

## Some New Evidence on the Incidence of Poverty in Pakistan†

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### INTRODUCTION

A number of studies have been done in the past to measure the level of poverty in Pakistan. These studies include Naseem (1973, 1977), Alauddin (1975), Mujahid (1979), Irfan and Amjad (1983), Kruijk and Leeuwen (1985) and Cheema (1985). The time periods covered by these studies are not the same. Moreover, in some cases the methodologies and results of these studies also differ. The present study covers the most recent data made available in the Household Income and Expenditure Survey (HIES) for 1984-85. Some selected previous Survey years have also been included in the study to see changes in poverty levels over time. The incidence of poverty is measured on the basis of both households and population. To determine the location of the poor, poverty levels have been estimated for rural and urban areas of the country.

### ESTIMATION OF THE POVERTY LINE

The poverty line has been estimated in terms of per capita income that allows the fulfilment of minimum nutritional requirements and other basic needs of a person. Food is the most basic of basic human needs. A human body needs a certain amount of energy, defined in terms of calories, daily. The caloric requirement varies with age, sex and nature of work of a person. It has been estimated that a male adult in Pakistan, on average, requires 2550 calories per day.<sup>1</sup>

The consumption patterns of households belonging to the lower income brackets have been used to determine food expenditure needed to obtain the required amount of calories. For different income groups, per capita quantity consumption of different food items are available from 1984-85 HIES, and caloric content of different food items is given in Government of Pakistan (1985a). With this information, the caloric content of the diet can be determined. Per capita consumption expenditure on food items are also reported in the 1984-85 HIES. These expenditures have been

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<sup>1</sup>Government of Pakistan (1985a).

adjusted to meet the minimum requirements of calories.<sup>2</sup> The monthly food expenditure required to obtain the necessary calories per adult turns out to be Rs 105.97 for rural areas and Rs 116.99 for urban areas when the average consumption pattern of the lowest three income brackets given in the 1984-85 HIES is used.<sup>3</sup> When the average consumption patterns of the next two higher income brackets (i.e., 4 and 5) is used, the food expenditure for rural areas rises to Rs 113.22 and for urban areas rises to Rs 124.66.<sup>4</sup>

These food expenditures have been obtained for an adult male person. To allow for sex and age composition of the Pakistani population, the adult equivalence of the whole population has been worked out by using adult equivalence scales prepared by Irfan and Amjad (1983, p. 47). The sex and age composition of the rural and urban population is given in the 1984-85 HIES. Adult equivalence of the total population turns out to be .8 for both rural and urban areas.<sup>5</sup> Food expenditure after multiplying with .8 becomes Rs 84.78 and Rs 93.59 for rural and urban areas respectively consistent with the average consumption pattern of the lowest three income brackets, and Rs 90.58 and Rs 99.73 for rural and urban areas respectively consistent with the average consumption pattern of the fourth and fifth income brackets.

To allow for non-food expenditure in the estimation of the poverty line, the distribution of total expenditure between food and non-food categories as provided in the 1984-85 HIES has been utilized. To be more specific, food expenditure needed for the required amount of calories has been multiplied by the reciprocal of the food expenditure share in total expenditure of the relevant lower income brackets. The poverty lines, on the basis of the average consumption pattern of the lowest three income brackets, for the year 1984-85 turns out to be Rs 159 and Rs 185 for rural and urban areas respectively. These poverty lines become Rs 172 and Rs 207 for rural and urban areas respectively when the average consumption pattern of the fourth and fifth income brackets are considered. People lying below the lower poverty line in each area are termed as very poor and those lying below the higher poverty line as poor. The poverty lines for previous years have been obtained by adjusting poverty lines for 1984-85 with the consumer price index. Per capita

<sup>2</sup> For example, if existing consumption of food items yields 2000 calories and the required amount of calories is 2550, then existing food expenditure will be raised by multiplying them with 2550/2000.

<sup>3</sup> Irfan and Amjad (1983) used average consumption patterns of the lowest two income brackets. In our case the results remain almost the same whether average consumption patterns of the lowest two or three income brackets are used. The income range of the lowest three income brackets is Rs 0-800.

<sup>4</sup> The income range of the fourth and fifth income brackets combined is Rs 801-1500.

<sup>5</sup> Irfan and Amjad (1983) also obtain the same result in their study.

poverty lines for very poor and poor for different years are given in Table 1.

Table 1  
*Estimates of Monthly per Capita Poverty Lines at Current Prices*

Years	Rural Areas		Urban Areas	
	Very Poor	Poor	Very Poor	Poor
1963-64	26.05	28.18	30.31	33.91
1966-67	30.39	32.88	35.36	39.57
1969-70	33.29	36.01	38.74	43.34
1979	98.84	106.92	115.00	128.68
1984-85	159.00	172.00	185.00	207.00

## RESULTS

Using the poverty lines reported above, poverty levels have been estimated on the basis of both households and population. We have followed Mujahid's methodology (1979) to estimate poverty levels. Linear interpolation has been used to determine the percentage of households lying below a given poverty line. The implication of this procedure is that in the income bracket where interpolation is being applied, it is being assumed that households in that income range are uniformly distributed. The estimates of population that is poor have been derived from estimates of poor households.

Poverty levels have been estimated for rural and urban areas separately. To arrive at the overall poverty level of combined rural and urban areas, a weighted average of the poverty levels of rural and urban areas has been used. For household results, weights used were proportions of households in the rural and urban areas, and for population results, the weights used were in terms of population.

The HIES has been carried out for the years 1963-64, 1966-67, from 1968-69 to 1971-72, 1979 and 1984-85. For the present study, we have taken the two most recent HIES years (1979 and 1984-85) and some selected previous HIES years (1963-64, 1966-67 and 1969-70). Poverty estimates on the basis of households and population are reported in Tables 2 and 3 respectively. The results for rural areas show that poverty increased during the Sixties and then declined at the end of the Seventies and middle of the Eighties. In 1963-64, very poor households were 36.79 percent and they increased to 43.05 percent in 1966-67 and to 44.24 percent in 1969-70. After that there was a significant decline in percentage terms of very poor

households from 44.24 in 1969-70 to 29.23 in 1979 and to 24.10 in 1984-85. The levels of poor households in all these years were higher than the levels of very poor households. Interestingly, in all these years the levels of poor households were higher by between 5.11 to 6.63 percentage points. The pattern of the poor households over time is identical to that of the very poor households. This shows a very close and positive relationship between poor and very poor households.

Table 2

*Estimates of Poverty in Pakistan – Households*

Years	Rural Areas		Urban Areas		All Areas	
	Percent of Very Poor Households	Percent of Poor Households	Percent of Very Poor Household	Percent of Poor Household	Percent of Very Poor Household	Percent of Poor Household
1963-64	36.79	42.69	40.88	48.89	37.69	44.05
1966-67	43.05	49.68	37.41	45.99	41.70	48.79
1969-70	44.24	50.76	34.09	42.55	41.78	48.77
1979	29.23	35.19	23.64	30.95	27.75	34.07
1984-85	24.10	29.21	19.40	25.61	22.79	28.21

Source: Based on *Household Income and Expenditure Survey(s)* (1963-64, 1966-67, 1969-70, 1979 and 1984-85).

Table 3

*Estimates of Poverty in Pakistan – Population*

Years	Rural Areas		Urban Areas		All Areas	
	Percent of Very Poor Population	Percent of Poor Population	Percent of Very Poor Population	Percent of Poor Population	Percent of Very Poor Population	Percent of Poor Population
1963-64	38.94	44.97	44.53	52.34	40.24	46.68
1966-67	45.62	52.35	40.96	49.79	44.50	51.74
1969-70	49.11	55.66	38.76	47.92	46.53	53.73
1979	32.51	38.84	25.94	33.70	30.68	37.41
1984-85	25.87	31.45	21.17	27.78	24.47	30.36

Source: Based on *Household Income and Expenditure Survey(s)* (1963-64, 1966-67, 1969-70, 1979 and 1984-85).

When poverty is measured on the basis of population, trends in it remain the same. The results also show that poverty levels are higher for population than for households. This means that poor households on the average have a larger size than the rest of the households.

Poverty in the urban areas followed a somewhat different pattern than in the rural areas. Poverty in the urban areas steadily declined during the entire period under study. The percentage of very poor households declined from 40.88 in 1963-64 to 19.40 in 1984-85. The estimate of poor households declined from 48.89 percent to 25.61 percent during the same period. Estimates of poverty for population are somewhat higher than those for households. However, their patterns over time are the same.

The results for all areas, which are, in fact, weighted averages of the results for rural and urban areas, are very close to the results for the rural areas. They show that poverty increased during the Sixties and then declined during the subsequent years of the study.

Many factors can be responsible for changes in poverty levels over time. The overall economic development of the country can influence these changes. Our economy grew during the entire period of our study. As a result of this, annual per capita GNP at constant prices of 1959-60 grew from Rs 458 in 1963-64 to Rs 865 in 1984-85.<sup>6</sup> However, our results indicate that poverty levels in the rural areas, despite this economic development, went up during the Sixties. It appears that changes in the agricultural sector during that period adversely affected the lower segments of the society. Irfan and Amjad (1983) explain in detail how the changes in agrarian structure during that period contributed towards the increase in rural poverty. Their argument is that "these changes were basically the result of new technology, first introduced in the Sixties, which increased profitability in the agricultural sector and led to large landowners resuming formerly rented-out land for self-cultivation. This led to an eviction of tenant farmers who now cultivated either much smaller size holdings or joined the ranks of the landless labourers and non-agricultural households." (pp. 34-35). These changes might have worsened the economic conditions of those evicted tenant farmers. They further argue that the decline in rural poverty observed at the end of the Seventies was the result of changes that took place "mainly outside the farm sector, especially the high levels of overseas migration and the spread effects of overseas remittances in the rural economy." (p. 35).

The level of remittances from overseas workers kept on rising till 1982-83 and after that it started registering a decline. However, the level of remittances in 1984-85 was more than double the level in 1978-79. Therefore, the further decline which

<sup>6</sup>Government of Pakistan (1987).

we observe in rural poverty in 1984-85 is partly the result of the spread effects of overseas remittances. Another important change which must have contributed towards reduction of poverty in 1984-85 was the introduction of the system of *Zakat* and *Ushr* in the early Eighties. A large amount of money collected from the rich under this system is distributed among the poor.<sup>7</sup>

For urban areas, we observe a negative relationship between poverty levels and economic development of the country. It appears that economic development of the country over the years has helped in reducing the incidence of poverty in the urban areas. As in the case of rural areas, the spread effects of overseas remittances must have contributed towards the reduction in poverty observed in 1979 and 1984-85. Similarly, the system of *Zakat* must have played a part in lowering the poverty level in 1984-85.

Poverty levels in the urban areas are found to be lower, except for the year 1963-64, than those in the rural areas. Perhaps it is due to better job opportunities in the urban areas. This also partly explains the increasing migration of people from the rural to urban areas of the country.

### CONCLUSIONS

In this study, poverty levels have been estimated for rural and urban Pakistan for certain years of the period from 1963-64 to 1984-85. Two alternative poverty lines have been estimated for each of the rural and urban areas on the basis of minimum nutritional requirements and other basic necessities of human life. People with income below the lower poverty line have been termed as very poor and those with income below the higher poverty line as poor. Poverty levels have been measured on the basis of both households and population.

The results for rural areas of the country show that poverty increased during the Sixties and then declined at the end of the Seventies and middle of the Eighties. For urban areas, however, poverty steadily declined during all the years under study. For the country as a whole, the results are similar to those of rural areas. Poverty levels when measured on the basis of population are higher than those measured on the basis of households. This shows that poverty-stricken households on the average have a larger size than the rest of the households. Poverty levels in the urban areas are found to be lower than those in the rural areas.

Our results show that poverty has significantly declined in the country over the years. However, the magnitude of poverty is still very large. The government will have to play an important role in the eradication of poverty from the country. The government must ensure that its present policies aimed at the alleviation of poverty

<sup>7</sup> In 1984-85, Rs 1340 millions were collected under this system. Government of Pakistan (1985).

are being effectively implemented. It should also come up with new policies to resolve this problem as early as possible. The rural areas of the country deserve special attention since our population is heavily concentrated there. Also the incidence of poverty is found to be relatively higher in these areas.

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