Kemiskinan or MAMPU) project, which emphasises that female-headed households are an important vulnerable group whose welfare status and economic potential needs improvement. Likewise, strong empirical evidence exists from many countries in the world, including Indonesia, that poverty rates among female-headed households are often higher than those among male-headed households (Pekka 2014). Table 6 shows coverage rates of selected social assistance programmes by wealth level and by the gender of the household head. In contrast to the disability and widow(er) analyses, for most social assistance programmes, the sex of the household head does not seem to be strongly correlated with programme access.

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[14] A person is defined as disabled if s/he has significant difficulties in at least 1 of the 17 selected disability variables (detailed coding can be obtained from the authors). The 17 variables list very specific activity limitations or participation constraints.

Table 4: Coverage Rates of Selected Social Assistance Programmes by Expenditure Decile and Disability

Expenditure Decile	Raskin (%)		Kartu Sehat (%)		Dana Sehat (%)		BLT Card (%)		BSM (%)		SKTM (%)		HH (number)	
	Disability	No Disability	Disability	No Disability	Disability	No Disability	Disability	No Disability	Disability	No Disability	Disability	No Disability	Disability	No Disability
1	90.91	76.21	62.80	59.33	0.00	2.55	68.33	38.94	37.02	10.75	26.33	21.59	15	229
2	92.45	72.09	69.78	52.70	0.00	5.55	41.12	33.23	11.70	4.02	8.45	21.41	19	224
3	86.70	66.11	52.59	49.83	0.00	4.25	27.79	23.35	5.03	8.04	23.36	11.51	19	225
4	55.16	66.06	30.95	39.86	10.52	3.41	2.62	25.96	2.67	11.25	0.00	18.77	14	229
5	89.33	60.30	30.51	39.28	0.00	2.31	11.46	22.18	4.50	4.82	6.13	15.63	15	229
6	83.25	50.81	50.27	31.83	0.00	1.59	37.82	15.07	8.06	8.49	20.88	14.18	15	228
7	51.70	47.02	24.35	31.21	0.00	2.23	0.00	16.77	10.71	5.60	10.71	13.25	14	230
8	56.07	40.92	41.77	20.44	0.00	2.42	20.98	13.78	0.00	4.29	31.51	13.90	17	226
9	53.27	35.33	42.71	15.09	9.06	4.58	30.67	11.77	0.00	2.49	0.00	6.78	10	234
10	35.28	30.46	24.19	16.11	15.23	3.30	30.16	5.60	0.00	0.66	5.19	8.33	13	230
All deciles	69.93	53.14	43.79	33.85	2.81	3.12	26.94	20.25	7.69	5.87	14.43	14.20	151	2,284

Note: Expenditures per capita were obtained by dividing average monthly household expenditures by household size and adjusting for spatial price differences by using BPS's official poverty lines. Survey weights applied.
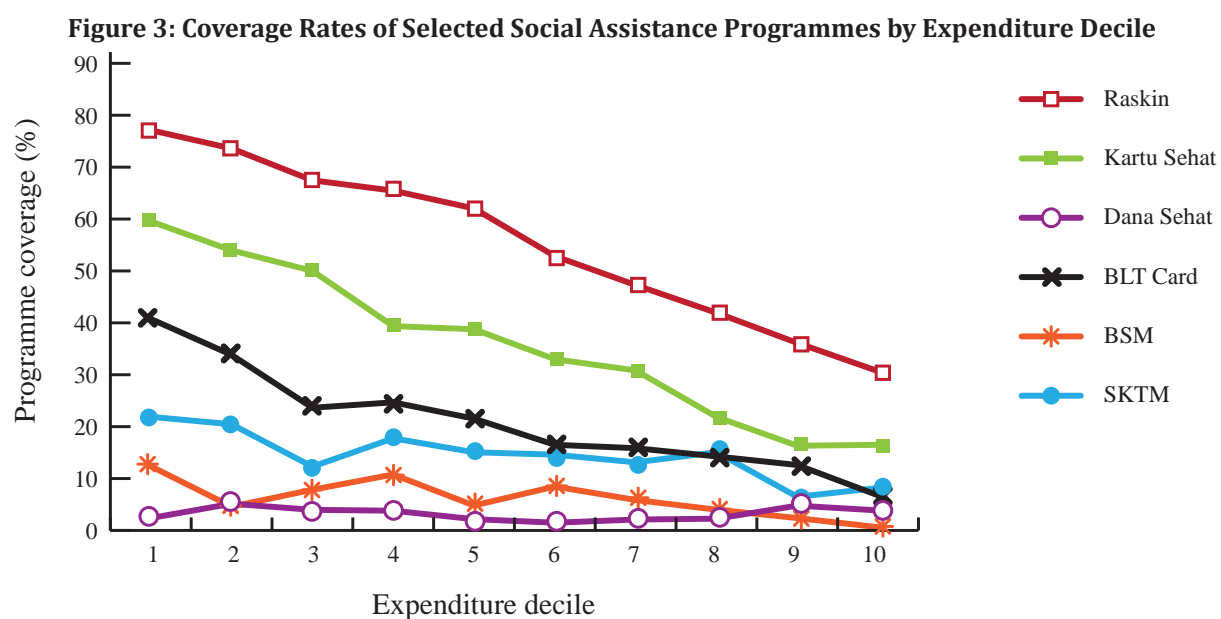
Table 5: Coverage Rates of Selected Social Assistance Programmes by Expenditure Decile and Widow/Non-Widow Status

Expenditure Decile	Raskin (%)		Kartu Sehat (%)		Dana Sehat (%)		BLT Card (%)		BSM (%)		SKTM (%)		HH (number)	
	Widow	Not a widow	Widow	Not a widow	Widow	Not a widow	Widow	Not a widow	Widow	Not a widow	Widow	Not a widow	Widow	Not a widow
1	100.00	75.38	29.88	61.80	0.00	2.57	62.54	39.09	15.40	12.14	30.70	21.22	13	231
2	72.63	73.70	70.38	52.20	0.00	5.69	47.65	32.33	9.67	4.04	4.40	22.17	21	222
3	82.56	66.51	74.08	48.50	0.00	4.22	37.32	22.78	8.70	7.79	9.43	12.47	18	226
4	59.72	66.37	22.02	42.11	5.14	3.59	15.35	26.15	30.31	7.70	4.18	19.89	29	214
5	70.82	61.20	46.37	38.04	0.00	2.38	21.86	21.51	7.73	4.53	20.89	14.51	22	222
6	79.93	50.65	55.00	31.20	0.00	1.61	24.98	15.81	37.61	6.10	11.83	14.82	13	230
7	48.00	47.19	36.73	30.13	0.00	2.36	15.16	15.94	10.97	5.26	20.94	12.18	26	218
8	77.62	38.61	43.30	19.87	0.00	2.47	14.53	14.24	6.67	3.76	16.00	14.99	21	222
9	44.92	34.75	42.90	12.16	8.20	4.24	27.70	10.25	1.74	2.48	9.43	6.02	30	214
10	41.87	28.85	21.30	15.70	7.30	3.29	14.53	5.48	0.00	0.73	5.89	8.56	32	211
All deciles	62.09	53.25	40.76	33.74	2.84	3.13	25.82	20.07	11.70	5.35	12.34	14.42	225	2,210

Note: Expenditures per capita were obtained by dividing average monthly household expenditures by household size and adjusting for spatial price differences by using BPS's official poverty lines. Survey weights applied.

Table 6: Coverage Rates of Selected Social Assistance Programmes by Expenditure Decile and Gender of Household Head

Expenditure Decile	Raskin (%)		Kartu Sehat (%)		Dana Sehat (%)		BLT Card (%)		BSM (%)		SKTM (%)		HH (number)	
	HH head female	HH head male	HH head female	HH head male	HH head female	HH head male	HH head female	HH head male	HH head female	HH head male	HH head female	HH head male	HH head female	HH head male
1	90.29	75.52	45.32	61.27	0.00	2.68	44.55	40.29	11.66	12.45	28.37	21.10	30	204
2	79.46	72.58	61.07	52.74	0.00	6.03	46.27	31.66	5.85	4.37	12.82	21.77	34	209
3	65.27	67.85	46.32	50.67	0.00	4.68	31.18	22.29	9.97	7.46	13.09	12.15	36	208
4	64.41	65.65	30.97	40.84	5.58	3.49	17.87	25.87	29.66	7.48	15.63	18.12	34	209
5	62.12	62.02	39.78	38.59	1.98	2.20	24.60	21.02	3.84	4.97	20.99	14.06	36	208
6	53.96	52.58	41.94	30.89	1.15	1.57	15.89	16.64	15.20	6.88	4.67	16.93	40	203
7	43.35	48.20	32.82	30.37	3.75	1.72	14.39	16.20	7.10	5.58	18.48	11.85	44	200
8	59.18	39.44	29.12	20.82	0.00	2.58	12.02	14.59	7.33	3.52	5.96	16.39	29	214
9	33.42	37.08	22.73	14.07	7.72	3.75	15.19	11.70	0.00	3.21	6.30	6.54	57	187
10	33.58	29.66	14.31	17.27	0.33	5.11	8.08	6.29	0.00	0.85	7.42	8.45	56	187
All deciles	54.54	52.12	34.68	33.24	3.26	2.31	20.64	20.64	5.60	7.75	14.74	11.69	396	2,039

Note: Expenditures per capita were obtained by dividing average monthly household expenditures by household size and adjusting for spatial price differences by using BPS's official poverty lines. Survey weights applied.

Coverage Rates by Wealth Levels in Rural and Urban Areas

As in most countries in the world, Indonesian poverty rates are significantly higher in rural areas compared with urban areas. One might then expect that a higher share of the rural population would be covered by social assistance programmes compared with the urban population. However, due to difficult access to eastern Indonesian villages and high transportation costs in eastern Indonesia, it is not clear a priori whether and on what scale a particular social assistance programme operates in rural areas. Furthermore, there are likely to be important differences in the role of cultural and community norms in rural and urban areas that could affect coverage rates of the various programmes differently in rural and urban areas.

Table 7 and figures 5, 6, and 7 show coverage rates for the different programmes by rural and urban status. Except for SKTM and Dana Sehat, all social assistance programmes reach significantly higher coverage rates in rural compared with urban areas (figure 5), indicating pro-poor regional targeting in programme implementation. However, some notable exceptions exist by province and social assistance programme, for instance, higher BSM coverage rates in urban compared with rural Maluku Utara.

Furthermore, figures 6 and 7 show a positive correlation across the various social assistance programmes in both rural and urban areas; high coverage rates in a particular province for a specific programme are usually associated with relatively high coverage rates for the remaining programmes and vice versa. Those correlations are particularly noticeable in the case of Raskin, Kartu Sehat, and BLT.

Table 7: Coverage Rates of Selected Social Assistance Programmes by Rural/Urban Area and Province

Province	Raskin (%)		Kartu Sehat (%)		Dana Sehat (%)		BLT Card (%)		BSM (%)		SKTM (%)	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Kalimantan Timur	21.16	52.42	12.78	12.61	4.17	2.80	7.52	8.41	1.76	3.33	11.94	11.74
Maluku	40.65	88.74	17.76	37.25	1.19	0.40	14.01	33.18	0.00	14.16	10.97	9.30
Maluku Utara	11.20	77.18	9.32	19.86	2.57	1.98	5.61	15.17	5.73	4.00	7.27	6.75
NTT	50.92	80.11	46.56	63.64	0.98	3.52	22.68	38.49	10.10	12.85	21.26	19.31
Papua	28.77	62.30	18.67	41.15	2.48	4.29	7.92	26.43	0.86	1.87	17.48	12.88
Papua Barat	32.27	61.19	21.66	49.10	3.54	1.94	21.53	32.32	5.33	14.59	16.38	7.60
Sulawesi Tenggara	37.50	82.07	16.03	44.05	0.00	4.13	6.75	21.02	1.80	5.36	7.16	16.00
All	28.52	74.70	19.10	46.75	2.87	3.28	10.21	29.01	2.98	8.37	13.76	14.57

Note: Survey weights applied.

Figure 5: Coverage Rates of Social Assistance Programmes by Rural/Urban Area

Figure 6: Coverage Rates of Social Assistance Programmes for Urban Areas by Province
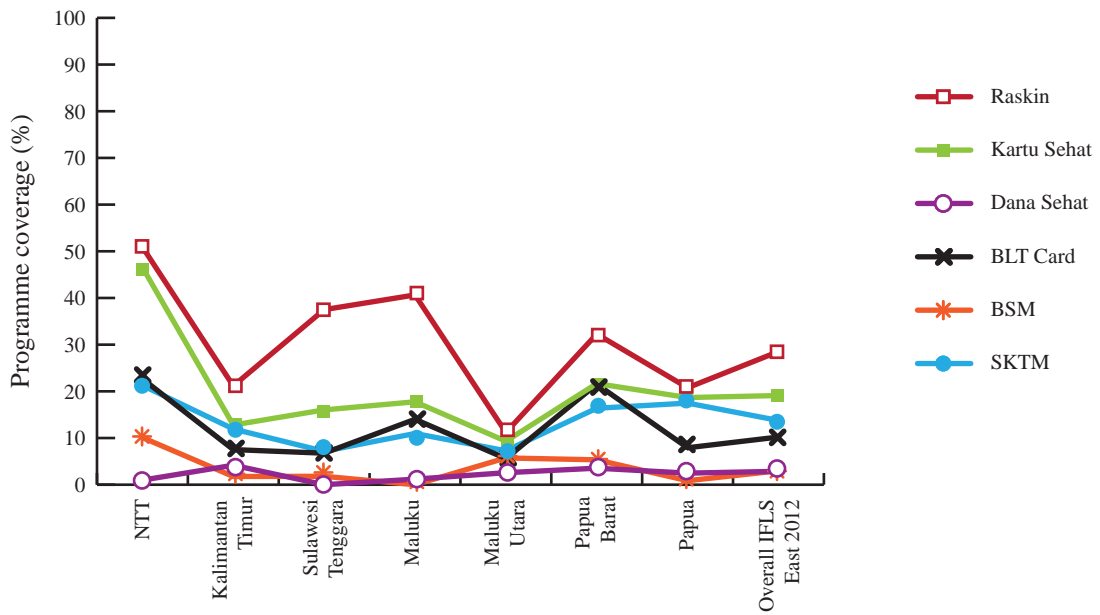
Figure 7: Coverage Rates of Social Assistance Programmes for Rural Areas by Province
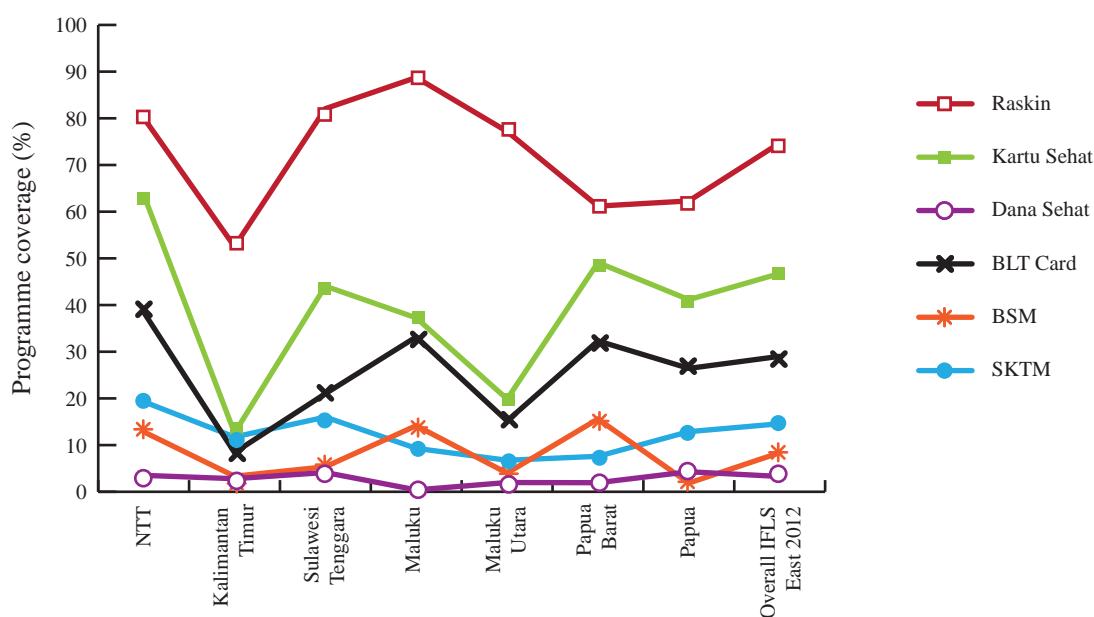
Commonalities as well as crucial differences exist with respect to coverage rates across wealth deciles between rural and urban areas. As shown in table 8, in both rural and urban areas, coverage rates along the wealth distribution (from poor to rich) tend to decrease, apart from BSM and Dana Sehat.

The coverage rates per expenditure decile for rural and urban areas (table 8 and figures 8A and 8B) support a similar conclusion. For the majority of programmes and expenditure deciles, the levels of social assistance programmes in rural areas exceed those in urban areas. This is particularly prominent for the Raskin, Kartu Sehat, and BLT programmes. It is important to note, however, that the coverage rate of Raskin in the first (poorest) decile is somewhat lower in rural than urban areas. This may suggest that this programme is less available for the poorest 10 percent of the rural population than those of the urban population.

Another important finding is that coverage rates of social assistance programmes (in particular Raskin, Kartu Sehat, BLT, and SKTM) appear to decrease with wealth levels in a much more steady and continuous manner in urban than rural areas. This result seems to suggest that, in rural areas, it is more difficult for programme administrators to discriminate between poor and better-off households, or stronger community cohesion in rural areas affects programme access. As has been widely reported in Indonesia, the practice of sharing programme benefits among all households in a village irrespective of the welfare of an individual household (*bagi rata*) is a common practice in rural areas, whereas it is largely uncommon for urban areas.

Table 8: Coverage Rates of Social Assistance Programmes by Rural/Urban Area and Expenditure Decile

Expenditure Decile	Raskin (%)		Kartu Sehat (%)		Dana Sehat (%)		BLT Card (%)		BSM (%)		SKTM (%)	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
1	83.27	75.59	51.02	61.66	0.00	2.98	34.18	42.38	6.82	13.75	48.17	15.35
2	54.83	83.02	45.85	58.04	6.69	4.36	20.28	40.61	0.43	6.68	28.75	16.28
3	48.36	78.09	38.85	56.22	6.42	2.61	20.75	25.25	3.59	10.21	10.50	13.29
4	43.83	79.40	24.86	48.73	3.87	3.76	11.15	33.40	9.84	11.38	21.23	15.50
5	25.44	82.10	23.06	47.36	2.04	2.24	8.49	28.69	2.17	6.25	12.47	16.49
6	19.41	82.20	12.40	51.06	0.47	2.39	6.08	25.64	6.22	10.43	14.97	14.27
7	23.21	71.07	19.47	42.07	1.44	2.76	10.88	20.76	5.49	6.25	9.83	16.37
8	20.65	64.56	10.32	34.14	1.18	3.40	5.90	23.16	0.80	7.42	11.51	18.87
9	16.49	61.61	9.14	25.65	4.81	4.74	5.91	21.31	0.00	5.46	7.19	5.56
10	10.17	57.43	6.42	29.62	2.76	5.29	1.14	14.08	1.11	0.00	7.42	9.17
All	28.52	74.70	19.10	46.75	2.87	3.28	10.21	29.01	2.98	8.37	13.76	14.57

Note: Expenditures per capita were obtained by dividing average monthly household expenditures by household size and adjusting for spatial price differences by using BPS's official poverty lines. Survey weights applied.
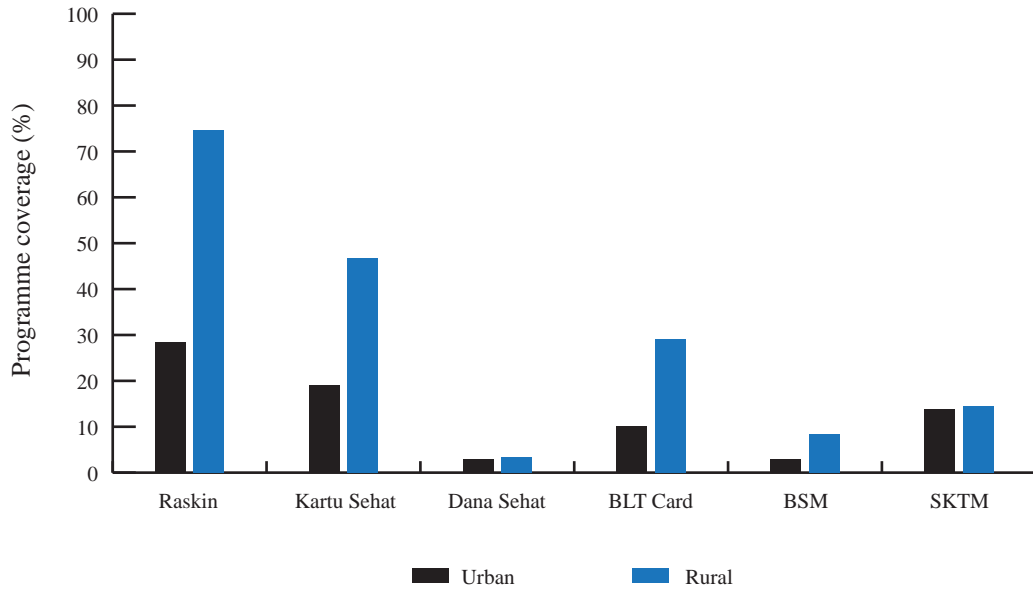
Figure 8A: Coverage Rates of Social Assistance Programmes for Urban Areas by Expenditure Decile
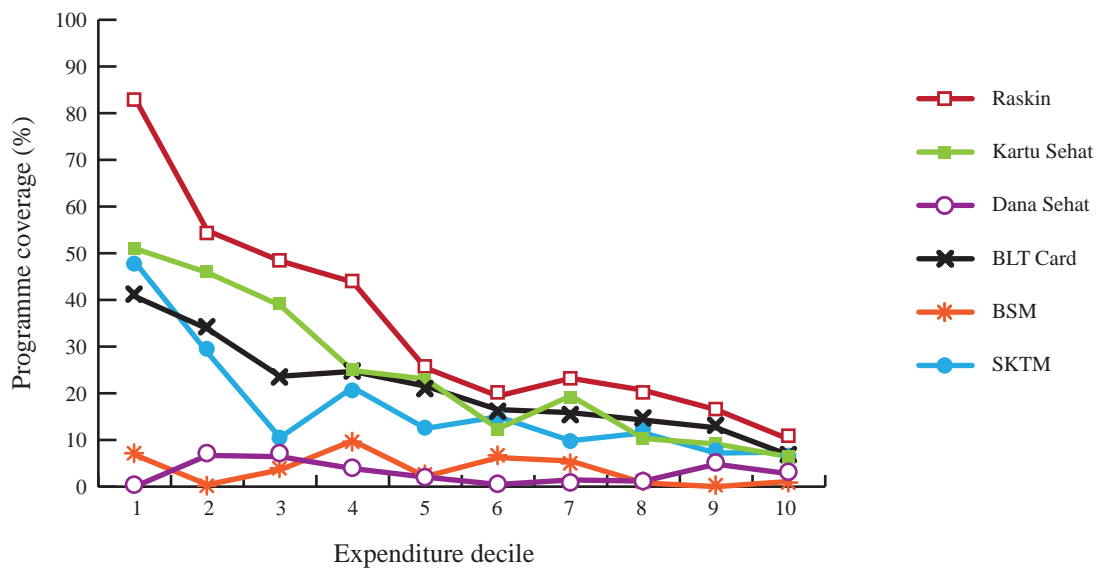
Figure 8B: Coverage Rates of Social Assistance Programmes for Rural Areas by Expenditure Decile
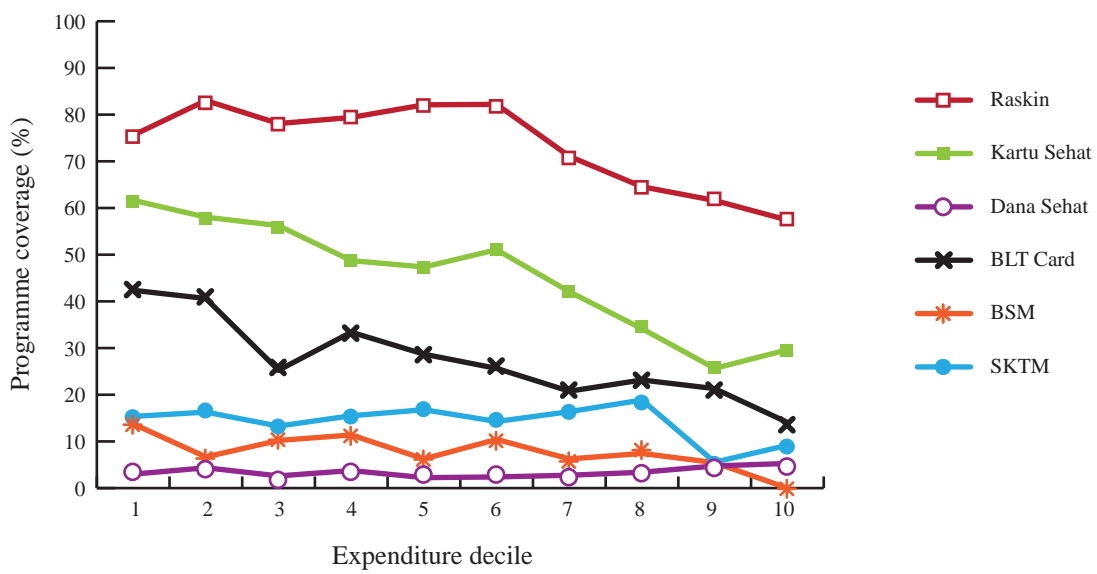
4. Determinants of Access to Social Assistance Programmes

Many factors can be used to explain the differences in programme coverage among households and across geographical areas. Many of these factors are present at the same time and interact with each other, so it is necessary to apply a multivariate regression framework to model the determinants of access to a particular social assistance programme (BLT, BSM, Kartu Sehat, Raskin, and SKTM). Regressions are run at the household level on the overall IFLS East 2012 sample, and also for rural and urban areas in order to sufficiently take into account the underlying relationship between certain factors and programme access that can differ substantially between rural and urban areas.

To estimate the determinants of programme access, we estimated linear probability models, choosing a categorical variable as the dependent variable, which takes the value 1 if a household receives a particular programme and 0 otherwise. As standard in the economic literature, we always showed three different regression specifications: the baseline model, the extended model, and the full model. The baseline model specification includes a basic set of control variables, for example, age of the household head, education level of the household head, and household size; whereas the extended model specification also includes variables from one of the following categories: infrastructure, trust, conflict, and wealth quintiles/SKTM[15]. The full model specification includes the whole set of variables (baseline model plus all extended model variables). Table A.5 in the appendix describes the exact coding of each of the variables.

The selected explanatory variables (factors) fall broadly into the following categories [16]:

- Socioeconomic household characteristics
- Demographic characteristics
- Religion
- Geography
- Violence and social conflict
- Infrastructure
- SKTM

Access to Raskin

Table 9 (entire IFLS East 2012 sample), table 10 (urban sample), and table 11 (rural sample) depict the regression results. The following analysis focuses largely on the full model column in order to keep the interpretations simple.

Basic Household Characteristics

The baseline and extended model specifications show that larger households and households in which the head has received relatively low levels of education are more likely to access Raskin. However, once the poverty status / expenditure quintile position is controlled for (poverty or full columns), the

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[15]   We included information on whether a household holds an SKTM as a further control variable.
[16]   Unfortunately, the IFLS-East 2012 did not collect information on birth and marriage certificates, which in some contexts are documents that need to be shown/submitted to access social assistance programmes in a particular area.

variables on household size and educational level of the household head lose their statistical significance, which suggests that they directly affect the poverty status of a household but nothing beyond. These results are largely the same when the regressions are estimated for rural and urban areas separately, although in urban areas, a lower number of years of schooling is associated with a higher chance of receiving Raskin beyond the effects of per capita expenditure levels.

Our results further indicate that, everything else being constant, households in rural areas seem more likely to receive Raskin than in urban areas. These findings are consistent with Raskin being shared (bagi rata) much more widely in rural than in urban areas.

Infrastructure

There are three infrastructure variables: electricity access in household, walking distance in minutes to the household's main water source, and walking distance in minutes to the nearest health centre (puskesmas). Although we did not find any significant effects for the distance variables, we did find that access to electricity seems to increase the chance of receiving Raskin. This result is puzzling and is largely driven by the sample of rural households. Although access to electricity seems to increase the chance of a household receiving Raskin in rural areas, it decreases the chance of receiving Raskin in urban areas. The results may suggest that, in urban areas, besides the poverty status (expenditure levels) of a household, the community may take into account not living in a dwelling connected to electricity in determining poverty levels, which therefore increases the chance of receiving Raskin. However, in rural areas, supply-side factors related to Raskin delivery might matter more. Raskin may not be available or is significantly less available in the remotest rural areas without electricity. This could help to explain the positive association between household access to electricity and receiving Raskin in rural areas.

Village Conflict and Trust

There may be good reasons to believe that level of conflict affects the chances of receiving Raskin. For instance, Raskin might not be delivered at all or be delivered in much smaller quantities to areas in which violent conflicts take place. The IFLS East 2012 contains information on whether violent conflicts took place in the past 12 months (the 'violent conflict' variable) and how safe households rate their village to be (the 'village safety' variable; larger values indicate higher safety). The IFLS East 2012 data show that, in rural areas with higher incidences of violent conflict, households are more likely to receive Raskin. Although this finding contradicts the expected relationship between level of conflicts and access to Raskin, it can potentially be explained by the bagi rata principle for rural areas. To mitigate conflict, equal sharing of Raskin rice is more likely to occur in areas where conflict takes place. Raskin rice allocations may then function to smooth conflict at the local level.

In this context, another set of variables might affect a household's chance of receiving Raskin. It is reported that local elites, such as village chiefs, allocate Raskin rice to households based on patronage networks. In this case, the connection between a household and the local elite or the majority ethnic group or religious group might impact receipt of Raskin rice. We tried to control for this relationship by using information on three variables that can proxy for trust and social inclusion. The three variables are willingness to help others (question on how willing a household is to help others in the village), trust within an ethnic group (question on whether a household trusts persons in its own ethnic group more than other ethnic groups in the village), and feeling taken advantage of (question on whether the household head believes s/he is being taken advantage of by other villagers). The analysis reveals that feeling taken advantage of is the only variable correlated with the chance of receiving Raskin rice. Households that report feeling taken advantage of are less likely to receive the rice. Although this result is consistent with socially excluded households being less likely to receive Raskin rice, the interpretation is not straightforward. It might be that household members who do not receive Raskin would feel they have been excluded undeservedly. At the least, it may indicate that households do not entirely agree with how Raskin rice is distributed at the local level.

Poverty

We grouped all households into expenditure per capita quintiles and included quintile-specific dummy variables in the regressions (quintile 5, the richest quintile is the reference category). In addition, we included information on whether a household holds an SKTM as a further control variable. The results show that, in all the settings considered (full sample, and rural/urban), poorer households are more likely to receive Raskin. However, the strength of the effect differs between rural and urban areas: rural areas only marginally use poverty status as a criterion for distributing Raskin. In line with these results, we found that holding an SKTM significantly increases the chance of receiving Raskin in urban areas, even when controlling for actual expenditure levels, which underscores the importance of holding an SKTM card for receiving access to social assistance programmes. However, we did not find the same effect from holding an SKTM card in rural areas, which underscores that Raskin distribution (at least when measured against the indicator of receiving Raskin or not) is not related to rural household welfare and poverty status.

Vulnerable Groups

Although the previous analysis showed that households with a disabled member and whose head is a widow(er) seem to have higher coverage rates under the Raskin programme, we found that none of the three indicators for vulnerable groups (disability, widow[er], and female-headed household) tended to be statistically significant in the regression framework. The results suggest that, after controlling for household wealth level and its sociodemographic composition, belonging to a vulnerable group does not have an additional effect on the likelihood of accessing Raskin rice.

Table 9: Linear Probability Model, Dependent Variable: Raskin (1=yes, 0=no)

| Variable | Baseline Model | Extended Model | | | | Full Model |
		Infrastructure	Trust	Conflict	Poverty	
Age	0.0102	0.0140**	0.0127*	0.0128*	0.00912	0.0161**
Age²	−0.00009	−0.000123*	−0.000114	−0.000114	−0.00008	−0.000143**
Sex (1 if male)	0.0117	0.0171	0.0200	0.0191	0.0108	0.0261
Married	−0.0999***	−0.0875**	−0.101**	−0.0979**	−0.0948***	−0.0796**
Widow (1 if yes)	−0.0423	−0.0403	−0.0609	−0.0553	−0.0404	−0.0508
Schooling (years)	−0.00923**	−0.0100***	−0.00968**	−0.00962**	−0.00575	−0.00704*
Muslim (1 if yes)	0.192	0.147	0.213*	0.210	0.186	0.180
Christian (1 if yes)	0.133	0.0967	0.169	0.163	0.112	0.125
Urban	−0.347***	−0.367***	−0.335***	−0.339***	−0.339***	−0.345***
HH size	0.0559***	0.0505***	0.0499**	0.0522***	0.0291	0.0189
HH size²	−0.00269**	−0.00237*	−0.00230	−0.00245*	−0.00120	−0.000587
Children under 5 (number)	0.0207	0.0297*	0.0295	0.0298	0.00649	0.0211
Children 6 to 15 (number)	0.0143	0.0120	0.0117	0.0132	0.0102	0.00661
Elderly (number)	0.0229	0.0109	0.0153	0.0126	0.0215	0.00691
Member of HH disabled (1 if yes)	0.0102	−0.000711	0.00768	0.00965	0.00202	−0.00522
Electricity in HH (1 if yes)		0.120**				0.117**
Distance to water source (in minutes)		-.0000498				−0.0000533
Distance to health centre (in minutes)		0.000171				0.000258
Willingness to help villagers			0.0534**			0.0526**
Trust same ethnicity more			−0.00501			−0.00584
Feeling taken advantage of by others			0.0354***			0.0354***
Violent conflict				0.0374		0.0266
Village safety				−0.0475*		−0.0417
Expenditure quintile 1					0.140***	0.158***
Expenditure quintile 2					0.158***	0.167***
Expenditure quintile 3					0.0821**	0.0884**
Expenditure quintile 4					0.0111	0.0118
SKTM					0.191***	0.170***
Constant	0.316*	0.182	0.0500	0.312*	0.290*	−0.0673
Observations	2,536	2,381	2,398	2,398	2,536	2,255
Adjusted R²	0.293	0.288	0.297	0.296	0.323	0.320

*Note: Robust standard errors used. Significance levels: *** p<0.01, ** p<0.05, * p<0.1. All regressions included province fixed effects. Survey weights applied.*

Table 10: Linear Probability Model, Dependent Variable: Raskin (1=yes, 0=no), Urban Areas

Variable	Baseline Model	Extended Model				Full Model
		Infrastructure	Trust	Conflict	Poverty	
Age	0.0203	0.0333***	0.0233*	0.0227	0.0173*	0.0333***
Age²	−0.000233	−0.000360***	−0.000265*	−0.000258	−0.000185	−0.000352***
Sex (1 if male)	0.00485	0.0203	0.0197	0.0181	0.00766	0.0341
Married	−0.142***	−0.104*	−0.134**	−0.130**	−0.0959*	−0.0469
Widow (1 if yes)	−0.117	−0.119	−0.152*	−0.153*	−0.0921	−0.121
Schooling (years)	−0.0316***	−0.0316***	−0.0339***	−0.0334***	−0.0213**	−0.0239**
Muslim (1 if yes)	0.248**	0.237**	0.207*	0.220*	0.183**	0.153*
Christian (1 if yes)	0.347***	0.323***	0.340***	0.356***	0.248**	0.232**
HH size	0.0370	0.0296	0.0284	0.0276	−0.00115	−0.0149
HH size²	−0.00139	−0.000396	−0.000846	−0.000778	0.000265	0.00131
Children under 5 (number)	0.0136	0.0180	0.0329	0.0330	−0.0139	0.00988
Children 6 to 15 (number)	0.0395*	0.0209	0.0318	0.0348	0.0356**	0.0203
Elderly (number)	0.0577	0.0445	0.0437	0.0392	0.0577	0.0585
Member of HH disabled (1 if yes)	0.0183	−0.0320	0.00308	0.00905	0.0186	−0.0158
Electricity in HH (1 if yes)		−0.342***				−0.403**
Distance to water source (in minutes)		0.000061				0.000041
Distance to health centre (in minutes)		0.00604**				0.00461**
Willingness to help villagers			0.0750			0.0718
Trust same ethnicity more			0.00118			−0.0138
Being taken advantage of by others			0.0201			−0.00932
Violent conflict				−0.0391		−0.103
Village safety				−0.0777*		−0.0554
Expenditure quintile 1					0.272***	0.249***
Expenditure quintile 2					0.198***	0.190**
Expenditure quintile 3					0.00468	−0.0515
Expenditure quintile 4					0.00503	−0.0223
SKTM					0.297***	0.293***
Constant	0.0152	−0.0173	−0.206	0.141	−0.0265	0.000544
Observations	751	638	696	696	751	594
Adjusted R²	0.197	0.239	0.224	0.225	0.285	0.365

*Note: Robust standard errors used. Significance levels: *** p<0.01, ** p<0.05, * p<0.1. All regressions included province fixed effects. Survey weights applied.*

Table 11: Linear Probability Model, Dependent Variable: Raskin (1=yes, 0=no), Rural Areas

| Variable | Baseline Model | Extended Model | | | | Full Model |
		Infrastructure	Trust	Conflict	Poverty	
Age	0.00705	0.00718	0.00961	0.00965	0.00610	0.0105
Age²	–0.000041	–0.000040	–0.000066	–0.000064	–0.000032	–0.000073
Sex (1 if male)	0.0260	0.0158	0.0272*	0.0270	0.0248	0.0169
Married	–0.0696	–0.0963	–0.0715	–0.0660	–0.0822	–0.107**
Widow (1 if yes)	–0.0173	–0.0282	–0.0230	–0.0175	–0.0275	–0.0447
Schooling (years)	0.00493	0.00331	0.00455	0.00407	0.00610	0.00408
Muslim (1 if yes)	0.198	0.155	0.216	0.214	0.180	0.171
Christian (1 if yes)	0.0370	0.00542	0.0553	0.0511	0.00797	0.00670
HH size	0.0809**	0.0770*	0.0812*	0.0820**	0.0661	0.0546
HH size²	–0.00541**	–0.00530**	–0.00563**	–0.00584**	–0.00415*	–0.00385
Children under 5 (number)	0.0239	0.0281	0.0266	0.0300	0.0189	0.0277
Children 6 to 15 (number)	0.00104	0.00571	0.00113	0.00256	–0.00332	0.00197
Elderly (number)	0.00818	–0.00163	0.0100	0.00628	0.00432	–0.00564
Member of HH disabled (1 if yes)	0.0268	0.0255	0.0267	0.0286	0.0248	0.0208
Electricity in HH (1 if yes)		0.0936*				0.0985*
Distance to water source (in minutes)		–0.000049				–0.000046
Distance to health centre (in minutes)		0.000168				0.000253
Willingness to help villagers			0.0259			0.0322
Trust same ethnicity more			–0.00634			0.000669
Being taken advantage of by others			0.0362*			0.0435**
Violent conflict				0.148**		0.170**
Village safety				–0.0265		–0.0229
Expenditure quintile 1					0.0823	0.117
Expenditure quintile 2					0.114	0.130*
Expenditure quintile 3					0.145**	0.168***
Expenditure quintile 4					0.0190	0.0352
SKTM					0.0542	0.0462
Constant	0.256	0.281	0.0628	0.222	0.262	0.0266
Observations	1,785	1,743	1,702	1,702	1,785	1,661
Adjusted R²	0.106	0.119	0.111	0.114	0.122	0.148

Note: Robust standard errors used. Significance levels: *** p<0.01, ** p<0.05, * p<0.1. All regressions included province fixed effects. Survey weights applied.

Access to Kartu Sehat

Basic Household Characteristics

In contrast to the analysis of access to Raskin, demographic characteristics seem to play a more important role in determining access to Kartu Sehat (Jamkesmas/Jamkesda). In particular, households with elderly members are more likely to be able to access Kartu Sehat. Given that elderly people are more likely to suffer from health problems than younger persons, it seems that the health card programmes do consider and take into account the elderly's higher need and demand for health care. However, we found that families with young children (below the age of 6) with equally high needs for health care, seem less likely to be included in the health card programmes. Regarding differences between rural and urban areas, we found that the coefficient on the share of elderly in the household remains positive for both locations. Given the lower number of observations in the split samples, it seems that smaller sample size is driving this result.

Infrastructure

We did not find a significant effect of the infrastructure variables on the chance of receiving Kartu Sehat. Access to Kartu Sehat does not seem to depend on remoteness or access to basic infrastructure/ services. It is likely that differences in infrastructure might be proxied by province fixed effects and the rural/urban dummy variable used when estimating all regressions.

Village Conflict and Trust

Similar to Raskin, many reasons exist that might explain why the level of conflict can impact availability and distribution of the Kartu Sehat programme. Although we did not find any effect of conflict variables in the separate regressions for the rural and urban samples, we did find a positive and statistically significant effect of the conflict variables on receiving Kartu Sehat in the regressions on the complete sample. Unfortunately, research and access data on Jamkesmas/Jamkesda is limited; therefore, the driving force behind this positive association remains unclear.

Furthermore, we found that lower levels of trust in other ethnic groups (other than that of the head of the household interviewed) are associated with lower levels of access to Kartu Sehat. Although this result is consistent with the assumption that socially excluded households are less likely to receive access to social assistance programmes in Indonesia, the interpretation is not straightforward. It might be that a household that does not receive Kartu Sehat feels therefore undeservedly excluded from the programme. At the least, it may indicate that households do not entirely agree with how Kartu Sehat is distributed at the local level.

Poverty

From the descriptive analysis in the previous section on Raskin, we found that the targeting of Kartu Sehat is imperfect because many recipients of the programme are classified as belonging to the richer wealth levels. However, the likelihood of households receiving Kartu Sehat declines with increased levels of wealth. The multivariate analysis confirms the descriptive findings: in all three samples (overall, rural, and urban), we found that households in the poorer per-capita expenditure quintiles are more like-

ly to receive Kartu Sehat. Furthermore and in line with findings for Raskin, we found that possession of an SKTM card improves access to Kartu Sehat, which underscores that the SKTM plays an important role in providing access to social assistance programmes in Indonesia.

Vulnerable Groups

Although the previous descriptive analysis on Kartu Sehat showed that households with a disabled member and households whose head is a widow(er) seem to have higher coverage rates for Kartu Sehat, we found that none of the three indicators for vulnerable groups (disability, widow[er], female-headed household) tends to be statistically significant in the regression framework. The results suggest that after controlling for the wealth level of the household and its sociodemographic composition, belonging to a vulnerable group does not have an additional effect on the likelihood of accessing Kartu Sehat.

Table 12: Linear Probability Model, Dependent Variable: Kartu Sehat (1=yes, 0=no)

Variable	Baseline Model	Extended Model				Full Model
		Infrastructure	Trust	Conflict	Poverty	
Age	0.00343	0.00452	0.00279	0.00243	0.00275	0.00570
Age²	−0.000024	−0.000035	−0.000021	−0.000016	−0.000014	−0.000050
Sex (1 if male)	0.0217	0.0250	0.0180	0.0199	0.0225	0.0245
Married	0.00441	−0.00714	0.00197	0.00280	0.0111	−0.00310
Widow (1 if yes)	0.00784	−0.0290	0.0169	0.0167	0.00886	−0.0165
Schooling (years)	−0.00213	−0.00189	−0.00136	−0.00244	0.00263	0.00395
Muslim (1 if yes)	0.0505	0.0396	0.0754	0.0763	0.0460	0.0770
Christian (1 if yes)	0.138	0.138	0.163	0.170	0.117	0.154
Urban	−0.148***	−0.144**	−0.139***	−0.144***	−0.134***	−0.129***
HH size	0.0234	0.0276	0.0203	0.0204	−0.00663	−0.0111
HH size²	−0.000188	−0.000451	0.000184	0.000186	0.00153	0.00195
Children under 5 (number)	−0.00553	−0.00538	−0.00568	−0.00409	−0.0262*	−0.0303*
Children 6 to 15 (number)	0.0313**	0.0305*	0.0342**	0.0327**	0.0252	0.0282
Elderly (number)	0.0557**	0.0614**	0.0634**	0.0615**	0.0533**	0.0732**
Member of HH disabled (1 if yes)	0.00264	−0.00187	−0.00679	−0.00746	−0.0126	−0.0218
Electricity in HH (1 if yes)		0.0434				0.0528
Distance to water source (in minutes)		0.000008				−0.000003
Distance to health centre (in minutes)		−0.000050				0.000018
Willingness to help villagers			−0.0151			−0.00573
Trust same ethnicity more			−0.0348**			−0.0311**
Being taken advantage of by others			0.000514			−0.00319
Violent conflict				0.0853*		0.0957*
Village safety				−0.00338		−0.000131
Expenditure quintile 1					0.251***	0.295***
Expenditure quintile 2					0.194***	0.219***
Expenditure quintile 3					0.111***	0.135***
Expenditure quintile 4					0.0500	0.0807**
SKTM					0.0912*	0.0859**
Constant	0.236	0.179	0.349	0.244	0.170	0.117
Observations	2,536	2,381	2,398	2,398	2,536	2,255
Adjusted R²	0.196	0.187	0.197	0.197	0.226	0.225

*Note: Robust standard errors used. Significance levels: *** p<0.01, ** p<0.05, * p<0.1. All regressions included province fixed effects. Survey weights applied.*

Table 13: Linear Probability Model, Dependent Variable: Kartu Sehat (1=yes, 0=no), Urban Areas

Variable	Baseline Model	Extended Model Infrastructure	Trust	Conflict	Poverty	Full Model
Age	0.00837	0.00672	0.00412	0.00388	0.00660	0.00550
Age²	−0.00012	−0.00010	−0.00008	−0.00008	−0.00009	−0.00009
Sex (1 if male)	0.0140	0.0224	0.0122	0.0125	0.0173	0.0232
Married	0.0445	0.0493	0.0466	0.0495	0.0655	0.0668
Widow (1 if yes)	0.0787	0.0167	0.0902	0.0960	0.0857	0.0384
Schooling (years)	−0.0220***	−0.0213***	−0.0227***	−0.0234***	−0.0159***	−0.0158***
Muslim (1 if yes)	0.192*	0.169*	0.184	0.164	0.141	0.0993
Christian (1 if yes)	0.299**	0.269**	0.308**	0.292**	0.237**	0.203**
HH size	−0.000332	0.00755	0.00198	0.00294	−0.0230	−0.00965
HH size²	0.00204	0.00215	0.00207	0.00205	0.00300	0.00289
Children under 5 (number)	−0.0187	−0.0286	−0.0150	−0.0149	−0.0405	−0.0489
Children 6 to 15 (number)	0.0177	0.00188	0.0145	0.0146	0.0157	−0.00119
Elderly (number)	0.0822	0.0782	0.0912	0.0883	0.0807	0.110
Member of HH disabled (1 if yes)	0.0138	0.00315	−0.00662	−0.00876	0.0119	−0.00113
Electricity in HH (1 if yes)		−0.0857				−0.0808
Distance to water source (in minutes)		−0.000034				−0.000015
Distance to health centre (in minutes)		0.00512***				0.00484***
Willingness to help villagers			0.0163			0.0111
Trust same ethnicity more			−0.0194			−0.0171
Being taken advantage of by others			0.0175			−0.00451
Violent conflict				0.0694		0.0891
Village safety				−0.0233		0.00253
Expenditure quintile 1					0.241***	0.245*
Expenditure quintile 2					0.158*	0.157
Expenditure quintile 3					0.0511	0.0264
Expenditure quintile 4					0.0275	0.0517
SKTM					0.0842*	0.0684
Constant	0.152	0.179	0.234	0.319	0.121	0.176
Observations	751	638	696	696	751	594
Adjusted R²	0.186	0.194	0.205	0.206	0.222	0.248

Note: Robust standard errors used. Significance levels: *** p<0.01, ** p<0.05, * p<0.1. All regressions included province fixed effects. Survey weights applied.

Table 14: Linear Probability Model, Dependent Variable: Kartu Sehat (1=yes, 0=no), Rural Areas

Variable	Baseline Model	Extended Model				Full Model
		Infrastructure	Trust	Conflict	Poverty	
Age	0.00258	0.00506	0.00279	0.00243	0.00275	0.00570
Age²	0.0000090	–0.0000213	–0.000021	–0.000016	–0.000014	–0.000050
Sex (1 if male)	0.0310	0.0304	0.0180	0.0199	0.0225	0.0245
Married	–0.00627	–0.0244	0.00197	0.00280	0.0111	–0.00310
Widow (1 if yes)	–0.0199	–0.0502	0.0169	0.0167	0.00886	–0.0165
Schooling (years)	0.0115**	0.0108**	–0.00136	–0.00244	0.00263	0.00395
Muslim (1 if yes)	0.0127	0.00404	0.0754	0.0763	0.0460	0.0770
Christian (1 if yes)	0.125	0.126	0.163	0.170	0.117	0.154
HH size	0.0545*	0.0585*	–0.139***	–0.144***	–0.134***	–0.129***
HH size²	–0.00317	–0.00374*	0.0203	0.0204	–0.00663	–0.0111
Children under 5 (number)	–0.00876	–0.00768	0.000184	0.000186	0.00153	0.00195
Children 6 to 15 (number)	0.0384**	0.0417**	–0.00568	–0.00409	–0.0262*	–0.0303*
Elderly (number)	0.0481	0.0541*	0.0342**	0.0327**	0.0252	0.0282
Member of HH disabled (1 if yes)	–0.0103	–0.00799	0.0634**	0.0615**	0.0533**	0.0732**
Electricity in HH (1 if yes)		0.0256	–0.00679	–0.00746	–0.0126	–0.0218
Distance to water source (in minutes)		0.00001				0.0528
Distance to health centre (in minutes)		–0.00008				–0.000003
Willingness to help villagers						0.000018
Trust same ethnicity more			–0.0151			–0.00573
Being taken advantage of by others			–0.0348**			–0.0311**
Violent conflict			0.000514			–0.00319
Village safety				0.0853*		0.0957*
Expenditure quintile 1				–0.00338		–0.000131
Expenditure quintile 2					0.251***	0.295***
Expenditure quintile 3					0.194***	0.219***
Expenditure quintile 4					0.111***	0.135***
SKTM					0.0500	0.0807**
Constant	0.0705	0.0275			0.0912*	0.0859**
Observations	1,785	1,743	2,398	2,398	2,536	2,255
Adjusted R²	0.137	0.148	0.349	0.244	0.17	0.117

Note: Robust standard errors used. Significance levels: *** p<0.01, ** p<0.05, * p<0.1. All regressions included province fixed effects. Survey weights applied.

Access to BSM

Basic household characteristics

BSM aims to support children from poor families in attending school. In line with this explicit targeting criterion, we found that the age structure of a household determines its access to BSM. Households with a relatively high share of children between 6 and 15 years are more likely to receive BSM than other households.

Infrastructure

We did not find a significant effect of the infrastructure variables on the chance of receiving BSM. Access to BSM in either rural or urban areas does not seem to depend on access to basic infrastructure/ services or degree of remoteness. Evidently, differences in infrastructure might be proxies for province fixed effects and the rural/urban dummy variable, which were used when estimating all regressions.

Village Conflict and Trust

In contrast to Raskin, the allocation of BSM depends much less on the level of conflict and trust among villagers. At the local level, the Dinas Pendidikan (district education office) along with local school principals and teachers are more likely to influence which students have a chance to receive BSM, despite the Ministry of Education and Culture and the Ministry of Religious Affairs explicitly advocating use of poverty criteria in selecting BSM students. Therefore, the likelihood of receiving BSM depends much less on a household's relation to the village elite, for example the village head, than in the case of Raskin. In line with this reasoning, we did not find that conflict or trust affect receipt of BSM.

Poverty

BSM should target poor households. However, when looking at the quintile dummies, we found little evidence that BSM does this. BSM targets poor households only to some degree by including expenditures per capita as a criterion. However, in this context, it is important to note that access to BSM seems to improve significantly in both rural and urban areas if a household holds an SKTM. Given that schools compile BSM lists[17] at the local level and school principals and teachers have limited information on households' welfare, it appears that schools have strongly adopted the approach of using the SKTM as an eligibility criterion for accessing BSM.

Vulnerable Groups

Although the analysis for other programmes earlier shows that households with a disabled member and households whose head is a widow(er) seem to have higher coverage rates under the BSM programme, further analysis finds that none of the three indicators for vulnerable groups (disability, widow[er], and female-headed household) tends to be statistically significant in the regression framework. The results suggest that, after controlling for the wealth level of the household and its sociodemographic composition, belonging to a vulnerable group does not have an additional effect on the likelihood of accessing BSM.

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[17] Lists of potential BSM recipients, which are then sent to the Dinas Pendidikan for verification, confirmation, and validation.

Table 15: Linear Probability Model, Dependent Variable: BSM (1=yes, 0=no)

Variable	Baseline Model	Extended Model				Full
		Infrastructure	Trust	Conflict	Poverty	
Age	-0.000288	-0.000348	0.000300	0.000460	-0.000669	0.000204
Age²	0.000004	0.000004	-0.000004	-0.000006	0.000008	-0.000005
Sex (1 if male)	0.00225	0.00362	0.00287	0.00193	0.00180	0.00404
Married	-0.0824***	-0.0884***	-0.0818***	-0.0830***	-0.0817***	-0.0877***
Widow (1 if yes)	0.00625	-0.00575	0.00383	0.00407	0.00659	-0.00835
Schooling (years)	0.000580	0.000873	0.000515	0.000708	0.000829	0.00127
Muslim (1 if yes)	-0.0843***	-0.0759***	-0.0506	-0.0499	-0.0887***	-0.0429
Christian (1 if yes)	-0.0844***	-0.0730***	-0.0502	-0.0500	-0.0904***	-0.0419
Urban	-0.0282*	-0.0344**	-0.0288	-0.0298*	-0.0297*	-0.0361**
HH size	0.0253***	0.0252***	0.0246***	0.0247***	0.0196***	0.0169**
HH size²	-0.00173**	-0.00165**	-0.00158**	-0.00159**	-0.00141**	-0.00106
Children under 5 (number)	-0.0148*	-0.0158*	-0.0178*	-0.0183*	-0.0148	-0.0206*
Children 6 to 15 (number)	0.0377***	0.0389***	0.0356***	0.0364***	0.0378***	0.0366***
Elderly (number)	0.00611	0.00607	0.00483	0.00464	0.00550	0.00445
Member of HH disabled (1 if yes)	-0.0131	-0.00864	-0.0110	-0.0110	-0.0112	-0.00495
Electricity in HH (1 if yes)		-0.00104				-0.00567
Distance to water source (in minutes)		-0.000009				-0.000023
Distance to health centre (in minutes)		0.000040				0.000044
Willingness to help villagers			0.00813			0.0128
Trust same ethnicity more			0.00659			0.00454
Being taken advantage of by others			0.00769			0.00699
Violent conflict				0.00757		0.00613
Village safety				0.0199		0.0200
Expenditure quintile 1					-0.0136	0.00236
Expenditure quintile 2					0.0248*	0.0375**
Expenditure quintile 3					0.00956	0.0213
Expenditure quintile 4					0.00831	0.0141
SKTM					0.0947***	0.0894***
Constant	0.166**	0.156**	0.0782	0.0874	0.173***	0.0245
Observations	2,536	2,381	2,398	2,398	2,536	2,255
Adjusted R²	0.098	0.098	0.094	0.095	0.119	0.116

Note: Robust standard errors used. Significance levels: *** p<0.01, ** p<0.05, * p<0.1. All regressions included province fixed effects. Survey weights applied.

Table 16: Linear Probability Model, Dependent Variable: BSM (1=yes, 0=no), Urban Areas

Variable	Baseline Model	Extended Model				Full
		Infrastructure	Trust	Conflict	Poverty	
Age	0.000827	0.00173	0.00127	0.00122	0.000513	0.00223
Age²	-0.000008	-0.000022	-0.000015	-0.000014	-0.000001	-0.000025
Sex (1 if male)	0.0185**	0.0219***	0.0198**	0.0197**	0.0165**	0.0215**
Married	-0.0337	-0.0311	-0.0337	-0.0350	-0.0259	-0.0236
Widow (1 if yes)	0.0225	0.0161	0.0248	0.0238	0.0349	0.0354
Schooling (years)	-0.00272	-0.00273	-0.00287	-0.00266	-0.000989	-0.000520
Muslim (1 if yes)	0.0573	0.0527	0.0575	0.0631*	0.0426	0.0364
Christian (1 if yes)	0.0441*	0.0431*	0.0410	0.0465*	0.0155	0.00594
HH size	0.0220**	0.0223*	0.0243**	0.0249**	0.0104	0.0100
HH size²	-0.000873	-0.000752	-0.000946	-0.000996	-0.000213	-0.00004
Children under 5 (number)	-0.0152	-0.0158	-0.0185	-0.0185	-0.0146	-0.0227
Children 6 to 15 (number)	0.00988	0.0103	0.00716	0.00799	0.00954	0.00808
Elderly (number)	-0.0187**	-0.0195**	-0.0155*	-0.0168**	-0.0243**	-0.0204
Member of HH disabled (1 if yes)	-0.0423***	-0.0403***	-0.0480***	-0.0475***	-0.0337*	-0.0346
Electricity in HH (1 if yes)		0.0327				0.0414
Distance to water source (in minutes)		-0.000021**				-0.000012
Distance to health centre (in minutes)		-0.000990				-0.00121*
Willingness to help villagers			0.00887			0.0194
Trust same ethnicity more			0.000557			-0.00235
Being taken advantage of by others			-0.00107			-0.000493
Violent conflict				0.00593		-0.00717
Village safety				0.0104		0.00945
Expenditure quintile 1					-0.0345	-0.0109
Expenditure quintile 2					0.0413**	0.0658***
Expenditure quintile 3					0.0279	0.0431*
Expenditure quintile 4					0.0207	0.0264*
SKTM					0.116***	0.116**
Constant	-0.0144	-0.0732	-0.0429	-0.0490	-0.0132	-0.153
Observations	751	638	696	696	751	594
Adjusted R²	0.096	0.098	0.099	0.099	0.154	0.166

Note: Robust standard errors used. Significance levels: *** p<0.01, ** p<0.05, * p<0.1. All regressions included province fixed effects. Survey weights applied.

Table 17: Linear Probability Model, Dependent Variable: BSM (1=yes, 0=no), Rural Areas

Variable	Baseline Model	Extended Model				Full
		Infrastructure	Trust	Conflict	Poverty	
Age	-0.000437	-0.000244	0.000376	0.000277	-0.00107	0.000191
Age²	0.0000051	0.0000040	-0.0000059	-0.0000054	0.0000104	-0.0000052
Sex (1 if male)	-0.0117	-0.00895	-0.0119	-0.0134	-0.0118	-0.00961
Married	-0.121**	-0.126**	-0.119**	-0.117**	-0.127**	-0.127**
Widow (1 if yes)	-0.00261	-0.0116	-0.00847	-0.00567	-0.00671	-0.0228
Schooling (years)	0.00295*	0.00317	0.00264	0.00298*	0.00214	0.00235
Muslim (1 if yes)	-0.100***	-0.0896***	-0.0636	-0.0651	-0.104***	-0.0536
Christian (1 if yes)	-0.0709*	-0.0597	-0.0282	-0.0331	-0.0682*	-0.0133
HH size	0.0351*	0.0361*	0.0286	0.0270	0.0358**	0.0264
HH size²	-0.00300*	-0.00297*	-0.00238	-0.00223	-0.00308**	-0.00210
Children under 5 (number)	-0.0158	-0.0173	-0.0183	-0.0191	-0.0152	-0.0208
Children 6 to 15 (number)	0.0525***	0.0520***	0.0510***	0.0520***	0.0526***	0.0499***
Elderly (number)	0.0280	0.0273	0.0253	0.0239	0.0290	0.0260
Member of HH disabled (1 if yes)	-0.00945	-0.00765	-0.00346	-0.00390	-0.00954	-0.00251
Electricity in HH (1 if yes)		-0.00382				-0.00723
Distance to water source (in minutes)		-0.000012				-0.000030
Distance to health centre (in minutes)		0.000046				0.000048
Willingness to help villagers			0.0132			0.0115
Trust same ethnicity more			0.0183*			0.0166
Being taken advantage of by others			0.0177			0.0173
Violent conflict				-0.00431		-0.00177
Village safety				0.0235		0.0231*
Expenditure quintile 1					-0.0297	-0.0116
Expenditure quintile 2					0.00372	0.0147
Expenditure quintile 3					-0.00895	0.00521
Expenditure quintile 4					-0.00203	0.00751
SKTM					0.0866***	0.0780***
Constant	0.157	0.140	0.0124	0.0864	0.174*	-0.0240
Observations	1,785	1,743	1,702	1,702	1,785	1,661
Adjusted R²	0.110	0.111	0.108	0.106	0.123	0.122

Note: Robust standard errors used. Significance levels: *** p<0.01, ** p<0.05, * p<0.1. All regressions included province fixed effects. Survey weights applied.

5. Raskin: Quantities and Prices

Overview of Quantities and Prices

In addition to whether a household has received Raskin in the preceding 12 months, the IFLS East 2012 asked households about the quantity of purchases (in kg), frequency of purchases (number of times per year), expenditures (in Rp) on Raskin rice, and its householder-assessed quality.

According to official programme guidelines for 2012, beneficiary households are supposed to receive 15 kg of Raskin rice for 1,600 Rp per kilogram each month (12 disbursements at 15 kg a month). As shown in Table 18 and figure 9, households in all provinces received on average significantly less Raskin rice and, in most cases (with the exception of NTT), had to pay higher prices per kilogram than was stipulated in the Raskin programme guidelines. Likewise, we observed significant provincial differences in the implementation of Raskin. Households in Maluku Utara that received Raskin rice at least once during the preceding 12 months received an average of 2.28 kg per month (lowest amount among the seven provinces), and households in Papua received an average of 6.90 kg per month (the highest among the seven provinces).

As widely documented (World Bank 2007, 2012f; Priebe and Howell 2014), Raskin rice is often not distributed monthly, but depending on the location, often only three to four times a year and households purchase larger quantities at each disbursement than the 15 kg stipulated by Raskin guidelines. Households purchased Raskin rice 2 or 3 times on average during the 12 months preceding the survey, with strong regional variations.

Furthermore, significant variations exist across regions in terms of the price paid for Raskin rice. The price charged for Raskin seems positively correlated with the market price of rice; areas that have a higher market price of rice also charge a higher price for Raskin rice. The lowest Raskin price was observed in NTT (about 1,200 Rp per kg); whereas the highest price was in Kalimantan Timur (about 2,500 Rp per kg). However, the ratio of the price of Raskin rice to the market price of rice seems constant; the price of Raskin was about 20–35 percent of the rice market price.

Table 18: Raskin (Coverage, Quantity, Price, and Quality) and Poverty Rates by Province

Province	Raskin pro-gramme coverage (%)	Average frequency Raskin bought in past 12 months	Average monthly amount of Raskin bought in past 12 months (kg)	Amount bought last time (kg)	Price per kg of Raskin (Rp)	Market price per kg of rice (Rp)	Ratio of Raskin price to market price, X 100	Average monthly savings from buying Raskin (Rp)*	Quality of Raskin†	Poverty rate (%)‡
NTT	72.83	2.01	4.93	31.20	1,235.91	5,403.52	22.87	20,553.26	2.17	20.41
Kalimantan Timur	24.95	3.62	5.75	20.67	2,527.92	8,577.84	29.47	34,802.16	2.48	6.38
Sulawesi Tenggara	71.90	4.01	4.54	13.77	1,673.02	4,828.74	34.65	14,321.71	2.28	13.06
Maluku	74.67	2.57	5.11	25.11	2,209.8	8,326.69	26.54	31,251.80	2.51	20.76
Maluku Utara	46.88	1.66	2.28	18.29	1,844.51	6,798.76	27.13	11,303.95	2.55	8.06
Papua Barat	54.35	2.78	5.63	29.52	2,346.35	9,161.90	25.61	38,388.59	2.37	27.04
Papua	48.55	2.57	6.90	33.04	2,359.46	8,025.20	29.40	39,107.77	2.30	30.66
All provinces	54.12	2.71	5.24	26.05	1,843.63	6,628.88	27.81	25,074.71	2.31	–

Note: Data in this table represent responses from Raskin recipients who had received Raskin in the past 12 months.

* Average monthly savings are calculated by multiplying the difference between the market price of rice and Raskin's price by the average monthly amount of Raskin bought.

† Quality of Raskin rice was measured on a scale from 1 (low) to 3 (high).

‡ Poverty rate refers to official BPS poverty rate for September 2012. Survey weights applied.

Analysis of the average monthly savings levels per household from buying Raskin rice reveals substantial disparities across the different provinces. The savings are the highest in Papua (average monthly per household savings of 39,000 Rp[18]); whereas the savings are lowest in Maluku Utara (average monthly per households savings of about 11,000 Rp).

The perceived quality of Raskin rice has been stable across regions. On a scale of 1 to 3 in which 1 is considered low and 3 high, perceived quality ranged from 2.17 in Nusa Tenggara Timur to 2.55 in Maluku Utara based.

Similar to the findings on Raskin coverage, the amount of Raskin rice across provinces also correlated positively with BPS poverty rates for these provinces, implying that more Raskin rice is provided to poorer provinces.

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[18] The calculation for Papua is based on multiplying the price difference between the market price of rice (6,629 Rp) and the Raskin price (1,844 Rp) with the average quantity (kg) of Raskin rice purchased (5.24 kg). Calculations for other provinces follow the same approach.

Figure 9: Raskin (Coverage, Quantity, and Price) and Poverty Rates by Province

Legend:
- Market price per kg of rice
- Price per kg of Raskin
- Avg. quantity of Raskin bought per month in the past 12 months
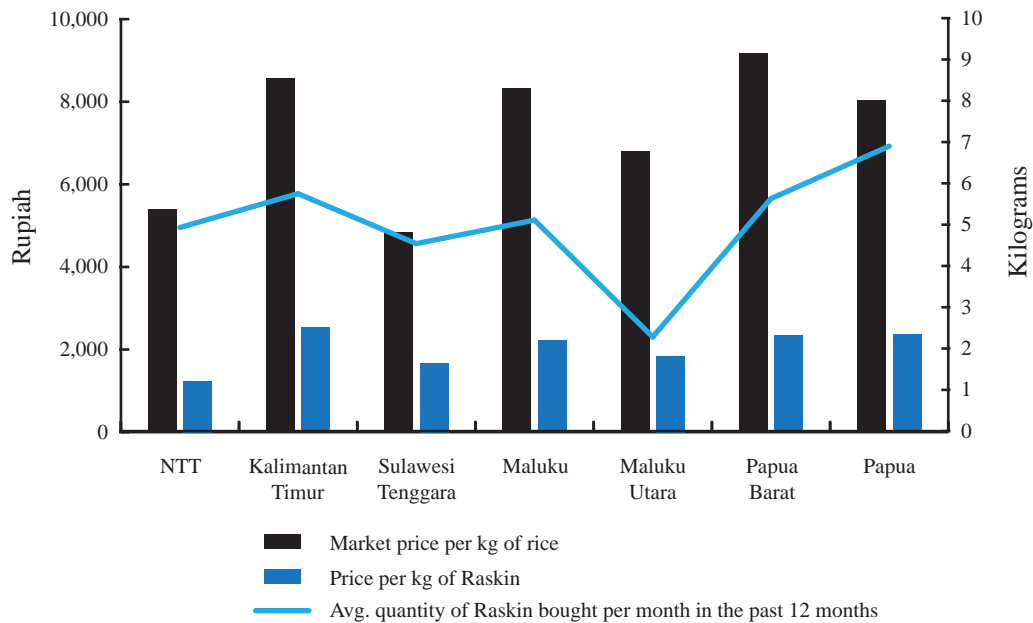
Raskin by Expenditure Decile

Section IV describes the declining trend in coverage rates of Raskin across the wealth distribution. However, to understand Raskin's targeting performance, it is important not only to see whether coverage rates vary by wealth levels but also whether they vary by other indicators of Raskin allocation, such as prices, kilogram purchases, frequency of purchases, and the quality of Raskin rice. Table 19 shows the respective descriptive results (mean values).

The second column, which shows Raskin coverage rates, reproduces the earlier results, which show a declining trend in coverage rates as households become wealthier. In contrast, the prices of Raskin, quantities of Raskin rice purchased, frequency of Raskin purchases, and quality of Raskin rice do not vary significantly with household wealth; the mean values for all these indicators are very similar across the entire wealth distribution. Compared with what richer households spend on average on 1 kg of rice at market price (7,340 Rp per kg in decile 10, compared with 6,264 Rp per kg in decile 1), the resulting savings in Rupiahs by purchasing Raskin is largest for richer households.

Table 19: Raskin (Coverage, Quantity, Price, and Quality) by Expenditure Decile

Expenditure decile*	Raskin coverage rate (%)	Average frequency Raskin bought in past 12 months	Average monthly amount of Raskin bought in past 12 months (kg)	Amount bought last time (kg)	Price per kg of Raskin (Rp)	Market price per kg of rice (Rp)	Ratio of Raskin price to market price, X 100	Average monthly savings from buying Raskin (Rp)†	Quality of Raskin‡
1	77.12	2.65	5.08	25.20	1,837.74	6,264.28	29.34	22,505.27	2.29
2	73.60	2.62	5.69	27.59	1,736.99	6,530.27	26.60	27,257.79	2.32
3	67.46	3.04	5.84	26.45	1,829.56	6,340.55	28.85	26,351.70	2.27
4	65.47	2.60	5.38	26.75	1,874.23	6,684.05	28.04	25,860.80	2.21
5	62.04	2.58	4.78	25.71	1,662.43	6,499.42	25.58	23,136.94	2.28
6	52.85	2.34	5.03	29.71	1,706.39	6,109.30	27.93	22,142.97	2.26
7	47.28	2.42	4.08	24.24	1,892.79	6,628.90	28.55	19,299.65	2.38
8	41.93	3.10	5.23	21.79	1,953.47	6,947.08	28.12	26,112.42	2.41
9	36.13	3.05	5.30	25.73	2,284.23	7,367.98	31.00	26,918.46	2.37
10	30.69	2.59	5.41	27.78	1,732.99	7,340.53	23.61	30,318.10	2.29
All deciles	54.12	2.71	5.24	26.05	1,843.63	6,628.88	27.81	25,074.71	2.31

Note: Data in this table represent responses from Raskin recipients who had received Raskin in the past 12 months.

* Expenditures per capita were obtained by dividing average monthly household expenditures by household size and adjusting for spatial price differences by using BPS's official poverty lines. Survey weights applied.

† Average monthly savings are calculated by multiplying the difference between the market price of rice and Raskin's price by the average monthly amount of Raskin bought.

‡ Quality of Raskin rice was measured on a scale from 1 (low) to 3 (high).

Figure 10: Raskin (Coverage, Quantity, Price, and Quality) by Expenditure Decile

Market price per kg of rice
Price per kg of Raskin
Avg. quantity of Raskin bought per month in the past 12 months
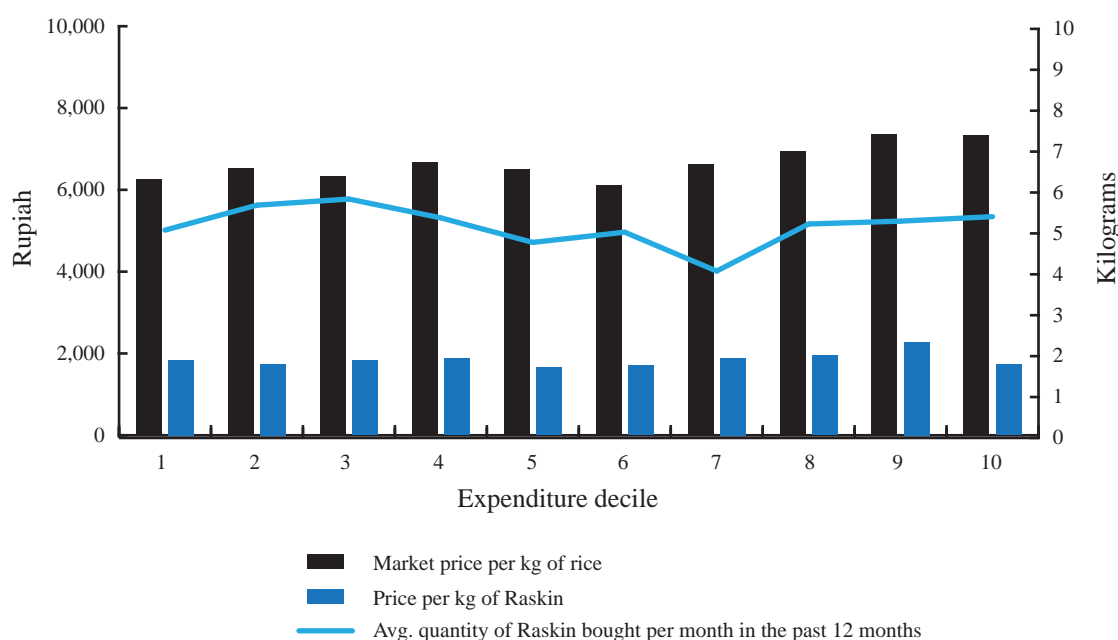
Differences between Rural and Urban Areas

Most indicators (coverage rates, Raskin price per kilogram, and quantity in kilograms of Raskin purchases) do not show any differences along the wealth distribution in rural areas. Poorer households pay the same price and receive the same amount and same frequency of Raskin compared with richer households (table 20). In contrast, significant differences exist in urban areas between poorer and richer households. Compared with richer households, poorer households purchase Raskin more frequently but at lower volumes per purchase than richer households. On average, in the past 12 months, poorer and richer households (conditional on buying any Raskin) received about the same amounts in urban areas. However, it is important to note that, in urban areas, richer households on average are charged higher prices for Raskin compared with poorer households.

Table 20: Raskin by Rural/Urban Area and Expenditure Decile

Statistic	Area Type	Deciles on Real Expenditures per capita										All
		1	2	3	4	5	6	7	8	9	10	
Raskin Coverage	Urban	83.27	54.83	48.36	43.83	25.44	19.41	23.21	20.65	16.49	10.17	28.52
	Rural	75.59	83.02	78.09	79.4	82.1	82.2	71.07	64.56	61.61	57.43	74.70
No. of times Raskin bought in past 12 months	Urban	4.00	3.07	4.26	3.13	2.57	2.36	2.37	3.59	2.54	2.58	3.27
	Rural	2.28	2.47	2.62	2.41	2.58	2.33	2.44	2.93	3.23	2.60	2.54
Avg. quantity of Raskin bought per month in the past 12 months	Urban	6.82	5.58	5.98	5.34	5.76	5.55	3.27	5.49	5.53	8.86	5.73
	Rural	4.61	5.72	5.79	5.39	4.62	4.92	4.33	5.14	5.21	4.61	5.09
Amount bought last time	Urban	19.75	24.47	20.67	19.00	29.63	31.43	20.84	18.93	29.91	36.67	23.08
	Rural	26.69	28.62	28.44	29.51	25.05	29.35	25.34	22.77	24.28	25.73	26.97
Price per kg of Raskin	Urban	1,871	2,075	2,186	1,940	2,208	2,274	2,113	2,469	3,060	2,655	2,234
	Rural	2,351	2,118	2,220	2,340	2,094	2,095	2,348	2,273	2,511	1,958	1,722
Market price per kg of rice	Urban	6,852	7,968	7,448	7,701	9,078	6,751	8,059	6,682	7,285	7,702	7,643
	Rural	8,166	8,017	7,811	8,233	8,135	7,929	8,070	8,822	9,143	8,810	6,338
(Raskin price/ market price) X 100	Urban	27.31	26.04	29.35	25.19	24.32	33.69	26.21	36.95	42.00	34.47	27.31
	Rural	28.79	26.42	28.42	28.43	25.75	26.42	29.10	25.76	27.47	22.22	28.79
Average monthly saving due to buying Raskin	Urban	33,953	32,867	31,452	30,773	39,569	24,862	19,461	277,595	23,386	44,709	30,974
	Rural	26,806	33,761	32,392	31,763	27,891	28,712	24,799	33,660	34,563	31,589	23,498
Quality of Raskin	Urban	2.47	2.47	2.33	2.18	2.43	2.30	2.63	2.49	2.33	1.94	2.40
	Rural	2.24	2.27	2.26	2.22	2.25	2.26	2.30	2.39	2.38	2.37	2.28

Note: Expenditures per capita were obtained by dividing average monthly household expenditures by household size and adjusting for spatial price differences by using BPS's official poverty lines. Survey weights applied.

Figure 11: Raskin for Urban Areas by Expenditure Decile

Legend:
- ■ Market price per kg of rice
- ■ Price per kg of Raskin
- — Avg. quantity of Raskin bought per month in the past 12 months
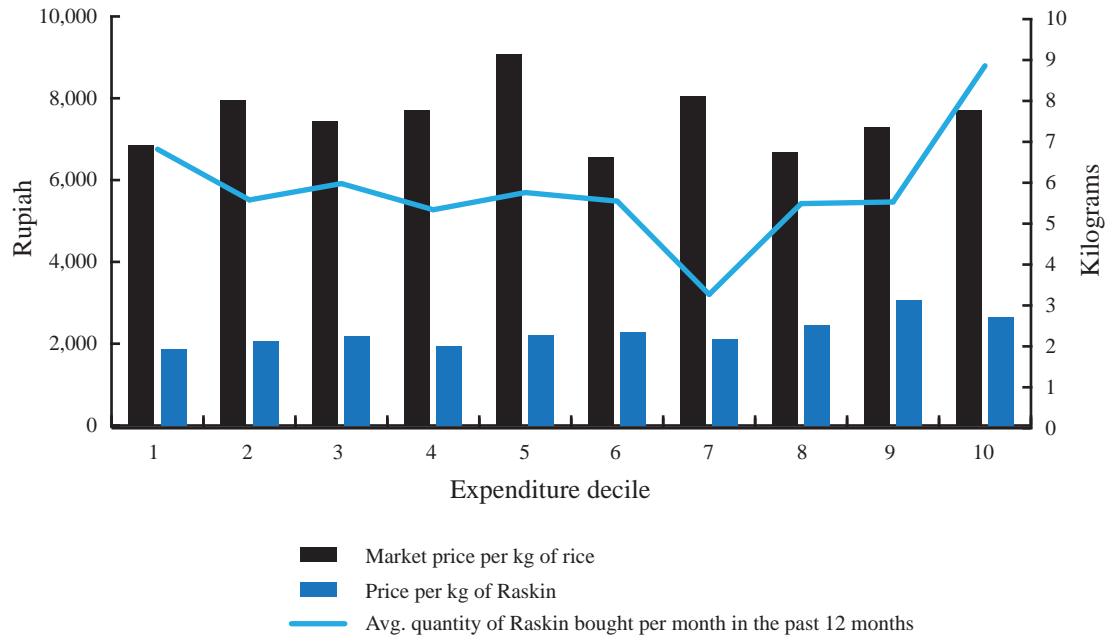
Figure 12: Raskin for Rural Areas by Expenditure Decile

Legend:
- ■ Market price per kg of rice
- ■ Price per kg of Raskin
- — Avg. quantity of Raskin bought per month in the past 12 months
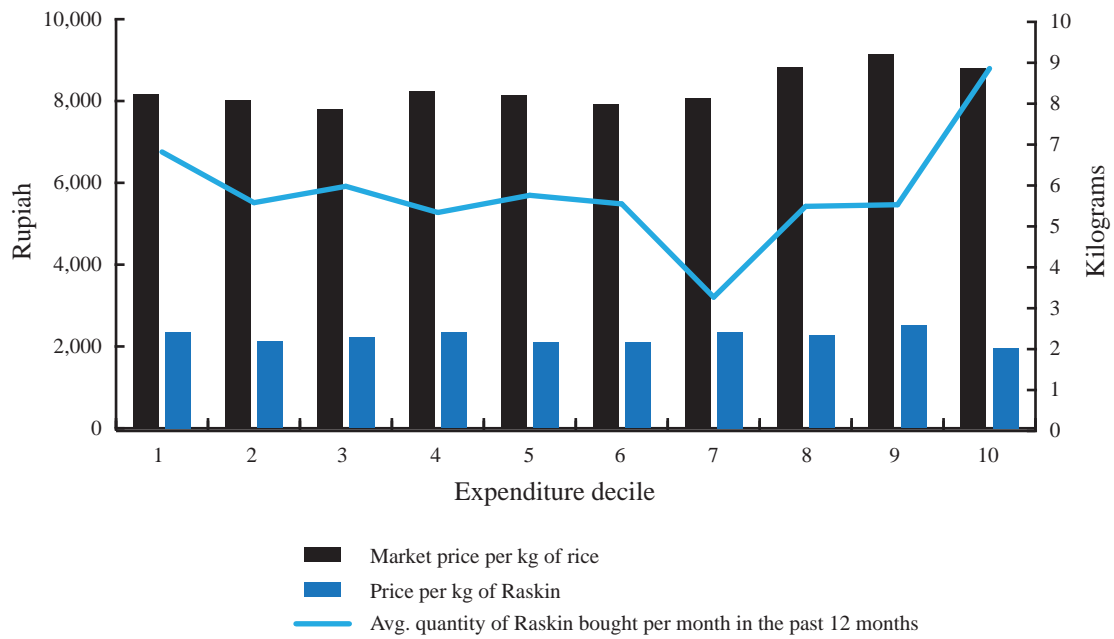
6. Overview of SKTM

Section IV on the determinants of access to Raskin, Kartu Sehat, and BSM showed that the SKTM plays an important role at the local level in determining households' access to social assistance programmes. This section looks more closely at the factors that determine which households receive the SKTM.

Coverage Rates and Poverty

Significant variations exist across provinces in the use and number of SKTM cards issued. Compared with province-specific poverty rates from BPS, we found that, in three provinces (Maluku, Papua, and Papua Barat), significantly fewer SKTM cards had been issued than expected (figure 13). However, household coverage rates of SKTM cards seem to correspond roughly to BPS poverty rates in the remaining four provinces (Kalimantan Timur, Maluku Utara, NTT, and Sulawesi Tenggara). Across all provinces, a small positive correlation exists between provincial poverty rates and the share of households covered by SKTM.

Figure 13: Coverage Rates of SKTM and Poverty Rate by Province
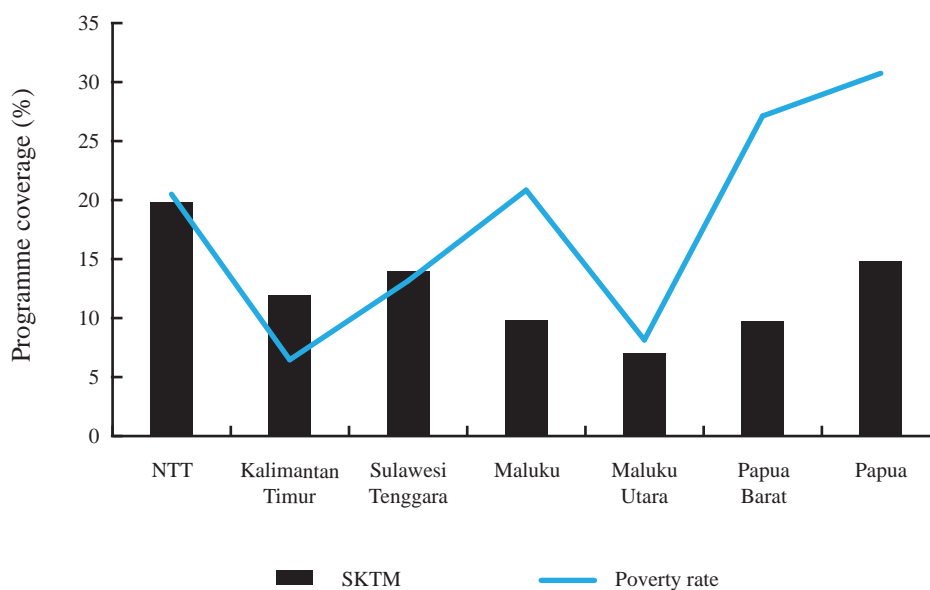
However, a weak positive correlation between poverty rates and SKTM coverage is found at the household level. Using expenditure per capita and asset decile statistics from the IFLS East 2012, we found that SKTM coverage rates do not steadily decrease across either expenditure or asset deciles (figure 14). Given the importance of SKTM in granting access to social assistance programmes, this is quite a worrying finding and suggests that the selection of SKTM beneficiaries is far from perfect.

Figure 14: Coverage Rates of SKTM by Asset and Expenditure Decile
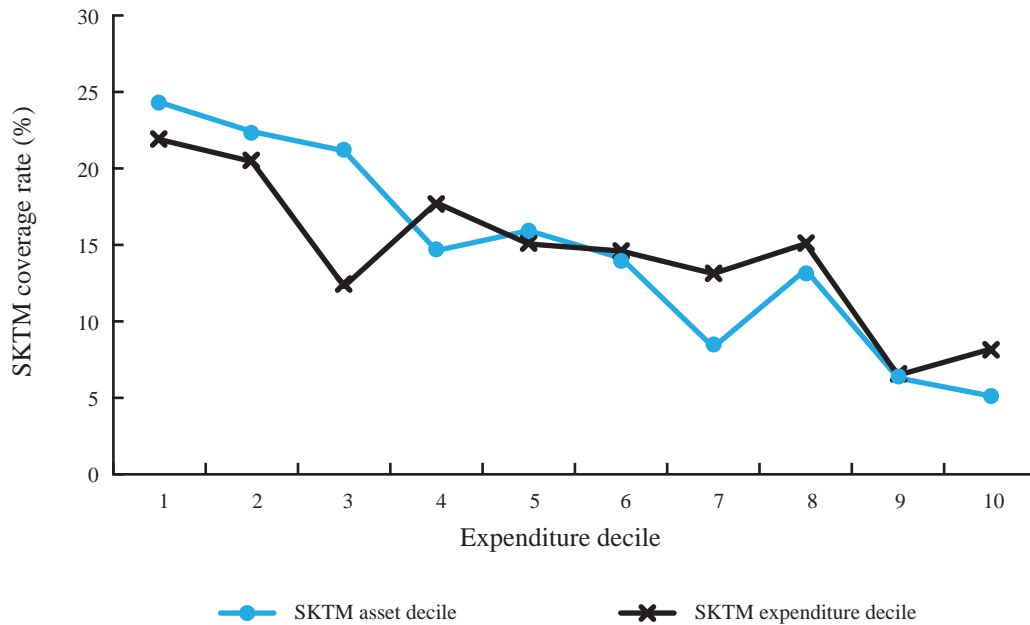
Consistent with the results for Raskin, significant differences exist between rural and urban areas in terms of the selection process of beneficiaries. As shown in figure 15, SKTM coverage rates are more pro-poor in urban areas compared with rural ones. Particularly for rural areas, no significant differences exist in coverage rates across the wealth distribution.

Figure 15: Coverage Rates of SKTM by Rural and Urban Area and Per Capita Expenditure Decile
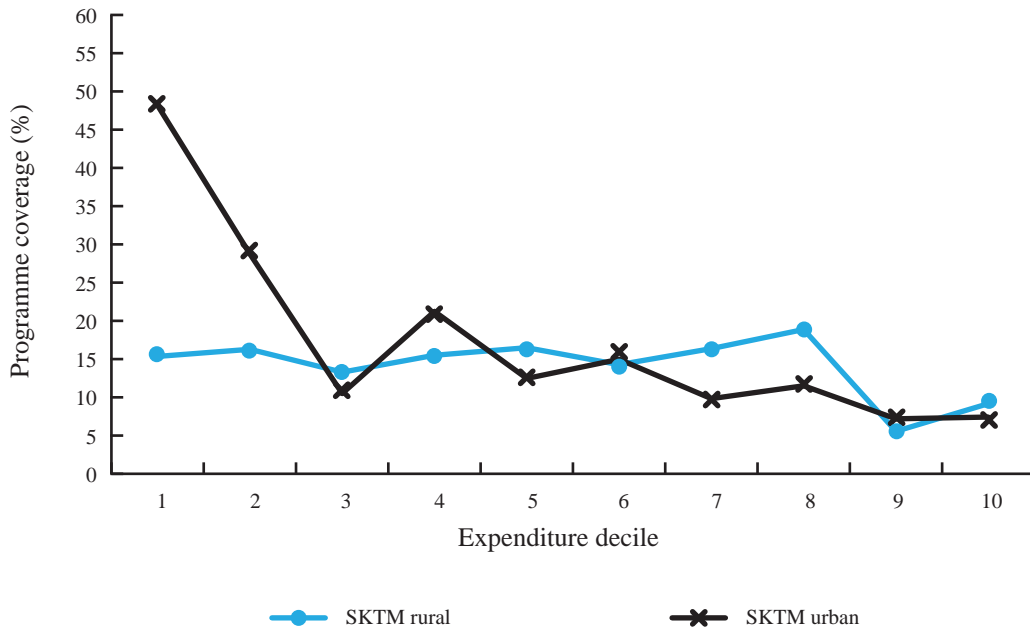
Determinants of Access to SKTM

This section applies the same regression framework as introduced in section IV in the analysis of access to BSM, Kartu Sehat, and Raskin. Therefore, we estimated a linear probability model using an ordinary least square estimator. The dependent variable was whether a household possessed an SKTM (=1) or not (=0). The explanatory variables again fall broadly into the following categories: basic household characteristics, infrastructure, conflict, trust, and poverty.

Basic Household Characteristics

The results show that larger household size is associated with a higher chance of receiving an SKTM. This finding holds for all three samples (overall sample and rural and urban samples) and holds when the poverty indicators (expenditure per capita quintiles) are included in the regression specification. The age structure of a household does not seem to play a role in the allocation of SKTM to households.

Infrastructure

The results show that better access to infrastructure (such as access to electricity or shorter distance to health centres) leads to a higher chance of receiving SKTM. This finding holds both for rural and urban areas. There are different ways of interpreting this finding, and without further research, it is difficult to establish which interpretation is more valid. For example, less developed areas may not use or issue an SKTM as frequently as developed areas. In addition, the allocation of SKTM to households is not optimal, so households that are closer to the seat of the local government may be able to ask for or be considered for an SKTM.

Village Trust and Conflict

The analysis shows that the level of conflict and trust at the local level does not seem to affect a household's chance of receiving an SKTM.

Poverty

In contrast to the analysis of what determines access to BSM, Kartu Sehat, or Raskin, we found that expenditure levels and poverty are not correlated with access to SKTM. These results seem largely driven by the fact that the majority of the IFLS East 2012 sample is drawn from rural areas. For rural areas, we found that access to an SKTM is largely independent of a household's wealth situation, whereas for urban areas, we found that households classified into the poorest expenditure quintile are significantly more likely to have access to an SKTM.

Vulnerable Groups

The descriptive analysis of SKTM coverage rates among vulnerable groups showed that allocation of an SKTM seems uncorrelated with a household belonging to any of the three analysed vulnerable groups. The regression results confirm these findings; after controlling for the wealth level of the household and its sociodemographic characteristics, belonging to a vulnerable group does not have an effect on the likelihood of receiving an SKTM (table 21).

The overall findings on access to SKTM are somewhat worrying. As section IV has shown, possession of an SKTM card plays an important role in accessing social assistance programmes in Indonesia, especially in urban areas. The weak link between the wealth-level indicators (expenditure quintiles) on the one hand and the finding that households are more likely to receive an SKTM if they have better access to infrastructure on the other hand seems to suggest that SKTMs are not optimally distributed and targeted. For rural areas, it might be argued that the particularly weak poverty targeting of SKTM might be less important, as SKTMs seem to play a lesser role in accessing social assistance programmes than in urban areas. Particularly in the case of BSM, teachers and school principals make extensive use of an SKTM as an eligibility criterion for access to BSM in both rural and urban areas. The weak relationship of SKTM to actual expenditure levels seems to suggest that the poorest students are not selected for BSM in the rural areas of the country.

Table 21: Linear Probability Model, Dependent Variable: SKTM (1=yes, 0=no)

| Variable | Baseline Model | Extended Model | | | | Full Model |
		Infrastructure	Trust	Conflict	Poverty	
Age	0.00434	0.00411	0.00381	0.00427	0.00434	0.00373
Age²	–0.000045	–0.000042	–0.000034	–0.000038	–0.000044	–0.000032
Sex (1 if male)	0.00565	0.00571	0.00779	0.00594	0.00642	0.0101
Married	–0.0283	–0.0358	–0.0289	–0.0300	–0.0270	–0.0381
Widow (1 if yes)	–0.0284	–0.0487	–0.0412	–0.0377	–0.0280	–0.0658
Schooling (years)	–0.00323	–0.00356	–0.00310	–0.00289	–0.00264	–0.00288
Muslim (1 if yes)	–0.0258	–0.0361	–0.0336	–0.0337	–0.0266	–0.0469
Christian (1 if yes)	–0.00608	–0.00382	–0.0105	–0.0123	–0.00818	–0.0125
Urban	0.0264	0.0172	0.0262	0.0250	0.0277	0.0149
HH Size	0.0526***	0.0538***	0.0510***	0.0513***	0.0486***	0.0468**
HH Size²	–0.00279***	–0.00281***	–0.00265***	–0.00272***	–0.00253***	–0.00226**
Children under 5 (number)	0.00981	0.0101	0.0128	0.0127	0.00761	0.0102
Children 6 to 15 (number)	0.00220	–0.000886	7.26e-05	0.00206	0.00162	–0.00357
Elderly (number)	0.00132	0.00104	–0.00831	–0.00838	–0.000206	–0.0117
Member of HH disabled (1 if yes)	–0.000360	0.00449	0.00295	0.00313	–0.00169	0.00634
Electricity in HH (1 if yes)		0.0656***				0.0689***
Distance to water source (in minutes)		0.000046*				0.000052*
Distance to health centre (in minutes)		–0.000119**				–0.000110*
Willingness to help villagers			0.00661			0.0129
Trust same ethnicity more			0.0216			0.0232
Being taken advantage of by others			0.0276			0.0280
Violent conflict				0.0352		0.0320
Village safety				0.0150		0.0158
Expenditure quintile 1					0.0447	0.0427
Expenditure quintile 2					0.0149	0.0274
Expenditure quintile 3					0.0227	0.0328
Expenditure quintile 4					0.0359	0.0489
Constant	–0.0313	–0.0713	–0.144	–0.0625	–0.0497	–0.257*
Observations	2,536	2,381	2,398	2,398	2,536	2,255
Adjusted R²	0.042	0.047	0.045	0.042	0.044	0.054

*Note: Robust standard errors used. Significance levels: *** p<0.01, ** p<0.05, * p<0.1. All regressions included province fixed effects. Survey weights applied.*

Table 22: Linear Probability Model, Dependent Variable: SKTM (1=yes, 0=no), Urban Areas

| Variable | Baseline Model | Extended Model | | | | Full Model |
		Infrastructure	Trust	Conflict	Poverty	
Age	0.00450	0.00258	0.00173	0.00313	0.00370	0.000802
Age²	−0.000074	−0.000052	−0.000034	−0.000049	−0.000064	−0.000022
Sex (1 if male)	0.00880	0.0145	0.0151	0.0129	0.0123	0.0267
Married	−0.113*	−0.122*	−0.114	−0.116*	−0.100	−0.110
Widow (1 if yes)	−0.126	−0.179	−0.150	−0.143	−0.121	−0.198
Schooling (years)	−0.0147***	−0.0147***	−0.0138**	−0.0148**	−0.0132**	−0.0126**
Muslim (1 if yes)	0.0775	0.0613	0.0791**	0.0568	0.0607	0.0422
Christian (1 if yes)	0.179***	0.168***	0.182***	0.162***	0.166**	0.157***
HH Size	0.0808***	0.0891***	0.0817***	0.0810***	0.0770***	0.0868***
HH Size²	−0.00405***	−0.00410**	−0.00412***	−0.00412***	−0.00401***	−0.00409**
Children under 5 (number)	0.00521	−0.00238	0.0181	0.0178	−0.00238	0.00688
Children 6 to 15 (number)	−0.00227	−0.0144	−0.00732	−0.00638	−0.00128	−0.0200
Elderly (number)	0.0208	0.0204	0.00113	0.00800	0.0224	0.00574
Member of HH disabled (1 if yes)	−0.0536	−0.0491	−0.0471	−0.0468	−0.0561	−0.0509
Electricity in HH (1 if yes)		0.133*				0.137**
Distance to water source (in minutes)		−0.00003				−0.00003
Distance to health centre (in minutes)		0.00191				0.00113
Willingness to help villagers			−0.0110			−0.0179
Trust same ethnicity more			0.00300			0.00864
Being taken advantage of by others			0.0479**			0.0382*
Violent conflict				0.0438		0.0397
Village safety				−0.0286		−0.0266
Expenditure quintile 1					0.143*	0.121*
Expenditure quintile 2					−0.0115	−0.0168
Expenditure quintile 3					−0.00692	−0.00995
Expenditure quintile 4					0.00848	0.00930
Constant	0.0117	−0.120	−0.0492	0.0735	−0.00289	−0.159
Observations	751	638	696	696	751	594
Adjusted R²	0.111	0.123	0.118	0.113	0.126	0.144

*Note: Robust standard errors used. Significance levels: *** p<0.01, ** p<0.05, * p<0.1. All regressions included province fixed effects. Survey weights applied.*

Table 23: Linear Probability Model, Dependent Variable: SKTM (1=yes, 0=no), Rural Areas

| Variable | Baseline Model | Extended Model | | | | Full Model |
		Infrastructure	Trust	Conflict	Poverty	
Age	0.00768	0.00769*	0.00663	0.00689	0.00779*	0.00669
Age²	–0.000066	–0.000067	–0.000054	–0.000057	–0.000067	–0.000055
Sex (1 if male)	0.00687	0.00381	0.00747	0.00519	0.00803	0.00553
Married	0.0623	0.0506	0.0622	0.0667	0.0599	0.0464
Widow (1 if yes)	0.0398	0.0286	0.0288	0.0320	0.0338	0.00527
Schooling (years)	0.00446	0.00379	0.00396	0.00474	0.00457	0.00343
Muslim (1 if yes)	–0.0131	–0.0210	–0.0216	–0.0258	–0.0193	–0.0365
Christian (1 if yes)	–0.0467	–0.0385	–0.0458	–0.0556	–0.0516	–0.0413
HH Size	0.0165	0.0157	0.0127	0.00765	0.0141	0.00313
HH Size²	–0.000840	–0.000925	–0.000504	–0.000111	–0.000546	0.000204
Children under 5 (number)	0.0187	0.0213	0.0173	0.0164	0.0190	0.0204
Children 6 to 15 (number)	0.0108	0.0115	0.0116	0.0134	0.0107	0.0133
Elderly (number)	–0.00751	–0.0100	–0.0146	–0.0158	–0.00831	–0.0178
Member of HH disabled (1 if yes)	0.0341	0.0359	0.0380	0.0353	0.0358	0.0415
Electricity in HH (1 if yes)		0.0505**				0.0513**
Distance to water source (in minutes)		0.000059*				0.000069*
Distance to health centre (in minutes)		–0.000089*				–0.000093*
Willingness to help villagers			0.0138			0.0304
Trust same ethnicity more			0.0374			0.0338
Being taken advantage of by others			0.0112			0.0180
Violent conflict				0.0245		0.0117
Village safety				0.0478*		0.0428
Expenditure quintile 1					0.0115	0.0115
Expenditure quintile 2					0.0182	0.0354
Expenditure quintile 3					0.0321	0.0410*
Expenditure quintile 4					0.0670	0.0813*
Constant	–0.141	–0.165	–0.246	–0.185	–0.158	–0.405**
Observations	1,785	1,743	1,702	1,702	1,785	1,661
Adjusted R²	0.038	0.046	0.042	0.042	0.042	0.060

Note: Robust standard errors used. Significance levels: *** p<0.01, ** p<0.05, * p<0.1. All regressions included province fixed effects. Survey weights applied.

7. Summary

In the past 15 years, the Government of Indonesia has introduced a variety of social assistance programmes for poor households to alleviate and escape intergenerational poverty. Several of these programmes operate at a very large scale all over Indonesia. Using new data from the IFLS East 2012 household survey, we found that in general all social assistance programmes are targeted towards the poor. Poorer regions seem to receive relatively higher shares of programme benefits and have more beneficiaries, whereas at the household level, we found that poorer households are more likely to receive social assistance benefits than richer households. However, many of the social assistance programmes have scope for improvement in terms of targeting accuracy and actual implementation across and within regions (Alatas et al. 2013a and 2013b, World Bank 2012g and 2012e).

Likewise, we observed remarkable differences in terms of targeting accuracy and access procedures across programmes. For instance, in the case of Raskin, we found that a substantial share of programme benefits go to richer households. However, Raskin implementation processes differ significantly between rural and urban areas, affecting the programme's performance; Raskin is significantly better targeted towards the poor in urban areas compared with rural areas. In urban areas, the poor are more likely to receive Raskin in higher quantities (kg) and at lower prices (Rp) than richer households. In contrast, we found that, in rural areas, richer households are equally as likely to receive Raskin as poorer households and to receive the same Raskin quantities at the same price. Similar findings can be made for other programmes such as BSM and Jamkesmas/Jamkesda, although each of these programmes face their own challenges and shortcomings.

When analysing the determinants of access to social assistance programmes, we found that one of the most important criteria for whether a household receives benefits of a social assistance programme is the possession of an SKTM. Even after controlling for wealth status and demographic, household, geographic, infrastructure, and violent conflict / social trust characteristics, we found that the possession of an SKTM significantly increases the chance of access to social assistance programmes, particularly in urban areas. This analysis finds that poor households are more likely to have received an SKTM than richer households. However, the relationship between expenditure levels and SKTM possession is far from perfect, as many richer households also possess an SKTM. The possession of an SKTM plays a lesser role in access to social assistance programmes within rural areas, except for in the BSM programme in which school principals/teachers identify eligible pupils based on SKTM ownership.

Our analysis further revealed that access to social assistance programmes by poor people is only mildly affected by lack of infrastructure or remoteness. However, this may be due to BPS's Susenas 2010 sampling frame, which was used to collect the IFLS East 2012 data and does not cover some of the remotest areas in the country, thereby biasing these results. Access to some social assistance programmes (in particular Raskin and Kartu Sehat) is partly affected by the level of trust and violent conflict, although a clear causal relationship cannot be established within the existing data. However, this initial analysis of the relationship between violent conflict and access to social assistance programmes suggests that violent conflict of itself does not necessarily result in lower levels of access and availability of social assistance programmes. Raskin allocations in rural areas are more likely to be shared across the entire village in areas with higher levels of violent conflict. This finding suggests that the benefits of social assistance programmes might be used to mitigate tensions or to avoid aggravating tensions. However, we did not find similar effects in the operation of BSM or Jamkesmas/Jamkesda.

Furthermore, the findings suggest that vulnerable groups, in particular households with a disabled member and those in which the household head is a widow(er), are more likely to be included in certain social assistance programmes such as BLT, BSM, Kartu Sehat, and Raskin, because vulnerable households are more likely to be poor and have a higher share of elderly household members. Once we controlled for the economic and sociodemographic composition of households, we did not observe any additional effect of having a disabled household member or widow(er) as the household head on access to social assistance programmes.

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Appendix

Table A.1: Description of the Social Assistance Programmes Covered in IFLS-East 2012

Programme	Description
Raskin	The Raskin programme is a national programme intended to help poor households in meeting their food needs and reducing their financial burdens through subsidised rice.
Kartu Sehat	Health Cards for the Poor; also referred to as the Jamkesmas or Health Card. If the household has the Jamkesda card, it is also likely to be included in the Kartu Sehat programme.
Dana Sehat	Community-based programme for health funds.
BLT Card	Temporary unconditional cash transfer; designed to supplement consumption for poor households facing unprecedented price increases.
BLSM Card*	Card entitling holder to BLSM transfers, unconditional cash transfers for the poorest Indonesian households.
BSM	Cash transfer for poor students; transfers of cash payments once enrolment, attendance, and other criteria have been verified.
JSLU†	Social cash transfer for the elderly.
Disability Benefit	Jaminan Sosial Penyandang Cacat cash transfer for individuals with very severe disability or disabilities.
PKSA	Social cash transfer for disadvantaged children.
Troubled Youth	Program Bantuan Santunan Anak Muda Bermasalah. This programme provides benefits to a variety of children belonging to so-called vulnerable groups, such as street children, children with disabilities, etc.
SKTM	Poverty letter entitling recipient to various social benefits.

Note: Information on Raskin can be obtained from World Bank (2007); on Kartu Sehat from World Bank (2012c); on the BLT card from World Bank (2012b); on the BLSM card from World Bank (2013); on BSM from World Bank (2012a); on JSLU/ASLUT from World Bank (2012d); and on SKTM from Sparrow, Suryahadi, and Widyantil (2010).

* BLSM stands for Bantuan Langsung Sementara Masyarakat (unconditional cash transfers).

† JSLU (Jaminan Sosial Lanjut Usia or old-age insurance) changed its name to ASLUT in 2013.

Table A.2: Coverage Rates of Social Assistance Programmes in the IFLS East 2012 by Province

Province	Raskin (%)	Kartu Sehat (%)	Dana Sehat (%)	BLT Card (%)	BLSM Card* (%)	BSM (%)	JSLU† (%)	Disability Benefits (%)	PKSA (%)	Troubled Youth Programme (%)	SKTM (%)	Poverty Rate (%)
NTT	72.83	59.38	2.89	34.55	0.00	12.16	0.26	0.00	0.46	0.00	19.80	20.41
Kalimantan Timur	24.95	12.76	4.00	7.63	0.00	1.95	1.01	0.00	0.77	0.26	11.91	6.38
Sulawesi Tenggara	71.90	37.65	3.19	17.77	0.29	4.55	0.26	0.00	0.00	0.00	13.98	13.06
Maluku	74.67	31.54	0.63	27.57	0.24	10.02	0.26	0.24	0.13	0.00	9.79	20.76
Maluku Utara	46.88	15.02	2.25	10.78	0.00	4.79	0.27	0.35	0.00	0.95	6.99	8.06
Papua Barat	54.35	42.60	2.32	29.76	0.00	12.40	0.59	0.00	0.37	0.00	9.68	27.04
Papua	48.55	31.93	3.55	18.84	0.00	1.45	0.26	0.35	0.26	0.00	14.77	30.66
All provinces	54.12	34.43	3.10	20.64	0.06	5.97	0.36	0.11	0.38	0.12	14.21	–

Note: Survey weights applied.

* BLSM stands for Bantuan Langsung Sementara Masyarakat (unconditional cash transfers).

† JSLU (Jaminan Sosial Lanjut Usia or old-age insurance) changed its name to ASLUT in 2013.

Table A.3: Coverage Rates of Social Assistance Programmes in the IFLS East 2012 by Province and Expenditure Quintile

Province	Expenditure Quintile	Raskin (%)	Kartu Sehat (%)	Dana Sehat (%)	BLT Card (%)	BSM (%)	SKTM (%)
NTT	1	75.52	77.44	4.31	54.21	14.37	21.96
	2	78.35	72.53	6.46	38.08	3.31	19.32
	3	83.72	79.89	3.02	30.34	12.65	14.56
	4	82.71	53.24	0.00	39.09	23.38	24.57
	5	68.47	62.57	2.33	31.42	4.57	20.02
Kalimantan Timur	1	70.72	24.33	0.00	27.80	0.00	39.22
	2	45.30	37.68	6.73	14.74	0.00	24.80
	3	35.49	23.23	9.15	18.55	6.36	19.55
	4	33.55	26.77	6.27	6.82	6.82	14.34
	5	24.73	5.67	4.46	0.00	4.73	14.57
Sulawesi Tenggara	1	91.05	74.42	0.00	13.19	8.96	24.60
	2	95.34	59.28	3.37	32.06	6.83	26.22
	3	89.86	35.86	7.79	17.92	3.54	10.38
	4	84.17	39.95	5.38	28.04	0.00	5.00
	5	83.24	28.34	1.99	22.73	7.11	18.30
Maluku	1	84.16	41.62	0.00	33.53	26.84	14.65
	2	93.02	35.06	0.00	45.66	14.69	9.67
	3	87.44	41.28	0.00	31.55	5.71	3.67
	4	79.45	49.23	0.00	22.66	2.34	20.92
	5	80.59	31.48	1.84	25.01	7.42	7.41
Maluku Utara	1	81.36	17.72	0.00	16.80	9.36	5.44
	2	79.15	26.71	2.29	9.75	4.44	2.29
	3	82.90	30.73	0.00	30.35	10.56	2.47
	4	62.52	9.35	1.68	8.71	15.54	10.35
	5	58.76	27.21	2.74	26.95	0.00	7.37
Papua Barat	1	82.49	45.26	6.67	40.25	24.48	6.41
	2	69.99	43.19	0.00	18.49	6.53	12.04
	3	63.48	53.41	0.00	35.89	23.32	8.46
	4	62.77	38.96	2.77	51.78	13.43	17.34
	5	66.34	53.88	1.92	20.21	13.00	10.10
Papua	1	67.83	46.17	0.00	32.86	0.00	16.19
	2	50.21	52.72	10.40	55.66	0.00	37.38
	3	58.74	53.38	0.00	12.66	0.00	6.77
	4	78.31	46.43	9.59	30.42	2.44	23.33
	5	53.00	40.59	0.00	19.64	0.00	13.05

Note: Expenditures per capita were obtained by dividing average monthly household expenditures by household size and adjusting for spatial price differences by using BPS's official poverty lines. Survey weights applied.

Table A.4: Description of Variables Used in the Construction of the Asset Index

Variable Name	Variable Type	Description
House, land	Dummy (1 if yes; 0 if no)	Whether the household owns the house/apartment in which the household lives
Other building	Dummy (1 if yes; 0 if no)	Whether the household owns any additional houses/apartments apart from the one in which the household is living
Vehicles	Dummy (1 if yes; 0 if no)	Whether the household owns any vehicles, that is, cars, boats, bicycles, or motorbikes
Appliances	Dummy (1 if yes; 0 if no)	Whether the household owns any household appliances
Furniture	Dummy (1 if yes; 0 if no)	Whether the household owns any furniture
Kitchen in house	Dummy (1 if yes; 0 if no	Whether the house has a kitchen inside
Access to electricity	Dummy (1 if yes; 0 if no)	Whether the house has access to electricity
Living area per capita	Continuous (m²)	The size of the housing area in square meters divided by the number of household members
No. of Rooms per capita	Continuous	Number of rooms in the house divided by the number of household members
Floor of house	Cardinal (scale from 1 to 6: 1. ceramic/marble/granite/stone; 2. tiles/terrazzo; 3. cement/bricks; 4. lumber/board; 5. bamboo, 6. dirt)	Main material of the floor of the house
Walls of house	Cardinal (scale from 1 to 3: 1. masonry (cement/prefabricated bricks); 2. lumber/board/plywood; 3. bamboo/woven/mat)	Material used in outer walls of the house
Roof of house	Cardinal (scale from 1 to 6: 1. concrete; 2. wood; 3. metal plates; 4. roof tiles/shingles; 5. asbestos; 6. foliage/palm leaves/grass/bamboo)	Main material used for roof of the house
Source drinking water	Cardinal (scale from 1 to 9: 1. pipe water; 2. well water w/pump; 3. well water [no pump]; 4. spring water; 5. rain water; 6. river or creek water; 7. pond, fish pond; 8. water collection basin; 9. aqua/air mineral)	Main source of drinking water in the household
Sewage disposal	Cardinal (scale from 1 to 9: 1. drainage ditch [flowing]; 2. drainage ditch [stagnant]; 3. permanent pit; 4. disposed into river; 5. disposed of in yard; 6. pond; 7. hole; 8. paddy field; 9. sea, beach)	Type of sewage disposal in the house
Garbage disposal	Cardinal (scale from 1 to 9: 1. disposed of in trash can, collected by sanitation service; 2. Burned; 3. Disposed of in river/creek; 4. disposed of in yard and left to decompose; 5. disposed of in pit; 6. forest, montane; 8. sea, lake, beach; 9. paddy field)	Type of garbage disposal in the house

Table A.5: Description of Variables Used in the Regression Analyses

Specification	Variable	Description
Baseline Model	Age	Age of household head; continuous variable
	Age²	Age of household head squared; continuous polynomial
	Sex	Sex of household head; dummy variable: 1 if male / 0 if female
	Married	Marital status of household head; dummy variable: 1 if married / 0 if not
	Schooling (years)	Proxy for education level of household head; continuous variable
	Muslim	Religion of household head; dummy variable: 1 if Muslim / 0 if not
	Christian	Religion of household head; dummy variable: 1 if Christian / 0 if not
	Urban	Area type household is located in; dummy variable: 1 if urban / 0 if rural
	HH Size	Number of household members; continuous variable
	HH Size²	Number of household members squared; continuous polynomial
	Children under 5 (number)	Number of children aged 5 or less in household; continuous variable
	Children 6 to 15 (number)	Number of children aged 6 to 15 in household; continuous variable
	Elderly (number)	Number of elderly aged 60 or more in the household; continuous variable
	HH member is disabled	At least 1 household member has a disability: 1 if yes / 0 if not
	Widow	Household head is widow/widower: 1 if yes / 0 if not
Extended Model: Infrastructure	Electricity in HH	Provides information on whether household has electricity; dummy variable: 1 if yes / 0 if not
	Distance to water source	Distance from the household to the nearest health centre; continuous variable: measured in minutes
	Distance to health centre	Distance from the household to the nearest water source; continuous variable: measured in minutes walking

Table A.5: Description of Variables Used in the Regression Analyses (continued)

Specification	Variable	Description
Extended Model: Village Conflict and Trust	Willingness to help villagers	Provides information on the degree to which the household head indicated s/he agreed (on a scale of 1 to 3 where 1 indicates disagree, 2 agree, and 3 strongly agree) with the following statement: I am willing to help people in this village if they need it; ordinal variable
	Trust same ethnicity more	Provides information on the degree to which the household head indicated s/he agreed (on a scale of 1 to 3 where 1 indicates strongly agree, 2 agree, and 3 disagree) with the following statement: I trust people with the same ethnicity as mine more; ordinal variable
	Feeling taken advantage of by others	Provides information on the degree to which the household head indicated s/he agreed (on a scale of 1 to 3 where 1 indicates strongly agree, 2 agree, and 3 disagree) with the following statement: In this village I have to be alert or someone is likely to take advantage of me; ordinal variable
	Violent conflict	Provides information on the degree to which the household head indicated s/he feels safe in the village given a scale of 1 to 4 (1 = very safe and 4 = very unsafe); ordinal variable
	Village safety	Provides information on whether violent conflicts have occurred in the village in the 12 months preceding the survey; dummy variable: 1 if yes / 0 if not
Extended Model: Poverty	Expenditure quintile 1	Variables indicating the per capita real expenditure quintile the household belongs to; 4 dummy variables: quintile 1 is the poorest quintile and quintile 5 (used as a reference category) is the richest.
	Expenditure quintile 2	
	Expenditure quintile 3	
	Expenditure quintile 4	
	SKTM	Household possess an SKTM card: 1 if yes / 0 if not

In the past 15 years, the Government of Indonesia has implemented a variety of social assistance programmes intended to improve the lives of the poor and help them escape poverty. Many of these programmes are now operating at a national scale and cover millions of Indonesians.

Using a new household survey dataset that covers the eastern areas of Indonesia (Indonesian Family Life Survey East 2012), this paper investigates the household-level determinants of access to social assistance programmes. The analysis reveals that social assistance programmes are relatively more available in poorer provinces and that poorer households—all things being equal—are more likely to access social assistance programmes than nonpoor households, which suggests that social assistance programmes in eastern Indonesia are successful in their efforts to target the poor (poverty targeting), both across regions and households. However, poverty targeting still has scope for improvement in terms of accuracy.

Besides the poverty status (as measured in per capita consumption expenditures), the authors found that several other factors influence programme access. Having a disabled household member or having a household head who is a widow(er) appears to increase the likelihood of receiving social assistance programmes. Likewise, the level of trust and conflict in a community affects access to social assistance programmes. Particularly in the case of Raskin, we found that the programme is distributed more widely among those communities that are characterized by higher levels of conflict and lower levels of trust. The authors did not find that poor access to infrastructure and remoteness influences household access to social assistance programmes once they controlled for province fixed effects in the regression framework. Furthermore, the findings suggest that possession of a local 'poverty letter' strongly improves household access to social assistance programmes, even after controlling for a wide set of socioeconomic characteristics. In general, determinants of programme access differ significantly among provinces and between rural and urban areas.