

POVERTY PROFILE AND CORRELATES OF POVERTY IN PAKISTAN: EVIDENCE FROM DISTRICT VEHARI

Muhammad Abrar-ul-haq¹ Syed Wahid Ali Shah¹ Ghulam Muhammad Qamri²

¹School of Economics, Finance and Banking, Universiti Utara Malaysia

²Department of Economics, The Islamia University of Bahawalpur (Pakistan)

Corresponding Author: abrarchudhary@hotmail.com

ABSTRACT: *Identification of factors that are strongly linked to poverty is an important aspect in developing successful strategies intended for poverty reduction. This study aims to assess the factors affecting the incidence of household poverty in rural areas of district Vehari (Pakistan). The binary logistic regression model was used for analysis. The study reveals that nearly 34.8 percent of respondents in the area are poor. Socio-economic empowerment, dependence ratio, household size, economic activity of head of household, access to finance, marital status, and age of household head is significantly influencing the incidence of poverty in the studied region. Moreover, the government is also responsible in providing proper infrastructural settings. This paper recommends that, households in this area should be empowered to have positive attitudes towards participating into economic and social activities using resources around them.*

Keywords: Rural poverty, Poverty determinants, Socio-economic empowerment index, District Vehari

INTRODUCTION

Since poverty is a multifaceted and multidimensional issue observable in Pakistan, but unfortunately it is yet to be eradicated through a specific plan. Poverty in Pakistan is twofold, one notion is lack of income and on the other hand access of basic needs. Pakistan's economy enjoyed a decline in poverty during the era of 1970 to 1980, but it rose up again in 1990. The era of 1990s was crucial because of the increasing trend of poverty and slowdown of overall growth rate. In the last four decades, Pakistan's economy grew by 6 percent annually. It was a terrific achievement, but unfortunately the benefits of this achievement could not create a trickle down effect to the masses of Pakistan. Despite of the persistent economic growth income disparity was increased between poor and rich. In 1996, this income inequality revealed lowest 20 percent of households received 7 percent income share and upper 20 percent received 49.4 percent share of the income [10].

Economic survey of Pakistan 2002-2003 publicized that the urban poverty was approximately 22.39 percent, rural poverty was 38.65 percent approximately and the overall poverty was 31.8 percent. This poverty turned into measured on the basis of common caloric consumption, according to grown up in keeping with the day. The common caloric intake in step with person in keeping with day turned into 2350 energy; this changed into same to Rs. 670 consistent with month within the 12 months 1998- 1999.

Poverty has been a crucial issue for Pakistan since independence and its persistence created immense ramifications for overall society. An approximated population of the globe is around 6.5 billion, from this populace 5.1 billion belong to terrible countries and residue of the 1.3 billion belongs to evolved international locations. Pakistan is the 6th largest populated state in the world. The total population of Pakistan was almost 159.19 million in 2004.

Pakistan's population increasing at an alarming rate and it is estimated that if the population increased at the same rate then, in 2050 the overall population of the Pakistan will 294.99 million. This alarming rate of increasing in population and poverty is a major problem faced by the people of Pakistan [7]. However, various poverty indicators for the year 2001 and 2005 i.e. poverty gap index, poverty severity index

and Headcount Index demonstrate that poverty is decreasing in Pakistan.

According to Human Development Report of UNDP [18] Pakistan was in 136th place among 177 developing countries of the world. Pakistan to host more than 2.4 million Afghan expatriates. More than 73 percent population of the Pakistan has only US\$2 to live a day. There are various type of poverty exist in Pakistan, however, when we measure poverty on the basis of income, Pakistan ranked below than all Central Asian States and even South Asian states less Nepal and Bangladesh. Although, Pakistan government spent almost one trillion Rupees (about \$16.7 billion) on poverty alleviation programs during the past four years, and successful in lessening poverty from 35 percent in 2000-01 to 24 percent in 2006. Major economic development programs were implemented in rural areas than in urban areas.

However, in the start of 2009 poverty jumped above to 37 percent and it affect more than 16.7 billion people. UNDP additionally gives the Human Poverty Index (HPI-1) that centers to quantify extreme hardship in health, individuals without access to an enhanced water source, underweight kids and adult literacy rate.

Literature Review

Theoretical Review

Jehovanes [12] discussed two popular phenomena of poverty which are behavior/cultural and structural/economic. In cultural aspect, poverty is associated with individual behavior of the poor or government that keeps them dependent. Hence, economic well-being tends to be weakened. Due to that, poverty tends to continue to pass on to the next generation. As a result, children of the poor people will have little opportunity to escape from the poverty cycle. On the other hand theorists associate structural poverty and situation of structural factors in an economy or institutional environments that favor one group over the others [13].

Poverty can be followed back to auxiliary components acquired in the economy. The segregation taking into account race and sexual orientation makes the trickiest obstacles in the economy. For instance, in the majority of creating nations high rate of destitution among ladies may be seen as the result of a patriarchal society that keeps on opposing their consideration in a piece of society [1]. Society has been

generally commanded by men, and as an outcome, welfare programs have been composed in ways that disparage open support for women instead of conjugal support. Karl Marx in his work “the Protestant Ethics and the spirit of capitalism” pointed out how the economic system of capitalism created the “the reserve army of the unemployed” as a conscientious strategy to keep wages low and the workers poor. The relationship between income and poverty supports the argument that productive work is the proper mechanism for lifting poor people out of poverty. Most of the studies on poverty adopted structural theory because strategies to expand economic opportunities and promote income growth are necessary for sustained poverty reduction [15].

Empirical review

Qureshi and Arif [16] estimated separately basic need poverty line and food poverty line like Jafri [11]. For basic need poverty line, the study considering recreation, transportation, education, health, housing, clothing, and food cost. The food cost just equal to food poverty line and for food poverty line, the study was considered the basic caloric intake (2295 and 2550 per day per adult equivalent for urban and rural respectively) into function of food consumption, identifying the expenditure consistent on basic caloric intake by regressing caloric intake on food expenditure.

By using data from PSES and HIES the current study provided estimates of poverty for the year of 1994 to 1999. The result revealed that the overall poverty level was 35.2 percent, 31.7 percent for urban areas and 39.8 percent for rural areas during the period of 1999. The study also concluded that the rural poverty was very higher comparable to urban and overall poverty.

Arif *et al.* [2] analyzed the level of poverty for the time period of 1994 to 1999 by adopting the methodology of Qureshi and Arif [16]. Said study measured the poverty level separately for urban and rural areas of the country and as well as at the overall level of the country. The results stated that poverty was enhanced from 27 percent to 35 percent of the time period of 1994 to 1999 and in rural areas that percent was close to 40 percent for the same period. According to results, greater than one-third population of the country was poorer and lived below the poverty line.

Sabir [14] measure the severity and depth of small farmer’s poverty by using national poverty line (Rs. 748 per capita per month expenditure) and head count ratio. By using binary logistic model the study also investigated the determinants of small farmer’s poverty. Poverty of small farmers in central Punjab was the main focus of the study.

Chaudhry *et al.* [4] analyzed poverty incidence through household’s demographic and socioeconomic characteristics. The study also investigated the correlation and profile of rural poverty. The study based on primary source of data, which was collected through a household survey of a village from Southern Punjab. A Foster Greer and Thorbecke (FGT) poverty index was used for measuring poverty profile, and for empirical analysis multivariate and bi-variate techniques were used. [See also: 3].

Haq *et al.* [9] investigated the factors affecting rural household poverty by using primary data, which was gathered through multi-stage random sampling of rural

households of southern Punjab. A Logit model applies to test the association between dependent and independent variables. The study concluded that the access to basic utilities provided by the government, the participation rate of household in local decision making, person per room, dependency ratio and female labor force can be alleviate poverty in studied area. Rural poverty in the region will be alleviated significantly if the government enhances socioeconomic empowerment of household, improve basic infrastructure and access to market facilities.

Khan *et al.* [14] investigated the determinants of rural household poverty by using primary data from district Bahawalpur (Pakistan). 600 households were selected for sample size by using a multistage random sampling technique from two tehsils of district Bahawalpur. Through Principle component analysis, the socioeconomic empowerment index is developed which is used as a proxy of socioeconomic empowerment of household. The result of the study revealed that socioeconomic empowerment, sewerage system, household size, employment ratio, female to male ratio, remittances, experience of the household in agriculture and only agriculture occupation have significant impact on rural household poverty. And study suggested that the policy maker give more attention to the socioeconomic empowerment of the household for poverty alleviation in rural areas. The study also suggested the improvement also required in demographic factors of the household for poverty reduction.

Rural poverty in Pakistan is relatively still very high entailing that the strategy to alleviate poverty in Pakistan by 2015 has not yet been attained. However, Jehovaness [12] demonstrates that poverty in most developing countries has been influenced by location disadvantaged together with low level economic infrastructure such as roads and other public amenities. This study aimed at investigating the determinants of rural poverty in Vehari district of Southern Punjab, Pakistan.

DATA AND METHODOLOGY

This study is based on primary data source. The data was collected through the structured questionnaires and document analysis. Multi-stage random sampling technique was employed to select 350 household head as respondents from the villages of Vehari District. If household head was not available, his spouse was interviewed instead. This study used poverty line Rs. 1745 per capita per month expenditure which was calculated by the Planning Commission of Pakistan [8]. The household was considered poor whose per capita consumption expenditure is below that poverty line and assign value 1, otherwise assign value 0. Binary logistic regression model was used for analysis.

Model equation

$$Y = \beta_0 + \beta X_i + \mu_i \quad \text{----- (1)}$$

In this study, the dependent variable y (incidence of poverty), was livelihood structure, while independent variables X_i were socioeconomic empowerment, age of household head, marital status, access to finance, economic activities of household head, household size and dependency ratio.

Variables and Measurement

Dependent Variable

Incidence of household poverty ($\alpha=0.791$) is taken and analyzed as the dependent variable in the current study. Poverty takes only two values 0 or 1. Assign value 1 if household per capita expenditure is below the poverty line, otherwise assign value 0.

Independent Variables

Socioeconomic empowerment ($\alpha=0.814$) is taken as independent variable. To measure this variable previously used and validated instrument has been utilized. To measure socioeconomic empowerment Khan *et al.* [14] transformation of socioeconomic empowerment instrument was utilized containing thirty eight items for the study. By using thirty eight items, eight factors were generated by using principal component analysis, namely; education of household head, gender of household head, access to infrastructure, shelter, assets and property, livestock, health within household and household accessories with factor loadings 0.771, 0.832, 0.811, 0.819, 0.729, 0.852, 0.834 and 0.748 respectively.

Age of household head ($\alpha=0.792$) is measured as categorical variable containing four values between 0-3. Assign value 0 if age lies between 18-35 years, value 1 if age lies between 36-45 years, value 2 if age lies between 46-60 years and value 3 if age lies 61 or above.

Marital status ($\alpha=0.746$) is measured as categorical variable containing four values between 0-3. Assign value 0 for single, value 1 for married, value 2 for divorced and value 3 for the widow.

Access to finance ($\alpha=0.734$) is taken as a binary variable contenting only two values 0 or 1. Assign value 1 if household has access to finance, otherwise assign the value 0.

Economic activities of household head ($\alpha=0.833$) are measured as categorical variable containing four values between 0-2. Assign value 0 if head of household is unemployed, assign the value 1 if head of household's occupation is agriculture & livestock keeping, assign the value 2 if head of household's occupation is trade and assign the value 3 if head of household's occupation is services and assign the value 3 if head of household is unemployed.

Household size ($\alpha=0.718$) is measured as a categorical variable containing three values between 0 and 3. Assign value 0 if household size is 1-4 members, value 1 if household size is 5-8 members and assign value 2 if household size is 8 or above members.

Dependency ratio ($\alpha=0.726$) is measured in ratio among employed and unemployed.

EMPIRICAL RESULTS AND DISCUSSION

Socio economic characteristics of respondents

Socio economic characteristics considered in this study include age, gender, education level, marital status,

occupation and household size. This type of information is considered important because they determine the functional roles of the individuals who head the households and how they influence livelihood of the family [6].

Table 1: Respondent's characteristics

Variables	Frequency	Percentage
Age of house hold head in years		
18-35	52	16.2
36- 45	81	23.14
46-60	127	36.2
61 & Above	90	25.7
Gender of House hold head		
Male	294	84
Female	56	16
Marital status of House hold head		
Married	280	80.0
Divorced	23	6.5
Widow	28	8.1
Single	19	5.4
Education of House hold head		
No formal Education	173	49.2
Primary Education	151	43.14
Secondary Education	26	7.4
Economic activities of House hold head		
Agriculture & Livestock keeping	270	77.15
Trade	47	13.4
Services	18	5.1
No activity	15	4.2
Household family size		
1-4	87	24.8
5-8	203	58.0
Above 8	67	19.2

Outcomes of the study revealed that the respondents that ranged between the ages of 18-35 were 16.2 percent, 36-45 were 23.14 percent, 46-60 were 36.2 percent, and above 60 were 25.7 percent (shown above in Table 1). The results suggested that most of the household head were at productive age.

The study involved female and male households, of which 16 percent were female and 84 percent were male headed households. Results showed that the majority of house hold heads were males and few households were headed by females. Furthermore, marital status of the household was investigated to understand the respondents' profile. Out of 350 respondents, 80 percent household head were married, 6.5 percent divorced, 8.1 percent widow and 5.4 percent were single households.

The findings provide some impression that most of the respondents involved in the study were mature and had

obligations for taking care of their families. It was observed that in this part of coast in Pakistan, male household heads were providers of daily expenditure of the household while women stayed at home. If, according to religious tradition, a man had more than one wife, he had to provide the daily life needs to all on an equal basis.

With regard to the education level of respondents, three categories of education levels were considered. Household's head who had never been to school were 49.2 percentage, while 43.14 percent had primary education and 7.4 percent completed ordinary secondary school education.

Concerning the economic activities, respondents who were engaged in non-farming activities such as agriculture & livestock keeping, trade, formal employed as their main economic activities were 77.15 percent, 13.4 percent, 5.1 percent respectively, while household's heads not involved in any activity was 4.2 percent. Finally results reveal that household having members 1-4 were 24.8 percent, 5-8 were 58.0percentwhile the families with members above 8 were 19.2 percent.

Model Fitting information

The model fitting results (Table 2) showed that the Chi-square statistics for the difference between the null model and the final model was significant at $\alpha=0.05$, $p=0.01$ implying existence of an association between dependent variable and independent variables. Hence we reject the hypothesis that there is no relationship between poverty structure and independent variables.

Table 2: Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept	327.521			
Final	272.165	42.351	06	0.000

Poverty level of respondents

Findings as observed from the factor summary (Table 3) showed that, 34.8 percent of respondents were Poor, and 65.2 percent were Non Poor.

Table 3: Poverty level of respondents

	N	Marginal Percentage
Poor	122	34.8%
Non Poor	228	65.2%

Parameter Estimates

Results showed that, seven factors were found to be related to poverty hence influencing poverty in the area of study. These were socioeconomic empowerment, age of household head, marital status, access to finance, economic activities of household head, household size, dependency ratio.

Socioeconomic empowerment, marital status, economic activity of household head and access to finance had negative coefficients while age of, household size and dependency ratio had positive coefficients. Results indicated that, households with small size families were more likely to assign higher ratings than those with large sizes. This implies that, small sized families were more likely to be non-poor than large size families. The study shows inverse relation among socioeconomic empowerment poverty incidence. As empowerment level increases the incidence of poverty of that household reduce. Socio-

economic empowerment effects households earning and social capacity. Household with higher socioeconomic empowerment has a lower probability to fall in poverty. The coefficient value of empowerment is -0.536 that is significant at the 5 percent level of significance.

Table 4: Parameter Estimates

Location	Coefficient	Std. E	t-value
EMP	-0.536	0.095	-5.666**
AGE	0.365	0.080	4.572**
MSTAT	-0.352	0.189	-1.862*
ACCESF	-0.395	0.208	-1.900*
ECOA	-1.285	0.573	-2.243**
H SIZE	1.048	0.033	32.038**
DEPR	0.222	0.048	4.618**
Constant	0.199	0.067	2.954**

R² = 0.41

DF = 07

N = 350

** 5 percent level of significance; * 10 percent level of significance

Age of household head is considered as an important factor of poverty incidence. Results of current study prove a positive relationship among household poverty and age of household head. The coefficient value of age is 0.365 that is significant at the 5 percent level of significance.

Results also showed that the households with other than agriculture occupation had less possibilities of being poorer than those who has agricultural occupation. These results are same with the findings by Khan *et al.* [14]. Economic activity is an important factor for rural household poverty. This study shows a negative relationship between economic activity and household poverty and that result are significant at the 10 percent level of significance.

Marital status also considered as an important factor for measuring rural poverty. Current study takes marital status as an ordinal variable and base category is single. The study proves a negative relationship between marital status and household poverty. In that household, the chance of poverty reduced by 35 percent whose head is not single and results are significant at the 10 percent level of significance.

On the other side, access to finance was more likely to assign higher ratings, implying that households with access to finance were more likely to be non-poor than those have not access to finance. That means, access to finance is among the key factors in the area determining the poverty situation. Access to finance is a means of generating more livelihoods, vehicle for investment and wealth accumulation. Access to finance reduces the household poverty by 39.5 percent and that results are significant at the 10 percent level of significance.

Also, results indicated that, households with small size families were more likely to assign higher ratings than those with large sizes. These results were contrary to the theory that large families reflect availability of labor, an important factor of production. The large families in the area implied presence of more dependents in the household, hence increasing vulnerability of large family sizes to poverty. Poverty can be experienced in a family where the number of

income earners are few than the number of household members. A large amount of income is required by the large family size to provide for the basic necessities such as food, school fees, medical services, transport and other daily expenses than for a small sized family. Therefore, small sized families were more likely to be non-poor than large size families and that results are statistically significant at the 5 percent level of significance.

With regards to the dependency ratio, dependents were regarded in this study as family members below 16 years and above 60 years. The results showed that, households with a low dependency ratio were more likely to be non-poor than otherwise. Therefore, the majority of households fell in poverty because of having large families with many dependents being children or elderly at unproductive age. This study proves the positive relationship among dependence ratio and household poverty in rural areas and that results are significant at the 5 percent level of significance.

CONCLUSION

The study findings revealed that a large number of people in the study area were poor nearly 34.8 percent. The factors that influenced poverty in the area were identified to be seven. These were socioeconomic empowerment, age of household head, marital status, access to finance, economic activities of household head, household size, dependency ratio. Households with small family size, dependency ration and those who have access to finance and higher socioeconomic empowerment were more likely to be non-poor. This paper recommends that, people should be educated to avoid following evil norms that hinder the women to participate in the socioeconomic activities. More effort should be made to educate people, especially children and women in the area as to increase literacy levels in the area. Giving proper education to people may have a positive effect on minimizing family sizes, hence reducing the problem of having more dependents in the household. The study also suggested that government should develop programs for the enhancement of rural people's socioeconomic empowerment. Government should provide the opportunities of employment to reduce the level of hidden unemployment in rural areas. The little participation of local people in services sector provides a room for further research towards investigating potential alternatives that will reduce the incidence of poverty level in studied region.

REFERENCE

- [1] Alex, A. Causes of Poverty in Africa: A Review of Literature. *American International Journal of Social Science* 3(2014)
- [2] Arif, G. M., Hina Nazli, and Rashida haq. Recent rise in poverty and its implications for poor households in Pakistan. *Paper presented at 16th annual general meeting and conference, Pakistan society of development economists, Islamabad, January* (2001) 22-24.
- [3] Bogale, A., Hagedorn, K., & Korf, B.. Determinants of poverty in rural Ethiopia. *Quarterly Journal of International Agriculture*, 44 (2005), 101-120.
- [4] Chaudhry, I. S., Malik, S., & ul Hassan, A.. The Impact of Socioeconomic and Demographic Variables on Poverty. *The Lahore Journal of Economics*. 14 (2009): 39-68
- [5] Commission on Legal Empowerment of the Poor. *Empowering the Poor Through Property Rights*. United Nations Development Programme, New York, 2: 64-128 (2008)
- [6] Emanuel, E. Prospects of Community-Based Forest Management in Sustaining Forest Resource Base and Socio-Economies of Local Communities in Tanzania. PhD Thesis, Sokoine University of Agricultural, Tanzania (2009).
- [7] Government of Pakistan. *Pakistan Economic Survey. Federal Bureau of Statistics, Islamabad* (2006).
- [8] Government of Pakistan. *Pakistan Economic Survey. Federal Bureau of Statistics, Islamabad* (2014)
- [9] Haq, M. A., Ayub, K., & Ullah, M. I.. The Determinants of Rural Household Poverty in Pakistan. *International Journal of Scientific and Research Publication*, 5 ((2015)).
- [10] Haq, R., & Bhatti, M. A. Estimating poverty in Pakistan: The non-food consumption share approach. *Working Papers & Research Reports*, RR-No (2002).
- [11] Jafri, S. Y., & Younis, M.. Assessing poverty in Pakistan. *A profile of poverty in Pakistan* (1999).
- [12] Jehovaness, A.. Determinants of Rural Income in Tanzania: An Empirical Approach. *Research approach*, 10 (2010).
- [13] Jordan, G. The Causes of Poverty Cultural vs. Structural: Can There Be a Synthesis. *Perspectives in Public Affairs*, 1, (2004), 18-34.
- [14] Khan, R. E. A., ur Rehman, H., & Abrar-ul-Haq, M. Determinants of Rural Household Poverty: The Role of Household Socioeconomic Empowerment. *World Applied Sciences Journal*, 32(2014), 1814-1819.
- [15] Omang, T. Cocoa Production and Poverty Reduction in Nigeria: A case Study in Etung LGA of Cross River State. *PhD Thesis, College of Humanities and Development Studies, China Agricultural Universit* (2013).
- [16] Qureshi, S. K., & Arif, G. M. *Profile of poverty in Pakistan, 1998-99*. Pakistan institute of development economics (2001).
- [17] Sabir, H. M., Hussain, Z., and Saboor, A. Determinants of Small Farmers Poverty in the Central Punjab (Pakistan). *Journal of Agriculture & Social Sciences*. 2 (2006): 10-12.
- [18] Watkins, K. Human Development Report 2007/2008: fighting climate change (2007)