Income Distribution and Poverty in Indonesia

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I. Introduction

More equitable distribution of income, and alleviation of poverty, have consistently been some of the major objectives of economic planning in Indonesia. Repelita III outlines eight "paths to equal distribution" including "equal access to basic human needs, particularly clothing and shelter." To what extent distribution oriented plans and policies have been effective in redistributing income and alleviating poverty in Indonesia during the last about 25 years are the issues to be examined in this paper.

II. Income Distribution

In the past, due to the absence of systematic data on income classes, studies on income distribution used indirect variables such as data on consumer surveys, wages, prices, consumption patterns, to analyse the share of different income classes on marco level. Also, generalization on the country as a whole were made on the basis of micro level studies conducted in different parts of the country on poverty, land ownership and cultivation patterns, etc.

Recently, Biro Pusat Statistik Indonesia has published data on distribution of population by provinces and also for the country as a whole, on the basis of expenditure and income classes. Also, data on income and expenditure distribution, according to decile

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Table 1

PERCENTAGE OF EXPENDITURE DISTRIBUTION IN INDONESIA BY DECILE GROUPS 1976-81

Decile	Percent Share in Total Expenditure											
	1976			1978			1980			1981		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Lowest	3.38	3.96	3.50	2.85	3.30	2.81	3.08	3.55	3.28	3.20	3.70	3.33
Second	4.54	4.48	4.53	3.85	4.86	4.48	4.23	4.89	4.44	4.32	5.08	4.59
Third	5.21	6.39	5.65	4.89	5.30	4.59	5.51	6.0	5.40	5.38	5.98	5.68
Fourth	6.51	6.39	5.88	5.81	6.42	6.25	5.84	6.73	6.43	6.99	7.51	6.38
Fifth	7.20	7.77	7.83	7.16	7.34	6.71	7.33	7.61	7.63	7.39	7.56	7.25
Sixth	8.45	8.84	8.18	7.54	8.67	8.05	9.04	9.52	8.32	7.47	9.06	8.19
Seventh	10.17	10.24	10.09	9.43	9.90	9.63	9.45	9.61	9.91	10.29	9.76	10.73
Eighth	11.65	11.96	11.86	12.26	12.32	12.14	11.47	12.26	12.32	11.74	13.03	11.09
Ninth	15.68	15.42	15.22	17.49	15.14	14.86	15.59	15.71	14.44	14.40	13.42	14.52
Tenth	27.29	24.55	27.26	28.72	26.75	30.48	27.96	24.12	27.83	28.82	24.90	28.24
Lowest 40%	19.64	21.22	19.56	17.40	19.88	18.13	21.74	21.17	19.55	19.89	22.27	19.98
Middle 40%	37.48	38.81	37.96	36.49	38.23	36.53	37.79	39.0	38.18	36.89	39.41	37.26
Upper 20%	42.97	39.97	42.48	46.21	41.89	45.34	43.55	39.83	42.27	43.22	38.32	42.76
Gini Ratio	0.35	0.31	0.34	0.38	0.34	0.38	0.36	0.31	0.34	0.35	0.30	0.34

Source: Biro Pusat Statistik, *Statistik Indonesia*, Jakarta, Indonesia, 1983

Table 4

PATTERN OF INCOME DISTRIBUTION IN INDONESIA 1976-1978
PROPORTION OF INCOME RECEIVED BY INCOME CLASSES

Population/Classes	1976			1977			1978		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Lowest 40 percent	14.86	12.60	11.88	14.76	11.29	10.76	13.92	11.42	11.08
Middle 40 percent	36.17	35.88	34.77	35.62	33.76	33.25	36.40	34.68	34.60
Upper 20 percent	48.98	51.52	53.35	49.62	54.95	55.99	49.68	53.89	54.32
Gini coefficient—									
Household	0.432	0.474	0.492	0.440	0.512	0.521	0.444	0.498	0.504
Per capita	0.416	0.462	0.473	0.436	0.496	0.504	0.407	0.476	0.474

Sources: Biro Pusat Statistik, *Tingkat dan Perkembangan Distribusi Pendapatan Rumah Tangga 1976-78*. Jakarta, 1983.

tent with the generally accepted notion of comparatively greater propensity to consume by lower income classes. In terms of their shares in expenditure and income, rural poor (lowest 40 percent) seem to have higher share in expenditure, although they were comparatively worse of than the urban poor in terms of their share in income. This might be due to greater amounts of in kind self produced goods and services consumed by rural poor than their urban counterparts. As regards changes in patterns of distribution overtime, it is important to note that figures in Tables 2 and 5 are not strictly comparable, because they pertain to different time periods. An examination of changes in degree of inequality in expenditure patterns (from figures in Table 3) during 1964-65 and 1981, we find that while the degree of inequality declined in case of rural population, it remained rather constant for urban population. As regards the distribution of income (Table 4) inequality increased among rural and decreased for urban population during the years 1976-1978. However, we would put more reliance on the figures on expenditure pattern for the reasons stated earlier.

There are some interesting aspects of income distribution in Indonesia. Comparing the degrees of inequality in Indonesia with other Asian countries, we find that Indonesia has one of the lowest degree of inequality as shown by Figures in Table 6:

Also comparing the urban/rural income ratios, Indonesia had one of the lowest ratios among the developing countless (Table 7) during 1976. Though, as we will discuss in a later section, the ratio between urban to rural income has increased during eighties. This ratio for Indonesia may still, however, be one of the lowest among the developing countries.

The main explanation for the comparatively favorable ratio for rural sector, lies in the pattern of growth in income in Indonesia since 1970. A high proportion of the Indonesian gross national product was contributed by exports of raw materials which originated mainly in the agricultural-rural sector.

III. Magnitude of Poverty in Indonesia

There are several studis on estimating the magnitude of poverty in Indonesia on both the absolute as well as relative basis. One

often quoted study is by Sajogyo (Penny and Singarimbun) who defined 'poverty threshold' in terms of annual per capita consumption levels in rice equivalents (320,240 and 180 kilograms in rural areas, and 480,360 and 270 kilograms in urban areas in both Java and outside Java respectively). Using data from SUSENAS for 1970 and 1976, Sajogyo estimated magnitude of poverty as in Table 8.

Table 8

SAJOGYO'S ESTIMATES ON LEVEL AND TRENDS OF POVERTY IN INDONESIA 1970-76

Poverty Thresholds (annual Per Capita Expenditures in rice equivalent)	1970		1976	
	% of Total	Number (millions)	% of Total	Number (millions)
Java-Urban				
Poor (480 kg)	55.90	7.13	42.50	6.89
Very Poor (360 kg)	43.70	5.37	28.49	4.62
Destitute (270 kg)	26.05	3.32	17.75	2.88
Java-Rural				
Poor (320 kg)	61.00	37.97	58.60	40.48
Very Poor (240 kg)	39.49	24.58	39.78	27.48
Destitute (180 kg)	20.93	13.03	24.95	17.24
Outside Java-Urban				
Poor (480 kg)	61.44	4.43	43.51	4.12
Very Poor (360 kg)	38.96	2.81	27.13	2.57
Destitute (270 kg)	20.78	1.50	14.55	1.38
Outside Java-Rural				
Poor (320 kg)	44.80	15.77	41.65	16.83
Very Poor (240 kg)	27.78	9.78	25.83	10.44
Destitute (180 kg)	15.01	5.28	14.44	5.83

Source: Sajogyo, "Garis Kemiskinan dan Kebutuhan Minimum Pangan," *Kompas*, 18 XI, 77, Jakarta.

Sajogyo found that although the proportions of the population below different poverty thresholds had decreased between the years 1970-76 in almost all cases, the proportions classified as very poor and destitute had, in fact, increased in rural Java. Moreover,

portion of population consuming calories less than the recommended minimum. A FAO study (Nicol) attempted to estimate to estimate caloric intake by different expenditure classes using SUSENAS data for the years 1969-70. The study estimated that in rural Java, about 57 percent of households spent less than Rp 1,000 per capita per month providing them with per capita energy of protein consumption of 1,400 calories and 30 grams of protein, which is well below the medically accepted minimum standards. Average energy and protein consumption was higher in outer islands than in Java, but again it appeared that the households in the lowest expenditure classes did not get adequate nutritive food intake. An estimated 28 percent of house holds in the rural outer islands were spending less than Rp 1,000 per month which could provide them with only 1,560 calories and 37 grams of protein each day on the average.

We shall now refer to some micro level studies on poverty based on expenditures and income levels. Sajogyo (1981a) studied the economic condition of the poorest 40 percent of the population in the rural areas in the Central and East Java for the period 1969-70 and 1976 and found that their lot had worsened during this period. In terms of the total caloric intake, it had declined by 27 percent from 1826 to 1339 per capita daily. Leon Mears (Mubyarto, Sajogyo and Tjondronegoro) found in 1976 that "per capita calorie availability from various food grains; rice, corn and cassava appear to be no higher in 1975 than it was in 1960." This phenomenon was explained on the basis that "incomes have not risen for the lower income individuals who might have been expected to consume more calories as their income rose."

In 1975, David Gibbons, Rudolphe De Koninck and Ibrahim Hasan analysed the effect of green revolution on farmers in villages of Aceh in Northern Sumatra (Gibbons, Konnick and Hasan). Their sample contained 87.1 percent pady farmers, 7.3 percent rubber growers and the rest; 4.6 percent were engaged in mixed farming. Their analysis estimated the extent and nature of poverty in Aceh. 62 percent farmers reported that their income was insufficient to meet the basic needs of their families, 38 percent indicated that their income was just enough, while only 1 percent found their income more than adequate. Taking 10.7 kilogram of rice per capita as the minimum adequate requirement, the study of found that 89.5 percent of the rice and rubber farmers

were poor (Esmara). They constituted 56.5 percent of rural population in Java, and 26.3 percent in outside Java. As regards urban population, 18.1 percent and 11.8 percent lived in Java and outside Java respectively. The total poor population in Indonesia, thus, consituted 53 million or about 40 percent of total population. Java has a higher incidence of poverty: with 55 percent of all households, the island had 77 percent of poor households and only 25 percent of rich households. The regions with high concentration of poor are Lampung, West Kalimantan, Central sulawesi, North Sulawesi, West Java, Central Java, Yogyakarta, East and West Nusa Tenggara. These regions have 51 percent of the total population with only 41 percent of the gross domestic product (Sajogyo, 1981b).

The poor in Indonesia suffer from some demographic disadvantages. Firstly, incidence of poverty among children under 10 years of age is significantly higher than that for the population as a whole. In Java, while the incidence of poverty among the urban and rural population is 18.1 and 56.5 percent respectively, the comparable figures are 24.5 percent and 61.9 percent for children age 6-9 respectively. Moreover, poor households have more people to supprot than the non-poor households. Greater incidence of poverty among children have serious adverse consequences for wellbeing of future generations in the nation. The higher dependency ratio among poor households explains higher proportion of income being consumed or the lower rates of households savings or capital formation.

The poor households also suffer from some social disabilities. Some of such social indicators may be noted; Households headed by women are more likely to be poor than the ones headed by men; Female headed households face higher incidence of poverty when she is widow or divorced than when single; The incidence of poverty rises with the age of household head; The incidence of poverty is inversely related to the level of eduational attainment of the head of household. These social disabilities need to be kept in view while adopting appropriate public policies for eradicating poverty. It would take longer and greater efforts to reduce the type of poverty that is indicated by these factors since such a poverty does not easily diminish with general level of economic development. Such sociological factors give rise to 'hard core' poverty which tend to be immune from economic growth.

Table 10

INCIDENCE OF POVERTY AMONG AGRICULTURAL HOUSEHOLDS 1978

Sector	Java		Outer Islands	
	Urban	Rural	Urban	Rural
Agriculture	40.6	54.3	21.8	24.2
Workers	64.6	58.6	37.2	31.8
Own Account Workers	15.4	47.2	22.8	22.4
Own Account Worker & Worker	37.4	60.8	10.0	24.9

Source: SUSENAS 1978 (May round), Biro Pusat Statistik, Jakarta.

agricultural workers or landless agricultural labor. While in 1971, 41 percent of the households owned no or virtually no land, in 1973 the figure increased to 46 percent. The corresponding figure for the rural Java was 57 percent. This does not include those unknown number of tenants and other families operating farms more than 0.1 hectare but who have been reduced to defect laborers by moderniation. Assuming that a farm family which operates less than 0.7 hectare would be in "non-sufficient" (tidak cukup) category then more than half of rural families would fall under the very poor condition (Mubyarto). The pattern of farm ownership is becoming more unequal over time. The Gini Coefficient of land ownership increased from 0.50 in 1960 to 0.55 in 1973. The key factor for alleviation of rural poverty lies in providing more nonfarming jobs to absorb the increasing rural population form the increase in population and also form labor displacement from technological advancement, in addition to providing supplementary work to the existing underemployed rural labor hosueholds. This is a stupendous task indeed!

The urban poor are highly diversified on the basis of their occupations and sources of income. They include agricultural workers, (on farm lands on urban fringes), petty traders, becak drivers and handicraft workers. The following are the major indicators of incidence of urban poverty in Indonesia.

Though both in money and real income and expenditures the urban poor classes registered some increase during 1970-76 (290 percent and 36 percent increases in money and real per capita ex-

tilizers, irrigation, eradication of pests and disease, and a better overall method of cultivation and harvesting and milling). For example in place of the traditional small ricecutting knife (ani-ani) and the system of volunteer labor paid in kind (the derep system), the sickle and simpler and more commercial system of harvesting (the tebasan system) have been used. There has been change in the system of rice milling-hand pounding of rice has been replaced by machine milling. In a period of 2 years (1971-73), the hand pounding of rice was estimated to have dropped from 80 percent to between 10-15 percent of the total (Mubyarto). These technological changes and use of new inputs and farm practices have had serious effect of the peasantry. Firstly, it has displaced lot of workers. It is estimated that where as the 1971 rice crop, would employ 399,900 full time workers through hand pounding, using rice mills-small and large, would employ only 200,000 and 33,000 workers respectively. It is estimated that with the introduction of rice milling, half of the jobs held by women for pounding rice have been lost. The use of the sickle in harvesting has reduced sizeable number of manhours. All this has lead to the displacement of labor, contributing further to the already accentuating under-employment problem among rural work force and reduction in real paid-out labor wages. For instance, during the period 1971-76, the index of real paid-out labor cost in rice cultivation feel from 100 in 1971 to 84 and 72 in Java and outer Islands respectively. Whereas, new technology and improved farm practices and inputs have been profitable to land owners in general, the same have had adverse effect on the farm labor and rural poor. The introduction of technology has also had its adverse effect in the industrial sector — both large and small scale industries. An ILO study[5] has estimated that during 1966-1971, while the production of textile cloth rose from 250 to 600 million meters, more than half of its work force lost jobs. About 20 percent of the worker employed in batik handprinting firms lost their jobs during the above period from the introduction of machine printing process. This large scale displacement of workers contributed to the impoverishment of both the rural and urban poor.

How has inflation affected the relative lot of poor? We have the following two sets of figures indicating the effect of rising

[5] International Labour Office, *Role of Textile Industry in the Expansion of Employment in Developing Countries,* ILO, Geneva, 1973, 85-87.

A study of the magnitude and indicators of poverty in Indonesia shows that most of it is 'hard core,' which is generally immune from the 'modernization of agriculture' or 'industrialization,' using capital intensive technology. These policies, as pointed out earlier, rather displace labor force, thus accentuating poverty. Since most of poor are concentrated in pockets of poverty, particularly in some rural regions, as landless workers or marginal farmers: owning tiny and fragmented uneconomic holdings, the crucial policies to imporve their economic condition, would involve gigantic efforts. Employment opportunities should be provided right in the pockets of poverty. Large scale migration of families from overpopulated to relatively thinly populated areas, with greater employment potential, should be promoted. The former will involve enlarging the scope of kabupaten public works programs, developing cottage and small scale industries on massive scale, using indigenous labor and raw materials and providing more funds for Inpres projects: establishing community health centers, providing drinking water facilities in villages, greening through re-forestation. The latter policies involve promoting transmigration policies on large scale by providing the needed social economic incentives to redistribute population all over the country. We are fully cognizant of extremely difficult social and economic problems implicit these massive programs and large magnitude of the required outlays. The expenditure involved in providing productive employment to rural unemployed poor should, however, be viewed as social cost which the society has to incur for tremendous social gain which will accrue from the alleviation of the pressing problem of poverty.

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