Journal of Agricultural Development and Policy, 2018
Volume 28, No. 1, 36-44

Incidence of Poverty among Marginal and Small Farmers in Rural Punjab

***Rupinder Kaur, ***Sukhvir Kaur, *Anupama, **Gurinder Kaur and *Gian Singh**
*Department of Economics, **Department of Geography, Punjabi University, Patiala
***Dashmesh Khalsa College, Zirakpur

Abstract

In this study an attempt has been made to analyse the incidence of poverty among the marginal and small farmers in the rural areas of Punjab. On the basis of the expert group criterion 46.55 per cent of the sampled farm population is living below the poverty line. The incidence of poverty is the highest in the Shivalik Foothills Region followed by the South-West and Central Plains Regions. By taking the poverty measure of 50 per cent of per capita income of the state, 80.76 per cent of total farm population is living below the poverty line. The 40 per cent of the state PCI criterion indicates that as many 72.98 per cent of the sampled farm population is living below the poverty line. The incidence of consumption based poverty among the marginal and small farmers is slightly less than the incidence of income based poverty among these categories. There is an inverse relation between the farm size and farm population living below the poverty line in all the three regions.

Keywords: *Marginal and small farmers, Income, Consumption expenditure, Poverty.*

JEL Classification: *I32, P24, P36, Q12, Q13*

Introduction

Poverty is a phenomenon which is complex in origin as well as manifestations (Ganguli, 1973). Therefore, an attempt to describe poverty of individuals, households, regions, states and nations is always found to be incomplete and therefore liable for criticism. The question of poverty in the Indian context is related to the low level of per capita income and its highly skewed distribution, along with a slow pace of economic development (Nayak, 2012). Poverty is the effect of lack of income and access to credit. The measures initiated to reduce indebtedness and regulating money-lending activities for agricultural purposes failed to provide a long-term solution (Kaur and Kaur, 2016). The poverty reduction in India has been relatively slow, and certainly much below what would be expected given the rapidity of income growth in the past fifteen years (Ghosh, 2012).

During the initial phases, the emphasis was on land reforms and agricultural growth. It was realized that higher agricultural growth by itself would not be sufficient to ensure removal of rural poverty (Singh, 2013). The

Corresponding Author email: rupinder12333@gmail.com

structuralist perspective envisages poverty, especially in rural India, as a long duration phenomenon. The famous axiom that 'Indian farmers are born, live and die in indebtedness' is a classic description of the structural roots as well as the form of poverty engulfing a bulk of the rural poor in the country (Mehta and Shah, 2003). The Green Revolution has helped in increasing the income levels of farmers. However, it is confined to some farmers, mainly those with larger holdings. The introduction of the new technology would, therefore, result in a growing polarization between large-scale and small-scale cultivators. The small and marginal cultivators, along with agricultural labourers are the hardest hit by price fluctuations dictated by global capital. All these developments have made survival even more precarious for the rural poor households (Wilson, 2002). Since the mid-1990s, large sections of the farm households have been facing a great deal of distress as a consequence of decline in agricultural income, erosion of their repayment capacity and increased debt burden. Although agriculture now accounts for only 14 per cent of Gross Domestic Product (GDP) in 2011-12, it is still the main source of livelihood for majority of the rural population (Anonymous, 2013).

Many national rural development programmes in the form of integrated efforts or cooperatives have endeavored to increase the availability of financial services, reduce collateral or other requirements, and adopt procedures to help rural clients. But because of the principle of open membership, most cooperatives have come under the control of well-to-do powerful farmers and have failed to make any contribution in the alleviation of poverty (Sharma, 2009). From the last couple of years, farmer's suicides become a major issue. The beginning of agrarian crisis requires to be located much earlier to the beginning of suicides, which goes back to the 1980's when terms of trade were going against agriculture, urban biased policies were dominating the state policies, and farming was becoming a losing proposition (Shery et al., 2016).

Major policy measures during the post-reform period were aimed at achieving the higher economic growth rate. They were of the belief that economic growth benefits through trickledown effect will automatically result into fall in the major economic problems such as poverty and inequality (Gupta et al., 2015). But most of the research findings have witnessed simultaneous rise in the level of inequality and slow down in the rate of poverty reduction (Prasad, 2013). During the post-reform period there has been an increase in the inequality of distribution of land owned. This trend in rural India has increased substantially land price and accordingly ousted the small farmers out of land market. It is widely felt that the benefits of growth did not trickle down automatically to the lower rungs of the income ladder (Anupama, 2015).

Poverty is defined as inability of an individual to satisfy certain basic minimum needs for a sustained, healthy and reasonable level of living. All those people who live below this minimum desirable level of living are said to be living below the poverty line. There are a large number of issues associated with the estimation of poverty in the country using the official poverty line that need to be given a serious consideration.. The social scientists define poverty in terms of deprivation and poor are those who are in various ways deprived. But in practice these social scientists have been concerned with those aspects of deprivation that are most readily measured flows of income and consumption (Harriss, 2012). However, the debate on measurement of poverty line still goes on.

In this paper an attempt has been made to analyse the incidence of poverty among the marginal and small farm-size categories in the rural areas of Punjab. More specifically, the aim is to estimate per capita income and consumption expenditure based poverty among the marginal and small farm-size categories.

Data Sources and Methodology

For the purpose of the present study data were collected from the three districts of Punjab state representing the three different regions, i.e. the South-West Region, the Central Plains Region and the Shivalik Foothills Region. The South-West Region comprises of Bathinda, Mansa, Ferozepur, Fazilka, Faridkot, Muktsar and Moga districts. The Central Plains Region constitutes Patiala, Fatehgarh Sahib, Sangrur, Amritsar, Kapurthala, Jalandhar, Tarn Taran and Ludhiana districts. The Shivalik Foothills Region comprises of Hoshiarpur, Pathankot, Nawanshahr, Gurdaspur and Ropar districts (Table 1). Keeping in view the differences in agro-climatic conditions and to avoid the geographical contiguity of the sampled districts, it was deemed fit to select one district from each region on random basis. Mansa district from the South-West Region; Ludhiana district from the Central Plains Region; and Hoshiarpur district from the Shivalik Foothills Region have been selected for the purpose of present study.

On the basis of random sample method, one village from each development block of the selected districts has been chosen. There are twenty seven development blocks in the selected three districts. Thus, in all, twenty seven villages were selected from the three districts under study. A representative proportional sample of households comprising marginal farmers, small farmers, medium farmers, large farmers and agricultural labourers were taken up for survey. The households selected were 681. Out of which, 408 households were of marginal farm-size category and 273 households wereof small farm-size category. Out of which, 88 marginal farm households and 62 small farm households from Mansa district, 161 marginal farm households and 149 small farm households from Ludhiana district and 159 marginal farm households and 62 small farm households from Hoshiarpur district have been selected. The present study relates to the agricultural year 2014-15.

The poverty prevailing among the marginal and small farmers in rural Punjab has been analyzed on the basis of following criteria:

The Expert Group Criterion

The poverty line worked out by the Expert Group in 1979 (Anonymous 1993) is Rs. 49.09 (rounded to Rs. 49.0) monthly the per capita expenditure at 1973-74 prices for the rural areas. However, for the purpose of this study the poverty line has been estimated by using

Table 1. Distribution of districts according to regions

Region	District
South-West	Bathinda, Mansa, Ferozepur, Fazilka, Faridkot, Muktsar and Moga
Central Plains Region	Patiala, Fatehgarh Sahib, Sangrur, Amritsar, Kapurthala, Jalandhar, Tarn Taran and Ludhiana
Shivalik Foothills	Hoshiarpur, Pathankot, Nawanshahr, Gurdaspur and Ropar

Source: *http://agropedia.iitk.ac.in/content/agro-climatic-zone-punjab; https://www.dairyknowledge.in/sites/default/files/7.1_1.pdf* the general consumer price index for the agricultural labourers for the year 2014-15 (Anonymous, 2016). The poverty line comes to Rs. 25683.84 per capita, per annum. The marginal and small farmers having per capita income or consumption expenditure below this level has been considered as poor households. The commonest measure is the Head-Count measure, given by the proportion of the total population that happens to be identified as poor, e.g., as falling below the specified income.

The 50 Per Cent of the State Per Capita Income (PCI) Criterion

In this method we define or draw the poverty line by taking 50 per cent or half the per capita income level of the state. Punjab's per capita income at current prices for the year 2014-15 is Rs. 114561 (Anonymous, 2016). The formula for finding the per capita income of persons who will constitute below the poverty line can be worked out as follows:

Cut-off income = PCI of State/2
= Rs. 1,14,561/2
= Rs. 57280.50/- (per capita per annum)

The 40 Per Cent of the State PCI Criterion

In this method we take 40 per cent of the per capita income of the state instead of 50 per cent and we draw the poverty line as follows.

Cut-off income = PCI of State/100x40
= Rs. 114561/100x40
= Rs. 45824.40/-(percapita, per annum)

The tabular results and analysis are discussed in two sections. Section-I explains income based poverty, while section-II deals with consumption based poverty.

Results and Discussion

Incidence of Income-Based Poverty: Category-wise

Table 2 represents the incidence of poverty among the marginal and small farm-size categories in the rural areas of Punjab. The table reveals that on the basis of the expert group criterion, 46.55 per cent of the sampled farm population is living below the poverty line. The Incidence of poverty is different for both of the farm-size categories. As many as 50.89 per cent persons of the marginal farmers and 26.74 per cent persons of the small farmers are living in poverty.

By taking the poverty measure of 50 per cent per capita income of the state, 80.76 per cent of total farm population is living below the poverty line. The proportion of farm population living below the poverty line is different for the different farm-size categories. The proportion of population living below the poverty line is 88.97 per cent for the marginal farm-size category and 68.50 per cent for the small farm-size category. So, we can conclude

Table 2. Percentage of Marginal and Small Farmers Living Below the Poverty Line: Category-wise

Criterion	Categories		
	Marginal farmers	Small farmers	All sampled
Expert Group	59.80	26.74	46.55
50 Per Cent of the State PCI	88.97	68.50	80.76
40 Per Cent of the State PCI	84.31	56.04	72.98

Source: *Field Survey, 2014-15*

from the table that most of the farm population is living below the poverty line in Punjab according to this method.

By using the second method, i.e., 40 per cent per capita income of the state, as many 72.98 per cent of the marginal and small farm households are living below the poverty line. This proportion is 84.31 per cent for the marginal farmers and 56.04 per cent for the small farmers. There is an inverse relationship between the farm size and farm population live below the poverty line.

Incidence of Income-Based Poverty: Region-Wise

The perusal of Table 3 represents the region-wise incidence of poverty among the marginal and small farm-size categories in the rural areas of Punjab. The table shows that on the basis of the Expert Group criterion, the incidence of poverty is the highest in the Shivalik Foothills Region followed by the South-West Region and the Central Plains Region. The proportion of population living below the poverty line is 66.06 per cent for the Shivalik Foothills Region, 43.33 per cent for the South-West Region and 34.19 per cent for the Central Plains Region. In the case of the marginal farm-size category, this percentage is also high in Shivalik Foothills Region (73.58 per cent) and low in the Central Plains Region (46.58 per cent). In the case of small farm-size category, a similar trend is noticed as for the marginal farm-size category. The above analysis shows that the incidence of poverty is inversely related with the development level of the region.

By taking the poverty measure of 50 per cent per capita income of the state, cut- off income for the poverty line is Rs. 57289.50 per capita, per annum. The incidence of poverty is the highest (85.52 per cent) in the Shivalik Foothills Region and the lowest in the Central Plains Region. This percentage is 83.33 for the

Table 3. Percentage of Marginal and Small Farmers Living Below the Poverty Line: Region-wise

Criterion	Farm-size categories	South-West Region	Central Plains Region	Shivalik Foothills Region
Expert Group	Marginal Farmers	59.09	46.58	73.58
	Small Farmers	20.97	20.81	46.77
	All Sampled	43.33	34.19	66.06
50 Per Cent of the State	Marginal Farmers	88.64	87.58	90.57
PCI	Small Farmers	75.81	63.76	72.58
	All Sampled	83.33	76.13	85.52
40 Per Cent of the State PCI	Marginal Farmers	82.95	82.61	86.79
	Small Farmers	54.84	53.69	62.90
	All Sampled	71.33	68.71	80.09

Source: *Field Survey, 2014-15*

South-West Region. In the case of marginal farm-size category, about 91 per cent farm population is living below the poverty line in the Shivalik Foothills Region. However, the South-West Region and Central Plains Region represent such percentages as 88.64 and 87.58, respectively. In the case of small farm-size category, this percentage is the highest (75.81 per cent) in the South-West Region and the lowest (63.76 per cent) in the Central Plains Region. This proportion is 72.58 in the Shivalik Foothills Region.

The 40 per cent of the state PCI criterion indicates that 72.98 per cent of the sampled farm households live below the poverty line (Table 1). However, there are considerable variations in the levels of poverty among the marginal and small farm-size categories across the regions. The incidence of poverty is the highest in the case of Shivalik Foothills Region i.e., 80.09 per cent and it is relatively low in the case of Central Plains Region i.e., 68.71 per cent. This percentage is 71.33 for the South-West Region. In the case of marginal farm-size category, this percentage is the highest (86.79 per cent) in the South-West Region and the lowest (82.62 per cent) in the Central Plains Region. The small farm-size category shows a similar trend as noticed in the case of marginal farm-size category. The analysis shows that incidence of poverty is inversely related with the development level.

Incidence of Consumption Based Poverty: Category-wise

In the previous section, we have measured the poverty among the marginal and small farm-size categories on the basis of income. The annual per capita consumption expenditure of an average sampled farm household in the rural areas of Punjab is Rs. 45703.43. The per capita consumption expenditure level is higher than the per capita income level. So it is also important to measure the incidence of poverty among the marginal and small farm-size categories based on their per capita consumption expenditure level. In this section, we work out poverty level on the basis of per capita consumption expenditure levels of the two farm-size categories. The basic criterion for the poverty line remains the same as applied in the previous section.

Table 4 depicts the incidence of poverty among the marginal and small farm-size categories in the rural areas of Punjab on the basis of per capita consumption expenditure. According to the Expert Group criterion as many as 25.40 per cent of the total sampled farm population is living below the poverty line in rural areas of Punjab. The proportion of population living below the poverty line is 32.60 per cent for the marginal farm-size category and 14.65 per cent for the small farm-size category.

By taking the poverty line of 50 per cent of per capita consumption expenditure of the state, as many as 76.80 per cent farm population is living below the poverty line. This proportion is 82.11 per cent for the marginal farm-size category and 68.86 per

Table 4. Percentage of Marginal and Small Farmers Living Below the Poverty Line:Category-wise

Criterion	Categories		
	Marginal Farmers	Small Farmers	All Sampled Farmers
Expert Group	32.60	14.65	25.40
50 Per Cent of the State PCI	82.11	68.86	76.80
40 Per Cent of the State PCI	73.77	54.58	66.08

Source: *Field Survey, 2014-15*

cent for the small farm-size category. There is an inverse relationship between the farm size and farm population live below the poverty line

If we consider moderately by taking 40 per cent per capita consumption expenditure of the state, 66.08 per cent farm population is living below the poverty line. The proportion of population living below the poverty line is 73.77 per cent for the marginal farm-size category and 54.58 per cent for the small farm-size category. There is also an inverse relationship between farm-size and farm population live below the poverty line.

Incidence of Consumption Based Poverty: Region-wise

The region-wise incidence of consumption expenditure based poverty is given in Table 5. The table reveals that on the basis of the Expert Group criterion the proportion of farm population living below the poverty line is 33.48 per cent in the Shivalik Foothills Region. The proportion of population living below poverty line is 25.33 per cent for the South-West Region and 19.68 per cent for the Central Plains Region. There is an inverse relationship between the farm size and farm population live below the poverty line in all the three regions. In the case of the marginal farm-size category, this percentage is the highest (38.99) in the Shivalik Foothills Region and the lowest (26.71) in the Central Plains Region. Similarly, in the case of small farm-size category, this percentage is the highest (19.35) in the Shivalik Foothills region and the lowest (12.08) in the Central Plains Region.

By taking the poverty measure of 50 per cent per capita consumption expenditure of the state, cut-off income for the poverty line is Rs. 57289.50 per capita, per annum. The incidence of poverty is the highest i.e., 85.07 per cent in the Shivalik Foothills Region and the lowest (70.32 per cent) in the Central Plains Region. This percentage is 78 for the South-West Region. In the case of marginal farm-size category, about 89 per cent farm population is

Table 5. Percentage of Marginal and Small Farmers Living Below the Poverty Line: Region-wise

Criterion	Categories	South-West Region	Central Plains Region	Shivalik Foothills Region
Expert Group	Marginal Farmers	31.82	26.71	38.99
	Small Farmers	16.13	12.08	19.35
	All Sampled	25.33	19.68	33.48
50 Per Cent of the State PCI	Marginal Farmers	77.27	78.26	88.68
	Small Farmers	79.03	61.74	75.81
	All Sampled	78.00	70.32	85.07
40 Per Cent of the State PCI	Marginal Farmers	71.59	70.19	78.62
	Small Farmers	59.68	51.01	58.06
	All Sampled	66.67	60.97	72.85

Source: *Field Survey, 2014-15*

living below the poverty line in the Shivalik Foothills Region. However, the Central Plains Region and South-West Region represent such percentages as 78.26 and 77.27, respectively. In the case of small farm-size category, this percentage is the highest in the South-West Region and the lowest in the Central Plains Region

The 40 per cent of the state PCI criterion indicates that the incidence of poverty is the highest in the case of Shivalik Foothills Region,s i.e., 72.85 per cent and it is relatively low in the case of Central Plains Region, i.e., 60.97 per cent. This percentage is 66.67 for the South-West Region. In the case of marginal farm-size category, this percentage is the highest (78.62) in the Shivalik Foothills Region and the lowest (70.19) in the Central Plains Region. For the small farm-size category, this percentage is the highest (58.68) in the South-West Region and the lowest (51.01) in the Central Plains Region. The analysis shows that incidence of poverty is inversely related with the level of development.

The comparison of income and consumption based poverty among the marginal and small farm-size categories in the rural areas of Punjab reveals that the incidence of consumption based poverty among the marginal and small farmers is slightly less than the incidence of income based poverty among these categories. This is so because these farmers try to maintain a minimum level of living by taking loans from various institutional and non-institutional agencies.

Conclusions and Policy Implications

The above analysis shows that that most of the farm population is living below the poverty line in Punjab. The incidence of poverty is slightly higher for the marginal farm-size category. The region-wise analysis shows that the incidence of poverty is the highest in the Shivalik Foothills Region followed by the South-West Region and the Central Plains Region. The incidence of consumption based poverty among the marginal and small farm-size categories in the rural areas of Punjab is slightly less than the incidence of income based poverty among these categories. This is so because these farmers try to maintain a minimum level of living and fulfill their basic needs by borrowing money from various institutional and non-institutional agencies.

The study shows that there is an inverse relationship between the farm size and farm population living below the poverty line. So, the government should introduce necessary land reforms by lowering the ceiling of land holdings, acquiring the surplus land and distributing this land among the marginal and small farmers. The government should strengthen the education network in the rural areas to improve the literacy levels of rural people in order to equip them for better livelihood. A campaign of human resource development should be launched by the government in order to get the coming generation technically educated so that they may be able to establish their own ventures. This will help uplift the level of income by decreasing the number of dependents.

The study further shows that incidence of income based poverty among the marginal and small farmers is slightly more than the incidence of consumption based poverty among these categories. So, attempts will have to be made to increase crop productivity so that the farm sector may provide enough income and employment to the marginal and small farmers. There is a need to provide urban facilities in the rural areas to give a boost to rural non-farm employment and sources of livelihood. Equally important is the need to promote rural nonfarm sector so that burden on the agricultural sector is reduced. Social security measures need to be implemented particularly for the benefit of these low income farmers. Further, distribution of essential goods particularly cereals and pulses at subsidized rates may be undertaken for the benefit of poor people The welfare schemes initiated by the government for the marginal and small farmers need to be implemented in their true spirit with zeal by the block and district level officers, allowing no laxity in their efforts to make such schemes successful. Such steps taken on the priority basis can help to lessen the economic and other problems of the marginal and small farmers.

References

Anonymous 1993. *Report of the expert group on estimation of proportion and number of poor*. Planning commission, New Delhi, p 34

Anonymous 2016. *Economic Survey of India*, 2015-16. Ministry of Finance, Department of Economic Affairs , New Delhi.

Anonymous 2013. *Twelfth Five Year Plan (*2012-17) *Economic sectors*, Planning Commission Govt. of India, New Delhi, p 27

Anonymous 2016. *Statistical Abstract of Punjab*, 2015. Economic adviser to Government of Punjab, Chandigarh, p 67

Anupama 2015. Multidimensional poverty in India: Has the growth been pro-poor on multiple dimensions? *Indian Journal of Economics and Development* **11:** 457-470.

Ganguli B N 1973. The Challenge of Poverty, In: *Law and Poverty*, ed.: L.M. Shingvi .N.M. Triphati Private Limited, Bombay, p 1.

Ghosh, J. 2012. *Poverty reduction in China and India*, Critical Quest. New Delhi.

Gupta S K, Lal P, Negi V and Gupta K 2015. Poverty, inequality and inclusive growth during post-reform period in India. *Indian Journal of Economics and Development* **11:** 553-562.

Harriss J 2012. *Researching poverty*. Critical Quest. New Delhi.

Kaur R and Kaur K 2016. Incidence and determinants of poverty among marginal and small farmers-A case study of Kaithal District. *Indian Journal of Economics and Development* **12:** 457-470.

Mehta A K and Shah A 2003. Chronic poverty in India: incidence, causes and policies. *World Development*, **31:** 491-511.

Nayak P 2012.*Economic Development and Social Exclusion in India*. Critical Quest. New Delhi.

Sharma N 2009.Nature and Extent of Household Savings and Indebtedness among Weaker Sections in Rural Areas of Haryana-A Study of Yamunangar District. *Political Economy Journal of India* **18:** 59-64.

Sherry R, Acharya K G and Dhurwey C 2016. Farmers's suisides in India and its causes. *Journal of Economic and Development* **12:** 237-40.

Singh A J 2013. Income and livelihood issues of farmers: A field study in Uttar Pradesh. *Agricultural Economics Research Review* **26**:89-96.

Prasad S 2013. Polarisation, inequality and inclusive growth: Kerala's experience in the reform period. *Journal of South Asian Studies* **1:** 91-103.

Wilson K 2002. Small cultivators in Bihar and new technology: Choice or compulsion? *Economic and Political Weekly* **37:** 1229-38.

Received: November 20, 2017 Accepted: January 6, 2018