

# Socio-Economic Dimensions of Rural Poverty: An Experience of Barani Areas in Punjab–Pakistan

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## ABSTRACT

This study was carried out on the Socio-economic factors lying behind the rural poverty in the Barani areas. Using the appropriate economic tools (Descriptive Statistics) on primary data as well as globally famous FGT class of poverty measures were used to see the Socio-economic factors causing poverty. It was observed that agricultural income of those related with agriculture sector is low as they have large family size coupled with illiteracy as well as dependency ratio was also very high.

**Key Words:** Rural poverty; Socio-economic; Barani areas; FGT

## INTRODUCTION

Poverty has become a burning issue among the researchers, policy makers and international bodies and organizations like IMF, ADB and World Bank. The problem of poverty is prevalent both in rural and urban areas with proportionate increase in the former is higher. Poverty is the result of economic, political and social processes that interact with each other and frequently reinforce in ways that exacerbate the deprivation in which poor people live (Haq, 1999). Right from 1990's all economic development plans of the successive governments have focused on poverty eradication but it continues to exist with the same momentum rather increasing despite macroeconomic stability and substantial economic growth rate in the country. In this way poverty scenario in Pakistan is a complex case as compared to other parts of the world. There is a general consensus that directs poverty alleviation and anti poverty programs must process rapid and sustainable growth. Among such programmes there are social sector development such as education, health, sanitation and increased provision of credit to the poor for investment in the micro-enterprise (Rauf, 2001).

As one looks towards the global poverty figures, the deprived masses of the poor are living in acute misery in the rural areas. According to International Fund for Agriculture Development (IFAD), out of total 1.2 billion poor more than 900 million live in rural areas around the globe. And the count for Asia and Pacific is 90% out of total 800 million rural poor (IFAD, 2002). The connotation of poverty is very wide and multidimensional in its character not easy to be conceptualized. World Bank defines poverty in terms of facing hunger, lack of shelter, being sick and not being able to see a doctor. Poverty is not being able to go to school and knowing how to read. Poverty is not having a job, is fear for future, living one day at a time. Poverty is losing a child to

illness brought about by unclean water. Poverty is powerlessness, lack of representation and freedom (World Bank, 2001).

Pakistan is faced with twin challenges of reviving growth and reducing poverty. The poor in Pakistan are not only deprived of financial resources but also lack access to basic needs such as education, health, clean drinking water and proper sanitation. Limited access to education, health and nutrition undermines their capabilities, limits their ability to secure gainful employment and results in income poverty and social exclusion; while also making them vulnerable to shocks (MOF, 2001).

Statistics reveal that in Punjab, over one third of the population lives below the poverty threshold and only 45% of them are termed as literate in the loose sense of educational standards. There is a lack of basic health facilities and the state of roads, canals, school buildings and other infrastructure is rapidly deteriorating (PRSP, 1998). Inadequate access to health services in rural areas and in the slums of urban areas has become a major cause of increasing poverty. A recent survey has reflected that the breadwinner in the poor family's on the average loses 80 to 90 working days in a year because of illness. This means not only a 20% reduction in families meager income, but additional expenditure on treatment, often require sale of an animal or other assets the family may have (Aziz, 2003). Social development and absolute poverty are affected by a number of likely factors like economic growths, level of income, access to multiple components of social services like health, education, family planning, nutrition, water and sanitation (Geyndt, 1990).

According to the caloric based poverty definition (Head count ratio), 31.8% people in Pakistan lived below poverty line in 2003. Poverty in Pakistan is largely a rural phenomenon as 38.65% rural population lived below the poverty line as against 22.39% urban population in 2003

(GOP, 2003). Based on the requirement of 2350 calories per adult equivalent per day, the planning division of government of Pakistan has adopted the official poverty line for the household income and expenditure survey (HIES) 2000-01 as Rs.748 per person per month.

The present study was conducted in Punjab's district Chakwal, which is located in Barani tract. Out of 11.83 million hectare of total cultivated area of Punjab province, about 3.10 million located in Barani tract which is further characterized by different ecological zones depending upon soil type. The Barani tract has its own peculiar socio-economic problems, which are quite different from that of irrigated areas. This study aims at exploring socio-economic characteristics of the rural poor along with identifying the factors responsible for their poverty.

## MATERIALS AND METHODS

This study is mainly based on primary data collected from the Barani rural areas of Tehsil Talagang of district Chakwal. A sample of 60 respondents well representative of the overall population was selected on random basis. For the estimation of poverty Foster, Greer and Thorbeck (FGT) class of poverty measures was employed. In this popularly used FGT class of poverty measures Head count ratio was used to identify the incidence of poverty, Poverty gap index was operated to find out the depth of poverty and squared poverty gap was determined to take into account the severity of poverty. Finally the findings of these measures were compared with that of Sen Class of poverty measures. In addition to that, keeping the poverty threshold in consideration, poor and non-poor classification was also made in terms of various socio-economic tangibles possessed by the households.

**Head count ratio.** It is based on poverty line that is established by costing a minimum basket of goods for basic human survival, using income or consumption data (Chaudhry, 1985). Helps in measuring the incidence of poverty, it can be measured by the following formula;

$$H = q / n$$

Where

H = head count ratio

q = number of person below a specified Poverty line.

n = total number of observation.

**Poverty gap (depth of poverty).** It measures the degree to which the mean income of the poor differs from the established poverty line (depth of poverty). It can be measured by following formula;

$$PG = 1 / n \sum_{i=1}^q [(Z - Y_i) / Z] = \text{mean proportionate poverty gap across the whole population.}$$

Where;

Z = poverty line,

Y<sub>i</sub> = income of ith individual

i = 1, 2, 3... n

Y<sub>1</sub>, Y<sub>2</sub>, Y<sub>3</sub>,.....Y<sub>q</sub>; Y<sub>q</sub> ≤ Z

Poorest ----- least poor

**Squared poverty gap (severity of poverty).** It captures differences in income levels among the poor it can be measured by the following formula;

$$SPG = 1 / n \sum_{i=1}^q [(Z - Y_i) / Z]^2$$

It is sensitive to the distribution among the poor.

**Sen index of poverty.** To come round various weaknesses and limitations, Sen. (1976) proposed a new measure of poverty based on an ordinal approach to comparisons. This measure is symbolically written as;

$$P = H [I + (1 - I) G]$$

Where

P = Sen. Index of poverty,

H = Head count ratio,

G = Gini coefficient

I = poverty gap ratio.

## Research Findings

**FGT class of poverty measures.** The approach of head count ratio was used to measure the number of poor below specified poverty line. Data in Table I showed the number of people below poverty line were 65% (Head Count Ratio) that is too high and shows the misery of the people and worse living condition. On an average, for the sample area (two villages), the values for poverty gap (PG) and squared poverty gap (SPG), stood at 28.6 and 16.4, respectively. Poverty gap shows that how far a poor is from the defined poverty line, while the composite index developed by Amrtya Sen takes into account all the above indexes into its fold and result for was 46.3 which was very high.

Following section discusses the causes and socio-economic characters of poor.

### Poor and non-poor classification: educational status.

One of the prominent causes of poverty is lack of education, which in other words is called investment in human being. People are poor because they invest less on educating themselves and this result in their low earnings. In case of education it was evident from the given Table II that in poor households the number of illiterate was more, as it is visible that a huge percentage about 62% was illiterate in poor households as compared to 14% in the non-poor households. While looking at primary level the number of children going to attend school was not sufficient (about 20.5%) which further exacerbate the matter and they were facing problem of mass illiteracy.

Another interesting outcome was that at metric level about 43% people were in non poor households as compare to only 8% in poor community of the surveyed area. There was no single graduate in poor households while only about 3% people were at college level the figure for non-poor was about 19% while about 5% were at graduation level. The results of the study substantiated the fact that higher the level of education lower will be the poverty level and improved socio-economic status enjoyed by the people.

**Poor and non-poor classification: gender and marital status.** In our society, which is characterized as male dominated, women are not treated, as they deserve. That is why they lag behind than woman of other countries and contributes little in the overall economic development of the country. Out of total number (that is 60) of respondent only eleven were woman and these women were the heads of their households. There was found no literacy among these surveyed woman and they were also deprived of the opportunities, which were almost very less in numbers especially in the surveyed villages. All women fell in the poor community as they had very less income generating opportunities and these women were also paid less for whatever work they found in their areas. Most of them were attached with harvesting as their profession as well as selling vegetables in the vicinity. One of the basic reasons is that these women were socially excluded and bounded in their houses; therefore it makes their lives miserable.

Poverty increases when the people under poverty get married because now they have to feed more people with their little income. The data given in the Table III revealed that among married people 27 (69%) lied below poverty line while for non-poor the percentage increases to 81. The incidence of poverty among people who did not get married was somewhat less and about 8%. The category of others include widow divorcee etc., they have the burden of dependents on them that is why they were more poverty stricken and include about 23%.

**Poor and non poor classification: family size and earning hands.** As it is said time and again that poor bear more children than non-poor families that in turn increases the dependency ratio. The following Table IV showed the categories of different family sizes of poor and non-poor community. Most of the poor households (about 59%) had their family size between 7 to 12 family members. Less income available at hand with a large family size makes them vulnerable and everyday necessary items remain scarce for them. One family among Poor had more than 17 family members, while there was no such family in non-poor community, which had such a high number of family members. It means that only few hands are feeding the lot as our average family size is large (7.8 in case of poor). From the above Table IV also it becomes clear that the earners are too small in number to feed masses. The average number of earner in the poor households is about one and a half while their average family size was 7.8 persons, as compared to more than 2% in the non-poor households having average family size of 5.9.

Even in the non-poor community, the number of earner was not satisfactory because their family size was also large, but in comparison with poor they were more in numbers and somewhat better off.

**Poor and non poor classification: occupation and income.** As an agricultural country where masses are attached with the agriculture profession, it is painful to say that incidence of poverty is more in these masses. As Table

**Table I. FGT AND SEN class of poverty measures**

Poverty Measure	Percent
Head Count Ratio	65.0
Poverty Gap	28.60
Squared Poverty Gap	16.07
Sen Index of Poverty	46.30

**Table II. Poor and non poor classification: educational status**

Educational Status	Below Poverty Threshold		Above Poverty Threshold	
	No.	%	No.	%
Illiterate	24	61.5	3	14.27
Primary	8	20.5	3	14.27
Middle	3	7.6	1	4.81
Metric	3	7.6	9	42.85
F.A/ F.Sc	1	2.8	4	19.04
Graduation and above	0	0	1	4.76
Total	39	100.0	21	100.0

**Table III. Poor and non poor classification: gender and marital status**

Gender	Gender (Household Heads)			
	Below Poverty Threshold		Above Poverty Threshold	
	No.	%	No.	%
Male	28	71.7	21	100
Female	11	28.3	0	0.0
Total	39	100.0	21	100.0
Marital Status	Marital Status (Household Heads)			
	Below Poverty Threshold		Above Poverty Threshold	
	No.	%	No.	%
Single	3	7.69	4	19.05
Married	27	69.23	17	80.95
Others	9	23.07	0	0.0
Total	39	100.0	21	100.0

V points out that people who had opted agriculture as their mean for surviving were more poverty stricken (about 49%) in the study area. It is worth mentioning here that the incidence of poverty was more in agriculture profession but increases as they continue to use old farm practices and did not adopted the improved modern technology.

The number of poor, attached with non-agricultural professions, below poverty line was about 35.52% as compared with that of about 48% in non-poor community. Those who had agriculture as well as non- agriculture profession face less incidence of poverty as table showed that only 15% people with both professions were below poverty line.

There was also difference of the income earned by the poor from the agriculture and that of non-poor. By looking into the data in the Table V, it leads us to the conclusion that agriculture income of the poor was surprisingly low because they were getting only about Rs.1350 on per month basis, while their non-agriculture income was bit more that was Rs.1402. By looking into the other side of the picture one can easily observe that the income earned by the non-poor from agriculture was Rs. 2842 per month, which was double as compared to poor community. Likewise, their non-agriculture income was Rs. 7190 that was worth more than poor household's income per month.

**Poor and non poor classification: landholding and ownership.** Land is described as precious and long lasting asset especially in rural areas. As Table VI showed, that 68% of the poor had less than 50 kanals of land while this ratio was 25% in the non-poor community. On the other hand, more than 50% among non-poor held land between 50 to 100 kanals while this figure was only 27% among poor households. By looking the Table VI one can see that only one person in poor household has land size more than 100 kanals while this number was 3 for non-poor. That is why tenancy is very common practice among the farmers. According to the findings, the number of owner of the land was about more than 68% as compared with that of 31% tenant. But the area under cultivation for each farmer (land available per capita) was very less about 2.73 kanals for the poor while 7.73 kanals, which is significantly higher, for non-poor.

The skewness in the distribution of land can be well judged by looking into the land availability per family to poor and non-poor that is 20.70 kanals and 53.76 kanals respectively. On the other side, when we look into the matter for non poor farmers than the situation was that more than 76% among them had their own land. But the size of owning the land was more than that of the poor persons. Only about 23% of them were tenant.

**Poor and non poor classification: house type, area and number of rooms.** Shelter is very important and basic of human living in a civilized society. The poor, in the study area had houses that were not so good according to living conditions. Most of the poor people (77%) lived in the Kaccha houses as compared to only 23% lived in pacca houses but these houses were not built accordingly. Looking into the Table VII one can easily judge that the people that were above poverty line had well living condition of their houses as compared to the houses of the poor. There were more than 80% households, in the non-poor houses, living in pacca houses while only 19% of them live in houses build from mud. For poor this figure was 23%. Having one's own house is every body's dream. But due to poverty it cannot come true because in poverty it is difficult to meet the daily needs of calorie intake and than how one can think of his own house in that type of miserable situation.

The Table VII also showed that only one person in the poor community had area of his house more than 40 Marla and nobody had house with more than 50 Marla. Most of the poor that were more than 96% live in the houses ranging up to 40 Marla. And if we look into the category of less than 20 Marla about 53% of the poor houses belong to this category as compared to only 19% of the non-poor. The mean or average area of the house for non poor stands at about 25 Marla as compared to only about 15 Marla for that of the poor households. Although, the poor having large average family size on the other hand 36% live in the houses having three rooms; while, this number was around 4.8% for non poor household. More than 61% of the poor had 3 to 6 rooms in their houses while only one house in the poor

**Table IV. Poor and non poor classification family size and earning hands**

Family Size	Family Size		Above Poverty Threshold	
	Below Poverty Threshold		No.	%
Less than 6	14	35.9	5	23.8
7-12	23	58.9	15	71.4
13-18	1	2.6	1	4.8
19-24	1	2.60	0	0
Mean		7.8		5.9
Earning Hands	Earning Hands		Above Poverty Threshold	
	Below Poverty Threshold		No.	%
1-2	32	82.05	6	28.57
3-4	5	12.82	11	52.38
4 and Above	2	5.13	4	19.05
Total	39	100	21	100
Mean		1.25		2.30

**Table V. Poor and non poor classification: occupation and income**

Occupation	Occupation		Above Poverty Threshold	
	Below Poverty Threshold		No.	%
Agriculture	19	49.10	3	14.28
Non-Agriculture	14	35.52	10	47.62
Both	6	15.38	8	38.10
Total	39	100.0	21	100.0
Occupation	Income by Occupation (Rs.)		Above Poverty Threshold	
	Below Poverty Threshold			
Agriculture	1348.71		2842.85	
Non-Agriculture	1402.56		7190.47	
Others	23.07		0	

**Table VI. Poor and non poor classification: Land holdings and ownership**

Land Holding (Kanals)	Land Holdings		Above Poverty Threshold	
	Below Poverty Threshold		No.	%
Less than 50	15	68.2	3	25.0
51-100	6	27.3	6	50.0
101-150	1	4.5	1	8.3
151-200	0	0	2	16.7
Total	22	100.0	12	100.0
Mean		21.358		49.952
Land Ownership	Land Ownership		Above Poverty Threshold	
	Below Poverty Threshold		No.	%
Owner	11	68.75	10	76.92
Tenant	5	31.25	3	23.08
Total	16	100.0	13	100.0
Land availability/family	20.70		53.76	
Land availability/Person	2.73		7.73	

households had more than 7 rooms. For non Poor this ratio goes beyond 85%. As 2 or more than 9.5% houses had more than 7 number of rooms. Average or Mean number of rooms for non-poor was 4 while for poor it was 3.

**Poor and non-poor classification: housing arrangements, facilities and drainage system.** Various arrangements mentioned in the Table VIII are very general and poor community enjoys these arrangements very less in number. If we look into the figure only 33% of the houses had ventilator in the poor households as compared to more than

57% in the non-poor houses. The facility of windows in poor houses was reported by more than 48% while more than 76% in non-poor houses. As villages are lacking the facility to drain the wastewater so was the case with these villages studied and separate facility of bathroom and kitchen were lacking in 30.77 and 15.3% of the household, respectively in poor houses. While both these above-mentioned categories for non-poor households were reported 71 and 90% and the difference is clear from the figures that the poor not only had the less house area but they also lack the basic facilities of the houses. People below poverty enjoy less electricity facility along with all electric items mentioned in the Table VIII. While people who are non-poor they enjoy electricity facility and its related items like television, refrigerator, iron etc. more as compared to poor. The Table VIII gives us the idea after electrification the fan is very basic and cheaper facility for any house but in this case only 74% people enjoyed this facility as compared to more than 95% people in non poor houses. In case of refrigerator only 5% of the poor had this facility compared with 62% non-poor. As it is said that the age in which we are living is an age of information technology, keeping aside the internet and other information related facilities, only 20% of the poor houses have the facility of television as compared with 76% in non poor houses.

Wastewater disposal through drainage is key health element. The two villages visited didn't have adequate drainage facilities. In one village there was no infrastructure for drainage while the other village (not whole village) had Kaccha drainage system.

Table VIII showed the number of people visited and had drainage facility was 48.7% below poverty line while for non-poor the percentage was more than 52. The drainage system, although pacca, but not covered which in turn cause health hazards for them.

**Poor and non poor classification: income and financial satisfaction.** As in rural areas most of the people have less education on one hand while they also have less number of opportunities with them on the other hand as well. Due to lack of skill and know how they have fewer jobs, that is why they get less income for their daily work. When it is asked that how much of the surveyed people are satisfied with their monthly income the result showed in Table IX that only 33% of the poor households were satisfied with their monthly income compared with more than 80% of the non poor households. The above Table IX in this regard provides the situation of the study area in which poor people showed that they don't have much income that helps them to make sophisticated living. By looking into the table one can easily conclude that more than 53% poor people just get by from the income they had with them. While, about 46%

**Table VII. Poor and non poor classification: house type, area and number of rooms**

Type of House	Type of House		Type of House	
	Below Poverty Threshold	Above Poverty Threshold	Below Poverty Threshold	Above Poverty Threshold
	No.	%	No.	%
Kaccha	30	76.92	4	19.04
Pacca	9	23.08	17	80.96
Total	39	100.0	21	100.0
Area of House (Marla)	Area of House		Area of House	
	Below Poverty Threshold	Above Poverty Threshold	Below Poverty Threshold	Above Poverty Threshold
	No.	%	No.	%
Less than 20	21	53.8	4	19.0
20-40	17	43.6	15	71.4
41-60	1	2.6	2	9.6
Above60	0	0.0	0	0
Total	39	100.0	21	100.0
Mean	15.05		25.047	
Number of Rooms	Number of Rooms in House		Number of Rooms in House	
	Below Poverty Threshold	Above Poverty Threshold	Below Poverty Threshold	Above Poverty Threshold
	No.	%	No.	%
Less than 3	14	35.9	1	4.8
3-6	24	61.5	18	85.7
7-9	1	2.6	2	9.5
Above 9	0	0	0	0
Total	39	100.0	21	100.0
Mean	3.0		4.0	

**Table VIII. Poor and non poor classification: housing arrangements, facilities and drainage system**

Arrangements	Housing Arrangements		Housing Arrangements	
	Below Poverty Threshold	Above Poverty Threshold	Below Poverty Threshold	Above Poverty Threshold
	No.	%	No.	%
Ventilator	13	33.33	12	57.1
Window	19	48.7	16	76.1
Separate Kitchen	6	15.3	15	71.4
Separate Bathroom	12	30.77	19	90.4
Sui Gas	12	30.77	8	38.1
Facilities	Housing Facilities		Housing Facilities	
	Below Poverty Threshold	Above Poverty Threshold	Below Poverty Threshold	Above Poverty Threshold
	No.	%	No.	%
Electricity	30	76.9	20	95.2
Electric Iron	9	23.1	20	95.2
Electric Fan	29	74.3	20	95.2
T.V	8	20.5	16	76.1
Refrigerator	2	5.1	13	61.9
Drainage system	Drainage System		Drainage System	
	Below poverty Threshold	Above Poverty Threshold	Below poverty Threshold	Above Poverty Threshold
	No.	%	No.	%
Open	19	48.7	11	52.3
Covered	0	0.0	0.0	0.0
Total	39	100.0	21	100.0

borrowed money, which in turn made their livelihood more and more miserable.

On the other hand, when we look into non-poor household's more than 35% people used to save their money. Although, it is not worth mentioning but in comparison with that of the poor they had the ability to meet the emergencies faced by them at any time. Among them 47% people just get by while only about 18% borrow money to make their livelihood decent. Zero saving among poor people is another cause, which make them vulnerable to any shock.

**Table IX. Poor and non poor classification: income and financial satisfaction**

Satisfaction Level	Income Satisfaction			
	Below Poverty Threshold		Above Poverty Threshold	
	No.	%	No.	%
Yes	13	33.33	17	80.95
No	26	66.67	4	19.05
Total	39	100.0	21	100.0
Satisfaction Level	Financial Asset Satisfaction			
	Below Poverty Threshold		Above Poverty Threshold	
	No.	%	No.	%
Save Money	0	0	6	35.3
Just Get By	7	53.85	8	47.1
Borrowed Money	6	46.15	3	17.6
Total	13	100.0	17	100.0
Mean	0.333		0.809	

## CONCLUSION

The relation between family size and self-perpetuating poverty is generally strong, especially in rural areas. To reduce the incidence of poverty, it is worth mentioning, that population control programme be started. For this purpose, it is necessary to educate the rural women, providing them better family planning services etc. Government should provide rural male and especially female, training of income generation skills, so that small entrepreneurs can be developed and village based provision of jobs and technical facilities must be ensured. This will help in increasing their family income and meeting their day-to-day needs.

Illiteracy is more in study area so it is suggested that public and private cooperation is needed in right direction to increase primary as well as secondary level education (not only enrollment increase but dropout ratio must be lessened) for the whole society especially for girls. Beside formal education non-formal especially technical education will help them to come out of poverty trap. Skill enhancing training courses is required to increase the earning ability of the persons as well as to make them viable and active participant for the growth of rural economy. A good drainage system ensures elimination of the fatal diseases.

Rural masses are attached with agriculture having low income as well as low productivity. For increasing their agriculture income, productivity enhancing efforts should be done, here the role of Agri. Extension worker is emphasized to guide the farmer for utilizing the available resources more efficiently. The monetary and fiscal management must be made as pro-poor growth rather than diverting the flow of capital to the benefits of already privileged class of the rural areas thereby widening the gap between have and have-nots. A special pro-poor growth package must be provided for the rural segments of Barani areas.

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