Determinants of Participatory Poverty: Evidence from Pakistan

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Abstract

This paper presents the empirical findings on the participatory poverty and its causes among rural household in Bahawalpur Division, Punjab (Pakistan). It is based on primary data collected through household survey. Multistage random sampling technique was used for data collection and 600 household from two districts of Bahawalpur division were selected. An ordinal Logit regression was used to estimate the factors affecting the participatory poverty of rural household. Participation in punchiat, relation with local governance, access to announce price by Government (for inputs) and access to support price by government (for outputs) were used as the proxy of participatory poverty. The estimates revealed that gender of head of household, household accessories, assets and property, average education of household, occupation of agriculture, household income and occupation of services reduce the participatory poverty among rural households.

Keywords: Participatory Poverty Index; Support Price; Announce Price; Punchiat Participation; Agriculture Sector;

1. INTRODUCTION

Poverty has many dimensions, like malnourishment, hunger, economic exploitation, no shelter, violence, no decision making in political system, poor living condition, no facility for school and uncertainty of tomorrow, etc. Powerlessness, lack of representation and freedom is another name of poverty. Poverty has many types varying from place to place and time to time and it has been portrayed in various manners. Poverty is the "incapability to maintain a minimum living standard anticipated with respect to basic consumption needs or some amount of income required for satisfying them (World Bank (2006).

Poverty is usually alienated into two groups, absolute poverty and relative poverty. Absolute poverty is when people lack the basic necessities for survival. For instance they may be starving, lack clean water, proper housing, sufficient clothing or medicines and be struggling to stay alive[1]. Relative poverty is when a number of people's approach of life and income is so much poorer than the common standard of living in the nation or area in which they survive that they resist to live a common life and to play a part in average economic, public and educational actions.

A common view of poverty is that when one is unable to satisfy some certain basic requirements but poverty is not only the name of hunger, if people has no access to basic utilities provided by government and cannot participate in social or local decisions of community, they are poor because of their poor participation. That kind of poverty is called participatory poverty. They are excluded as they are not part of the networks which support most people in ordinary life, social networks, community and local infrastructure. Poverty is a very broad and wide concept: it includes not only hunger and shelter, but problems of social-local relationships, access to basic infrastructure of government and failures in social protection.

In practice, the participatory poverty is a three-fold phenomenon. The first is participation in social decisions making. The second is access to basic infrastructure of government and third one is relation with local governance. All of them impact a person's economic and social life.

The most prominent studies carried out on poverty include those of Sabir (2004) investigate the current poverty profile and the determinants of small farmer's poverty in Pakistan, Sabir et al, (2006) investigated the depth and severity of the poverty of small farmers by using head count ratio, Amjad and Kemal (1997) investigated the macroeconomic policies and its impact on poverty reduction in Pakistan. The main objective of the study, to identify those policies (especially at the macro level), which play a pivotal role in ensuring that the process of economic development and growth as a result real betterment the lives of people.

In Pakistan, poverty has been higher in rural areas (38.65%) than urban areas (22.39%)[2]. The majority of these rural poor are the small farmers. The gap between rural poor and urban poor is becoming wider[3] over time which calls for corrective action. Thus, targeting of rural household seems imperative in alleviating rural participatory poverty. The objective of this study is to determine participatory poverty profile of the rural household in division Bahawalpur and identification of the factors which reduce rural participatory poverty.

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[1] European Anti-Poverty Network, 2010
[2] Chudhary (2009)
[3] Malik (2006)

2. METHODOLOGY

The data used in this paper is based on primary source. Through multi-stage random sampling survey 600 rural household of division Bahawalpur were selected for analysis. The sample is selected in four steps. At first, two districts (i.e. Bahawalpur and Bahawalnagr) were randomly selected from division Bahawalpur. In the second step, select randomly two Tehsiles from each district[4]. In the third step, from each Tehsile two union council and then two villages from each union council were selected for sample. In the fourth and last step, almost identical number of households was selected in each village to obtain information. Total sixteen villages were selected from eight union council of Bahawalpur (Two form each Hasilpur and Kherpur tamywale) and Bahawalnagr (Two from each Chistian and Haroonabad). A structured questionnaire was used to gather data on personal, family and community characteristics, etc.

We generate an index for participatory poverty of the household by adding four variables namely; Participation in punchiat, Relation with local Governance, access to announce price of Government[5] and access to sport price of Government[6]. All the four variables are qualitative in nature and assign value 0 if yes and otherwise 1. By adding the values of above four variables we determine the participatory poverty of the household and its value lies between 0 and 4. Higher value 4 shows lower level of participation or high level of participatory poverty and lower value 0 indicate high participation or low level of participatory poverty. An ordinal Logit regression approach was used to estimate the factors affecting the participatory poverty of rural household. Gender of household head, household accessories, property and asset, average education of household, agriculture occupation, household income and services occupation are used as explanatory variables.

Determinants of Poverty

In order to determine correlates of poverty a probability Model i.e. Ordinal Logit model is used.
Mathematical form of the model is:

$$Y_i = \beta X_i + \mu_i \qquad\text{------------ -- (1)}$$

Where: Y_i is dependent variable that indexes the measure of Participatory Poverty, X_i is independent variables, β is the parameter to be estimated and u_i is the stochastic error term. In this model, the response variable was ordinal; taking values 0 to 4. The probability of being poor is estimated by using the ordinal Logit regression model given as:

$$L = Ln\, (P_o / 1-P_o) = \beta_o + \beta_1\, HEAD + \beta_2\, HACCER + \beta_3 ASSERTS + \beta_4\, AEDU$$
$$+ \beta_5\, AGR + \beta_6\, HINCOM + \beta_7\, SERO + \mu_i \qquad\text{------------------------ (2)}$$

The operational definitions of the variables included in the model are defined as follows:

PP: Participatory poverty calculated through an index by adding four variables[7] and its value lying between 0 and 4.

HEAD: Gender of household head is taken as Binary variable and assigned value one if household head was male, zero otherwise.

HACC: In the current study fourteen items were included to calculate the house accessories. House accessories include physical goods of the house and its living condition which are followings; Gold/Silver/Bonds, Radio, Television, Cell Phone, refrigerator, Room Color, Air conditioner, Washing machine, Water pump, Personal computer, Car /Jeep, Sewing Machine, Motor-cycle, Separate kitchen. Assigned values one if the particular item is exists in that household, otherwise zero and finally household accessories calculated by adding of all these values.

ASST: Asset and property of a household includes those goods which significantly contribute to per capita income of household. In current study five indicators are taken to measure the level of asserts and property of the household namely; Tractor, Agriculture equipment, Tube well, land owned and land leased. Assigned value 10 for each tractor, tube well, agriculture equipment and one Acer of land owned and land leased. And finally calculate property and assert by adding the values of above five indicators and its value lies between 0 and 1020 in our sample.

AEDU: Average education of the household was calculate by adding the education of total labor force (in number of years) and divided by total labor force of the household.

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[4]i.e. Tehsile Hasilpur and Kherpur-tamywale was chosen from Bahawalpur and Tehsile Chistian and Haroonabad were chosen from Bahawalnagr

[5] Announce price of Government of inputs i.e. Government set ceiling price of fertilizer, pesticide, etc.

[6] Sport price of government of output i.e. Government set ground price of wheat, sugar, cotton, etc.

[7] Participation in punchiat, relation with local governance, access to announced price of government, access to support price of government

AGRO: In current analysis agriculture occupation taken as a binary variable taking the value as one if the occupation of household head is agriculture and zero otherwise.

HINC: Total income of the household earned by all the sources of household. Remittances also included in household income.

SERO: Services occupation also taken as binary variable, assigned value one if the head of household's occupation is services and zero otherwise.

3. RESULTS AND DISCUSSION

The results reveal the incidence of participatory poverty of rural household. The results in Table I reveal five levels of participatory poverty namely non-poor, mild poor, moderate poor, poor and the poorest. The household is non-poor when its value is 0, every next higher value state higher level of participatory poverty and 4 state extreme poverty. The results revealed that 4.3% household are non-poor in term of participatory poverty. Approximately 9% of household are lying at first level of participatory poverty or mild poor. 17.9% of households were lying at second level of participatory poverty or moderate poor and 17.6% Household are poor at third level in term of participatory poverty and 51.6% household poor at fourth and high level of participatory poverty or poorest.

Table I. Indices (%) of Participatory Poverty

Po		Frequency	Percentage
Non-poor	0	25	4.3%
Mild Poor	1	52	8.6%
Moderate Poor	2	108	17.9%
Poor	3	105	17.6%
Poorest	4	310	51.6%
Total		**600**	**100%**

The ordinal Logit results have been shown in table II. Majority of results are consistent with economic theory. The results are discussed below:

Gender of household head: Gender of household head plays a significant role in determination of participatory poverty. It has been observed that male has for more liberty of mobility then its female counter part. In the same way rural society gives more respect, owner and participatory opportunity to males. The current analysis shows the probability of participatory poverty reduced in that household whose head of household is male and result is significant at 5% level of significance.

Household accessories: Our society is status conscious. Normally status of a person is determined by the number of accessories he is having. There is positive relation between accessories and social empowerment. We have attempted to explore the relationship between participatory poverty and household accessories. The estimates show that the increase in household accessories reduced the probability of participatory poverty of that household and the results are significant at less than 5 percent of level of significance.

Assert and property:

The ownership of asset and property by the household decreases the probability of participatory poverty of the house. Higher level of asset and property leads to higher level of income of the household which increases the socio-economic empowerment of the household. The household with high socio-economic empowerment reduced the probability of participatory poverty. The results are significant at 5 percent level of significance.

Table II. Ordinal Logit Estimates of Participatory Poverty

Variables	β	SE	t-value
HEAD	-2.784	0.923	-3.016**
HACC	-0.079	0.023	-3.434*
ASST	-.006	0.001	-6.000*
AEDU	-.240	0.072	-3.333*
AGRO	-2.010	0.253	-7.944*
HINC	-1.411	0.000	-1411
SERO	-.365	0.207	-1.763***
Constant: Poverty = 0	-11.856	1.136	-10.436*
Constant: Poverty = 1	-10.151	1.106	-9.178*
Constant: Poverty = 2	-8.452	1.084	-7.797*
Constant: Poverty = 3	-7.158	1.066	-6.714*

Nagelkerke R Square = 0.526
LR Statistics (Chi-Square) = 400.062
N = 600
P = 0.000

  * represents the 5 percent level of significance,
  ** represents the 10 percent level of significance

Average Education of household: Average education of household is assumed as an important determinant of poverty. Education increases the awareness and vision. Education sensitizes people about their social empowerment and also about their duties, legal and social rights. So, educated person tries to get a respectable position in society by reducing participatory poverty.

The regression estimates shows that the increase in one year average education cause to reduce the participatory poverty at higher stage by 24 percent which is significant at 5% level of significance.

Agriculture occupation: Pakistani society is feudal society. Social empowerment is usually linked with agriculture land holding. So that former enjoy good social position in rural areas. Our results have shown that the agriculture professions of the head of household slides down the probability of participatory poverty of the household and significant at 5 percent level of significance.

Services occupation: Services occupation taken as important factor which affect participatory poverty of household. In rural areas most of the educated people joined the public sector. Services in public sector in rural social structure provides opportunities to build relation with local governs, increase participation in punchiat and access to basic utilities which provides by the government. The current result shows probability of being poor at higher level reduced 36 percent in those households whose head of household has services occupation. These results are significant at 5 percent level of significant.

Recommendations

- Basic democratic system would be implemented and the punchiat system would be strengthened.
- The implementation of offered prices by the government may increase the participation.
- The literacy rate and level of education should be a priority to alleviate participatory poverty. The education of the household would go a long way in alleviating poverty.

References

Akerele, D., Momoh, S., Adewuyi, S. A., Phillip, B. B., and Ashaolu, O. F. (2012). Socioeconomic Determinants of Poverty Among Urban Households in South-West Nigeria. *International Journal of Social Economics, 39* (3): 168 - 181.

Arif, G. M. (2000). Recent Rise in Poverty and Its Implications for Poor Households in Pakistan. *The Pakistan Development Review, 39* (4); 1153-1170

Arif, G. M., Nazli, H., and Haq, R. (2000). Rural Non-agriculture Employment and Poverty in Pakistan. *The Pakistan Development Review, 39* (4); 1089-1110

Centre for Research on Poverty Production and Income Distribution (2003) Pakistan, Human Condition Report 2003. United Nations Development Programmes Centre for Research on Poverty Reeducation and Income Distribution, Islamabad

Chaudhry, I. S., Malik, S., and Hassan, A. U. (2009). The Impact of Socioeconomic and Demographic Variables on Poverty: A Village Study. *The Lahore Journal of Economics 14 (1)*; 39-68

Hashmi, A. A., Sial, M. H., and Hashmi, M. H. (2008). Trends and Determinants of Rural Poverty: A Logistic Regression Analysis of Selected Districts of Punjab. *The Pakistan Development Review, 47* (4); 909-

923.

GOP, 2010–11. *Economic Survey of Pakistan.* Economic Adviser's Wing Ministry of Finance, Government of Pakistan (GOP), Islamabad.

GOP, 2008. *Punjab Devilment Statistics.* Bureau of Statistics, Government of Punjab (GOP), Lahore.

Malik, S. (1996). Determinants of Rural Poverty in Pakistan: A Micro Study. *The Pakistan Development Review, 35* (2); 171-187.

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