Landlessness and Rural Poverty in Pakistan

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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 the 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. Although landlessness and rural poverty in Pakistan received significant attention in the 1970 and 1980, discussions on this issue remained limited in the 1990s. 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 be the most important contributor to rural poverty. A high concentration of landownership is a major constraint to agricultural growth and alleviation of poverty. There is 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 (HIES), 2001-02 that has been used to examine the landlessness and rural poverty in the country. 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.

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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); Kruijk and Leeuwen (1985); Malik (1988); Ahmad and Ludlow (1989); Ercelawn (1990), Malik (1991, 1994); Amjad and Kemal (1997); FBS (2001); World Bank (1995, 2002); Anwar and Quershi (2002); Planning Commission (2003) and Malik (2005). These authors and/or institutions employed different methods, chose different poverty lines and thereby, reported divergent poverty trends.

In contrast to Naseem (1973) and Alauddin (1975); Irfan and Amjad (1984) in a seminal paper showed a significant increase in rural poverty between 1963-64 and 1969-70, whereas a significant reduction in poverty between 1969-70 and 1979 (see Figure 1). The authors finding suggest that rural poverty rose due to the significant changes in the agrarian structure, especially the size distribution of holdings which are said to have had important repercussions for the rural occupational distribution of households. The introduction of new technology allowed large landowners to resume land previously rented-out for self cultivation. Tenant farmers were hence evicted, and had either to operate smaller landholdings, or then join the ranks of the landless labourers. Thus, despite a greater agricultural growth on account of technological innovation, the conditions of those evicted deteriorated. Increased mechanisation led to a decrease in demand for labour which has been one of the key reasons for the increase in poverty. On the other hand, decline in rural poverty in the 1970s was due to a significant increase in remittances that allowed a redistribution of income in the rural sectors having positive impacts on poverty.
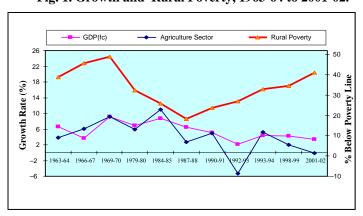
Fig. 1. Growth and Rural Poverty, 1963-64 to 2001-02.

Source: Pakistan (2002); Amjad and Kemal (2003); Planning Commission's notification August 16, 2002; Anwar and Qureshi (2002).

However, rural poverty continued to decline between 1979 and 1987-88 because of respectable growth in agriculture sector together with continuous flow of overseas workers' remittances. Various attempts to estimate rural poverty in the 1990s include FBS (2001); World Bank (2002); Anwar and Qureshi (2002); Planning Commission (2003) and Malik (2005). Except World Bank (2003), these studies found a rising trend in poverty levels in the country during the 1990s (see Table 1).

Table 1

Headcount Measure for Pakistan—1990-91 to 2001-02

Years	FBS (2001) 2550 Calories	World Bank (2002) 2550 Calories	Planning Commission (2003) 2350 Calories	Anwar and Qureshi (2002) 2550 Calories
Overall				
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
Rural				
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.

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 *not* 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 percent in 1990-91 whereas it were low at 35.9 percent in 1998-99 relative to other studies.[1] It is, therefore, not appropriate to draw a conclusion about poverty trend when the method of measurement is not consistent. Thus, a stagnant trend drawn for the 1990s by the World Bank (2002) study for rural poverty in Pakistan seems to be a puzzling conclusion.

[1]See Anwar (1996); Malik (1991, 1994); Amjad and Kemal (1997) and Anwar and Qureshi (2002).

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 percent in 1992-93 to 36.3 percent in 1998-99. Furthermore, Anwar and Qureshi (2002) used an inflation adjusted poverty line of Rs 668 per adult per month in 1998-99 prices and concluded a substantial rise in rural poverty from 32.1 percent 1998-99 and to 41.0 percent 2001-02. Although Malik (2005) did not mention the poverty line used in the study, his results also corroborate a rising trends in rural poverty during the 1990s. The rise in rural poverty was attributable to a decline in growth rates of agriculture sector which reversed the historically declining trend and resulted in rise in rural poverty (see Figure 1). In addition, Malik (2005) concluded that the growth in agriculture sector was overstated due to incorrect account of livestock fishing and forestry for some years of the 1990s. With a population growth rate of 2.5 percent over this period, growth in per capita growth remained stagnant at 0.6 percent over the 1990s. Consequently, real wages of agricultural workers fell during the period. Thus, the rise in poverty was certain given the decline in real wages of the population during the 1990s. Furthermore, Malik (2005) argued that skewed land distribution results in sharecropping which exploits the poor tenants and is thus one of the major constraints for rural poverty reduction.

In 2002-03, the Planning Commission reduced the reference threshold in determining national poverty line from minimum calorie intake 2550 to 2350 per adult per day required on average for an individual for physical functioning and daily activities. Planning Commission notified the estimated official poverty line at Rs 673 per capita per month in 1998-99 price and Rs 748 per capita per month in 2001-02 prices. The implications of this change of the definition of poverty is that the poverty levels has been reduced by 2 percentage points at national as well as the province level which is an statistical artefact but not a decline in reality. Poverty estimate implied by the above official poverty line suggests that 32 percent of population in Pakistan and 38.9 percent of population in rural areas were poor in 2001-02. It is noteworthy that Anwar and Qureshi (2002) using lower poverty line of consumption expenditure of Rs 735 per adult per month in 2001-02 prices estimated a headcount at 35.6 percent for the country as a whole. Thus, official poverty estimates at 32 percent of population using a higher poverty line of Rs 748 per capita per month in 2001-02 seem to be significantly lower and needs to be corroborated from independent sources.[2] 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

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[2]World Bank (2005) Poverty Update also reports high level of poverty at 37 percent for 2001-02 using the official poverty line. ADB working paper by Malik (2005) also reports sufficiently high poverty level.

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 official poverty line of Rs 748.56 per adult per month in 2001-02 notified by Planning Commission as sufficient resources in rupee term to meet minimum requirement of 2350 calorie per adult has been used. 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_α, have been used. These measures do not only reflect the severity of poverty but also satisfy the axiom of decomposability and additivity.

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

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_α is the mean of squared proportionate poverty gaps and indicates greater severity of poverty among the poorest. The higher the value of α the more sensitive the measure is to the well being of the poorest. As α 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 2001-02 have been used to examine the rural poverty in Pakistan. The universe consists of all urban and rural areas of the four provinces of Pakistan defined as such by the Population Census. The sample of HIES 2001-02 consists of 14,599 households both rural and urban in all the four provinces of Pakistan. A stratified random sampling has been done. Accordingly, the population is divided into mutually exclusive sub-populations, each of which is sampled independently. The results of these independent random samples are then combined to provide the desired estimate for the entire population. 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. POVERTY LEVELS IN PAKISTAN

The poverty appears to be widespread in Pakistan. The results indicate that prevalence of absolute poverty in Pakistan implied by the official poverty line was at 38.02 percent in 2001-02 (see Table 2). Incidence of rural poverty was far greater than the urban poverty. The results suggest that 42.93 percent of population in rural areas and 26.04 percent of 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.

Table 2

Headcount by Province and Region Using Poverty Line
Official 748.56 per Adult in 2001-02

	Urban	Rural	Overall
Punjab	26.92	39.27	35.71
Sindh	22.73	48.63	38.50
NWFP	34.21	48.00	45.97
Balochistan	28.57	42.07	39.72
Pakistan	26.04	42.93	38.02

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

Poverty estimates at the province level suggest the highest incidence of rural poverty in Sindh at 48.63 percent followed by NWFP at 48 percent and Balochistan 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 percent in 2001-02.

1. Landownership and Poverty

The above results indicate that prevalence of poverty in rural areas was substantially higher than the urban areas. 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. Tables 3 to 5 reports headcount ratio, poverty gap and poverty severity measure by land holding. Poverty incidence was found to be the highest in Pakistan in rural areas among landless at 54.89 percent followed by non-agriculture households at 47.76 percent.

Table 3

Headcount by Landholding, Using Official Poverty Line
748.56 per Adult in 2001-02

		Rural
Punjab	Landless	45.12
	Under 5 Acres	32.18
	5 to under 12.5 Acres	21.43
	12.5 to under 35 Acres	19.36
	35 to under 55 Acres	7.78
	55 and above Acres	5.42
	Non-agriculture	47.54
	Total	39.27
Sindh	Landless	58.67
	Under 5 Acres	46.62
	5 to under 12.5 Acres	43.66
	12.5 to under 35 Acres	42.77
	35 to under 55 Acres	9.80
	55 and above Acres	.00
	Non-agriculture	46.82
	Total	48.63
NWFP	Landless	65.95
	Under 5 Acres	43.21
	5 to under 12.5 Acres	35.57
	12.5 to under 35 Acres	29.66
	35 to under 55 Acres	.00
	55 and above Acres	.00
	Non-agriculture	50.87
	Total	47.88
Balochistan	Landless	69.63
	Under 5 Acres	42.55
	5 to under 12.5 Acres	25.37
	12.5 to under 35 Acres	34.27
	35 to under 55 Acres	14.55
	55 and above Acres	.00
	Non-agriculture	45.39
	Total	42.07
Pakistan	Landless	54.89
	Under 5 Acres	37.00
	5 to under 12.5 Acres	28.17
	12.5 to under 35 Acres	27.67
	35 to under 55 Acres	8.43
	55 and above Acres	3.72
	Non-agriculture	47.76
	Total	42.91

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

Table 4

Poverty Gap by Landholding, Using Official Poverty Line
748.56 per Adult in 2001-02

		Rural
Punjab	Landless	8.41
	Under 5 Acres	5.67
	5 to under 12.5 Acres	4.43
	12.5 to under 35 Acres	3.39
	35 to under 55 Acres	2.84
	55 and above Acres	2.20
	Non-agriculture	10.94
	Total	8.45
Sindh	Landless	14.48
	Under 5 Acres	8.94
	5 to under 12.5 Acres	10.92
	12.5 to under 35 Acres	7.28
	35 to under 55 Acres	3.71
	55 and above Acres	.00
	Non-agriculture	10.54
	Total	11.16
NWFP	Landless	14.43
	Under 5 Acres	7.52
	5 to under 12.5 Acres	7.09
	12.5 to under 35 Acres	6.51
	35 to under 55 Acres	6.41
	55 and above Acres	3.00
	Non-agriculture	10.11
	Total	9.28
Balochistan	Landless	10.76
	Under 5 Acres	7.68
	5 to under 12.5 Acres	3.59
	12.5 to under 35 Acres	4.21
	35 to under 55 Acres	1.68
	55 and above Acres	.00
	Non-agriculture	8.57
	Total	7.35
Pakistan	Landless	12.15
	Under 5 Acres	6.56
	5 to under 12.5 Acres	6.11
	12.5 to under 35 Acres	4.68
	35 to under 55 Acres	3.27
	55 and above Acres	1.63
	Non-agriculture	10.58
	Total	9.12

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

Table 5

Poverty Severity by Landholding, Using Official Poverty Line
748.56 per Adult in 2001-02

		Rural
Punjab	Landless	2.21
	Under 5 Acres	1.52
	5 to under 12.5 Acres	1.42
	12.5 to under 35 Acres	.94
	35 to under 55 Acres	1.03
	55 and above Acres	.89
	Non-agriculture	3.67
	Total	2.70
Sindh	Landless	4.97
	Under 5 Acres	2.61
	5 to under 12.5 Acres	3.68
	12.5 to under 35 Acres	1.98
	35 to under 55 Acres	1.41
	55 and above Acres	.00
	Non-agriculture	3.38
	Total	3.65
NWFP	Landless	4.58
	Under 5 Acres	1.93
	5 to under 12.5 Acres	1.89
	12.5 to under 35 Acres	1.61
	35 to under 55 Acres	.81
	55 and above Acres	.19
	Non-agriculture	2.87
	Total	2.59
Balochistan	Landless	2.17
	Under 5 Acres	1.67
	5 to under 12.5 Acres	.76
	12.5 to under 35 Acres	.75
	35 to under 55 Acres	.19
	55 and above Acres	.00
	Non-agriculture	2.30
	Total	1.84
Pakistan	Landless	3.83
	Under 5 Acres	1.75
	5 to under 12.5 Acres	1.94
	12.5 to under 35 Acres	1.22
	35 to under 55 Acres	1.10
	55 and above Acres	.61
	Non-agriculture	3.41
	Total	2.84

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

However, poverty incidence declines with increases in the land holding. Poverty gap and poverty severity measures also indicate a substantially high poverty gap among landless in the country (12.15 percent) followed by non-agricultural households (10.58 percent). Poverty gap also declines with increases in landholding (see Table 4). The severity of poverty measure that capture the degree of inequality among the poor also follow a similar pattern.

The above results suggest that the unequal landownership 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 67 percent households own no land (landless plus non-agriculture, see Table 6). In contrast, about 18.25 percent household own under 5 acres of land and 9.66 percent household own 5 to 12.5 acres 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 1 percent (0.64 percent plus 0.37 percent) households own greater than 35 acres of land suggesting a highly skewed landownership pattern. This is also confirmed by the Gini coefficient of land holding which was very high at 0.6151 in 2001-02 (see Table 8). Thus, highly unequal land distribution is the main manifestations of poverty in rural Pakistan.

Table 6

Percent Distribution of Households by Landholdings

	Rural
Landless	10.36
Under 5 Acres	18.23
5 to under 12.5 Acres	9.66
12.5 to under 35 Acres	3.87
35 to under 55 Acres	0.64
55 and above Acres	0.37
Non-agriculture	56.87
Total	100.00

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

Data at province level provides a more disaggregated picture of landlessness and rural poverty in Pakistan (see Table 3, 4 and 5). At province level, the highest poverty incidence among the landless was found in Balochistan at 69.6 percent followed by NWFP at 65.9 percent and Sindh at 58.6 percent (see Table 3).

Households engaged in non-agricultural economic activities were also severely hit by poverty across rural areas. The highest poverty incidence among the non-agriculture households was found in NWFP at 50.8 percent followed by Balochistan at 45.3 percent and Punjab at 47.5 percent. On the other hand, households with a small land holding under 5 acres were also hit by the poverty in Sindh at 46.6 percent followed by NWFP at 43.2 percent and Balochistan at 42.5 percent. However, poverty levels generally decrease with increases in land holding and eliminates with 55 acres and above. Thus, distribution of landownership 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 86 percent households own no land in Sindh (landless plus non-agriculture), followed by 78 percent in Balochistan and 74 percent in Punjab (see last column, Table 7). The unequal landownership pattern is clearly reflected by the fact that a very small portion of all households holds large farm size in all provinces. Notably, merely 0.1 percent households own 55 acres of land in Sindh and NWFP followed by 0.2 percent households in Punjab and 0.3 percent households in Balochistan suggesting a highly skewed landownership pattern. Distribution of land by per capita consumption quintile shows a greater concentration of first four consumption quintiles in land holding under 12.5 acres. On the other hand, top quintile—the top 20 percent richest have greater concentration of large size land holding of 35-55 acres and 55 acres and above in all provinces suggesting a highly unequal distribution of land across provinces. This is also confirmed by Gini coefficient of landownership 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 8). Similar ranking can be observed for the coefficient of variation in landownership. It is noteworthy that Gini coefficient of landownership is substantially higher than the Gini coefficient of expenditure[3] (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 Balochistan followed by Sindh and Punjab. 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 72 percent of tenant-operated[4] areas are under sharecropping arrangement. Prevalence of rural poverty by main employment status also confirms the high susceptibility of poverty of share cropper (see Table 9). The highest level of poverty was found among share croppers (47.84 percent) followed by non-agriculture households (44.01 percent), and contract cultivators (34.83 percent) livestock only (34.51 percent).

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[3]See Anwar (2003), Trends in Inequality between 1998-99 and 2001-02; paper presented in 19th AGM of Pakistan Society for Development Economics.
     [4] See Malik (2005).

Table 7

Percent Distribution of Owned Lands, by per Capita
Consumption Quintiles, by Province

		Q1	Q2	Q3	Q4	Q5	Total
Punjab	Landless	6.9	7.0	5.5	5.6	3.6	5.4
	Under 5 Acres	9.9	16.3	15.7	15.8	14.0	14.5
	5 to under 12.5 Acres	4.3	4.5	7.3	9.8	9.9	7.7
	12.5 to under 35 Acres	1.1	1.4	2.2	3.7	4.7	2.9
	35 to under 55 Acres	.4		.1	.3	1.2	.5
	55 and above Acres	.1		.3	.3	.6	.3
	Non-agriculture	77.4	70.7	68.9	64.5	66.1	68.7
	Total	100.0	100.0	100.0	100.0	100.0	100.0
Sindh	Landless	27.1	17.8	17.3	11.2	4.3	13.9
	Under 5 Acres	4.9	6.0	6.0	4.5	1.6	4.3
	5 to under 12.5 Acres	8.8	5.9	7.2	6.1	3.9	6.0
	12.5 to under 35 Acres	2.0	3.6	2.6	2.4	2.9	2.7
	35 to under 55 Acres	.3		.7	.6	1.2	.6
	55 and above Acres	.2	.3	.3	.1	.8	.4
	Non-agriculture	56.9	66.4	65.9	75.0	85.4	72.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0
NWFP	Landless	13.6	9.0	6.4	5.5	1.4	7.4
	Under 5 Acres	22.4	28.0	36.2	32.4	17.9	28.0
	5 to under 12.5 Acres	3.3	4.3	5.3	5.5	6.7	5.0
	12.5 to under 35 Acres	1.3	.5	1.1	1.7	2.3	1.3
	35 to under 55 Acres		.3			.7	.2
	55 and above Acres		.1			.4	.1
	Non-agriculture	59.4	57.7	51.0	54.9	70.7	58.0
	Total	100.0	100.0	100.0	100.0	100.0	100.0
Balochistan	Landless	8.5	10.8	5.2	3.2	1.8	5.8
	Under 5 Acres	2.9	1.9	1.9	4.1	2.0	2.5
	5 to under 12.5 Acres	4.7	8.6	12.7	13.7	11.3	10.6
	12.5 to under 35 Acres	2.6	8.2	10.1	9.6	5.8	7.6
	35 to under 55 Acres		.3	.4	1.4	.4	.5
	55 and above Acres	.2		.5	.9		.3
	Non-agriculture	81.1	70.3	69.3	67.2	78.8	72.7
	Total	100.0	100.0	100.0	100.0	100.0	100.0
Pakistan	Landless	12.6	10.0	8.3	6.8	3.5	7.7
	Under 5 Acres	10.4	15.3	15.8	14.6	10.8	13.3
	5 to under 12.5 Acres	5.2	5.0	7.3	8.6	8.2	7.1
	12.5 to under 35 Acres	1.4	2.1	2.5	3.4	4.1	2.9
	35 to under 55 Acres	.3	.1	.2	.4	1.1	.5
	55 and above Acres	.1	.1	.3	.2	.6	.3
	Non-agriculture	70.1	67.5	65.6	66.0	71.7	68.3
	Total	100.0	100.0	100.0	100.0	100.0	100.0

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

Table 8

Land Inequality by Province

Land Owned (Acres)	Punjab	Sindh	NWFP	Balochistan	Pakistan
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.

Table 9

Percent of Poor by Main Employment Status

	Rural
Share Cropper	47.84
Contract Cultivator (Lessee on Fixed Rent)	34.83
Live Stock only	34.51
Owner Cultivator	25.03
Non-agriculture	44.01

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

2. Sources of Income of Landless Poor

However, distribution of landownership is part of the story of rural poverty in the country. Landless households earn most of their income from non-agricultural sources. This is clear from Table 10 that share of non-agricultural income is dominated in total income of landless households in all consumption quintiles which ranges from 45 percent to 74 percent. Landless are mostly engaged in informal activities that absorb a large majority of unskilled, uneducated or less educated and poor individuals. For example, 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 involved in these activities can be characterised 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.

Table 10

Distribution of Income by Household Head for Landless Household (Rural)

Per Capita Exp. Quintiles	Landless Income as % of Total Income	Occupation of Head of Household								
		Employer, Employing Less than 10 Persons	Employer, Employing 10 or More Persons	Self-employed	Paid Employee	Unpaid Family Worker	Share Cropper	Contract Cultivator	Livestock Only	Total
Q1	74.09	1.19	02.00	25.49	51.14	43.	14.78	2.96	3.98	100
Q2	66.73	.85	.10	23.85	55.40	.79	12.45	3.16	3.40	100
Q3	59.18	1.19	.29	24.81	54.93	1.68	9.86	3.52	3.73	100
Q4	52.98	1.67	0.23	28.61	50.60	.91	9.95	4.42	3.61	100
Q5	45.56	4.20	1.79	26.70	52.19	1.70	5.68	2.82	4.92	100

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

VI. SUMMARY AND CONCLUSIONS

The paper examined the landlessness and rural poverty in Pakistan. The results indicate that prevalence of rural poverty based on official poverty line is far greater than the urban poverty—42.9 percent of rural population compared to 26 percent 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 54.89 percent across rural areas in the country. Not only the poverty gap but also the degree of inequality among the landless household was substantially high. A highly unequal landownership pattern is reflected by the fact that merely 1.0 percent households own greater than 35 acres and above 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. It thus appears that 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. Strikingly, just 0.1 percent households own 55 acres and above land in Sindh and NWFP followed by 0.2 percent households in Punjab and 0.3 percent households in Balochistan suggesting a highly skewed landownership pattern. Punjab had the highest Gini coefficient of land holding followed by NWFP, Sindh and Balochistan in 2001-02. The finding that Gini coefficient of landownership 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 one of the most important contributors 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[5] has been a source of increased efficiency, increased demand for labour and reduced poverty. While landlessness appears to be one of most important causes of rural poverty in Pakistan, some policy implications to reduce rural poverty are discussed here.

First, 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 programmes for rural public works can have

[5]See Binswanger, *et al.* (1995) and Lipton (1998).

significant role in reducing rural poverty. It is, therefore, suggested to initiate rural public works programmes and scale up the existing programmes.

Second, though agricultural growth is considered essential for poverty reduction in rural areas, it may not alone be sufficient to reduce poverty because of the factors that drive the growth in agriculture sector. These included the higher use of conventional inputs such land, water, fertiliser and seed; increase in total factor productivity that depends on agricultural research and extension; adequate rural infrastructure; and targeted transformations in the institutional set up including financial institution and input and output markets. These are the areas where future research can be focused to design and implement pro-poor policy and institutional packages to reduce rural poverty.

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 in Pakistan remained unable to benefits from the microcredit programmes. On the contrary, in Bangladesh 95 percent of the poor households (or 9.79 million out of 10.2 million poor households) were provided microcredit so far which has greatly reduced absolute poverty during the last three decades. While economic growth is not sufficient for poverty reduction, the government should pay a serious attention to the expansion microcredit schemes so as to give adequate coverage to bulk of the poor particularly in rural areas. Along with expansion of the microcredit to the poor, there is also a need to monitor and assess the impact of existing microcredit scheme on the poor.

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