

# Micro-level Determinants of Rural Poverty in Pakistan

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**Abstract-** The current study identifies the factors affecting rural household poverty by using first hand data, which was collected through rural household survey of southern Punjab. A Logit model used to check the relationship among dependent and independent variables. Dependency ratio, higher fe-male labor force, person per room, lowering household size, higher education, higher household participation rate Gender of household head, fe-male to male ratio and access to basic utilities provided by the government can be alleviate poverty in studied area. Poverty will be more alleviate in rural areas of Pakistan, if government improve basic infrastructure and empowerment of rural peoples and market access facilities.

**Index Terms-** Empowerment, Market access, Poverty alleviation, Southern Punjab

**Jell Classification:** D14, E24, I21, O12

## I. INTRODUCTION

Form last several decades lots of developing countries of the world have to pay more attention to poverty alleviation. Lots of research work has been done on issuing of poverty mitigation and its long-run economic & social impact. In the view of fact the poverty alleviation is still major agenda of all economies. In 2000 The World Bank has published three international reports and in 2000/2001 The Word Banks issues a report which mainly focused the issue of poverty. This practices has started sciences 1980 and in 1990 on the same subject. In fact, poverty in rural areas is more prominent with multidimensional aspects. In 2003 the international labor organization published a report in his 91<sup>st</sup> session about issue of poverty and ILO also focused on poverty issue.

Now we narrow down the issue of poverty in Pakistan after briefly discussing the importance of issue of poverty. There is an adequate proof that poverty increased in 1960's, decrease quickly in the 1970s and 1980s again come back in 1990s. In 2000s again it is has start decreases [Government of Pakistan (2006), Arif et al. (2001), ali and tahir (1999), Amjad and kemal (1997)]. Furthermore, according to world band (2000) is harder to understand the decreasing trend in poverty. Through demographic factors which affect employment level, remittances, workers, dependency ratio, labor force, assets ownership and access, real wage rates and employment. However the higher gigantic poverty exists in rural areas of Pakistan rather than urban areas.

In literature, whenever poverty alleviation is taken as a key problem of economy, efforts have been started to alleviate

poverty through improving many areas which affect the rural households economically and socially. Because poverty alleviation has one of primary objective of government policies and government made efforts to reduce household poverty from last few decades in Pakistan by increasing job facilities, improving health and education facilities, sustainable growth, improving infrastructural facilities and reduce financial crisis but slightest importance has been given at micro or district level poverty reduction. Now we discuss here some studies carried on poverty alleviation and about the factors affection household poverty.

Chaudhry et al. (2008) investigate the factors which affect urban poverty in Multan region by using Governance as a key factor. The current study pays more attention on governance at local level and calculates its impact on urban household poverty in Multan. In current study poverty and good governance measured by using first hand data which was collected through random household survey of 200 households. Bi-variate model was used for analyze the impact of governance on household poverty. Logit model was used for multivariate analysis in current study and the dependent variable was poor which assign dichotomous values. Governance is a key variable and its measure by set of proxy variables and other serving variables were female labor force, dependency ratio, education of household head, participation rate, assets, persons per room and informal sector workers. And result shows that there was negative relationship between good governance and urban household poverty.

Sabir et al, (2006) calculate the intensity and its depth of small formers poverty by using head count ratio and local poverty line (Rs.748). The current study also investigates the determinants of household poverty of small formers in region of central Punjab by using binary logistic model. Current study based on primary data which was collected through the random sampling of 300 households from three district of central Punjab. Current study conclude that household poverty of small former were affected by age of head of household, low price agriculture output, high price of agriculture inputs, larger household size, education of head of household, number of depended.

Chaudhry (2003) studied household poverty in district Bahawalpur by using micro determinants of household poverty. Logit regression models and income regression models were used to identifying the factors affecting the household poverty in region. The current study concluded that efficient economic infrastructure, higher agriculture production, improving educational and health services were consider the strategy actions to reduce household poverty in studied region.

Haq (2013) calculate the socio-economic empowerment of rural household by generating a composite index through Principle

component analysis. Thirty eight indicators are used for measuring socio-economic empowerment. Study also analyzes the severity of poverty in studied region and estimate the relationship among household poverty and socio-economic empowerment of households. The study concluded that the incidence of poverty is higher in rural area of Punjab.

Haq and khan (2013) investigate the factors affecting the participatory poverty of the rural household by using first hand data which was collected through household survey of Division Bahawalpur and concluded that education of head household, occupation of head, household size, social participation are the main factors which affect participatory poverty of the rural household. Later studies of Haq et al. (2015) also estimate the deterrments of rural household poverty in region Bahawalpur District by using the data of a village.

Khan et al. (2015) analyzed the factor of rural poverty by taken a special focus on socio-economic empowerment of rural households. They calculated socio-economic empowering by using principle component analysis and then check its impact on rural household poverty and study concluded the strong inverse relation among socio-economic empowerment and household poverty.

After analyzing the existing literature, now discuss the importance and subject of matters of current study. This study is focused rural area of Southern Punjab. However key objectives of current work are:1) To explore the important projects of the Government to removing household poverty and improving empowerment of rural household, 2) To calculate the current

rural poverty situation and its trend in studied region, 3) To identifying the factors which affect rural household poverty in region and in last recommend suitable policy implications for poverty alleviation in Pakistan and especially in Southern Punjab.

## II. DATA AND METHODOLOGY

Bahawalpur Division is administrative division of southern Punjab. The empirical estimation of current study based on 1<sup>st</sup> hand data which collected from rural areas of Bahawalpur. Due to difficulties of data collection in rural areas, the current study selected one village (19/F.W: Tehsil Hasilpur) consisting 110 household. A random sampling technique was used for data collection from the rural area of Bahawalpur by conducting a household survey.

In current study, the poverty line adopted from Planning Commission of Pakistan (2014) which is Rs. 1745.00 (2550 calories). Head count ratio method is used in current study for measuring incidence of rural poverty between households. Furthermore, a Logit model is used for empirical analysis among the factors which affect the rural household poverty in studied region. In current study explained variable have only two values (dummy variable), assigned vale 1 is household is poor and otherwise 0. The current study based on some important quantitative variables and as well some qualitative variables. Selected variables for econometric model are listed in Table 1.

**Table 1: List of Variables and its Coding**

Variables	Description of Variables
<b>Explained Variable</b>	
POVT	1 if household is poor, and 0 otherwise
<b>Explanatory variables</b>	
HMRT	1 if household produce for market and access to it, and 0 otherwise
PROM	Persons per room among the household
ASET	1 if household has physical assets, and 0 otherwise
LDHL	1, if household has landholding , and 0 otherwise
AGEH	Age of household head in years
PART	Participation rate
HHLT	1 if household head is literate, and 0 otherwise
GENDER	1 if household head is male, and 0 otherwise
FRTM	Female-male ratio (member)
EDUC	Education codes (education level of household)
DPNR	Dependence ratio
HISZ	Household size
SERO	1 if household head is services occupation, and 0 otherwise

On the basis of existing literature and theoretical frame work , dependency ratio (DPNR), Age head of household (AGEH), household size (HSIZ), female-male ratio (FRTM), and person per room have positive relationship among rural poverty alleviation and other independent variables has negative relationship with poverty alleviation.

### **Trend of rural poverty in southern Punjab:**

In rural areas of Pakistan, nearly 68 percent of population has living and poverty is higher in rural areas<sup>1</sup> of Pakistan rather

than urban areas. However, in southern Punjab rural household poverty is more complex and severs, it is nearly 40 percent in the region of division Bahawalpur, Multan, Dera Ghazi Khan.<sup>2</sup> Severity of poverty increases in 1990s and then later than stat declining. BRDP's report has been shows that poverty has declined by nearly 33 percent (within last nine years) in the studies region. 40 percent households are being poor according to

<sup>1</sup> 36 percent of the rural population is poor(FBS 2002)

<sup>2</sup> International fund for agricultural development (2001)

result of current study and that result is same as BRDP (2009). On the basis of current result it is concluded that poverty is reduced in current studied area of southern Punjab due to projects of BRDP and Government policies.

### III. RESULTS AND DISCUSSIONS

The empirical results of current study stated that in southern Punjab poverty is higher than rest of Punjab. Factors which affect rural household poverty are determined by using a Logit model in current study. The results of Logit regression are discussing in below table.

**Table 3: Logit Regression Analysis**

Explanatory Variables	Coefficients	Odds ratios
Constant	-8.43**	0.63
HMRT	-1.87*	0.74
PROM	1.31*	0.49
ASET	-0.45**	0.14
LDHL	-0.76*	0.67
AGEH	0.89*	2.45
PART	2.19*	0.41
HHLT	-0.46**	0.94
GENDER	-0.83**	3.46
FRTM	0.56**	0.35
EDUC	-0.49**	0.97
DPNR	0.92**	2.38
HISZ	0.12*	0.76
SERO	-0.61**	0.69

Number of observations = 110, Loglikelihood = -32.71  
DF = 13, P-Value = 0.000

**Notes:** \* 5 percent level of significant.  
\*\* 10 percent level of significant.

Education is a very important phase of heterogeneous of employment. High educational aptitude might be require a healthier position of service opportunities and mainly in rural contest a good awareness of the bursting potential of innovative agricultural techniques. Education enhances the understanding and visualization. Educated person have more aware about their duties and more aware about their legal and social rights. In this study, average education calculated by adding the points (0 if their household members have no education, 5 if the education is at secondary level, 10 if the education is at college or university level) divided by total number of households and results shows that the increase in average education reduce the chance poverty. Analogous relationship is observed for education of household head and poverty. Poverty reduces by increasing the education of household head.

Size of Household is considered as a key factor affecting poverty especially in remote areas of Punjab, due to higher joblessness ratio and higher reliance ratio in rural region. In rural areas, a large number of old age household member and children contribute a little in income of that household, so for that population is a big hurdle in way of poverty declining. In current studies dependent member considered below than the 14 year and above the 65 years and results reveals that there is a positive

relationship between household size and poverty. Probability of being poor increases as increases the household size and result is significant at 10 percent of level.

In Pakistan majority of families considered a lucky thing to birth of a male child rather than female child's birth. In rural areas of Pakistan it's considered that the male child to be help full member to their family because they augment families' income when mature up and there for its causes to reduce poverty of that household. In result of current study there is a positive association between female-male ratio and poverty. Poverty of being poor increased by increasing the ratio. And also observed the relationship female-male ratio of workers, study shows that female labor force has significant contribution in the area. Probability of being poor decreased by increases the ratio of female workers.

Current study has also found a significant and negative relationship between poverty alleviation and the number of livestock, assets, Gender of household head and services occupation of head of household. Probability of being poor reduced by increasing of each factor. Person per room and age of head of household are also the significant factors affecting poverty, and there is positive association between them. Probability of being poor increased by increasing them.

In current study market access is taken as a binary variable, which is significant at less than 5 percent. There is negative relationship between poverty and HMRT, chance of poverty decreases on that household how produce for the market rather than those who not have any access to market.

### IV. SUMMARY AND POLICY MEASURES

For poverty alleviation lots of methods have been adopted by government at all over in Pakistan from since its creation and some time may achieve good economic growth rate in different years. Poverty alleviation and high growth rate was resulted by the good efforts by the governments and international organizations. Evidences proved that the poverty alleviation at micro level was also on right track but it's more significant with the support with macroeconomic stability in Pakistan.

The empirical analysis proved that the problem of poverty is more severe in rural areas rather than urban areas of the country. The poverty level and its trend in rural areas of Punjab and NWFP are almost same. The result of current study shows that almost 40 percent household are poor and it's higher amongst other rural areas of province of Punjab.

Factors affecting household poverty in rural Punjab epically in studied area are also identified by using Logit model in current study. The key outcomes of current empirical analysis are summarized below.

- i. Age of head of household. Dependency ratio, size of household, persons per room, female to male ratio are highly allied with rural household poverty and has positive relationship between them and household poverty. Probability of being poor increases when that variables are increased.
- ii. Female labor participation, market access, education, overall participation rate, production for market, Gender of household head, assets and livestock has inverse

relationship with poverty. Probability of being poor reduce when value of these variables increases.

Because poverty alleviation has one of primary objective of government policies and government made efforts to reduce household poverty from last few decades in Pakistan. Government introduces poverty alleviation policies in 2001 in reply of increasing trend of poverty in 1990s and in the result of these policies the trend of household poverty start falling at all over Pakistan. Now it's more care full need to re address this problem in the age of globalizing world by focusing on new upcoming strategies. This may be the problem of physical economic infrastructure, microfinance, marketing and functioning of the market at both macro and micro level.

On the basis of current study's result it's recommended that government of Pakistan and also international institution must pay extraordinary focus to market access, improve governance and other socioeconomics variables, basic infrastructure which causes to remove rural household poverty in Pakistan. International institution also focuses to conduct surveys independently by hiring the local staff and local researcher to calculate the projects development and progress.

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