Relative Poverty in Pakistan An Estimation from the Household Income and Expenditure Survey (1984-85)*

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I. INTRODUCTION

This paper¹ operationalises the concept of relative poverty in the context of Pakistan. The exercise is carried out both at the national and the provincial level. Basides an estimation of the incidence of poverty at the aggregate level, the paper provides a cross-sectional comparison of poverty in different socio-economic groups in the four provinces of Pakistan.

The paper is organised in six sections. After the introduction, Section II gives a brief theoretical reflection on the concept and measurment of relative poverty. This section also describes the methodology followed in this paper. Section III presents poverty estimates for the country as a whole and Section IV gives the results for the four provinces of Pakistan. This section also examines the relationship between the findings at the national level and the provincial level. Section V presents a brief comparison of high poverty groups across provinces. Some concluding remarks are given at the end in Section VI.

II. CONCEPT AND MEASUREMENT OF POVERTY

1. Relative Poverty

The proponents of the concept of relative poverty asserts that the position of an individual in relation to the other members of his society with respect to

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¹This Paper is a condensed version of the paper presented at the Eighth Annual General Meeting of the PSDE. The reader is referred to the original paper for a more elaborate discussion.

^{*}Owing to unavoidable circumstances, the discussant's comments on this paper have not been received.

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degree of satisfaction determines whether he is poor or not. If the average level of household resources are considered as an indicator of the standard degree of satisfaction in the society concerned, then the households whose resources are less than a specified percentage of this average are considered poor because they do not have enough to take part in the average living experience of that society. Following this scheme to define the poverty line, the concept is thought to take account of the social and cultural needs of a household. This approach is highly significant for policy-makers as it includes in the definition of the poor those who gain when resources become evenly distributed and the non-poor are those who lose in this process. In this way, actions to alleviate poverty incorporate actions to reduce inequality. However, it is indeed the case that poverty and inequality do not subsume each other. 'The notion of poverty relates to deprivation with respect to norms that involves a great deal more than considerations of economic inequality' Sen (1978).

Various Authors emphasise the change of stress from the absolute poverty lines to the relative poverty lines. [Fuchs (1965); Rainwater (1969); Rein (1974); Lansley (1980); O' Higgins and Jenkins (1990) and Teekens and Zaidi (1990)], all propose that the poverty line should be linked to an indicator of the average standard of living in the society. However, the choice of a measure of houshold resources, an indicator of the average and its fraction varies among the authors. For instance, views differ with respect to the shoice between income and expenditures as a measure of household resources. Those using income are concerned with the right to a minimum level of resources and others who use expenditures believe that poverty should be concerned with an attained standard of living Atkinson (1989). Some consider that the arithmetic mean is a better indicator of the average while others using the median argue that it is only the lower half of the income distribution that one should be concerned with in the measurement of relative poverty. Similarly, a normative scheme is followed in selecting one or the other fraction of the average as the poverty line.

2. Methodological Issues

For the measurement of poverty one may use at least two distinct methods. One is to check whether the actual consumption basket of people leaves some of the needs unsatisfied. This is the *direct method* to measure poverty and it does not involve quantification of a monetary poverty line. An individual is considered poor if one of his basic needs is not stisfied. In contrast, we have the *indirect method* whose first step is to calculate a monetary poverty line at which all basic needs are said to be sufficiently satisfied. The direct method is adopted only

when one takes the standard of living conception of poverty and the indirect. method, in principle, refers to both (i.e. standard of living and the minimum rights) conceptions of poverty.

In this paper, the indirect method is used to operationalise the concept of poverty. Three main arguments are noted in support of this method. First, it is easy to work whith due to its monetary and one-dimensional character. Second, it provides a numerical measure of the intensity of poverty in monetary terms. Third, it provides a measure of the opportunites open to an individual or family and is not influenced by consuption decisions made Barreiros (1988). The last argument is true only when income is taken as a measure of resources. Major limitations of this method are related to the complications involved in the determination of a single monetary poverty line in a society of diverse behaviours and tastes.

Three steps may be distinguished in poverty measurement:

- (a) selection of the variable by which resources of a household/person are to be measured;
- (b) determination of the poverty line below which people are considered poor; and
- (c) specification of poverty indices which could adequately aggregate the extent of poverty.

Since the needs of different members of a household are not indentical and there exist economies of scale within a household, it is appropriate to assign a different weight to each member of the household. By this procedure household size is replaced by the equivalent household size and resouces of the households are compared on the basis of resources per equivalent adult. The equivalent scale recommended by OECD [OECD (1982)] is used in this study. This scale assigns a weight of one to the first adult, 0.7 to every other adult and 0.5 to children of age 13 years and younger. It should be noted here that this scale implies rather high estimates of the requirements of large households in order to reach the same welfare level as small household. A natural consequence of this choice would be a higher concentration of poverty in large families.

In this paper, expenditures will be preferred to income for several conceptual and practical resons. First, income seems to be less reliably recorded in the household budget surveys, the major objective of these surveys being the computation of Consumer Price Indices. Second, expenditures reflect both declared and undeclared resources of low-income households better than income, because this group has a propensity to save close to zero. Another compelling argument to

prefer expenditures above present income is its relative stability over time as a reflection of long-term [for example, based on the life-cycle hypothesis of Modigliani and Brumberg (1954) or permanent income hypothesis of Friedman (1957)] welfare situation of a household. This will particularly be true for household, with irregular incomes, such as agricultural workers. There are also notable weaknesses of expenditures as a measure of household resources. First, voluntary underconsumption of households should not be viewed as poverty. Second, expenditures may only give a short-run picture of household resources since it is possible that payments are made by dissaving or by borrowing, a process which cannot be continued in the long run. Fourth, the fact that all expenditures may not be indentified with the consumption in the same period emphasises that current expenditures do not necessarily reveal the present consumption level of a household. Since the choice between income and expenditures carries considerable importance, this study also provides the sensitivity of the poverty statistics by using income as a representative of the household resources.

The determination of the poverty line is an important step in poverty measurement because the various ways by which a poverty line may be defined reveal different concepts of poverty. This paper, measuring relative poverty, takes 75 percent of the national average as the poverty line. The monthly average equivalent expenditures are calculated as Rs 340, which means that the poverty line is Rs 255 (expenditures per equivalent adult). The monthely average equivalent income is Rs 369 and the poverty line Rs 276 (income per equivalent adult). The poverty line is taken indentical for all provinces which implies that the differences in the cost of living across the provinces are negligible: a strong assumption which may not be true in reality. However, this assumption facilitates a more useful comparison of poverty across the provinces since the difinition of poverty is the same in each province. Furthermore, the sensitivity of the extent of poverty to the choice of a fraction of the average to define the poverty line should not be overlooked. This sensitivity is briefly discussed in this paper by presenting the results for the poverty line fixed at 50 percent of the average equivalent expenditures (and income).

The next crucial step is the selection of the statistical indices which could adequately aggregate poverty for a specific group of households. Six statistical indices were estimated for this purpose, only the head-count measure and share of poor population based on this measure is included in this paper.²

Poverty is estimated for the socio-economic groups calssified according to the characteristics of the head and the members of the household. In this way,

²For a discussion on the results of the other indices, see the original paper presented in the Eighth Annual General Meeting of PSDE.

we are able to identify the high poverty groups. However, poverty in any group, will not show wether the households in that group are permanent or transitory poor. This phenomenon cannot be studied unless panel-data are available. However, certain characteristics of poor groups may reflect wether poverty is permanent or not. For example elderly and disabled poor persons may be regarded as permanentely poor in a given system of social provisions.

III. POVERTY IN PAKISTAN: SOME FINDINGS

It is found that at the national level almost 39 percent of all households are poor when the poverty line is taken as 75 percent of the national average of equivalent expenditures. This amounts to 507 million poor households which is equal to almost 36.5 million poor persons. Poverty incidence is higher for the income based poverty line: 43 percent of the households are below this poverty line. The income measure shows there to be 6.4 million households living in a poverty, equal to around 40.7 million poor persons (see Table 1). The probable

Table 1

Average Equivalent Expenditures (and Income) and Percentage and Absolute Number of Poor Households and Persons in Pakistan

1	2	3	4	5	6	7	8				
1. Punjab 319	346	42.9	3,567	46.4	3,858	22,722	24,576				
2. Sindh 379	398	29.8	1,066	36.0	1,288	6,729	8,128				
3. N.W.F.P 363	410	34.5	743	40.4	870	5,036	5,897				
4. Balochistan 321	358	45.3	363	45.9	368	2,056	2,083				
Total 340	369	38.7	5,746	43.0	6,385	36,543	40,685				
Note: - column 1: - column 2: - column 3 & 4:	Average Percentage based por	equivalenge and at verty line	nt icome (osolute nu e).		onth). ooor hous	eholds (ex	penditure-				
- column 5 & 6: Percentage and absolute number of poor households (income-based poverty line).											
column 7:column 8:	- column 7: Absolute number of poor persons (expenditure-based poverty line).										

explanations of higher income-poverty are:

(a) The expenditure distribution, in general, is expected to be less unequal than the income distribution; and

(b) Income may be more underestimated for the low-income groups compared to the high-income groups. The average national income (and the poverty line associated to it) is not much affected by this pattern of underestimation. The consequence is that the poverty rates are overestimated when income is taken as the instrumental variable.

Taking the expenditure-based poverty line, the following paragraphs present the breakdown of poverty according to the characteristics of the households. The results are presented in Table A.1 of Appendix A. The first three classifications are based on the overall characteristics of the household, namely their occupational group, size and the economic situation of the members. The last two classifications are based on the characteristics of the head of the household pertaining to their educational attainment and the sector of economic activity.

The first classification, the occupational group of the household, is obtained by aggregating the International Standard Classification of Occupation (ISCO) given at one-digit level. It is found that the group of agricultural, animal housbandry and forest workers is the poorest of all: 45 percent of the households is poor in this group. The other group with significantly high poverty is the households occupied as production workers, transport operators and labourers: almost 43 percent of these households is poor. The composition of the poor pupulation is such that almost 65 percent of the poor households is in these two groups.

The size of the households, the second classification, shows that the poverty incidence increases with the size of the household. Almost half of the families with six or more members are poor, while all other groups show a poverty rate below the national poverty rate. This phenomenon becomes more obvious by looking at the composition of the poor pupulation: more than 85 percent of the poor is found in the households with five or more members. However, one should not lose sight of the fact that these findings may be closely linked to the choice of equivalence scale.

The third classification, economic situation of the household, shows the activity status of the members of the household. In almost half of the total number of households only the head is active. This group has a poverty rate slightly less than the average. The last category of this classification (namely: others) contains several types of households: households in which only the spouse is active, households in which neither head nor a spouse but another member is active and households in which all members are inactive. This group accounts for 46 percent of the total number of households, having a poverty rate slightly above the average. The small group of households where head, spouse and other members of the

household are active is the poorest group in this classification: slightly over half of the households in this group are poor. This may be a consequence of poverty which forces more members of the household into the labour market or it may be a phenomenon linked to large family size.

The classification according to the educational attainment of the head shows that the households whose heads have primary or less education have the highest poverty rate (almost 42 percent). This group contains around 86 percent of the total number of poor households. A notable observation is that poverty falls as the educational attainment of the head increases.

According to the fifth classification, economic activity of the head, houehold groups whose heads are working in the agriculture, hunting, forestry and fishing sectors are the poorest. This confirms the finding of the first classification. The households whose head is active in the mining, manufacturing and construction sector also has the highest poverty rate (44.8 percent, the same as the poverty rate of the group mentioned first).

In conclusion, the households categorised as the agricultural, animal husbandry and forest workers and production workers, transport operators and labourers are relatively more poor. Furthermore, the large households (six or more members), the households whose heads have attained primary or less education and the households whose heads are active in the agricultural, mining, manufacturing and construction sectors are also identified as high poverty groups.

It is highly likely that the groups identified as poor from the classifications based on different characteristics of households will contain the same households. For example, the agricultural workers may have larger families and they may also be the least educated groups. Hence, it is further needed to cross-classify households in order to locate more specific characteristics of the poor groups.

A comparison with the poverty rates for the income-based poverty line shows that the poverty position of the groups is independent of the choice of income or expenditures as the representative of the household resources (see Table A.2, Appendix A). The only exception is found in the fifth classification, the household groups active in the agricultural sector are more poor than those active in the mining, manufacturing and construction sectors. An interesting extension of the present exercise is foreseen as to locate households who are poor by both incomeand expenditure-based poverty lines or only poor by one of the two poverty lines.

One modification of the difinition of poverty so far used is to fix the poverty line at 50 percent of the average. The results presented in Table A.3 of Appendix A show that the poverty incidence is highly sensitive to this change. Poverty falls of 15 percent of the total number of households for the expenditure-based poverty

line. Quite notably, poverty is lower for the income-based poverty line, only 11 percent are poor. This means a 8 percent more reduction in poverty than that suggested by expenditure-based poverty line. Obviously, it is per definition equivalent to the fact that a greater number of households have income between the two income cut-off points than those having expenditure between the two expenditure cut-off points. No conclusive reasons of this finding are suggested by the present analysis. The household groups which show relatively higher poverty remain the same as given by the original definition of the poverty line.

IV. POVERTY IN THE FOUR PROVINCES OF PAKISTAN

The average equivalent expenditures of a province may reflect the resources of an average household in that province. It is shown in Table 1 that Sind has the highest equivalent expenditures (Rs 379 per month) and Punjab the lowest (Rs 319 per month). This welfare ranking of provinces is confirmed by the poverty index estimated in this paper. It is found that Sindh and N.W.F.P are the least and Punjab and Balochistan are the most poor provinces in Pakistan. The analysis at the provincial level shows that the distributions of poor households is such that a slightly more than 60 percent of the poor households lives in Punjab (see Table 1), as opposed to 56 percent of the total number of households.

In the following sub-sections, the main findings for the four provinces of Pakistan are analysed by using the expenditure-based poverty line. More importantly, the relationship between the findings at the national level and the provincial level will is examined. Appendix A provides all the poverty statistics.

1. Punjab

In Punjab, 43 percent of the households have expenditures below the poverty line. This amounts to 3.6 mollion poor households, equal to 22.7 million poor persons. For the income-based poverty line, this province is the poorest in Pakistan. The composition of poor groups as identified at the national level remains unchanged. However, the increase in poverty in this province as compared to the national poverty rate is not the same for all groups. The groups of households who are categorised as clerical, sales, service and related workers and production workers, transport operators and labourers show a relatively higher poverty in this province. Other important differences in the group-specific poverty are observed for the households whose heads are active in the mining, manufacturing, construction and distributive trades sectors: the poverty rate is almost 7 percent higher in each of these two groups compared to the poverty rates for the same groups at the national level.

2. Sindh

In Sindh, the poverty rate is around 10 percent less than the national poverty rate: almost 30 percent of the households is poor in this province. This finding shows that this province is the least poor province in Pakistan during the year 1984-85. As in Punjab, the differences in group-specific poverty compared to the corresponding estimates for the whole country are not alike, even to the extent that they are in opposite directions. For instance, the group of households in which head, spouse and other members are economically active observes a 10 percent higher poverty rate. Poverty is also higher for those households where both head and spouse are active. As opposed to this, there is a lower poverty for those two groups which had higher poverty in Punjab. They are production workers, transport operators and labourers and those whose heads are active in the mining, manufacturing and construction sectors: the group-specific poverty rate is more than 16 percent less than the corresponding national estimates for each of these two groups. On the whole, the high poverty groups as identified for the whole country remain unchanged.

3. N.W.F.P.

The poverty incidence in the province of North-West Frontier Province (N.W.F.P.) is 34.5 percent, which is about 4 percent less than the national poverty rate. This amounts to almost 700 thousand poor households or 5 million poor persons. The group-specific poverty in this province is also considerably different from the national estimates. The households whose heads are highly educated have more poverty in this province (31 percent) compared to the national average (22 percent). The agricultural worker is no longer the poorest group in the first classification. A significantly higher difference in group-specific poverty is seen for two- and three-member households and for those households in which both head and spouse are active.

4. Balochistan

Balochistan has the highest poverty incidence within a province. Almost 45 percent of the households are poor. In absolute terms, there are almost 400 thousand poor households, equal to 2 million poor persons. Despite somewhat higher poverty for the province as a whole, the group of households headed by high educated persons is less poor (by almost 13 percent). As opposed to this, the group of households classified as professional, technical and administrative workers and those whose heads are active in the mining, manufacturing and construction sectors have almost 15 percent higher group-specific poverty rate in this province.

The composition of the population is significantl different in this province with respect to the classification based on the economic situation of the household. There are almost 14 percent more households in which only the head is active and this group now contains more than 67 percent of the total number of the poor households compared to almost 48 percent for the entire country. Similarly, there is a notable difference in the composition of the poor households according to the household size: almost 59 percent of the poor has six or more member as compared to around 74 percent for the entire country.

V. COMPARISON OF HIGH POVERTY GROUPS ACROSS PROVINCES

This section provides a brief comparison of group-specific poverty across provinces. From the first classification, it is found that the households categorised as agricultural, animal husbandry and forest workers are relatively more poor in all provinces. The highest poverty rate in this group is found in Balochistan (54 percent) followed by Punjab (46.8 percent). Except in Sindh, the production workers, transport operators and labourers are the poorest group in this classification in all provinces. The poverty rate in this group ranges from 54.5 and 48.6 percent in Balochistan and Punjab to almost 39 percent in N.W.F.P. and 26 percent in Sindh. The second classification shows that in all provinces the poverty rate increases with the size of the household (see Table A.1, Appendix A). The poverty rate for the households with six or more members ranges from 56 percent in Balochistan to almost 41 percent in Sindh.

In the third classification, the poverty rate is highest in all provinces for those households in which head, spouse and some other numbers are economically active, the only exception being N.W.F.P. This group is a small group for all the provinces, making up slightly over 1 percent of the total number of households in Punjab, Sind and N.W.F.P. and just 0.3 percent in Balochistan. The households in the group "other" and those in which only the head is economically active together account for more than 96 percent of the total number of households in all provinces. The former group shows the highest poverty rate in Punjab (43 percent) followed by Balochistan (41 percent), N.W.F.P. (39 percent) and Sindh (34 percent) and the latter group has the highest poverty rate in Balochistan (47 percent) and the lowest in Sindh (25 percent) (see Table A.1 in Appendix A).

The Classification based on the educational attainment of the head shows that in all provinces poverty decreases as the educational attainment of the head increases. Table A.1 in Appendix A shows that the households whose heads are educated primary or less have high poverty rates in all four provinces. This group

is the poorest in Balochistan (almost 48 percent) followed by Punjab (46 percent). The fifth classification shows that the agricultural sector contains the high poverty groups in all provinces. Sindh has its poorest group in this sector. The poorest group in the other three provinces is the group of households headed by those active in the mining, manufacturing and constructions sector: the poverty rate in this group is the highest in Balochistan almost 60 percent.

VI. CONCLUDING REMARKS

It may seem more appropriate to estimate absolute poverty in a developing country like Pakistan of which the average level of resources is not very high, yet an estimation of relative poverty also offers considerable insights. Among others, its most notable significance is for policy-makers whose principal objectives include a more equal distribution of resources. Moreover, the analyses based on the group-specific poverty are also useful, for example in devising the poverty elmination tools.

Admittedly, there are important limitations of such an exercise which should not be overlooked. The first refers to the quality of the data. The data from the Household Income and Expenditure Survey as a source of poverty analysis have important weaknesses, such as a non-representation of homeless people and a possible under-representation of illiterate people. The accounting period to record income and expenditures is a month, or sometimes an average of the previous months, which does not take into account the seasonal fluctuations of a longer period. The second limitation is due to an arbitrariness present in the definition of poverty. For instance, this paper takes a narrow view in measuring the households' resources by income and expenditures. An overview of the multi-dimensional resources owned by a household would be more desirable. Furthermore, the unit of analysis is taken as a 'household', although there may exist a significant inequality in the distribution of resources within a household. The poverty thereshould is based on the average of the country as a whole under the assumption that this measure of central tendency would reflect the dominant living patterns. The differences in the cost of living across provinces are assumed negligible. All such suppositions are based on a value judgement which can easily be questioned. It would be interesting to see whether the composition of poor groups chnages if alternative approaches to measure relative poverty are adopted, such as by taking some other fractions of the mean, a different indicator of the average or a differenct equivalent scale. In conclusion, this paper should be considered as a preliminary attempt to measure relative poverty in Pakistan.

The results lead to the following conclusions:

- (a) Almost 39 percent of the total number of households in Pakistan is poor when the resources of the households are measured by expenditures. Poverty is higher (43 percent) for the income-based measurement. One simple reason of this result may be an under-reporting of income by low-income households and the other the difference between the spread of the income- and expenditure-distribution around the average. The poverty incidence is found highly sensitive to the choice of percentage of the average to express the poverty line. The poverty incidence is only 15 percent when the poverty line is fixed at 50 percent of average equivalent expenditures. Quite contrary to the previous findings, poverty is lower for the income-based poverty line: almost 11 percent of the households is poor when the poverty line is fixed at 50 percent of the average equivalent income;
- (b) The analysis of group-specific poverty shows that poverty is relatively high for the household groups whose head have little or no education and for the large households. The household groups which are categorised as agricultural, animal husbandry and forest workers and production workers, transport operators and labourers are also relatively often poor. Finally, the sectors of mining, manufacturing and construction contain high numbers of poor. These findings remain the same in all provinces. Quite notably, for some groups the poverty changes quite differently from the overall change for the province as whole; and
- (c) The province of Punjab which accounts for 56 percent of the total number of households and Balochistan, the biggest in terms of area, are the poorest among the four provinces of Pakistan. The composition of poor households is such that more than 60 percent of the poor live in Punjab.

Table A 1

Poverty Indices for the Expenditure-based Poverty Line

	PAKISTAN		3	PUNJA	В	SINDH			N.W.F.P			BALOCHISTAN			
•	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.
PAKISTAN	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Total	100	38.7	100	100	42.9	100	100	29.8	100	100	34.5	100	100	45.3	100
Occupational Group of the															
Household															
1. Professional, tech., admin.															
and managerial workers	4.2	20.1	2.2	3.8	23.4	2.1	4.4	11.9	1.8	4.5	14.8	1.9	6.1	35.2	4.7
2. Clerical, sales, service and		•													
related workers	25.9	34.1	22.9	24.6	40.5	23.2	28.2	23.2	22.0	26.5	29.3	22.5	27.5	36.7	22.3
3. Agricultural, animal husbandry															
and forest workers	30.0	45.0	34.9	28.3	46.8	30.9	33.4	43.6	48.9	32.3	38.5	36.0	25.9	54.1	30.9
4. Production workers, transp.															
operators and labourers	27.1	42.7	29.9	29.4	48.6	33.3	24.6	25.8	21.3	22.5	38.8	25.3	27.4	54.5	33.0
5. Inactive (or no occupation															
specified)	12.8	30.5	10.1	13.8	32.8	10.6	9.4	19.0	6.0	14.2	34.3	14.1	13.2	31.4	9.1
Size of the Household															
1. One member	2.9	4.2	0.3	2.5	6.4	0.4	4.0	0.6	0.1	2.4	5.3	0.4	2.0	5.6	0.2
2. Two members	6.4	10.5	1.7	6.1	13.9	2.0	7.1	4.5	1.1	6.2	5.4	1.0	7.6	19.1	3.2
3. Three members	7.9	20.0	4.1	8.0	24.8	4.6	7.6	9.2	2.3	7.0	11.9	2.4	11.7	30.8	8.0
4. Four members	11.6	26.7	8.0	11.4	30.7	8.2	11.7	17.4	6.8	10.3	18.6	5.6	16.7	40.9	15.1
5. Five members	13.0	35.9	12.1	13.3	39.4	12.2	13.1	27.3	12.0	11.3	32.1	10.5	14.3	46.1	14.6
6. Six or more members	58.2	49.0	73.8	58.8	53.2	72.9	56.4	40.9	77.4	62.8	44.0	80.1	47.6	56.0	58.8

29.8

36.3

39.5

31.7

Table A 1-(Continued) BALOCHISTAN N.W.F.P SINDH PAKISTAN PUNIAB Coi. Col. 2 3 2 3 3 3 1 1 2 3 **PAKISTAN Economic Situation of the** Household 47.3 67.3 42.3 48.5 52.5 25.1 44.2 50.0 31.6 45.8 64.5 36.8 48.5 49.2 1. Only head of household active 50.9 43.3 3.5 2.0 19.1 1.1 1.1 40.0 1.0 1.9 1.8 42.7 1.8 2.4 2. Both head and spouse active 1.9 39.3 26.3 1.2 0.3 100.0 0.7 60.5 2.2 1.6 1.2 50.5 1.6 1.2 53.7 1.5 1.1 3. Head, spouse and others active 46.5 38.5 51.9 34.1 41.1 30.9 48.2 44.0 33.8 49.9 40.3 48.0 47.8 43.3 46.0 4. Others Educational Attainment of the Head 88.3 47.8 93.2 86.7 82.8 35.5 85.2 79.3 45.9 84.8 77.6 33.3 1. Primary or less 79.9 41.5 85.8 28.7 3.0 3.1 28.6 2.0 5.5 5.7 22.4 4.3 3.6 5.7 31.9 4.7 6.5 36.0 2. Middle 4.2 28.7 6.1 31.5 9.8 17.2 5.7 7.3 6.1 8.9 27.7 6.4 9.3 32.1 7.0 3. Intermediate 0.5 31.1 5.7 2.5 9.1 2.9 6.9 13.3 3.1 6.3 5.5 22.2 3.2 4.9 25.3 4. Higher Economic Activity of the Head 1. Agriculture, hunting, forestry 26.3 53.2 30.9 46.8 31.1 33.7 43.3 49.0 32.6 38.3 36.2 30.2 and fishing 2. Mining, manufacturing and 24.8 16.9 25.9 14.7 14.7 40.1 17.1 14.8 59.8 19.5 20.7 51.4 18.6 44.8 21.6 construction 3. Distributive trades, catering, 16.7 20.7 28.2 16.9 22.5 17.8 40.8 21.6 22.7 34.2 19.8 repairs and transport 22.4 4. Communication, banking,

26.7

21.8

19.5

32.0

32.1

31.6 Note: (Column 1: Household share, Column 2: Poverty rate, Column 3: Share of poor population)

28.8

finance and other services

28.1

23.5

34.6

22.7

Table A 2

Poverty Indices for the Expenditure-based Poverty Line

	P	AKIST	AN		PUNJA	B		SINDI	-1		N.W.F.	.P	BAL	OCHI	STAN
	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.
PAKISTAN	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Total	100	43.0	100	100	46.4	100	100	36.0	100	100	40.4	100	100	45.9	100
Occupational Group of the Househo	old														
1. Professional, tech., admin.															
and managerial workers	4.2	22.9	2.2	3.8	26.0	2.1	4.4	14.1	1.7	4.5	21.3	2.4	6.1	35.2	4.7
2. Clerical, sales, service and															
related workers	25.9	38.3	23.1	24.6	44.9	23.8	28.2	28.3	22.2	26.5	33.0	21.6	27.5	36.3	21.7
3. Agricultural, animal husbandry															
and forest workers	30.0	49.8	34.7	28.3	49.1	29.9	33.4	52.2	48.4	32.3	46.1	36.9	25.9	56.7	32.0
4. Production workers, transp.															
operators and labourers	27.1	47.1	29.7	29.4	52.5	33.3	24.6 -	31.3	21.4	22.5	45.0	25.1	27.4	56.1	33.5
5. Inactive (or no occupation												-			
specified)	12.8	34.5	10.3	13.8	36.7	10.9	9.4	24.3	6.3	14.2	40.2	14.1	13.2	28.0	8.1
Size of the Household															
1. One member	2.9	5.3	0.4	2.5	8.1	0.4	4.0	1.2	0.1	2.4	7.0	0.4	2.0	0.0	0.0
2. Two members	6.4	13.6	2.0	6.1	16.4	2.2	7.1	6.6	1.3	6.2	12.8	2.0	7.6	22.1	3.7
3. Three members	7.9	23.3	4.3	8.0	27.1	4.7	7.6	14.4	3.0	7.0	16.7	2.9	11.7	33.7	8.6
4. Four members	11.6	32.1	8.7	11.4	35.3	8.7	11.7	25.4	8.3	10.3	25.5	6.5	16.7	41.6	15.1
5. Five members	13.0	40.2	12.2	13.3	43.4	12.4	13.1	32.4	11.8	11.3	37.6	10.5	14.3	46.9	14.6
6. Six or more members	58.2	53.6	72.5	58.8	56.7	71.8	56.4	48.2	75.5	62.8	50.0	77.7	47.6	55.8	57.9

Continued —

Table A 2-(Continued)

	PAKISTAN			PUNJAB			SINDH			N.W.F.P			BALOCHISTAN		
	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.	Col.
PAKISTAN	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Economic Situation of the Household															
1. Only head of household active	50.9	42.4	50.2	49.2	47.0	49.8	52.5	31.9	46.5	50.0	40.1	49.6	64.5	49.6	69.7
2. Both head and spouse active	1.9	43.4	1.9	1.8	47.6	1.8	2.4	46.4	3.1	2.0	23.4	1.2	1.1	40.0	1.0
3. Head, spouse and others active	1.2	54.2	1.5	1.2	59.3	1.5	1.1	65.1	2.0	1.6	23.7	0.9	0.3	100.0	0.7
4. Others	46.0	43.4	46.4	47.8	45.5	46.9	44.0	39.7	48.5	46.5	42.0	48.3	34.1	38.5	28.6
Educational Attainment of the Head															
1. Primary or less	79.9	46.1	85.7	79.3	49.5	84.6	77.6	40.1	86.4	82.8	41.7	85.5	88.3	48.1	92.5
2. Middle	5.7	35.4	4.7	6.5	39.4	5.5	5.7	27.6	4.4	3.6	31.0	2.8	3.1	28.6	1.9
3. Intermediate	8.9	31.6	6.5	9.3	35.2	7.1	9.8	23.0	6.3	7.3	33.3	6.0	6.1	31.5	4.2
4. Higher	5.5	25.2	3.2	4.9	27.3	2.9	6.9	15.4	3.0	6.3	37.1	5.8	2.5	22.7	1.2
Economic Activity of the Head				1											
1. Agriculture, hunting, forestry	20.2	49.6	34.8	28.5	49.2	30.2	33.7	51.7	48.4	32.6	45.7	36.9	26.3	55.7	31.9
and fishing	30.2	49.0	34.8	20.3	49.2	30.2	33.1	31.7	70.7	32.0	75.7	50.7	20.5	00.,	04.7
2. Mining, manufacturing and construction	18.6	49.1	21.2	20.7	54.9	24.5	16.9	31.2	14.6	14.7	47.7	17.4	14.8	59.8	19.3
3. Distributive trades, catering,		20.6	20.1	22.7	45.0	22.2	22.7	27.4	17.3	20.7	32.0	16.4	22.5	36.3	17.
repairs and transport	22.4	38.6	20.1	22.7	45.3	22.2	24.1	21.4	17.3	20.7	32.0	10.4	22.3	50.5	17.0
4. Communication, banking,			20.0	20.4	20.2	22.2	267	26.7	10.0	22.0	37.1	29.4	36.3	38.9	30.8
finance and other services	28.8	35.5	23.8	28.1	38.3	23.2	26.7	26.7	19.8	32.0	3/.1	29.4	30.3	30.9	30.0

Note: (Column 1: Household share, Column 2: Poverty rate, Column 3: Share of poor population.)

Table A 3 (Pakistan)

Poverty Index for the Poverty Line Fixed at 50 percent of the Average Equivalent Expenditures and Income

	1	2	3	4
Total	14.9	100	10.6	100
Occupational Group of the Household				
1. Professional, tech., admin. and managerial				
workers	6.2	1.8	4.2	1.7
2. Clerical, sales, service and related workers	11.6	20.2	8.1	19.8
3. Agricultural, animal husbandry and forest				
workers	18.1	36.6	12.0	33.9
4. Production workers, transp. operators and				
labourers	17.0	31.0	13.7	35.0
5. Inactive (or no occupation specified)	12.0	10.4	8.0	9.7
Size of the Household				
1. One member	0.6	0.1	0.2	0.1
2. Two members	3.1	1.3	2.3	1.4
3. Three members	5.1	2.7	3.3	2.5
4. Four members	7.7	6.0	5.0	5.5
5. Five members	11.6	10.2	7.7	9.4
6. Six or more members	20.3	79.6	14.8	81.2

Table A 3-(Continuea)	1	2	3	4
	<u> </u>			•
Economic Situation of the Household				
1. Only head of household active	14.6	50.0	10.1	48.4
2. Both head and spouse active	14.8	1.9	10.7	1.9
3. Head, spouse and others active	17.7	1.4	10.9	1.2
4. Others	15.1	46.7	11.2	48.5
Educational Attainment of the Head				
1. Primary or less	16.3	87.5	11.5	86.8
2. Middle	9.7	3.7	7.8	4.2
3. Intermediate	9.6	5.7	6.9	5.8
4. Higher	8.1	3.0	6.2	3.2
Economic Activity of the Head				
1. Agriculture, hunting, forestry and fishing	18.1	36.8	12.1	34.4
2. Mining, manufacturing and construction	18.0	22.6	14.6	25.5
3. Distributive trades, catering, repairs and				
transport	12.4	18.7	8.6	18.1
4. Communication, banking, finance and				
other services	11.3	21.9	8.1	21.9

Note: Column 1: Poverty rate (expenditure-based poverty line).

Column 2: Share of poor population (expenditure-based poverty line).

Column 3: Poverty rate (income-based poverty line).

Column 4: Share of poor population (income-based poverty line).

REFERENCES

- Atkinson, A. B. (1989) *Poverty and Social Security*. Hemel Hamptead. United Kingdom: Harvester.
- Barreiros, L. (1988) Poverty and Household Consumption Patterns. And Operationalizing Concepts and Measurement of Poverty and Basic Needs. In R. Teekens (ed) *Theory and Policy Design for Basic Needs Planning: A Case Study of Ecuador*. The Hague: Institute of Social Studies. 27–51 and 351–375.
- Burki, S. J. (1988). Poverty in Pakistan: Myth or Reality. In T. N. Srinivasan and P. Bardhan (eds) Rural Poverty in South Asia. New York: Columbia Press.
- Chamber, R. (1988) Poverty in India: Concepts, Research and Reality. Brighton: University of Sussex.
- Hagenaars, A. J. M. (1986) The Perception of Poverty. Amsterdam: North Holland.
- Hagenaars, A. J. M., and K. De Vos (1988) The Definition and Measurement of Poverty. *The Journal of Human Resources* 23:2.
- Haveman, R. H. (1987) Poverty Policy and Poverty Research. Madison: University of Wisconsin Press.
- Jerve, A. M., and R. Asberg (1985) Poverty in Pakistan. In A. M. Jerve (ed) Pakistan Country Study and Norwegian Aid Review. Oslo: The Chr. Michelsen Institute.
- Lipton, M. (1988) The Poor and the Poorest. Washington, D.C.: The World Bank. (World Bank Discussion Papers.)
- Naseem, S. M. (1973) Mass Poverty in Pakistan: Some Preliminary Findings. The Pakistan Development Review 12:4.
- Naseem, S. M. (1981) Underdevelopment, Poverty and Inequality in Pakistan. Lahore: Vanguard.
- OECD (1982) The OECD List of Social Indicators. Paris: Organisation for Economic Cooperation and Development.
- Pakistan, Government of (1987) Household Income and Expenditure Survey 1984-85. Karachi: Federal Bureau of Statistics.
- Sen, A. K. (1976) Poverty; An Ordinal Approach to Measurement. *Econometrica* 44:2 219-231.
- Sen, A. K. (1978) Three Notes on the Concept of Poverty. Geneva: ILO.
- Teekens, R., and B. M. S. Van Praag (1990) Analysing Poverty in the European

- Community (ed) Eurostat News Special Edition 1-1990. Luxembourg: Office for Official Publications of the European Communities.
- Teekens, R., and M. A. Zaidi (1990) Relative and Absolute Poverty in the European Community. In R. Teekens and B. M. S. Van Praag (1990).
- Van Praag, B. M. S. (1984) Objective and Subjective Definitions of Poverty. In G. Sarpellon (ed) *Understanding Poverty*. Millan: Franco Angeli Libri.