# **Landlessness and Rural Poverty in Pakistan**

 $\mathbf{B}\mathbf{y}$ 

Talat Anwar, Sarfraz K. Qureshi and Hammad Ali\*

# **Abstract**

Although reducing rural poverty has been the key agenda of economic reforms in Pakistan, the rural poverty continues to rise during the 1990s. The causes of rural poverty are complex and multidimensional. The rural poor are quite diverse both in the problems they face and the possible solutions to these problems. The rural poor are not homogeneous in terms of their natural or economic environments or their sources of income. The paper uses the most recent household data set available—PIHS 2001-02 to examine the causes of rural poverty and what accounts for its persistence and what policy measures should be taken to alleviate it. Poverty estimates using official poverty line suggest the high prevalence of rural poverty ranging from 39% to 48% in all provinces. Rural poverty is found to be strongly correlated with lack of asset in rural areas. The unequal land ownership in the country is found to be one of the major causes of poverty as poverty level was the highest among the landless households followed by nonagriculture households. The landless households are substantially high in rural areas. About 75% households own no land in the country. Notably 0.05% households own greater than 2 hectares of land in Punjab as well as in Sindh suggesting a highly skewed land ownership pattern. Punjab has the highly unequal land ownership pattern followed by NWFP, Sindh and Baluchistan. The highly unequal land distribution seems to have resulted in tenancy arrangements such as sharecropping resulting in high prevalence of absolute poverty particularly in Sindh. A broad-based land reform program including land redistribution and fair and enforceable tenancy contracts together with rural public works programs and access to credit—is critical for reducing rural poverty in Pakistan

<sup>\*</sup> The authors are respectively Joint Director (Research) State Bank of Pakistan, Karachi, former Director of PIDE, Islamabad and Statistical Officer, Federal Bureau of Statistics, Islamabad. The views expressed are those of the authors and do not necessarily reflect those of the institutions.

#### I. Introduction

Poverty imposes a repressive weight on Pakistan particularly in rural areas where almost one third of population and majority of the poor live. Although poverty has declined during the 1970s and 1980s, the absolute number of poor has increased substantially since 1960s. Despite a number of policy initiatives and programmes undertaken for poverty alleviation by various governments, absolute poverty particularly in rural areas continued to rise in Pakistan during the 1990s. Much has been written about poverty in Pakistan so far. A number of attempts have been made by various authors/institutions to estimate the rural poverty in Pakistan in the 1990s. Discussions have remained limited to estimating the regional and provincial trends for rural poverty in Pakistan. However, there is no discussion on the landlessness and rural poverty in Pakistan. Landlessness and rural poverty are closely linked since land is a principal asset in a rural economy like Pakistan. Landlessness to agricultural land is considered to the most important contributor to rural poverty. A high concentration of landownership is a major constraint to agricultural growth and alleviation of poverty. There a general perception that highly skewed distribution of land in Pakistan is one of the important causes of widespread poverty particularly in rural areas.

It is this context that has guided us to examine the landlessness and rural poverty in Pakistan. The paper is structured as follows. The next section provides a critical review of the most recent work on the extent and trends in poverty in the 1990s. Methods of measurement of poverty are discussed in Section III. Section IV discusses the data set of household integrated economic survey, 2001-02 that has been used to examine the landlessness and rural poverty. Section V presents the results for the prevalence of rural poverty using the official poverty line. Main conclusions and policy implications conclude the discussion in the final section.

### II. Review of Rural Poverty

Various authors/institution have estimated incidence of poverty in Pakistan since the 1960s. The work on poverty include Naseem (1973; 1979), Alauddin (1975), Mujahid (1978), Irfan and Amjad (1984), Kruik and Leeuwen (1985), Malik, Mohammad, H. (1988), Ahmad and Ludlow (1989), Ercelawn (1990) and Malik, S. J.(1991;1994). These authors and/or institutions had employed different methods, chose different poverty lines and have thereby, reported divergent poverty trends. However, a general consensus emerging from the literature is that rural poverty has declined during the 1970s and 1980s. The decline in rural poverty was mainly attributable to the fact that economy witnessed a remarkable growth rate at 6 per cent per annum over this period mainly due heavy capital inflows from abroad in the forms of foreign aid and overseas workers remittances. In addition, private investment in agriculture remained high and reached at its peak during the period. Thus, high private investment in agriculture together with substantial overseas workers' remittances to rural areas seems to have reduced rural poverty in Pakistan during the 1970s and 1980s. However, there is a general consensus in the literature of rising levels of rural poverty in Pakistan during the 1990s. Although a

number of attempts have been made to estimate poverty, more recent attempts include FBS (2001), World Bank (1995; 2002), Anwar and Quershi (2003) and Planning Commission (2003). These studies used different poverty line and methods and have thus reported different poverty levels in the country (see **Table 1**).

Both FBS (2001) and World Bank (2002) studies are comprehensive in coverage of issues and thus important to understand poverty in the country at regional and provincial level. However, unlike other studies World Bank (2002) is the only exception that argues that rural poverty is more or less stagnant in Pakistan during the 1990s. This contrary trend is mainly attributed to the fact that World Bank (2002) had overestimated the rural poverty in 1990-91 as it had <u>not</u> made correction for household expenditure for its composition via a correction in the per adult equivalent ratio to compute poverty in 1990-91. However, in the later period, it has made such correction to compute poverty in 1998-99. Due to this inconsistency in method of computing poverty, the World Bank (2002) rural poverty estimates were high at 36.9% in 1990-91 whereas it were low at 35.9% in 1998-99 relative to other studies. Thus, a stagnant trend drawn for the 1990s by the World Bank (2002) study for rural poverty in Pakistan is a misleading conclusion.

Table 1: Headcount Measure for Pakistan—1990-91 to 2001-02

	FBS (2001)	World Bank (2002)	Planning Commission, G	Anwar and oP Qureshi (2003)
Years	2550 calories	2550 calories	(2003) 2350 calories	2550 calories
		<u>Overall</u>		
1990-91	-	34.0	-	17.2
1992-93	26.6	25.7	-	-
1993-94	29.3	28.6	-	-
1998-99	32.2	32.6	30.6	30.4
2001-02	-	-	32.1	35.6
		<u>Rural</u>		
1990-91	-	36.9	-	-
1992-93	29.9	27.7	-	-
1993-94	34.7	33.4	-	-
1998-99	36.3	35.4	34.6	32.1
2001-02	-	-	38.9	41.0

Source: Various studies cited above

The FBS (2001) study evaluates the poverty trends during the 1990s. The study used its estimated poverty line of Rs.782 per adult per month in 1998-99 prices sufficient to meet minimum calorie intake of 2550 per adult per day. The rural poverty trends drawn by the study is consistent with the other studies. The study concludes that rural poverty increased significantly from 29.6% in 1992-93 to 36.3% in 1998-99. On the other hand, Anwar and

Qureshi (2003) used a poverty line of Rs.668 per adult per month in 1998-99 prices and concluded a substantial rise in rural poverty from 32.1% 1998-99 and to 41.0% 2001-02. Both rural poverty gap and severity of poverty increased significantly during this period.

So far the discussion about estimation on poverty in Pakistan has been centered on estimating poverty lines consistent with 2550 calorie intake per day as minimum requirement for a male adult aged 20-39. However, Planning Commission made a case in 2002-03 that the reference threshold in drawing national poverty line should be the average calorie intake required for all individuals rather than the male adult aged 20-39. Planning Commission notified the estimated official poverty line at Rs.748 per capita per month in 2001-02 prices. Poverty estimate implied by the official poverty line suggests that 32% of population in Pakistan and 38.9% of population in rural areas were poor in 2001-02.

It is noteworthy that Anwar and Qureshi (2003) using lower poverty line of consumption expenditure of Rs.735 per adult per month in 2001-02 prices estimated a headcount at 35.6% for the country as whole. Thus, official poverty estimates for 2001-02 seem to be significantly lower and needs to be corroborated from independent sources. Official poverty estimates are even lower than the World Bank (2002) and FBS (2001), which estimated poverty at 32% in 1998-99 using poverty line at Rs.682 per adult per month consistent with calorie norm at 2550 per adult per day. It is expected that adjusting this poverty line by inflation and using it will give poverty estimate higher than 38% in 2001-02. Thus, there is need to use official poverty line to estimate poverty level of poverty in the country. In this context, the paper uses the official poverty line and the most recent available household data—HIES 2001-02 to estimate rural poverty in Pakistan.

### III. Methods of Measurement of Poverty

To estimate the rural poverty in the country, the absolute poverty line notified by Planning Commission in July 2002 sufficient to meet minimum requirement of 2350 calorie per adult has been used. The estimated official poverty line is at Rs.748.56 per adult per month in 2001-02 prices for Pakistan. While estimating poverty, an adjustment has been made in the overall poverty line for Pakistan using the Paasche indices at the primary sampling unit level to account for the significant price differences between the rural and urban regions. To obtain representative estimates of population, a weight is assigned to each observation in the sample according to the weighting factors given in HIES, 2001-02.

To measure the poverty, the Foster, Greer and Thorbecke (1984) class of poverty measures  $P\alpha$ , have been used. These measures do not only reflect the severity of poverty but also satisfy the axiom of decomposability and additivity.

$$P_{\alpha} = \frac{1}{n} \sum_{i=1}^{q} \left[ (Z - y_i)/Z \right]^{\alpha}$$

-

<sup>&</sup>lt;sup>1</sup> An Asian Development Bank study reports substantially high level of poverty at 38% using the official poverty line.

These measures have clear advantages for evaluating policies which aim to reach the poorest. Note that if  $\alpha$ =0, the FGT index,  $P\alpha$ = Headcount measure, if  $\alpha$ =1,  $P\alpha$ = Poverty gap index or quotient and if  $\alpha$ =2,  $P\alpha$  is the mean of squared proportionate poverty gaps and indicates greater severity of poverty among the poorest. The higher the value of  $\alpha$  the more sensitive the measure is to the well being of the poorest. As  $\alpha$  approaches infinity the measure collapses to one which reflects the poverty of the poorest person.

#### IV. The Data Set

The most recent available primary data of Household Integrated Economic Survey (HIES) for the year for the year 2001-02 have been used to examine the rural poverty in Pakistan. HIES provides complete information on quantity and expenditure of all food and non food items. Since income of the poor varies particularly in rain fed economy like Pakistan, the household current consumption expenditure is preferred to income as the indicator of living standards. Hence, current consumption expenditure on all non-durables is used as a proxy for 'permanent income' for the measurement of poverty in this paper.

# V. Prevalence of Rural Poverty

**Table 2** reports estimates of poverty in Pakistan for 2001-02. The results indicate that prevalence of absolute poverty in Pakistan implied by the official poverty line was at 38.07 percent in 2001-02. Incidence of rural poverty was far greater than the urban poverty. The results suggest that 42.97% population in rural areas and 26.04% population in urban areas were poor in 2001-02. This implies that 55 million individuals out of 145 million were poor in Pakistan; of these, 37.4 and 17.6 million individuals were located in rural and urban areas, respectively.

Poverty estimates at the province level suggest the highest incidence of rural poverty in Sindh at 48.79 percent followed by NWFP at 48 percent and Baluchistan at 42 percent. Although rural poverty in Punjab was the lowest among the provinces in terms of ranking but the headcount was still considered to be substantial at 39% in 2001-02.

Table 2: Headcount by pro	Table 2: Headcount by province and region using poverty line official 748.56 per adult in 2001-02						
	<u>Urban</u>	Rural	Overall				
Punjab	26.92	39.27	35.71				
Sindh	22.73	48.79	38.63				
NWFP	34.21	48.00	45.98				
Baluchistan	28.57	42.07	39.72				
Pakistan	26.04	42.97	38.07				
Source: Authors' computati	on from primary data of I	HIES 2001-02					

### V(i). Determinants of Rural Poverty

2 to under 3 hectares

5 & above hectares

Non agriculture

Total

The above results indicate a substantially high prevalence of rural poverty in Pakistan compared to the urban region. The next question arises, what accounts for causes and persistence of high prevalence of rural poverty in rural area. This section attempts to address this question. The distribution of asset ownership is central in understanding poverty. Land is the principal asset in a rural economy. Results indicate that poverty is strongly correlated with lack of asset in Pakistan. **Table 3** reports headcount ratio by land holding. Poverty incidence was found to be the highest among landless at 54.6% followed by non-agriculture households at 38.4%. However, poverty incidence declines with increases in the land holding and vanishes in land holding 1 to 2 hectares and above. Poverty gap and poverty severity measures also indicate a substantially high poverty gap as well as the degree of inequality among the landless household (See **Table 3**).

The above results suggest that the unequal land ownership in Pakistan is one of the important causes of poverty since land is the principal asset in an agrarian economy. The landless households are substantially high in Pakistan. About 75% households own no land (landless plus non-agriculture in **Table 4**). In contrast, about 23.8% household own

Table 3: Head Count By land holding using official poverty line

Source: Authors' computation from primary data of HIES 2001-02

Pakistan	Urban	Rural	Total
Landless	48.79	54.89	54.55
Under 1 hectare	24.84	32.08	31.83
1 to under 2 hectares	.00	.00	.00
2 to under 3 hectares	.00	.00	.00
5 & above hectares	.00	.00	.00
Non agriculture	25.69	47.76	38.38
Total	26.04	42.93	38.04
Poverty gap by land holdings			
Pakistan	Urban	Rural	Total
Landless	10.47	12.15	12.05
Under 1 hectare	4.83	6.03	5.99
1 to under 2 hectares	.00	00	00
2 to under 3 hectares	.00	.00	.00
5 & above hectares	.00	.00	.00
Non agriculture	5.17	10.58	8.28
Total	5.25	9.13	8.01
Severity of poverty by land holdings			
Pakistan	Urban	Rural	Total
Landless	3.06	3.83	3.79
Under 1 hectare	1.44	1.70	1.70
1 to under 2 hectares	.00	1.62	1.52

.00

1.58

1.60

.00

.00

3.41

2.84

.00

.00

2.63

2.48

Table 4: % Distribution of households by land holdings						
Pakistan	Urban	Rural	Total			
Landless	1.32	10.36	7.71			
Under 1 hectare	2.72	32.67	23.88			
1 to under 2 hectares	.017	0.046	.038			
2 to under 3 hectares	.017	.0309	.027			
5 & above hectares		.0293	.021			
Non agriculture	95.93	56.87	68.32			
Total	100.	100	100			
Source: Authors' computation from primary data of HIES 2001-02						

under hectare of land, which merely provide subsistence level of living standards. A very small proportion of households hold large farm sizes in the country. Strikingly, barely 0.08% households own greater than 2 hectares of land suggesting a highly skewed land

Table 5: Headco	unt by land holding using poverty line	official 748.56 per ad	ult in 2001-0	2
		Urban	Rural	Overall
Punjab	Landless	34.21	45.12	44.45
	Under 1 hectare	24.51	26.25	26.19
	1 to under 2 hectares	.0	.0	.0
	2 to under 3 hectares	.0	.0	.0
	5 & above hectares	.0	.0	.0
	Non agriculture	26.92	47.54	38.99
	Total	26.92	39.27	35.71
Sindh	Landless	56.71	58.67	58.60
	Under 1 hectare	27.70	42.34	41.69
	1 to under 2 hectares	.0	.0	.0
	2 to under 3 hectares	.0	.0	.0
	5 & above hectares	.0	.0	.0
	Non agriculture	22.19	46.82	32.99
	Total	22.73	48.79	38.63
NWFP	Landless	61.27	65.95	65.41
	Under 1 hectare	21.25	41.39	40.82
	1 to under 2 hectares	.0	.0	.0
	2 to under 3 hectares	.0	.0	.0
	5 & above hectares	.0	.0	.0
	Non agriculture	33.23	50.87	46.66
	Total	34.21	48.00	45.98
Baluchistan	Landless	56.00	69.63	68.73
	Under 1 hectare	35.58	29.77	29.86
	1 to under 2 hectares	.0	.0	.0
	2 to under 3 hectares	.0	.0	.0
	5 & above hectares	.0	.0	.0
	Non agriculture	27.84	45.39	41.18
	Total	28.57	42.07	39.72
Pakistan	Landless	48.79	54.89	54.55
	Under 1 hectare	24.84	32.08	31.83
	1 to under 2 hectares	.00	.00	.00
	2 to under 3 hectares	.00	.00	.00
	5 & above hectares	.0	.00	.00
	Non agriculture	25.69	47.76	38.38
	Total	26.04	42.97	38.07
Source: Authors'	computation from primary data of HIES		•	
	• •			

		Q1	Q2	Q3	Q4	Q5	Total
Pakistan	Landless	12.6	10	8.28	6.82	3.55	7.71
	Under 1 hectare	17.3	22.5	26	27.1	24.5	23.9
	1 to under 2 hectares					0.14	0.04
	2 to under 3 hectares				0.07	0.05	0.03
	5 & above hectares			0.07		0.03	0.02
	Non agriculture	70.1	67.5	65.6	66	71.7	68.3
		100	100	100	100	100	100
Punjab	Landless	6.86	7.04	5.47	5.6	3.61	5.4
	Under 1 hectare	15.7	22.2	25.5	29.8	30.2	25.
	1 to under 2 hectares					0.12	0.0
	2 to under 3 hectares				0.11		0.02
	5 & above hectares			0.11		0.05	0.0
	Non agriculture	77.4	70.7	68.9	64.5	66.1	68.
	Total	100	100	100	100	100	100
Sindh	Landless	27.1	17.8	17.3	11.2	4.28	13.
	Under 1 hectare	16	15.7	16.8	13.7	9.87	13.
	1 to under 2 hectares					0.26	0.0
	2 to under 3 hectares					0.19	0.0
	5 & above hectares						
	Non agriculture	57	66.5	65.9	75	85.4	7:
	Total	100	100	100	100	100	10
NWFP	Landless	13.6	8.99	6.41	5.52	1.37	7.3
	Under 1 hectare	27	33.3	42.6	39.6	28	34.
	1 to under 2 hectares						
	2 to under 3 hectares						
	5 & above hectares						
	Non agriculture	59.4	57.7	51	54.9	70.7	5
	Total	100	100	100	100	100	100
Baluchistan	Landless	8.52	10.8	5.19	3.16	1.75	5.7
	Under 1 hectare	10.4	18.9	25.5	29.6	19.5	21.
	1 to under 2 hectares						
	2 to under 3 hectares						
	5 & above hectares						
	Non agriculture	81.1	70.3	69.3	67.2	78.8	72.
	Total	100	100	100	100	100	10

ownership pattern. This is also confirmed by the Gini Coefficient of land holding which was very high at 0.6151 in 2001-02. Thus, highly unequal land distribution is the main manifestations of poverty in rural Pakistan.

Data at province level provides a more disaggregated picture of landlessness and rural poverty in Pakistan. At province level, the highest poverty incidence among the landless was found in Baluchistan at 68.7% followed by NWFP at 65.4% and Sindh at 58.6% (See **Table 5**). Households with non-agriculture economic activity were also severely hit by the poverty across the country. The highest poverty incidence among the non-agriculture households was found in NWFP at 46% followed by Baluchistan at 41% and Punjab at 38.9%. On the other hand, households with a small land holding under 1 hectare were also hit by the poverty in Sindh at 41.6% followed by NWFP at 40.8% and Baluchistan at 29.8%. However, poverty levels decreases with increases in land holding and eradicates with 1 hectare and above in all the provinces. Thus, distribution of land ownership seems to be one of the most important determinants of rural poverty in the country.

Distribution of land holding at province level indicates that about 85% households own no land in Sindh (landless plus non agriculture), followed by 78% in Baluchistan and 74% in Punjab (See **Table 6**). The unequal land ownership pattern is clearly reflected by the fact that a very small portion of all households holds large farm size in all provinces. Notably, merely 0.05% households own greater than 2 hectares of land in Punjab as well as in Sindh suggesting a highly skewed land ownership pattern. Distribution of land by per capita consumption quintile shows that first four consumption quintiles hold under 1 hectare of land. On the other hand, top quintile—the top 20% richest own large land holding greater than 2 hectares and above in all provinces suggesting a highly unequal distribution of land across provinces. This is also confirmed by Gini Coefficient of land ownership as the Punjab had the highest Gini at 0.6339 followed by NWFP at 0.5893 and Sindh at 0.5072 in 2001-02 (See **Table 7**). Similar ranking can be observed for the coefficient of variation in land ownership. It is noteworthy that Gini Coefficient of land

Table 7: Land Inequality by province.								
Land owned	Punjab	Sindh	NWFP	Baluchistan	Pakistan			
(acres)								
Maximum	905	200	75	80	905			
Mean	8.2493	12.4086	3.5637	13.4157	8.1539			
Standard deviation	31.0081	17.9607	5.9887	11.0927	26.0994			
Coefficient of								
Variation	3.7589	1.4474	1.6805	0.8268	3.2008			
Gini (Land owned)	0.6339	0.5072	0.5893	0.3761	0.6151			
Gini (Expenditure)	0.3099	0.3082	0.2684	0.2314	0.3067			

Source: Authors' computation from primary data of HIES 2001-02

ownership is substantially higher than the Gini Coefficient of expenditure<sup>2</sup> (and income) suggesting an evidence of high underreporting of expenditure (and income) by the richest households due to the tax evasion. However, the maximum land holding by a household was in Punjab at 905 acres followed by Sindh 200 acres. The average land holding was highest in Baluchistan followed by Sindh and Punjab

<sup>&</sup>lt;sup>2</sup> See Anwar (2004), Trends in Inequality between 1998-99 and 2001-02; paper presente4d in 19<sup>th</sup> AGM of Pakistan Society for Development Economics.

The highly unequal land distribution in Pakistan results in tenancy arrangements such sharecropping which are disadvantageous to the poor. The incidence of sharecropping is high as about 67 percent of tenant-operated areas were under sharecropping arrangement in 2000. In Pakistan, the share cropped area<sup>3</sup> has increased from 66.2% in 1990 to 67.5% in 2000. While the sharecropping area increased marginally in Punjab, there was a rapid increase in sharecropping in Sindh from 56.6% in 1990 to 65.7% in 2000 which is also reflected in the highest incidence of rural poverty in Sindh. Prevalence of rural poverty by main employment status also confirms the high susceptibility of poverty of share cropper (See **Table 8**). The highest level of poverty was found among share croppers (47.7%) followed by non agriculture households (38.2%), livestock only (34.5%) and contract cultivators (34.1%).

Table 8: Percent of poor by main employment status							
	Urban	Rural	Both				
Share cropper	43.10	47.84	47.68				
Contract cultivator	22.96	34.83	34.14				
Live stock only	33.60	34.51	34.46				
Owner cultivator	19.56	25.03	24.86				
Non agriculture	24.84	44.01	38.15				
Source: Authors' computation from prim	nary data of HIES 2001-02						

### V(ii). Sources of Income of Landless Poor

However, distribution of land ownership is part of the story of rural poverty in the country. Landless households earn most of their income from non-agricultural sources. This clear from **table 9** that share of non-agricultural income is dominated in total income

Table 9: Distribution of Income by sources for Landless Household

•	Per capita exp quintiles				
	Q1	Q2	Q3	Q4	Q5
Non-Agri-Income as% of total Income	79.27	74.11	70.11	68.88	74.28
Employer, employing less than 10 persons	1.36	0.9	1.03	2.56	3.42
Employer, employing 10 or more persons	0.02	0.23	0.29	0.11	2.04
Self employed	26.89	27.47	28.11	31.34	32.23
Paid employee	54.09	55.96	57.69	55.58	57.53
Unpaid family worker	0.34	0.57	1	0.49	0.59
Owner cultivator	0.54	0.79	1	0.85	0.45
Share cropper	11.43	8.64	6.09	4.94	1.48
Contract cultivator	2.29	2.36	2.15	2.28	0.88
Live stock only	3.06	3.08	2.64	1.85	1.39
Total	100	100	100	100	100

Source: Authors' computation from primary data of HIES 2001-02

\_

<sup>&</sup>lt;sup>3</sup> See Agriculture Census (1990, 2000)

of landless households in all consumption quintiles which ranges from 69% to 79%. Landless are mostly engaged in informal activities that absorb a large majority of unskilled, uneducated or less educated and poor individuals. Paid employment and self employment are the two major sources of income of landless households. However, the poorest landless in the first two quintiles have significantly higher income share from share cropping, contract cultivating and livestock than their richest counterpart in the high consumption quintiles. Households involves in these activities have been characterized as the poorest of the poor. On the other hand, high consumption quintiles landless households have higher share of income as employers, income from self and paid employment than the poorest landless in the first two consumption quintiles.

### VI. Summary and Conclusions

The paper examined the landlessness and rural poverty in Pakistan. The results indicate that prevalence of rural poverty on official poverty line is far greater than the urban poverty—42.9% of rural population compared to 26% of urban population was poor in 2001-02. The results showed that poverty is strongly correlated with lack of land which is the principal asset in the rural economy of Pakistan. Prevalence of poverty was found to be the highest among landless at 54.6% in the country. Not only the poverty gap but also the degree of inequality among the landless household was substantially high. A highly unequal land ownership pattern is reflected by the fact that merely 0.08% households own greater than 2 hectares of land in Pakistan. This result is also supported by the Gini Coefficient of land holding which was considerably high at 0.6151 in 2001-02. Thus, highly unequal land distribution is the main manifestations of poverty in rural Pakistan.

Distribution of land holding at province level indicates that a very small portion of all households holds large farm size in all provinces. Notably, merely 0.05% households own greater than 2 hectares of land in Punjab as well as in Sindh suggesting a highly skewed land ownership pattern. Punjab had the highest Gini coefficient of land holding followed by NWFP, Sindh and Baluchistan in 2001-02. The finding that Gini coefficient of land ownership was substantially higher than the Gini Coefficient of expenditure and income is suggestive of the fact of high underreporting of expenditure and income by the richest households due to the tax evasion. The highly unequal land distribution seems to have resulted in tenancy arrangements such as sharecropping which seem to have resulted in high incidence of poverty particularly in Sindh.

It appears that landlessness to agricultural land is the most important contributor to rural poverty in Pakistan. A high concentration of landownership and unfair tenancy contracts are major obstacles to agricultural growth and alleviation of poverty. Thus both agricultural growth and poverty alleviation can be achieved, if land inequality is reduced and the tenants are protected by well-enforced tenancy contacts. Analysts have shown

that land redistribution<sup>4</sup> has been a source of increased efficiency, increased demand for labour and reduced poverty.

We found that landless and the poor a largely dependent upon non-agricultural sources of income. In rural economy employment is mainly seasonal and determined at low wages, leaving a large proportion of the landless households in poverty. In this context, employment programs for rural public works can have significant role in reducing rural poverty. It is, therefore, suggested to initiate rural public works programs and scale up the existing programs.

Finally, there has been a much discussion about microcredit to the poor in Pakistan but much remains to be done to develop this sector. Although the micro finance institutions in Pakistan are emerging as an important player for poverty reduction, a substantial segment of the poor population remained underserved. Our estimates show that 38.1 percent of population (or 8.3 million households) were below the official poverty line in 2001-02, while just 6 percent (or 0.5 million) households were provided with loan, through microcredit schemes in the country so far. A bulk of rural poor remained largely unaffected through microcredit programs. Thus, there is a need for expansion in the microcredit services together with monitoring and assessing the impact of microcredit on the poor.

# References

- **Ahmad, E. and S. Ludlow (1989):** Growth, Poverty and inequality in Pakistan, Pakistan Development Review.
- **Alauddin, T. (1975)**, Mass Poverty in Pakistan, A further Study, *Pakistan Development Review*.
- **Amjad, R. and M. Irfan (1984)**: "Poverty in Rural Pakistan", in ILO-ARTEP (1984) (eds), Impact of Return Migration on Domestic Employment in Pakistan: A Preliminary Analysis.
- **Amjad, R and Kemal, A.R. (1997)**, Macroeconomic Policies and their Impact on Poverty Alleviation in Pakistan, Pakistan Development Review, 36:1 (Spring)
- **Anwar, T. (1996),** Structural Adjustment and Poverty: The Case of Pakistan, Pakistan Development Review, 35:4 P II (Winter).
- Anwar, T. (1999), Economic Growth, Structural Adjustment and Poverty in Pakistan; Proceedings of International Seminar on "Human Resources Development for Sustained Economic Growth and Poverty Alleviation as well as Progress in the Member States of the OIC." Organised by Islamic Institute of Technology, the Organisation of the Islamic Conference (OIC) 11-13 April 1999, 266-291, Dhaka.

-

<sup>&</sup>lt;sup>4</sup> See Binswanger (1995) and Lipton (1998)

- **Anwar, T.** (2002a), The Impact of Globalization and Liberalization on Growth, Employment and Poverty: A Case Study of Pakistan. WIDER Discussion Paper No.2002/17, United Nations University/World Institute for Development Economic Research, Helsinki, Finland
- **Anwar, T. (2002b),** Unsustainable Debt Burden and Poverty in Pakistan: A Case for HIPC Debt Relief, WIDER Discussion Paper No.2002/53, United Nations University/World Institute for Development Economic Research, Helsinki, Finland
- **Anwar, Talat and Qureshi, Sarfraz Khan (2003)**, Trends in Absolute Poverty in Pakistan: 1990-2001, Proceeding of the Papers at the 18<sup>th</sup> Annual General Meeting and Conference held in January 2003, Islamabad.
- **Anwar, Talat (2004a),** Trends in Income Inequality in Pakistan between 1998-99 and 2001, paper presented at the 18<sup>th</sup> Annual General Meeting and Conference held in January 2004, Islamabad
- **Anwar, Talat (2004b),** Recent Macroeconomic Developments and Implications for Poverty and Employment in Pakistan: The Cost of Foreign Exchange Reserves Holdings in South Asia, paper presented at an International Conference at Australia South Asia Research Centre, Australian National University, Canberra.
- **Arif, G.M.** (2002), Measuring Poverty in Pakistan: A Critical Review of Recent Poverty Lines in *Human Condition Report 2002, Centre for Research on Poverty Reduction and Income Distribution* (CRPRID), Islamabad.
- **Asian Development Bank (2002),** *Poverty in Pakistan, Issues, Causes and Institutional Responses,* Pakistan Resident Mission, Islamabad.
- **Binswanger, Hans, Deininger, K., Feder, G, (1995),** "Power, Distortions, Revolt and Reform in Agricultural Land Relations, In Hand Book of Development Economics, by Behrman, J., and Srinivasan, T.N., Vol3B (Amsterdam: Elsevier).
- **CRPRID** (2002), Human Condition Report 2002, Centre for Research on Poverty Reduction and Income Distribution (CRPRID), Islamabad.
- **Deaton, A (1994)**, 'The Analysis of Household Surveys: Microeconometric Analysis for Development Policy,' mimeo, Princeton University.
- **Ercelawn, Aly (1990)**, Absolute Poverty in Pakistan, Mimeo, Applied Economics Research Centre, Karachi.
- **Federal Bureau of Statistics,** Household Income and Expenditure Survey (HIES), Various Surveys, Statistics Division, Islamabad.
- Federal Bureau of Statistics (2001), Poverty in the 1990s, Statistics Division, Islamabad.

- **Foster, James., J. Greer, and E. Thorbecke, (1984)** A Class of Decomposable Poverty Measures, Econometrica Vol. 52, pp: 761-765
- Gazdar, Haris, Stephen Howes and Salman Zaid (1994), Recent Trends in Poverty in Pakistan, STICERD, London School of Economics, Background Paper for the Pakistan Poverty Assessment, memeo.
- **Government of Pakistan (1985)**, Energy and Protein Requirements, Report of a joint FAO/WHO Ad-hoc Experts Committee, Geneva, Islamabad
- **Government of Pakistan (2002)**, *Economic Survey*, 2001-2002, Ministry of Finance Islamabad,
- **Greer and Thorbecke (1986),** A Methodology for Measuring Food Poverty Applied to Kenya, Journal of Development Economics, 24(1986) 59-74. North-Holland.
- **Irfan and Amjad (1984),** Impact of Return Migration on Domestic Employment in Pakistan: A Preliminary Analysis, ILO-ARTEP.
- **Jafri, S.M..Y** (1999), Assessing Poverty in Pakistan in "A Poverty Profile of Poverty in Pakistan", Mahbub ul Haq Centre for Human Development, Islamabad.
- **Kakwani, Nanak, (1990)**, Testing for Significance of Poverty Differences with Application to Cote d Ivoire, Living Standard Measurement Study Working Paper No.62, The World Bank, Washington, D.C.
- **Kemal, A.R.** (2002), Macro-economic Policy and Poverty in Pakistan in *Human Condition Report 2002, Centre for Research on Poverty Reduction and Income Distribution* (CRPRID), Islamabad.
- Kruik and Leeuwen (1985), Changes in Poverty in Pakistan, Pakistan Development Review.
- **Liption, Michael, (1985),** Successes in Anti Poverty (Geneva: International Labor Office)
- Malik, Mohammad, H. (1988), Existing Evidence on Poverty, Pakistan Development Review
- Malik, Sohalil, J. (1991), "Poverty in Pakistan 1984/85 and 1987/88", in M. Lipton and J.Van deer Gaag (eds), Including the Poor, World Bank, Washington D.C.
- Rural Poverty in Pakistan, Pakistan Development Review
- **Malik, Sohalil, J. (1994)**, "Poverty in Pakistan 1984/85, 1987/88 and 1990-91", mimeo, IFPRI, Washington D.C.

- **Mujahid, G.B.** (1978), Measurement of Poverty and Income Distribution, Pakistan Development Review 17:3.
- Naseem, S.M. (1973): "Mass Poverty in Pakistan: Some Preliminary Findings" *Pakistan Development Review*, Vol. 12: 4, 312-360.
- Naseem, S.M. (1979), Underdevelopment, Poverty and Inequality in Pakistan, Vanguard, Islamabad
- **Qureshi S.K. and G.M. Arif (1999)** 'Profile of Poverty in Pakistan 1998-9', *MIMAP Technical Paper Series* No.5, PIDE: Islamabad
- World Bank (1995), Pakistan Poverty Assessment, Washington, D.C.
- World Bank (2002), Poverty in Pakistan: Vulnerabilities, Social Gaps, and Rural Dynamics, Washington, D.C.