

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 macro 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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groups, have been made available.¹ Firstly, we give below data on distribution of consumption expenditure and analyse the same for discerning the pattern of income distribution.

The figures in Table 1 give data on the share of different decile groups in the total consumption expenditure during the years 1976, 1978, 1980 and 1981. In Table 2, we have grouped the expenditure data on deciles into three classes: Lowest 40 percent, Middle 40 percent and Upper 20 percent and computed changes in their respective shares during the period 1976-81. An analysis data would show that the share of the lowest 40 percent of population increased, though little: 2.15 percent. Within this group, however, the rural component fared relatively better than the urban. Their share registered an increase of 4.95 percent from 21.22 percent in 1976 to 22.27 percent in 1981. The share of the 40 percent middle group declined somewhat: 1.57 percent for the urban population and gained little (1.54 percent) for the rural population. The share of the upper 20 percent of the population, registered a minor (0.6 percent) increase from 42.48 to 42.76 percent with the urban component faring better than the rural. The decline in the proportion of expenditure by rural rich and an increase in the case of their urban counterpart should be expected. Firstly, in the case of upper brackets, non-agricultural or industrial assets would be a major source of income and secondly and more importantly, rich household would prefer to live in urban areas, even if their source of income might be agricultural. However, for the country as a whole, figures on the estimates on Gini Ratios for the period 1976-81 (Table 1) surprisingly show, almost constant figures indicating constant shares. As regards the distribution of total expenditure in the rural sector, the degree of inequality declined as indicated by decline in the Gini ratios during 1976-81. It may be pointed out that Anne Booth and R. M. Sundrum had estimated almost similar results on the Gini coefficients, for both the urban and rural population for earlier years 1964-65 and 1972 (Sundrum and Booth) as shown in Table 3 below.

The Indonesian Governments has recently published statistics on the distribution of income, according to decile groups, for rural and urban population, which throws light on the existing

1. BPS (Biro Pusat Statistik), Indonesia, *Statistik Indonesia*, BPS, 1983.

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 2
CHANGES IN SHARE IN TOTAL EXPENDITURE
BY EXPENDITURE CLASSES 1976-1981

Population/Classes	Percent Change 1976-81		
	Urban	Rural	Total
Lowest 40 percent	1.27	4.95	2.15
Middle 40 percent	1.57	1.54	1.84
Upper 20 percent	0.6	-4.1	0.6

Source: Computed

Table 3
GINI COEFFICIENTS OF EXPENDITURE IN
INDONESIA BY SECTORS DURING 1964-1981

	1964-65	1970	1978	1980	1981
Urban	0.35	0.34	0.38	0.36	0.35
Rural	0.35	0.35	0.34	0.31	0.30

Sources: Anne Booth & R.M. Sundrum, "Income Distribution," in Anne Booth & Peter McCawley, *The Indonesian Economy During the Soeharto Era*, Oxford University Press, Kuala Lumpur, 1981. Biro Pusat Statistik, *Statistik Indonesia*, 1983.

pattern as well as the trend on income distribution as given in Tables 4 and 5.

The pattern of income distribution in 1978 indicates inequality in that the lowest 40 percent received only 11.08 percent of total income, while the upper 20 percent got 54.32 percent. Changes in the pattern of income distribution during the period 1976-78 show declining share of the lowest 40 percent of the population both in the urban and rural sectors. The middle 40 percent population as a whole registered a minor decline: 0.49 percent with rural population losing 3.1 percent and their urban counterpart gained a little: 0.6 percent. The upper 20 percent of the population had a net gain in its share with rural component registering higher increase compared to its rural counterpart.

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
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.

Table 5
CHANGES IN SHARE OF VARIOUS CLASSES
IN INCOME IN INDONESIA 1976-78

Population/Classes	Percent Change 1976-78		
	Urban	Rural	Total
Lowest 40 percent	-6.3	-9.4	-6.7
Middle 40 percent	0.6	-3.1	-0.49
Upper 20 percent	1.4	4.6	0.18

Sources: Computed

A comparison of the patterns of expenditure and income distribution and also the changes there in show some variations. The question whether the data on consumption expenditure or those on income, are better indicators of relative inequalities, is a debatable one. There are arguments for and against using statistics on consumption expenditure. Surveys of spending are, in general, better than those of income since most income groups, particularly, those self-employed and in higher income brackets, would tend to under report their income fearing tax problems. Also, since a substantial part of real income of subsistence farmers is composed of self produced goods and services, information on consumption rather than income would be a better indicator of their real earnings. On the other hand, however, consumption expenditure would underestimate the income of the upper income brackets since their average propensity to consume is lower than those in the lower income classes. But if we assume a stable saving behavior, the trend in expenditure shares should still be a more satisfactory indicator of changes in income distribution. It will be noted that the degree of inequalities, as indicated by estimates of Gini ratios, also differ between the rural and urban population. Firstly, the shares of the lowest 40 percent and the middle 40 percent population in total expenditure are greater than those in income, while the share of the upper 20 percent population is greater in income than in expenditure. These variations can be explained by differences in savings patterns of different income classes. Lower the income classes, greater seems to be differences between their shares in expenditures and income, which is consis-

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

Table 6
GINI COEFFICIENTS OF INCOME DISTRIBUTION IN
SELECTED ASIAN COUNTRIES

Countries	Year	Gini Coefficient
Hong Kong	1971	0.34
Indonesia	1976, 1981	0.34
Japan	1975	0.42
Korea (South)	1971	0.51
Malaysia	1970	0.49
Singapore	1975	0.50
Sri Lanka	1973	0.41
Taiwan	1974	0.29
Thailand	1971-73	0.50

Sources: Toshiyuki Mozoguchi, "Concept of Poverty in Various Stages of Economic Development in Asian Countries," *The Philippine Economic Journal*, 18, 4, 1979, 356.

Table 7
URBAN/RURAL INCOME DISPARITIES IN INDONESIA AND
SELECTED DEVELOPING COUNTRIES

Country	Year	Ratio of Urban to Rural Incomes	Relative Urban/ Rural Income disparity
Bangladesh	1960/70	149	48.6
Brazil	1970	281	88.6
Columbia	1970	232	73.6
India	1967-68	235	32.9
Indonesia	1976	184	73.2
Malaysia	1970	214	86.2
Philippines	1970	208	81.6
South Korea	1971	187	56.4
Sri Lanka	1970	172	65.5
Taiwan	1972	122	19.4
Thailand	1969	298	157.4

Source: Muhyarto edit, *Growth and Equity in Indonesian Agricultural Development*, Yayasan Agro Ekonomika, 1982, 221.

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)
<u>Java-Urban</u>				
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
<u>Java-Rural</u>				
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
<u>Outside Java-Urban</u>				
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
<u>Outside Java-Rural</u>				
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,

for both Java and outside Java, and actual number of people below all the three thresholds decreased in urban areas but increased in rural areas.

The World Bank has provided another measure of magnitude of poverty in Indonesia in the year 1976 on the basis of expenditure pattern of households for different classes.² Defining poverty arbitrarily as having monthly per capita consumption below Rp 3,000, the World Bank Study provided estimates on the incidence of poverty (proportion of regional population with average per capita consumption less than Rp 3,000 per month) and distribution of poverty (regional poverty population as a proportion of total poverty population) as in Table 9.

Table 9
INCIDENCE AND DISTRIBUTION OF POVERTY IN
URBAN AND RURAL JAVA & OUTSIDE JAVA 1976

Regions	Urban		Rural	
	Incidence	Distribution	Incidence	Distribution
Sumatra	13.5	14.1	28.5	10.1
Java	20.7	70.2	58.7	73.8
Bali & Nusa Tenggara	27.4	3.7	49.5	6.1
Kalimantan	13.9	4.8	17.3	1.4
Sulawesi	15.7	6.1	45.0	6.4
Maluka	31.2	1.2	61.9	2.2
Indonesia	18.7	100	50.2	100

Source: World Bank, *Employment and Income Distribution in Indonesia*, Washington D.C., 1978, 84-85.

In 1976, 18.7 percent of the urban population and 50.2 percent of the rural population in Indonesia were not able to maintain level of consumption above the extremely low standard of Rp 3,000 per capita, per month.

By disaggregating the aggregative data for studying consumption pattern of different expenditure classes, we find a high pro-

² World Bank, *Employment and Income Distribution in Indonesia*, Washington D.C. October 1978.

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 households 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 paddy 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

consumed less than the minimum required diet, while only 10.5 percent peasant families had access to adequate diet. The study came to the conclusion that economic growth in the region had resulted in unequal development, sizeable proportions also have been left behind.

There is another much quoted micro level study³ of poverty in Kalurahan Sriharjo in Kabupaten Bantul in the special region of Yogyakarta and also for the special region itself, for the years 1959 & 1968. Assuming the average size of a family 4.5 persons and that rice consumption per family should be 450 kg rice per year (100kg person per year) and that 20.25 percent of the income must inevitably be spent for non-food items, then 50 percent of families were not able to afford to eat rice at the rate of 100 kg per head. One hundred kg rice would be able to provide only 780 calories per day per person, whereas minimum average daily requirement were at least 1600 calories. From these figures the Sriharjo study concluded that the majority of people in the Yogyakarta region, including Sriharjo were poor and many of them were desperately so. At least half the families did not earn enough to be able to eat rice — the preferred basic food, the year round. The study found that the situation had rather worsened in latter years.

IV. Profile of Poverty in Indonesia

From the various estimates on poverty discussed in an earlier section the consensus seems to be that 40 percent of the Indonesian population is poor; about 15 percent of them destitute. Who are these poor, what is their profile?⁴ What can we say about the overall pattern of poverty in the country? These are some questions that need to be addressed to before any meaningful public policy could be adopted to alleviate poverty.

In 1978, 49 million persons in rural areas (38.4 million in Java and 10.57 million in outside Java) and 3.38 million persons in urban areas (2.73 million in Java and 1.1 million in outside Java)

³ See Penny, et al. and Sajogyo (1975).

⁴ World Bank, *Poverty in Indonesia — A Profile*, Staff Working Papers, 671, 6.

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, constituted 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 support 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 educational 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.

The level of educational attainment among the poor population is quite low. For the country as a whole, 37 percent of the urban and 42.3 percent of the rural population never attended schools. Over half of women in poor rural households did not have any schooling at all. The chances of having more than mere primary education are very small indeed for members of poor households. The rate of drop out from schools is quite high among poor children. Whereas 92.0 percent among the age group 7-12 years school, the corresponding rate falls to 42 percent and 12 percent at the age groups of 13-15 and 16-18 years respectively. As already pointed out, lack of education is one of the important causes for low economic standards. During surveys, a high proportion of the poor give 'lack of funds' as the main reason for leaving schools in general.

An analysis of the pattern of consumption of the poor population shows that a very high proportion of their budget (71.7 percent of urban and 74.1 percent of rural population) goes into one item which is the most important for their survival, namely food. In spite of the high proportion of expenditure on food, their caloric and protein intakes (1500 calories and 27 grams of protein) are less than the recommended minimum of 2100 calories and 55 grams of protein respectively. We have already pointed out, in an earlier section, that for the poorest 20 percent in rural Java, the daily caloric consumption per capita, has actually decreased from the woefully low figure of 1059 to 935 during the period 1970-76 (Mubyarto).

Agricultural households form majority of rural households, they constitute a larger proportion of the poor households: 74 percent in rural Java and 84 percent in rural areas of the outer Java. Agricultural households can be divided into three groups indicated in Table 10 below.

In general agricultural workers or laborers suffer the highest incidence of poverty followed by those engaged in agriculture on their own farms but also work partly as agricultural workers and farm operators. From this, it follows that land owned and operated by a household is the most crucial factor determining the incidence of poverty. Unfortunately the pattern of farm ownership is increasingly marked by smallness of farm holdings and growing inequality in farm ownership. In 1963, 20 percent of rural household did not own any land and they were mere

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-

Table 11

INCIDENCE OF POVERTY FOR URBAN HOUSEHOLDS, 1978

Sources of Income	Java	Outer Islands
Agricultural Workers	64.6	37.2
Service Workers	25.3	6.6
Industry/Handicrafts	35.5	9.4
Sales	14.7	11.3

Source: World Bank, *Poverty in Indonesia A Profile*, Washington D.C., 1984, 24.

penditure respectively). The degree of inequality actually increased. The Gini co-efficient registered an increase from 0.327 to 0.368 during the above period. It suggests that the fruits of rapid economic growth in urban Indonesia have been unequally distributed among various income classes. The income distribution in urban areas is greatly influenced by two major factors: (a) access to administrative and technical jobs in the private sector and overall employment in the public sector, (b) Level of education, which is highly correlated to the level of income.

An increase in rural/urban income disparity is another disquieting feature of the income distribution and poverty in Indonesia. The ratio of urban to rural incomes: 135 in 1970, which was one of the lowest among developing countries, registered an increase to 184 in 1976 (Mubyarto). If not checked, this growing disparity might act as an urban pull factor causing rural-urban movement and the growth of crowded urban centers, with all the attending socio-economic problems.

V. Poverty and Some Public Policy Issues

In this section, we will discuss the impact of some public policies on the lot of poor in Indonesia. The first, and rather an important issue, concerns the impact of improved technology on different sectors of the national economy, on economic condition of poor. In the rural sector, green revolution has occurred in several parts of the country involving introduction of improved technologies and other farm operations (e.g., superior seeds, fer-

tillers, 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 fell 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 study⁵ 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.

Table 12
PRICE INCREASES USING DIFFERENT INDICES IN
INDONESIA 1970-1976 (1976 INDEX WITH 1970 = 100)

Price Index	Java		Outside Java	
	Urban	Rural	Urban	Rural
9 Essential commodities	273	284	250	244
Cost of living (62 commodities)	273	N.A.	249	N.A.
Food	305	304	265	N.A.

Source: World Bank, *Employment and Income Distribution in Indonesia*, 1978, 72.

prices on the economic wellbeing of low income population.

Table 13 shows that increase in the price index of food was greater than that for other items. Since poor families spent greater proportion of their income on food, they were adversely affected the most. Table 13 gives price indices in respect of goods and services bought by households in three income classes—the poorest 40 percent, middle 40 percent and the richest 20 percent. It will be observed that, in general, the index of prices paid by the poorest 40 percent registered the greatest increase during the period 1970-1976 creating comparatively greater hardship for them.

Table 13
ESTIMATION OF INFLATION 1970-76
PRICE INDEX FOR JANUARY-APRIL 1976
(JANUARY-APRIL, 1970 = 100)

Region	Prices Paid by		
	Poorest 40 Percent	Middle 40 Percent	Richest 20 Percent
Rural Java	346	322	307
Urban Java	299	294	302
Rural Outer Java	282	251	218
Urban Outer Java	270	243	267

Source: David O. Dapice, "Trends in Income Distribution & Levels of Living 1970-75" Papanek, G. ed., *The Indonesian Economy*, Praeger, New York, 71.

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 improve 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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