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Incidence and Determinants of Poverty among Farmers in the Border Areas of Rural Punjab: An Income and Consumption-based Analysis

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Abstract

Poverty continues to be a major socio-economic concern in rural India, particularly among agricultural households with limited landholdings. This study examines the incidence and determinants of poverty among farmers in the border areas of rural Punjab using primary data collected during 2021-22. Poverty is estimated using multiple approaches, including the Tendulkar and Rangarajan criteria, World Bank extreme and moderate poverty lines, and relative poverty thresholds based on state per capita income. Both income-based and consumption-based poverty measures are employed to capture absolute and relative deprivation. The findings reveal that the incidence of poverty is high among marginal farmers across all measures followed by the small farmers, while the semi-medium and medium farmers are relatively less affected. Regression results show that family size, dependency ratio, farm size, subsidiary income, education, and asset ownership significantly influence poverty outcomes.

Keywords

Rural poverty, Farmers, Border areas, Punjab.

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1. Introduction

Poverty is conceptualized as a condition where individuals or families lack the resources to meet their minimum needs and struggle to maintain a basic standard of living. Poverty is a imperative global issue, and India despite its status as a developing and densely populated nation fights with poverty. Poverty goes beyond mere financial insufficiency; it embodies a social reality where a segment of society struggles to meet even their most fundamental needs. Human Rights underscores the universal entitlement to a standard of living conducive to health and well-being, encompassing essentials like food, clothing, shelter, health care, and vital social services (Junofy, 2013). In India, poverty is now also assessed using multidimensional indicators rather than only calorie-based income levels. Around 14.96 per cent of the population was multidimensionally poor in 2019-21, which declined further to about 11.28 per cent in 2022-23 (NITI Aayog, 2023). Empirical studies on rural poverty in India consistently emphasize the inverse relationship between farm size and poverty incidence. Ravallion and Datt (1996) demonstrated that land ownership and agricultural growth significantly reduce rural poverty, though benefits are unevenly distributed. Ghosh (2018) and Joshi and Rana (2020) observed that marginal and small farmers remain vulnerable due to limited asset ownership and dependence on agriculture. Consumption-based studies highlight that poverty persists even when minimum calorie norms are met. Deaton and Drèze (2009) argue that traditional poverty lines underestimate deprivation by ignoring non-food necessities. Kundu and Sarangi (2016) shows that relative consumption poverty remains high among smallholders despite improvements in food security. Several studies identify household size, education, asset ownership, and non-farm income as crucial determinants of poverty (Tilak, 2005; Mehta & Naveen, 2017). Recent literature also advocates the use of relative poverty measures to better capture inequality in economically advanced regions (Bhalla & Kaur, 2011; Chakrabarti, 2021).

Punjab, often perceived as one of India's more prosperous states, presents a paradox wherein agricultural prosperity coexists with widespread agrarian distress among the marginal and small farmers. The border areas of rural Punjab face additional vulnerabilities due to fragmented landholdings, limited diversification opportunities, rising input costs, and socio-political uncertainties. These factors make an in-depth assessment of poverty in these regions particularly relevant. The

present study seeks to contribute to the literature by providing a comprehensive assessment of poverty among farmers in the border areas of rural Punjab using different poverty benchmarks and by identifying key determinants influencing income-based and consumption-based poverty. While existing studies provide valuable insights, there is limited empirical work focusing specifically on the border areas of rural Punjab using both income and consumption perspectives. This study attempts to fill this gap.

2. Objectives of the Study

Objectives of this study are two-fold:

1. Estimate the incidence of income-based and consumption-based poverty among different categories of farmers.
2. Identify key determinants influencing poverty among different categories of farmers.

3. Research Methodology

The study is based on primary data collected through a structured field survey conducted during 2022-23 in the border districts of rural Punjab. There are 20 development blocks which lie on the international border. All 20 development blocks were selected as the primary area of investigation. One village was selected from each development block located within 10 kilometers of the international border in Punjab. A total of 20 villages were chosen from six districts adjoining the India-Pakistan border. A representative proportional sample of 30 per cent of farmers from each category was randomly selected for the survey. A total of 423 farm households were selected for the survey across all 20 villages. Out of 423 selected farm households, 134 farmers belong to the category of marginal farmers, 137 to small farmers, 82 to semi-medium farmers, 54 to medium farmers and 16 to large farmers.

3.1 Criteria for Measurement of Poverty

Poverty is measured using several established criteria to provide a comprehensive analysis of poverty levels. These thresholds help identify the varying degrees of poverty among farmers, facilitating targeted interventions. The prevalence of poverty has been analyzed on the basis of following criteria:

Tendulkar criterion: Tendulkar committee was constituted by the Planning Commission to review the methodology for estimation of poverty in India In 2005. For 2004-05, the poverty line using by this methodology is estimated to be Rs. 543.51 per capita, per month for the rural areas of Punjab (GoI, 2009). For this study, figures were adjusted using the consumer price index for agricultural and rural labourers for the year 2021-22 (GoI, 2022). Consequently, the annual poverty line comes to be Rs. 20947.09. Hence, all the farmer households having per capita income or per capita consumption expenditure below Rs. 20647 per annum has been considered as poor households. The most widely used measure of poverty is

the Head-Count measure, given by the proportion of the total population falling below the specified poverty income.

Rangarajan criterion: An Expert Group under the chairmanship of Dr. C. Rangarajan, to review the methodology for measurement of poverty in the country, was constituted by the Planning Commission in June 2012. The Rangarajan Committee's broader definition of poverty emphasizes essential needs such as nutrition, education, and housing. The committee submitted its report in June 2014, setting the rural poverty line in Punjab at Rs. 1127.48 per person per month for the year 2011-12 prices (GoI, 2014). For the present study, figures were adjusted using the consumer price index for agricultural and rural labourers for the year 2021-22. Consequently, the updated annual poverty line is Rs. 22907.28. Farmers with a per capita income or consumption expenditure below this threshold are classified as poor households.

World Bank's Moderate Poverty Line Criterion: The World Bank has suggested two methods to measure poverty among the peoples of developing countries. These global standards enable us to contextualize poverty levels within a broader framework. The World Bank's moderate poverty line criterion establishes a standard for assessing and defining poverty levels across various countries and regions. This standard is periodically updated by the World Bank. The updated moderate poverty line is set at \$3.10 per day per person, at purchasing power parity (Ferreira *et al.*, 2015). According to the purchasing power parity (PPP) rate of Indian Rupees to US Dollars for 2021-22, which is 1 USD = Rs. 22.88 (source: www.data.oecd.org), the annual income cut-off for the moderate poverty line is calculated as follows:

$$\text{Poverty line} = 3.10 \times 22.88 \times 365 = \text{Rs. } 25888.72.$$

World Bank's Extreme Poverty Line Criterion: The second concept of poverty is the extreme poverty line. In 2021, the World Bank revised the extreme poverty line to \$1.9 per person, per day. The purchasing power parity of the Indian Rupee in 2021-2022 is \$1 = Rs. 22.88 (www.data.oecd.org).

$$\text{Poverty line} = 1.9 \times 22.88 \times 365 = \text{Rs. } 15825.00$$

50 per cent of State per Capita Income Criterion: The 50 per cent threshold of the state's per capita income indicates individuals living on incomes equivalent to half the average income per person of the state. Per capita income of Punjab at current prices for the year 2021-22 is Rs. 161888 (GoP, 2022). After calculations the poverty line comes to Rs. 80944 per annum. All the farmers having per capita income or per capita consumption expenditure below Rs. 80944.00 has been considered as poor households.

$$\begin{aligned} \text{Cut off income} &= \text{PCY of state} \times 50\% \\ &= \text{Rs. } 161888 \times 50/100 \\ &= \text{Rs. } 80944 \text{ (per capita, per annum)} \end{aligned}$$

40 per cent of State per Capita Income Criterion: The 40 per cent threshold denotes a lower benchmark, indicating a more severe form of deprivation. Individuals living below this level face significant challenges in accessing even the most fundamental necessities, including food, shelter, and healthcare. The poverty line comes to Rs.64755 per annum. All the farmers having per capita income or per capita consumption expenditure below Rs. 64755 have been considered as poor households.

$$\begin{aligned}\text{Cut off income} &= \text{PCY of state} \times 40\% \\ &= \text{Rs. } 161888 \times 40/100 \\ &= \text{Rs. } 64755 \text{ (per capita, per annum)}\end{aligned}$$

The factors influencing the per capita income or expenditure of farmers has been analyzed and carried out by the use of multiple regression analysis. The multiple regression model used as follows:

$$Y = a + b_1 X_1 + b_2 X_2 + \dots + b_n X_n$$

Where, Y is the dependent variable; X_1 - X_n are the explanatory variables; a is a constant term and b_1 - b_n are the regression coefficients for X_1 - X_n , respectively. The following variables are chosen for the final analysis to examine the determinants of income-based poverty:

$$Y = f(X_1, X_2, X_3, X_4, X_5)$$

Where, Y=Per capita income (Rs.), X_1 =Family size, X_2 =Number of earners, X_3 =Expenditure on education (Rs.), X_4 =Per capita income from subsidiary occupations (Rs.), X_5 = Farm size.

Factors influencing per capita consumption expenditure are considered as determinants of poverty. The following variables are chosen for the final analysis.

$$Y = f(X_1, X_2, X_3, X_4, X_5)$$

Where, Y=Per capita consumption expenditure (Rs.), X_1 =Number of dependents, X_2 =Education level of the head of the household, X_3 =Per capita expenditure on education (Rs.), X_4 =Per capita income from subsidiary occupations, X_5 =Per capita value of assets (Rs.).

4. Results and Discussion

4.1 Incidence of Income-based Poverty

Poverty is financial situation and level of well-being of a person when he is unable to obtain basic necessities like clothing, food, and shelter. The amount of money needed to purchase food in order to produce that number of calories is therefore known as the poverty line. Table-1 displays the proportion of farmers who have income below poverty thresholds, classified according to various ways. Under extreme poverty criterion 5.74 per cent of all sampled population face the incidence of poverty. The marginal farmers face the highest poverty incidence of 14.68 per cent, followed by the small farmers (3.09 per cent). When considering the

moderate poverty criterion, 14.14 per cent of the total sampled population is living below the poverty line. The situation is worse for the marginal farmers as data shows that 33.61 per cent of the population of marginal farmers is living below the moderate poverty line. 6.18 per cent of the population of small farmers and 4.54 per cent of the population of the semi-medium farmers is living below the moderate poverty line. Moderate poverty has a greater impact on marginal farmers in comparison with other categories.

The Rangrajan and Tendulkar parameters exhibit parallel patterns, with a greater proportion of the marginal farmers being impacted in comparison to other categories. According to the Tendulkar criterion, slightly more than 9 per cent of the population of all sampled farmers is living below poverty line. Under this criterion, the marginal farmers face the highest (23.00 per cent) poverty incidence followed by the small farmers (6.18 per cent) and semi-medium farmers (0.95 per cent). According to the Rangrajan criterion, about 12 per cent of all sampled population is living below the poverty line. Under this measure, the marginal farmers experience the most severe poverty rate of 31.31 percent, followed by the small farmers and semi-medium farmers.

Table-1: Percentage of Population of Farmers Living below Income-based Poverty

Methods	Marginal Farmers	Small Farmers	Semi-Medium Farmers	Medium Farmers	Large Farmers	All Sampled Farmers
Extreme poverty	14.68	3.09	—	—	—	5.74
Moderate poverty	33.61	9.89	4.54	—	—	14.14
Tendulkar criterion	23.00	6.18	0.95	—	—	9.08
Rangrajan criterion	31.31	6.18	0.95	—	—	11.59
50 per cent of PCY criterion	80.26	62.91	40.70	20.54	—	54.99
40 per cent of PCY criterion	71.78	49.92	16.08	13.24	—	42.46

Source: Field Survey, 2021-22

Similarly, according to the criterion of 40 per cent and 50 per cent of the per capita annual income of the state, the data reflects the incidence of poverty for all the farmer categories except the large farmers. According to the outcomes, about 55 per cent of the population of all sampled farmers is living below 50 per cent of per capita income of the state. 80 per cent of the population of the marginal farmers is living on less than 50 per cent of the per capita of the state. This percentage is 62.91 for the small farmers, 40.70 for the semi-medium farmers, and 20.54 for the medium farmers. According to 40 per cent of per person annual income of state

measure, 42.46 per cent of the population of all sampled farmers is living below poverty line. The marginal farmers experience the most severe poverty rate of 71.78 per cent, followed by the small farmers with 49.92 per cent, semi-medium farmers with 16.08 per cent and medium farmers with 13.24 percent.

The findings depicts that the marginal farmers are particularly vulnerable to poverty across all measures followed by the small farmers, while the semi-medium and medium farmers are relatively less affected. Large farmers remain largely unaffected across all measures. These findings highlight the urgent need for targeted interventions and policies to address rural poverty in Punjab, tailored to the specific circumstances and needs of different farm-size categories.

4.2 Consumption-based Poverty

The incidence of consumption-based poverty is also calculated. Table 2 displays the proportion of population of farmers who live below the poverty line depending on their consumption levels. The extreme poverty and Tendulkar criterion indicate that there are no farmers who have become poor among all categories of farmers. These two methodologies do not detect any farmer whose consumption levels place them below the poverty threshold. According to moderate poverty and Rangarajan criterion, only 8.25 per cent and 4.79 per cent of the population, respectively of the marginal farmers lives below the poverty line.

Table-2: Percentage of Population Living below Consumption-based Poverty

Methods	Marginal Farmers	Small Farmers	Semi-Medium Farmers	Medium Farmers	Large Farmers	All Sampled Farmers
Extreme poverty	—	—	—	—	—	—
Moderate poverty	8.25	4.13	—	—	—	3.27
Tendulkar criterion	—	—	—	—	—	—
Rangrajan criterion	4.79	—	—	—	—	1.16
50 per cent of PCY criterion	78.63	65.69	43.97	5.72	—	53.95
40 per cent of PCY criterion	73.08	39.10	9.55	—	—	36.28

Source: Field Survey, 2021-22

However, the effective application of the 50 per cent and 40 per cent of per capita income approaches exposes substantial poverty rates among all farmer categories except the large farmers. Following the 50 per cent of per capita consumption expenditure of state criterion, 53.95 per cent population of all sampled farmers is living below the poverty line, a significant proportion of the

population of the marginal farmers (about 79 per cent) and small farmers (65.69 per cent) are experiencing poverty as measured by the consumption-based poverty threshold. About 44 per cent of the population of the semi medium farmers lives below the poverty line. The data reveals that medium farmers exhibit low poverty rates according to these criteria, with a mere 5.72 per cent of them falling under the 50 per cent criterion. According to the criterion of 40 percent of the per capita consumption of the state, 36.28 per cent of the population of all sampled farmers is living below the poverty line. Slightly more than 73 per cent of the population of marginal farmers and 39.10 per cent of the population of small farmers fall below this consumption-based poverty threshold. About 10 percent of the population of semi-medium farmers also experience poverty. Interestingly, the data shows that no medium and large-scale farmers meet the poverty criteria under these measures.

It stresses the significant obstacles encountered by the marginal and small farmers in fulfilling their fundamental consumption requirements. Furthermore, the extremely low poverty rates among medium and large farmers highlight a substantial inequality in the allocation of income throughout the agricultural sector. Overcoming these inequalities and guaranteeing the availability of goods and services for the smaller farmers may prove crucial for alleviating poverty. The findings align with earlier studies that emphasize the vulnerability of marginal and small farmers (Ravallion & Datt, 1996; Ghosh, 2018). The persistence of consumption poverty under relative thresholds supports Deaton and Drèze's (2009) critique of calorie-based poverty lines. Additionally, through the comparison of the income and consumption-based poverty within the households of farmers has been observed that the incidence of poverty based on consumption is somewhat lower than the incidence of poverty based on income. These families are compelled to take loans from others to sustain a least standard of living.

4.3 Determinants of Income-based Poverty

An effort has been undertaken to explain the fluctuations in per capita income among farmers in the border areas of rural Punjab. The findings of a multiple regression model on the variables influencing income-based poverty among various categories of farmers are displayed in Table-3. The regression coefficient for the variable family size is indeed negative and significant at the one per cent level of significance for all categories of farmers. This means that an increase in family size is associated with a decrease in per capita income and increases the incidence of poverty among farmers. This implies that an increase in the number of family members can lead to the sharing of resources, which might end up resulting in an increase in poverty proportions. The regression coefficient for the variable number of earners is indeed positive for all farm categories, but it is not significant for the semi-medium and medium farmers. However, it is significant at the one per cent level for the small and large farmers, and at the five per cent level of significance for the marginal farmers. This implies that an increase in the number of

earners can lead to an increase in per capita income, which ends up resulting in a decreased incidence of poverty.

**Table-3: Factor Affecting Income-based Poverty of Farmers
(Results of Multiple Regression Analysis)**

Methods	Marginal Farmers	Small Farmers	Semi-Medium Farmers	Medium Farmers	Large Farmers	All Sampled Farmers
Family size	-0.23* (3.25)	-0.52* (8.05)	-6.49* (5.54)	-0.76* (4.26)	-0.76* (5.10)	-0.36* (10.13)
Number of earners	0.15** (2.15)	0.34* (5.28)	0.70 ^{NS} (0.65)	0.24 ^{NS} (1.35)	0.95* (4.07)	0.18* (4.91)
Expenditure on education	0.03 ^{NS} (0.54)	0.20* (3.49)	0.03 ^{NS} (0.47)	0.22*** (1.83)	0.00 ^{NS} (0.03)	0.02 ^{NS} (0.92)
Per capita income from subsidiary occupations	0.43* (6.79)	0.34* (5.69)	0.36* (6.03)	0.43* (4.32)	-0.07 ^{NS} (0.44)	0.26* (8.78)
Farm size	0.49* (8.44)	0.47* (7.92)	5.68* (10.14)	0.38* (3.64)	0.48* (3.15)	0.68* (22.91)
R ²	0.59	0.60	0.55	0.56	0.85	0.66

Source: Field Survey, 2021-22.

Note: The figures in brackets indicate t values.

* Significant at one per cent, **Significant at five per cent, *** Significant at ten per cent, NS Not significant.

The relationship between expenditure on education and per capita income for the small, medium, and large farmers is positive, as indicated by the positive coefficients. These findings indicate that allocating resources to education could potentially lead to positive financial advantages to families; however, the regression coefficients are only significant for the small and medium farmers. The presence of positive coefficients for the variable per capita income from subsidiary occupations is linked to a decrease in income-based poverty for all the categories of farmers, except for the large farmers. These findings indicate that expanding income streams beyond agriculture can be advantageous in alleviating poverty, especially for farmers with limited land and resources. It is significant at the one per cent level of probability for all the sampled farmers and all categories of farmers except the large farmers. The regression coefficient for farm size is positive, indicating that bigger farm sizes are correlated with lower levels of income-based poverty among all the categories of farmers and it is significant at the one per cent level of significance. This is consistent with the notion that large farms yield greater revenues, hence decreasing the probability of experiencing poverty. The regression model explains approximately 66 per cent of the variation in per capita income, indicating strong explanatory power.

The above analysis indicates that family size has a significant negative impact on per capita income across all farmer categories. The number of earners positively

influences income, particularly among marginal and small farmers. Income from subsidiary occupations significantly reduces poverty, emphasizing the importance of livelihood diversification. Farm size emerges as a strong determinant, with larger holdings associated with higher income levels.

4.4 Determinants of Consumption-based Poverty

The following Table-4 outlines the results of a regression analysis on factors affecting consumption-based poverty among the different categories of farmers.

**Table-4: Factor Affecting Consumption-based Poverty of Farmers
(Results of Multiple Regression Analysis)**

Methods	Marginal Farmers	Small Farmers	Semi-Medium Farmers	Medium Farmers	Large Farmers	All Sampled Farmers
Number of dependents	-0.22** (2.36)	-0.215*** (1.66)	-0.28* (2.98)	-0.13 ^{NS} (1.33)	-0.27 ^{NS} (0.75)	-0.18* (4.90)
Education level of the head	-0.01 ^{NS} (0.14)	-0.06 ^{NS} (1.10)	0.14*** (1.90)	0.16** (2.06)	0.41 ^{NS} (1.52)	0.04 ^{NS} (1.19)
Per capita expenditure on education	-0.06 ^{NS} (1.17)	0.05 ^{NS} (0.58)	0.08 ^{NS} (1.07)	-0.37* (4.37)	-0.62*** (1.95)	-0.05 ^{NS} (1.27)
Per capita income from subsidiary occupations	0.12** (2.09)	0.16** (2.19)	0.07 ^{NS} (0.58)	0.24* (3.51)	0.31 ^{NS} (1.49)	0.16** (1.97)
Per capita assets	1.01* (18.45)	0.87* (8.94)	0.87* (8.68)	1.11* (10.95)	-0.51 ^{NS} (1.08)	0.89* (22.37)
R ²	0.76	0.63	0.66	0.76	0.52	0.72

Source: Field Survey, 2021-22

Note: The figures in brackets indicate t values.

* Significant at one per cent, **Significant at five per cent, *** Significant at ten per cent, NS Not significant

The factor number of dependents shows a significant negative effect on consumption-based poverty for all the sampled farmers. This suggests that having dependents generally decreases per capita consumption, which increases the incidence of poverty. The regression coefficient of the education level of the head of family is positive for the semi-medium, medium and large farmers. But it is significant for the semi-medium and medium farmers at ten and five per cent levels, respectively. Per capita expenditure on education has no significant effect on consumption-based poverty for the marginal, small and semi-medium farmers, but for the medium and large farmers, this coefficient is significant. Per capita income from subsidiary occupations has a significant positive effect on consumption-based poverty for all the categories of farmers except the semi-medium and large farmers. This suggests that income from subsidiary activities tends to increase per capita consumption, which results in less poverty. The value of assets has a significant

positive effect on consumption-based poverty for all the categories except the large farmers. This implies that higher assets generally reduce poverty among farmers.

Overall, the regression models seem to explain a significant portion of the variance in per capita consumption, as indicated by the relatively high R-squared values across all categories. The coefficient of multiple determination for all the sampled farmers depicts that 72 per cent variation in per capita consumption is explained by the explanatory variables.

The above analysis of data contained in Table-4 depicts that the number of dependents negatively affects per capita consumption, increasing poverty incidence. Education of the household head and asset ownership positively influence consumption levels, especially among semi-medium and medium farmers. Income from subsidiary occupations significantly enhances consumption among marginal and small farmers. . Unlike some studies that find education uniformly beneficial, this study reveals its heterogeneous impact across farm-size categories, suggesting structural constraints in translating education into income gains for marginal farmers.

5. Conclusion and Policy Implications

The study examines the incidence and determinants of poverty among farmers in the border areas of rural Punjab using both income and consumption-based approaches. It finds that poverty is highly concentrated among the marginal and small farmers, reflecting significant inequality across farm-size categories. Both Tendulkar and Rangarajan criteria exhibit similar patterns, confirming that marginal and small farmers are the most vulnerable. Relative poverty measures show significantly higher poverty incidence, with more than half of the sampled population living below 50 per cent of the state per capita income. While absolute poverty measures indicate relatively low levels of deprivation, relative poverty measures reveal substantial hidden inequality. The analysis shows that factors such as landholding size, family size, dependency ratio, education, and asset ownership play a crucial role in determining poverty. Income diversification through subsidiary occupations is found to significantly reduce vulnerability among farmers. Although basic consumption needs are largely met, many households continue to face economic insecurity. The challenges are more severe in border areas due to structural constraints and limited opportunities. The study also reflects the paradox of prosperity alongside agrarian distress in Punjab. Overall, it concludes that poverty is multidimensional and requires targeted, region-specific policy interventions.

The study highlights the need for targeted policy interventions to address poverty among marginal and small farmers in rural Punjab. Promoting non-farm employment and subsidiary income opportunities is essential to reduce dependence on agriculture. Strengthening education and skill development programs can enhance farmers' productivity and adaptability. Additionally, improving access to credit and supporting asset-building initiatives will increase financial resilience

among smallholders. The study also emphasizes the importance of incorporating relative poverty measures in policy design to better capture actual deprivation. Overall, a focused and inclusive approach is required to reduce inequality and improve rural livelihoods.

References

- Bhalla, S. S., and R. Kaur, "Labour Force Participation of Women in India", *Economic and Political Weekly*, 46(35), 2011, 67-75.
- Chakrabarti, S., "Relative Poverty and Inequality in India: An Assessment", *Journal of Development Studies*, 57(4), 2021, 567-583.
- Deaton, A., and J. Drèze, "Food and Nutrition in India: Facts and Interpretations", *Economic and Political Weekly*, 44(7), 2009, 42-65.
- Ferreira, F. H. G., S. Chen, A. Dabalen, Y. Dikhanov, N. Hamadeh, D. Jolliffe, A. Narayan, E. B. Prydz, A. Revenga, P. Sangraula, U. Serajuddin, and N. Yoshida. "A Global Count of the Extreme Poor in 2012: Data Issues, Methodology and Initial Results", IZA Discussion Paper 9442, IZA Institute of Labor Economics, Bonn, Germany, 2015.
- Ghosh, S., "Farm Size and Rural Poverty in India", *Indian Journal of Agricultural Economics*, 73(3), 2018, 371-387.
- Government of India, *Report of the Expert Group to Review the Methodology for Estimation of Poverty*, Chaired by S. D. Tendulkar, New Delhi: Planning Commission, 2009.
- Government of India, *Report of the Expert Group to Review the Methodology for Measurement of Poverty*, New Delhi: Planning Commission, 2014.
- Government of Punjab, *Statistical Abstract of Punjab, 2016-17*, Chandigarh: Economic and Statistical Organisation, 2022..
- Government of Punjab, *Statistical Abstract of Punjab, 2022*, Chandigarh: Economic and Statistical Organization, 2022.
- Joshi, M., and R. Rana, "Agrarian Distress in Punjab: A Socio-Economic Analysis", *Punjab Economic Journal*, 34(2), 2020, 45-67.
- Junofy, A. R. N., "A Study on Poverty and Hunger in India", *Mediterranean Journal of Social Sciences*, 4(12), 2013, 147-152.
- Kundu, A., and N. Sarangi, "Poverty and Food Security in India: Changing Patterns", *Journal of Social and Economic Development*, 18(1-2), 2016, 35-50.
- Mehta, A. K., and P. Naveen, "Determinants of Rural Poverty in India: A Household-Level Analysis", *Margin: The Journal of Applied Economic Research*, 11(3), 2017, 311-337.
- Ravallion, M., and G. Datt, "How Important to India's Poor Is the Sectoral Composition of Economic Growth?", *World Bank Economic Review*, 10(1), 1996, 1-25.
- Sen, A., *Poverty and Famines: An Essay on Entitlement and Deprivation*, Oxford: Oxford University Press, 1981.
- Tilak, J. B. G., "Education and Poverty", *Journal of Human Development*, 6(2), 2005, 191-207.
- World Bank, *Global Monitoring Report 2015/2016: Development Goals in an Era of Demographic Change*, Washington, DC: World Bank Publications, 2015.
- World Bank, *Poverty and Shared Prosperity 2020: Reversals of Fortune*, Washington, DC: World Bank Publications, 2021. ★