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Socio-Economic and Demographic Factors of Poverty Alleviation in Pakistan: A Case Study of Southern Punjab

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ABSTRACT

This study aims to explore the socio-economic and demographic determinants of poverty in Southern Punjab by using the cross sectional data consisting of 785 household heads. Binary logistic regression and ordinary least square method are used for estimation. The findings exhibit that the variables like family system, household size, presence of disease and status of employment of household head are positively and significantly related to poverty whereas household head age, rural-to-urban migration, years of schooling, number of earners, women status of work, remittances, the physical assets value and ownership of house significantly and negatively influence the likelihood of poverty and positively influence the per capita income of the households in Southern Punjab. The study also provides the comparison of regional and division level. It is concluded that DG Khan division is the poorest among all the divisions of the southern Punjab. In DG Khan Division, the households have less education, high dependency ratio. In rural areas of southern Punjab, there is more poverty as compare to urban areas. The rural poverty is due to many factors like high dependency rate, lower level of education, adoption of profession, lower per capita income, dissaving. It is suggested that education should be promoted, employment opportunity should be provided so that dependency rate may be reduced, rural areas should be restructured by provision of basic necessities of life.

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1. Introduction

Poverty has many dimensions which have been discussed by many economists and social scientists. These dimensions may be no shelter, malnourishment, not having capabilities to visit a

doctor for medical checkup, being ill, unemployment, not able to pay school fee, lack of representation, powerlessness, illness due to the dirty water, having little assets such as land and others, high expenditure shares on staple food and many interconnecting obstacles which lead to develop human beings. Poverty is the "incapability to maintain a minimum living standard anticipated concerning basic consumption needs or some amount of income required for satisfying them [World Bank (2006)]. Sen (1976) is among the pioneers to conceptualize the concept of Multidimensional Poverty as it is an alternative and direct way to use the concept of capability and functioning to define poverty. Multidimensional poverty is a relatively stable measure as it does not fluctuate due to inflation because there are difficulties in adjusting data for prices and inflation.

As definition and response of poverty have constantly being changed as a result of developments in knowledge and results of events over the period, so it is not a new phenomenon for the developing countries. United Nations (UN) member countries signed the series of eight targets as a part of The Millennium Development Goals (MDGs). One of them was to alleviate poverty by 2015. Not only is this, but the subsequent Sustainable Development Goals (SDGs) (UN, 2012) also targeting on ending poverty. On the other side, there has been a great debate on the extent of poverty either it is psychological, social, physical, or political as a largely economic interpretation of poverty is embraced in the agenda of SDGs and the MDGs. For the development of a nation, poverty reduction should be the state foremost obligation as its part of the objective of Millennium Development Goals (MDGs). There is a persistent decrease in household poverty since the last decade in Pakistan. It is estimated that 24% population of Pakistan's lives below the national poverty line; out of which 31% live in rural areas and 13% belong to urban areas. When poverty is measured on the basis of the multidimensional poverty index, 38.8% of the population live under the poverty line, is poor, out of which 9.4% live in urban areas and 54.6% reside in rural areas.

Having aim at poverty reduction, poverty can drive the choice of policies (Chambers 1995; Wratten 1995; Kanbur and Squire 1999). At different times and different places, poverty can be compared which gives insight into poverty in the community (Ravallion 1992). Measuring poverty can help policymakers to focus efforts to reduce poverty or to direct resources or as if it is not measured properly then it does not reflect reality and will lead to misinformation to the policymakers. This research empirically investigates the determinant of household poverty of households belongs to Southern Punjab (Pakistan). This study focuses on the following objectives.

- To investigate the socio-economic and demographic determinants of household poverty through the poverty line approach of Southern Punjab (Pakistan)
- To investigate the socio-economic and demographic determinants of household poverty through per capita income approach of Southern Punjab (Pakistan)
- To recommend policies which are based on the micro-level findings of the study

2. Literature Review

This section highlights the studies available in literature that explore the factors of poverty at national and international levels. Sandefur and Sakamoto (1988) highlighted the structure of household and income as well for America and India. The estimation was done through primary data by using a questionnaire for the year 1980. The authors concluded that during this estimation period, Indians preferred to live in a family; household having coupled with children, as compared to the black or white in the United States. The greater frequency of the family household, specifically couples having children among Indians and Americans would be considered to design social policies. Ahmed (1995) analyzed income inequality in different occupations and worked on Pakistan's PCI (per capita income) based on

1992-1993. The results showed that in the various occupations or professions, the lowest level of inequality was observed in Baluchistan, and the highest inequality in NWFP province.

Lanjouw and Ravallion (1995) elaborated on the association between poverty and the size of the household by taking into consideration the case study of Pakistan. Primary data were used for the year 1991 through a survey. The results showed the existence of a strong negative relationship between the consumption and the size of the household.

Azhar and Ahmad (2001) studied the basic shortcomings of different poverty reduction methods and focused on the role of the political economy and the shift from the wealthy to the poor. The results showed that poverty alleviation policies and programs were a real concern for the political economy. The basic premise of poverty alleviation policy was to focus on how information and incentives were integrated into the program design. The technical poverty alleviation method ignored the background of policy design. These two different approaches could be bridged by best utilizing two interdependent elements.

Datt and Jolliffe (2005) analyzed the influence of poverty in Egypt. Primary data were collected through a questionnaire for the year 1997 and were used to estimate the results. Findings revealed that the household size had a negative impact on the dependent variable living; the standard of the people. While other independent variables including education, intergenerational effects, and owned land had a positive relationship with the dependent variable. Furthermore, education was considered a crucial factor for the living standard. Khalid et al (2005) examined the determinants of food poverty in Pakistan. The study decomposed the estimates on the urban or rural levels. The microdata used in this study from 1998 to 1999 was taken from HIES (Household Integrated Economic Survey and PIHS (Pakistan Integrated Household Survey). Multivariate analysis was used to determine food poverty in Pakistan. The results indicated that on average 40 percent of households were poor at the national level. In rural areas, poverty was comparatively higher with 46 percent of the households falling below the poverty line, while in urban areas 41 percent of households were poor.

Cheema et al. (2008) estimated changes in the intensity, severity, and incidence of poverty in the Punjab region below the provincial level. Foster, Greer, and Thorbecke were used to measure poverty. It was estimated that there was a highly impoverished enclave in the southern and western parts of Punjab. With very few exceptions, the incidence and severity of poverty in most areas of the enclave were extremely high and there was average poverty in every two families. The enclave also performed poorly at the district level development indicators. Choudhry et al. (2009) analyzed the impact of the social and economic factors of Tehsil Jatoi (Muzaffargarh District). Poverty profile and econometric methods were used for empirical analysis. It was suggested that dependency on family, household size, land ownership, participation, and livestock quantity had a significant impact on the incidence of poverty.

Jamal (2011) estimated the poverty through non-income deprivation indicators for Pakistan. The estimation period was from 2008 to 2009. Findings showed that fifty-seven percent of people in the year 2008-09 living in Pakistan were in the state of the multiple deprivations. The rural incidence was high, however, twenty-six percent of the urban population was facing poverty in terms of the indicators that had been used in the multidimensional construction.

Nisar et al. (2013) investigated Pakistani issues such as income inequality and poverty and their impact on the family. Using multiple logit models, the 2008-09 dataset was used for estimation. The

results showed that land and livestock as an asset, male as a head of household, secondary education, employment, and women's empowerment greatly reduced the chances of short-term poverty. During this period, income distribution deteriorated due to the gap between low-income and high-income families.

Jayamohan and Kitesa (2014) used cross-sectional data from 1999 to 2000 and 2004 to 2005 to investigate the relationship between poverty and gender in Ethiopia. The results showed that the number of poor households, in both the male-headed households and the female-headed households, declined during the period 1999-2000 to 2004-2005, with a lower the reduction of the female-headed household rate. The feminization of poverty was, therefore, a weak theory of the Ethiopian city.

Haq et al. (2015) measured the causes of family poverty affecting rural areas in Vehari (Pakistan). The data were collected from 350 selected households through multi-level random sampling and for analysis binary logistic regression models were used. It was analyzed that nearly 34.8% of the respondents in the region were poor. Socio-economic empowerment, dependency ratio, family size, household economic activity, access to finance, marital status, and head of household age had a positive impact on the incidence of poverty in Vehari.

3. Data and Methodology

This section presents the data sources, sampling technique, poverty line recruited in this study, model specification, and description of variables.

3.1 Data Sources and Sampling Technique

About 785 household heads were interviewed from southern Punjab. From the formula, the sample size of 785 was calculated which is as given below.

$$SS = \frac{z^2 * p(1-p)}{e^2} \div \left(1 + \left(\frac{z^2 * p(1-p)}{e^2 N} \right) \right)$$

The total household of southern Punjab is almost 4930998 (Pakistan Bureau of Statistics, 2019). The sample size of 785 was calculated at a 95 % confidence interval and a 3.5 % margin of error. To calculate the sample size from each district out of 785, propionate sampling is used. There are three divisions of southern Punjab such as Multan, Bahawalpur, and DG khan division and each division consists of four districts. The division with a higher number of households has a higher proportion to be included in the sample. In the second stage, convenience sampling is used to collect information from the household head.

3.2 Poverty Line

In the current study, the poverty line is drawn on the basis is of the World Bank definition. The World Bank defines poverty in absolute terms. The household is living in extreme poverty if it falls below the poverty line of US\$1.90 per person per day. While calculating the poverty line based on the current dollar rate, it is estimated that the household having income 8664 Rupees per month or more than 8664 Rupees are classified as non-poor and the household having income less than 8664 Rupees are classified as poor.

3.3 Model Specification and variable1 description:

Determinants of households poverty of overall Southern Punjab and divisions of southern Punjab like Bahawalpur, Multan and DG Khan based on the poverty line are explored by using Binary Logistic regression. The operational model is specified as follows:

$$Pov = f \left(\begin{matrix} FSYS, HHSIZE, AGEHH, MIG, POD, YOSHH, SOEMP, NOERN, \\ WSOS, RIMI, LNSATS, OWNH \end{matrix} \right)$$

In order to explore socio-economic and demographic determinants household poverty based on per capita income in the three divisions and Southern Punjab by using the same variables. we have used ordinary Least Square method in the log linear form. The functional form of operational model is as follows:

$$PCI = f \left(\begin{matrix} FSYS, HHSIZE, AGEHH, MIG, POD, YOSHH, SOEMP, NOERN, \\ WSOS, RIMI, LNSATS, OWNH \end{matrix} \right)$$

Table 1: Description of Variables

Variables	Variables Description	
Dependent Variable		
LNPCI	Natural Log of Per Capita Income	It is calculated by dividing the total household income on total household size
POV	Poverty	=1 if the household head per capita income is lesser than 8664 rupees per month. =0 if household head per capita income is more than 8664 rupees per month
Explanatory Variables		
AGEHH	household head age	household head age expressed in years
HHSIZE	Household size	Total number of peoples residing in a household
AREA	Area of residence	It describes the region of residence i.e rural or urban if the household lives in urban areas = 1 otherwise = 0
MIG	Migration	Rural to urban migration =1 if household migrated from the rural area to urban areas = 0 if not
YOSHH	Years of schooling of the household head	It describes the educational level or schooling of household head in years
FSYS	Family system	The family system is estimated as nuclear or joint =1 if joint = 0 if nuclear
RIMI	Remittances	= 1 if receives remittances =0 if not
NOERN	Number of earners	A total number of earner sin households. It including own, spouse and other members
OWNH	Ownership of house	Either house is owned or rented = 1 if own house

		=0 if not
WSOS	Working status of spouse	=1 if the Spouse is participating in the labor force =0 if Otherwise
LNASTS	Natural log of the value of assets	It includes all the assets of the household like land, car, house, property, television, tractor, etc.
SOEMP	Sector of employment	It discusses the sector of employment of household either it is formal or informal = 1 if informal sector employee = 0 if formal sector employee
POD	Presence of diseases	Either the person has a disease or not. = 1 if presence of diseases = 0 if not

3.4 Data Analysis

Data is analyzed through descriptive and econometric technique. Descriptive statistics shows maximum, minimum, mean, median and standard deviation. Correlation matrix shows degree of association among variables. Econometric technique measures the relationship between the dependent and independent variables by log-linear regression and loghistic regression technique.

3.4.1 Descriptive Analysis:

Descriptive analysis may be done through descriptive statistic, poverty trends and correlation analysis which is as follows.

3.4.1.1 Descriptive Statistics

The descriptive statistics of variables that are used in this analysis are presented in Table 2 that consists of a minimum, maximum, mean, and standard deviation of variables.

Table 2: Descriptive Statistics

Variables	Minimum	Maximum	Mean	Std. Deviation
AGEHH	20	90	48.12	11.546
YOSHH	0	20	9.85	4.723
HHSIZE	2	19	6.19	2.162
NOERN	1	7	2.02	1.152
WSOS	0	1	0.22	0.417
MIG	0	1	0.13	0.339
RIMI	0	1	0.12	0.322
SOEMP	0	1	0.45	0.497
POD	0	1	0.22	0.412
OWNH	0	1	0.89	0.316
FSYS	0	1	0.47	0.500
PI	0	1	0.39	0.487
LNASTS	20000	77550000	4382464.46	7909851.730
INOME	6000	506000	71745.94	59431.120

Source: Author’s Calculations Based on Household Survey Data, 2019

3.4.1.2 Poverty Trends

Table 3 explains the poverty trends based on the international poverty line which is estimated in Pakistani rupees at 8664 in 2019. The household is poor if the income of the household has less than 8664 rupees per month and is non-poor if the income of the household having more than 8664 rupees per month. It is found that 38.59 percent of residents of the Southern Punjab living below the poverty line the incidence of poverty is higher in rural areas (46.13) than in urban areas (29.05). Among the divisions, the incidence of poverty is higher in the DG Khan division it is estimated at 43.14 percent.

Table 3: Poverty Incidence (Poverty Line 8664)

Division	Area	Poor	Non-Poor	Total Households	Poverty Incidence
Southern Punjab	Total	303	482	785	38.59
	Rural	201	233	434	46.13
	Urban	102	249	351	29.05
Multan	Total	89	166	255	34.90
	Rural	59	72	131	45.03
	Urban	30	94	124	24.19
DG Khan	Total	107	141	248	43.14
	Rural	72	101	143	50.34
	Urban	35	70	105	33.34
Bahawalpur	Total	107	175	282	37.94
	Rural	70	90	160	43.75
	Urban	37	85	122	30.32

Source: Author’s Calculation from the Survey data, 2019

Note: National Poverty line as estimated at Rs. 8664.0 per person per month

3.4.1.3 Correlation Analysis

Correlation analysis is used to check the multicollinearity problem and degree of association among each set of variables. The results of the correlation analysis of south Punjab are presented in Table 4. To evaluate the multicollinearity issue, it is suggested that if the value of the coefficient of correlation between two independent variables in a model is greater than 0.80 there exists a problem of multicollinearity otherwise there is no multicollinearity in between two independent variables in a model. Finding show that there is no issue of multicollinearity among the variables.

Table 4: Correlation Matrix

	PI	AGEHH	YOSHH	HHSIZE	RIMI	MIG	SOEMP	POD	FSYS	OWNH	NOERN	LNASTS	WSOS
PI	1.000												
AGEHH	-0.06	1.00											
YOSHH	-0.49	-0.04	1.00										
HHSIZE	0.22	0.28	-0.14	1.000									
RIMI	-0.23	0.10	0.08	0.001	1.000								
MIG	-0.22	-0.012	0.21	-0.04	0.10	1.000							
SOEMP	0.41	0.004**	-0.47	0.05	-0.09	-0.12	1.000						
POD	0.25	0.052	-0.24	0.12	-0.03	-0.06	0.15	1.000					
FSYS	0.22	0.13	-0.08	0.44	-0.03	-0.05	0.05	0.12	1.00				
OWNH	-0.22	0.12	0.14	-0.06	0.05	-0.02	-0.13	-0.12	-0.003	1.00			
NOERN	-0.18	0.24	0.07	0.45	0.11	0.07	-0.10	-0.01	0.20	0.06	1.00		
LNASTS	-0.30	0.08	0.16	0.000**	0.12	0.12	-0.14	-0.05	-0.01	0.11	0.09	1.00	
WSOS	-0.26	0.08	0.16	0.15	0.01	0.12	-0.13	-0.038	0.06	0.07	0.47	0.13	1.000

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

3.4.2 Econometric Analysis

This section provides the estimation of both specifies models. Binary Logistic regression model that uses a dummy variable to determine the factors of occurrence or non-occurrence of poverty in a household. A household is poor if the per capita income of the household falls below the poverty line otherwise non-poor. Ordinary Least Square (OLS) method is employed for determining the poverty level of household by using household per capita income.

3.4.2.1 Determinants of Household Poverty in Southern Punjab Binary Logistic

Table 5 demonstrates the binary logistic estimates of household poverty. The household poverty is used as a dependent variable, measured by a dummy variable is equal to “one” when household falls below the poverty line and equal to “zero” when household falls above the poverty line, while explanatory variables consist of the family system (FSYS), size of the household (HHSIZE), household head age (AGEHH), rural-to-urban migration (MIG), presence of disease (POD), household head schooling years (YOSHH), head of the household’s working sector (SOEMP), total earners in a household (NOERN), women status of work (WSOS), remittances (RIMI), value of physical assets value (ASTS), and ownership of the house (OWNH). The McFadden R-squared indicates the goodness of fit of the model and it means that the variation in dependent variable due to the explanatory variables is 0.46 percent while the remaining 0.54 percent is random variation. The LR-statistic (482.72) shows the overall significance of the model. Likewise, the McFadden R-square and LR-statistic of other divisions of Southern Punjab can be observed from Table 5.

We have observed that the variables like family system, household size, presence of disease, and sector of employment of household head positively and significantly affect the likelihood of poverty whereas the variables household head age, rural-to-urban migration, the household head years of schooling, a household having several earners, women status of work, remittances, the physical assets value and ownership of house significantly and negatively influences the possibility of poverty of household in Southern Punjab. In Bahawalpur division, the demographic variables household size and status of employment of the household head originated to be positive and significant determinant while household head schooling years, a household having several earners, women status of work, remittances, and physical assets value are the factors that statistically significant and negatively influences the poverty in Bahawalpur division.

Considering the Multan division it is found that the variables household size, presence of disease, and sector of employment of household head are significant and encouraging factors of the likelihood of household poverty while the variables household head age, rural-to-urban migration, household head years of schooling, household having number of earners, spouse participation and physical assets value are the discouraging and significant factors of the likelihood of household poverty in Multan division. In the DG khan division, it is originated that the variables, family system, household size, and sector of employment of household head are the factors that positively and significantly impacted the likelihood of household poverty while the variables rural-to-urban migration, household head years of schooling, a household having many earners, remittances, physical assets value and ownership of house negatively and significantly contributing aspects of the likelihood of household poverty in DG khan division.

Table 5: Binary Logistic Estimates of of Household Poverty in Southern Punjab

Dependent variable: Poverty Status of Household = 1 if household lies under a poverty threshold, = 0 otherwise				
Explanatory Variables	Southern Punjab	Bahawalpur Division	Multan Division	DG Khan Division
Constant	7.444** (6.249)	11.246** (4.783)	9.360** (3.458)	4.097* (2.277)
Demographic Variables				
FSYS	0.850** [0.201] (3.628)	0.344 [0.081] (0.897)	0.707 [0.161] (1.320)	1.313** [0.322] (2.958)
HHSIZE	0.403** [0.095] (5.546)	0.477** [0.112] (4.057)	0.441** [0.100] (2.608)	0.493** [0.121] (3.571)
AGEHH	-0.026** [-0.006] (-2.547)	-0.009 [-0.002] (-0.549)	-0.076** [-0.017] (-3.360)	-0.002 [0.000] (-0.145)
MIG	-1.289** [-0.305] (-2.999)	-1.019 [-0.240] (-1.300)	-1.347*** [-0.306] (-1.771)	-1.356*** [-0.333] (-1.682)
POD	0.844** [0.200] (3.130)	0.654 [0.154] (1.436)	1.073*** [0.244] (1.783)	0.750 [0.184] (1.629)
Socio-Economic Variables				
YOSHH	-0.188** [-0.045] (-6.923)	-0.144** [-0.034] (-3.005)	-0.237** [-0.054] (-3.351)	-0.201** [-0.049] (-4.559)
SOEMP	1.243** [0.294] (5.519)	0.925* [0.218] (2.381)	1.506** [0.342] (2.725)	1.885** [0.462] (4.550)
NOERN	-0.531** [-0.126] (-4.100)	-0.534* [-0.126] (-2.250)	-0.905** [-0.206] (-2.895)	-0.478* [-0.117] (-2.342)
WSOS	-0.961** [-0.228] (-2.986)	-1.113*** [-0.262] (-1.650)	-1.613*** [-0.366] (-1.881)	-0.789 [-0.193] (-1.604)
RIMI	-1.954** [-0.463] (-3.651)	-1.483*** [-0.349] (-1.870)	-2.389 [-0.543] (-1.617)	-1.844*** [-0.452] (-1.849)
PASTS	-0.428** [-0.101] (-5.880)	-0.811** [-0.191] (-5.213)	-0.348** [-0.079] (-2.151)	-0.278** [-0.068] (-2.722)
OWNH	-1.121** [-0.265] (-3.101)	0.807 [0.190] (1.406)	-1.129 [-0.257] (-1.265)	-1.981** [-0.486] (-2.747)
McFadden R ²	0.461	0.471	0.478	0.440
LR Statistic	482.72	176.33	190.71	149.36
P-value (LR-Stat)	0.000	0.000	0.000	0.000
Sample Size (N)	785	282	255	248

Source: Author's Calculations by Using E-Views (Statistical Software).

Note: The values in the brackets and parenthesis are marginal effects and z-statistic values respectively.

*5 percent level of Significance,

**1 percent level of Significance,

***10 percent level of Significance

3.4.2.2 OLS Estimates of Determinants of Household Poverty Based on Per Capita Income

Table 6 portrays estimation of the factors that affect the per capita income and in turn household poverty status in Southern Punjab. The dependent variable used in a model is the log of household's per capita income while the explanatory variables comprised of the family system (FSYS), size of the household (HHSIZE), household head age (AGEHH), rural-to-urban migration (MIG), presence of disease (POD), household head schooling years (YOSHH), household head employment status (SOEMP), number of earners in a household (NOERN), women status of work (WSOS), remittances (RIMI), physical assets value (PASTS), and ownership of the house (OWNH). The R-squared is 0.455 it reveals that explained variation in the dependent variable is 45.5 percent while the remaining 54.5 percent is due to the other variables that are not added in a model. The value of F-statistic (53.722) and it shows that the model is highly significant statistically overall. Likewise, the value of R-squared and F-statistic of various divisions of Southern Punjab are 0.53, 0.46 and 0.47 respectively.

The results show that family system, size of the household and status of employment of household head are the factors that reduces the household income per capita and enhance poverty. The variables household head age, rural-to-urban migration, the household head schooling years, a household having several earners, women status of work, remittances, physical assets value and ownership of house are the aspects that positively and significantly influences the household welfare. These factors reduces the poverty level in Southern Punjab. In the Bahawalpur division, the household size and employment status of the household is negatively linked to the income per capita and directly related to the household poverty while the age of the household head, household head schooling, total employed members, women status of work, remittances, and physical assets value are the factors that positively and significantly influenced the household per capita income and inversely linked to the poverty probability in the Bahawalpur division.

In the Multan division, it is found that the variables like household size and employment status of household head negatively and significantly impact the household per capita income and positively influences poverty whereas the household head age, household head schooling, total employed members, spouse participation and remittances positively and significantly affects the per capita income. As a result, poverty in Multan division has declining trend.

In the DG Khan division, it is originated that size of the household and employment status of the household are the factors that negatively and significantly influence the household income per capita and directly impact the household poverty whereas the age of the household head, years of schooling of the head of the household, household having many earners, remittances, physical assets value and ownership of house increase the per capita income of the household. When per capita income increases, poverty level reduces in Dera Ghazi Khan division.

Table 6: OLS Estimates of Household Poverty Based on Per Capita Income

Dependent Variable: Household Per Capita Income				
Explanatory Variables	Southern Punjab	Bahawalpur Division	Multan Division	DG Khan Division
Constant	7.861** (36.069)	7.473** (22.422)	7.840** (16.671)	7.932** (22.386)
Demographic Variables				
FSYS	-0.083*** (-1.853)	-0.060 (-1.035)	-0.135 (-1.290)	-0.102 (-1.201)
HHSIZE	-0.110** (-9.332)	-0.102** (-6.668)	-0.085** (-3.151)	-0.141** (-6.539)
AGEHH	0.008** (4.695)	0.004*** (1.935)	0.009* (2.326)	0.010** (3.039)
MIG	0.156** (2.562)	0.140* (1.641)	0.168 (1.460)	0.192 (1.560)
POD	-0.002 (-0.056)	-0.028 (0.425)	-0.065 (-0.584)	-0.058 (-0.664)
Socio-Economic Variables				
YOSHH	0.036** (7.267)	0.034** (4.991)	0.038** (3.048)	0.037** (4.441)
SOEMP	-0.338** (-7.368)	-0.227** (-3.743)	-0.293** (-2.613)	-0.465** (-5.886)
NOERN	0.138** (6.104)	0.088** (2.849)	0.159** (3.380)	0.172** (4.307)
WSOS	0.169** (3.001)	0.190* (2.301)	0.271* (2.360)	0.007 (0.079)
RIMI	0.244** (3.838)	0.168*** (1.950)	0.415** (3.481)	0.051 (0.389)
LNASTS	0.062** (4.698)	0.114** (5.300)	0.040 (1.429)	0.055** (2.619)
OWNH	0.136* (2.076)	0.002 (0.030)	0.168 (1.158)	0.342** (2.731)
R ²	0.455	0.526	0.461	0.474
Adjusted R ²	0.446	0.505	0.434	0.447
F-Statistic	53.722	24.932	17.256	17.689
P-value (F-Stat)	0.000	0.000	0.000	0.000
Sample Size (N)	785	282	255	248

Source: Author's Calculations by Using E-Views (Statistical Software).

Note: The values in the parenthesis are t-statistic values.

*5 percent level of Significance,

**1 percent level of Significance,

***10 percent level of Significance

4. Conclusions

The main purpose of study is to investigate the factors that alleviate poverty in southern Punjab. The study is based on survey. The study concludes that family system, household size, presence of disease and employment status of household have become the cause of poverty whereas the Household head age, rural-to-urban migration, the household head years of schooling, household having number of earners, women status of work, worker remittances, the physical assets value and ownership of house significantly reduce the poverty in Southern Punjab.

In Bahawalpur division household size and occupation of the household head escalates poverty significantly. The variables like household head, schooling years, a household having number of earners, women status of work, remittances, and physical assets value are the factors that significantly decreases poverty level. Similarly in Multan and D.G Khan division, the same situation is found. The poverty is caused by household size an occupation of the household. The rest of the variables have decreasing impact of the poverty. But the more intensity is observed in D.G Khan division.

It is recommended that household size should be reduced by taking action on birth control program. Moreover health and education facilities should be provided at the nearest distance of household residence. In rural areas of southern Punjab, the government should provide basic facilities so that the economic status of the household may be improved and poverty intensity may reduce. There should be provision of employment opportunities in formal as well as informal sector especially in D.G Khan Division because it is poorer as compared to other divisions of Southern Punjab.

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