INCIDENCE OF POVERTY AMONG THE MARGINALISED FARMERS IN GUNTUR DISTRICT OF ANDHRA PRADESH

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ABSTRACT

The main objective of the paper is to analyse the incidence of poverty among the marginalized poverty in the Guntur district of Andhra Pradesh. The primary data collected from 400 sample respondents by using the multi stage random sampling method. The primary data reveals that the deferent measure of poverty by various committees, according to 50 per cent of SPCI, 90 per cent farmers are living in the below poverty in Palnadu and Guntur region, except in Delta region. The persons living in below poverty line decreases with increasing farm size. On the basis of $2 per day, incidence of persons living below poverty in Guntur region is 97.01,
94.68 per cent in Palnadu and 76.03 per cent in Delta region. There is inverse relationship between farm size and person living in below poverty line. The contribution of the explanatory variables such as family size, income from subsidiary occupation number of earners and farm size is positive and statistically significant, where as the regression coefficient pertaining to expenditure on education is positive and not significant in Palnadu region.

KEYWORDS: *Small, Marginal farmers, Poverty, Guntur, Andhra pradesh.*

INTRODUCTION

The agricultural sector, extending over 46 per cent of the total geographical area by making it a vital element for the inclusive and sustainable growth of Indian economy and providing employment to nearly 53 per cent of the population. The facts that approximately 30.5 per cent of the rural population live below poverty line in 2019-20 emphasized the need for high growth rate in agricultural sector. Thus the agricultural sector not only contributes to overall growth of economy but also reduce poverty by providing the employment and food security to the majority of the population in the country. Over the last sixty years the production of food grains has been increased from 52 million tons in 1950-51 to 250 million tons in 2019-2020, at the same time the production of oil seeds also increased from 5 million tons to 28 million tons. India got a third place in terms of production in Paddy, Wheat, Fruits, Cereals, Groundnut and Sugarcane. The share of agriculture and allied sector in gross domestic product declined steadily from 38.8 per cent in 1980-81 to 13.7 per cent in 2019-20. The share of agriculture in total work force also declined from 75.9 per cent in 1961 to 56.4 per cent in 2010-11. The performance of agriculture in the post independence period had been impressive as compared to the pre independence period. The overall performance of agriculture and allied sector had got up to the mark

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during the period 2001-2011. The low growth in GDP from agriculture during 2001-2011 coupled with higher instability would have lead to more vulnerability and distress among the farming community.

REVIEW OF LITERATURE

Sanjay Kumar et.al., (2021) The present paper evaluates the impact of 'Farm Debt Waiver Schemes' announced by the Governments of Punjab and Uttar Pradesh in 2017 on the livelihood of beneficiary farmers in both the states. The data were collected for the pre-debt waiver year period (before redemption) and post-debt waiver period (after redemption) by selecting 180 beneficiary farmers each from the selected states. The results of the study reveal that in Punjab, major change in the occupational status of beneficiaries after debt redemption was observed in case of dairy as secondary occupation, since more farmers started rearing dairy animals by adopting it as an enterprise. On the contrary in Uttar Pradesh, slight change was observed in agricultural labour as secondary occupation adopted by beneficiaries followed by a meager change in adoption of dairy enterprise. The income of beneficiary farmers both in Punjab and Uttar Pradesh increased after the redemption of debt. Due to loan waiver of institutional liability, sampled farmers in Punjab were able to return higher quantum of non-institutional loans also. Thus, loan waiver scheme in Punjab has resulted in decline of indebtedness on the sampled household farms. In Uttar Pradesh also, there was change in amount borrowed as well as decline in the amount outstanding for the selected beneficiaries which confirms the impact of debt waiver scheme in Uttar Pradesh.

Soumitra Chatterjee et.al., (2020) in their study compares the economic impacts of conservation agriculture and conventional farming systems in the Lower Gangetic alluvial tract of West Bengal, India. Under conservation agriculture the overall gain in system productivity is 2.40%. The estimated change is attributable to the relative change in input use. Technology had a minor effect on the change in crop productivity, and the reduced use of machine labour, bullock labour, and plant protection chemicals had a significant positive impact. Farms that practised conservation agriculture averaged a 12.88% higher return per rupee of investment than conventional farm families

Zainab and Srikanthamurthy (2019 conducted a study to analyse the sources of income and pattern of expenditure of farm households in Karnataka. The study revealed that the households had to depend on non- farm activities for additional income because cultivation of crops was not sufficient source for survival. The expenditure incurred by the farm households on different food and non-food items showed that the percentage of non-food expenditure out of the total expenditure was higher as compared to expenditure incurred on food. There was a positive relationship between annual food expenditure and annual income. As the land holding increased, the income earned from livestock also increased. The study further revealed that there was a significant positive impact between the access of irrigation and net income. So, it showed that the government should increase irrigation facilities to the farmers.

Solomon (2018)[5] made an attempt to analyse the poverty status of small-scale farmers in Bayelsa state of Nigeria. The study was based on random sampling which was applied on six hundred farmers. The study revealed that the majority of the respondents were females i.e., 80 per cent. Among all the sampled farmers, 27 per cent crop farmers and 38 per cent livestock farmers were poor. The depth of poverty for crop farmers and livestock farmers were 0.072 and 0.098, respectively. The regression model revealed that education level, age, household size, farming experience, farm size, household income, household expenditure contributed significantly in determining the poverty status of the farmers.

OBJECTIVES:

The main objective of the paper is to analyze the incidence of poverty among the marginalized poverty in the Guntur district of Andhra Pradesh.

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METHODOLOGY

The paper is base on the primary data A multi-stage random sample method is employed to select 400 sample households from these four regions. In the *first stage* four mandals are selected at random from the list of mandals, where more than 80 per cent of farmers are marginal and small farmers. Thus, for the study, Tadikonda from Guntur region, Narasaraopeta from Narasaraopet region, Kollipara from Tenali region and Gurazala from Gurazala region are selected. In the *second stage* two villages from every mandal are selected at random. Altogether eight villages were selected from the list of villages where more than 80 per cent of marginal and small farmers depend on cultivation. In the Final stage the villages were identified. The household census was conducted and prepared a list of farm households operating below 5 acres of land holdings. And each village 50 sample respondents was selected by the simple random sampling method, altogether 400 sample respondents was selected and the data collected for the year of 2021-22 .

EMPIRICAL ANALYSIS

Poverty is a state where a person is unable to maintain a minimum socially accepted level of standard of living. It is regarded as the root cause for low levels of health and educational outcomes, poor access to clean water and sanitation, inadequate physical security, lack of voice, and insufficient capacity and opportunity for mobility. In the previous chapters the researcher has discussed the socio-economic status and the economics of cultivation in marginal and small which clearly shows that there is negative returns from the cultivation, the returns are not sufficient to meet the cost of cultivation and the incidence of indebtedness is very high among the marginal and small farmers in the three regions. In this context an attempt is made in this paperr to analyse the income based poverty levels of the sample households in the three regions by using various methodologies adopted by various export groups, government agencies and committees.

I State PCI Criterion at 50 per cent

As per the PCI criterion, the poverty line will be worked out to the 50 per cent of the export group criterion. This is to define poverty in relation to contemporary living standard by drawing the poverty line at, say half the average income level of the state. Per capita income of Andhra Pradesh at current prices for the year 2020-21 is Rs. 35,770/- (GoAP, 2021). The formula for finding the income level of households who will constitute the below poverty line which can be worked out in as follows:

$$\text{PCI of state Cut off income} = \frac{\text{Per Capita Income of State}}{2}$$

II.The $2 on the World Bank Criterion, i.e., Median Poverty Line

Following the World Bank's methodology of $ 2.00 per day, the poverty line was worked out as, annual per capita income = Rs. 39,610/- per annum, per person. As the marginal and small farm households having per capita income or per capita consumption expenditure below Rs. 39,610/- have been considered poor household. The related tabular results and analysis are discussed in below.

Prevalence of Income-based Poverty at 50 %of SPCI

The region wise persons living below the poverty line is presented in the Table 1, which is worked out on the basis of income as per the Export Group Criterion. The fifty per cent of state per-capita income considered poverty line which is Rs.35,770/- . The table clearly shows that above 90 per cent farmers are living in the below poverty line in Palnadu region and Guntur region, except in Delta region, which is 67.81 per cent. The intra-farm category analysis is observed that there is slight variation among the marginal and small farmers in the three regions. About 74.65 per cent, 98.33 per cent and 95.83 per cent of marginal farmers and 61.33 per cent, 85.29 per cent and 93.55 per cent of

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small farmers in Delta region, Palnadu region and Guntur region regions respectively are living in the below poverty line. The above analysis clearly shows that the incidence of poverty is high in Guntur region and Palnadu region, with 94.78 per cent and 93.55 per cent respectively, compared to Delta region i.e., 67.81 per cent. The analysis also proves that the persons living below poverty line decreases with increasing farm size.

Table .1
Poverty Concentration at 50% of the State per capita Income
(Poverty line Rs.35,770 per capita income, per annum)

Regions	Farming category	Percentage of persons Bellow Poverty line
Delta region	Marginal	74.65
	Small	61.33
	Total	67.81
Palnadu region	Marginal	98.33
	Small	85.29
	Total	95.62
Guntur region	Marginal	95.83
	Small	93.55
	Total	94.78

Source: Primary Data

Poverty levels at $ 2

By using the 2 dollars per day method, the region wise percentage of persons living below the poverty are presented in the Table-2. It reveals that the incidence of persons living below poverty in Guntur region is 97.01 which is 94.68 per cent in case of Palnadu region and 76.03 per cent in case of Delta region. With respect to marginal farmers, it is 98.33 per cent in Palnadu region, 97.22 per cent in Guntur region and 84.51 per cent in Delta region. In case of small farms, the persons living below poverty are 96.77 per cent in Guntur region, 88.24 per cent in Palnadu region and 68.00 per cent in Delta region. It clearly shows that there found inverse relationship between farm size and person living in below poverty line.

Table-2
Poverty Concentration at 2 Dollars-Region and farming category wise
(Poverty line Rs. 39,610 per capita income, per annum)

Regions	Farming category	Percentage of persons Bellow Poverty line
Delta region	Marginal	84.51
	Small	68.00
	Total	76.03
Palnadu region	Marginal	98.33
	Small	88.24
	Total	94.68
Guntur region	Marginal	97.22
	Small	96.77
	Total	97.01

Source: Primary Data

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Table-3
Factors effecting income based poverty among marginal and small farmers-Region wise

Factors	Delta region			Guntur region			Palnadu region		
	Marginal	Small	Total	Marginal	Small	Total	Marginal	Small	Total
Family size	-0.3984** (2.10)	-0.3738* (1.96)	-0.2657* (1.85)	-0.4583* (1.90)	-0.3218** (1.10)	-0.3907* (0.99)	-0.5124* (2.20)	-0.0730	-0.4133*
Farm size	0.2131* (1.56)	0.5517* (2.09)	0.3545* (3.21)	0.2014** (1.21)	0.4413* (1.75)	0.4725** (2.18)	0.2201* (2.99)	0.2538** (2.55)	0.2618** (2.01)
Income from Subsidiary occupation	0.1816* (1.85)	0.3187*	0.62913 (3.29)	0.1659	0.3089*	0.4864* (3.12)	0.2207	0.28966* (1.77)	0.3995 (1.95)
Expenditure on education	0.1410** (1.98)	0.3026** (1.75)	0.1794** (2.12)	0.1295	0.1795** (1.85)	0.1509** (1.77)	0.3119* (2.85)	0.2855** (2.09)	0.1618** (1.89)
Number of Earners in the family	0.3823	0.4352*** (1.51)	0.1045	0.4958** (2.07)	0.3258** (2.25)	0.3345** (3.32)	0.254** (2.56)	0.3241** (2.30)	0.2885** (2.32)
R²	0.70	0.78	0.80	0.69	079.	0.78	0.64	0.70	0.75

Source: Sample survey

Note: Figures in the Parentheses indicates t-values

* Significant at one per cent

** Significant at five per cent

*** Significant at ten per cent

Determinants of Income-based Poverty: Region-wise

On the basis of well recognized criteria, poverty is also measured in terms of per capita income or per capita consumption. Sincee, the factors which affect the per capita income or per capita consumption expenditure of the marginal and small farm-size categories are considered to be the determinants of poverty. The following variables are selected for the final run: table-3

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

Where, Y = Per capita income (Rs.)

X_1 = family-size (number)

X_2 = Per capita income from subsidiary occupations (Rs.)

X_3 = Per capita expenditure on education

X_4 = No. of earners in the family

X_5 = Farm-size (in acres)

In this way, an attempt has been made to explain the variations in per capita income of the marginal and small farmers in the rural Andhra Pradesh. Variations in the per capita income of the marginal and small farmers are explained by family-size, income from subsidiary occupations, expenditure on education, number of earners and farm-size The economic and social status prevailing / existing in the three regions in the study area are different from one another.

Therefore, in order to get exact ideas about the factors influencing the income based poverty, region wise and category wise regression analysis has been worked out and presented in the table-. In the table the estimated regression coefficients show that there are variations in per capita income which are explained by family size, farm size, income from subsidiary occupation, number of earners in

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the family and expenditure on education in the three regions. The estimated regression coefficients for family size are found to be negative in the three regions. The expenditure on education is positive in the three regions, but it is significant in case of Delta region and Guntur region. The number of earners in the family is also found to be positive in the three regions, but it is significant in Palnadu region. The values of R2 value are respectively 0.80 in Delta region, 0.78 in Guntur region and 0.75 in Palnadu region.

The intra category analysis also reveals that the regression coefficient for the income from subsidiary occupation is positive in marginal and small farmers, but it is significant in Palnadu region among the marginal and small farmers. The regression coefficient for expenditure on education is positive in the three regions all for both marginal and small farmers, however, it is significant in case of marginal and small farmers in Delta region and in case of small farmers in Guntur region. The regression coefficient for family size is positive in the three regions, but it is significant among the marginal and small farmers in Telangan and Palnadu region regions. The numbers of earners are positively related in the three regions of marginal and small farmers, but it is significant in Delta region and Guntur region. The coefficient value of multiple determination range from 0.64 to 0.70 (0.70 in Delta region, 0.69 in Guntur and 0.64 in Palnadu region) for marginal farmers and 0.69 to 0.78 per cent (0.78 in Delta region 0.79 in Guntur and 70 per cent in Palnadu region) of small farmers, which explains that there is 64 to 70 of variation for marginal and 69 to 78 per cent variation for small farmers in per capita income as explained by the explanatory variables. The values of R^2 are 0.80 in Delta region, 0.78 in Guntur and 0.75 in Palnadu region. The above analysis clearly shows that the contribution of the explanatory variables such as family size, income from subsidiary occupation number of earners and farm size is positive and statistically significant, where as the regression coefficient pertaining to expenditure on education is positive and not significant in Palnadu region. This analysis leads to conclusion that the better employment opportunities should be extended to the marginal and small farmers that can help to improve their level of income.

CONCLUSION

The main objective of the paper is to analyse the incidence of poverty among the marginalized poverty in the Guntur district of Andhra Pradesh. The primary data reveals that the deferent measure of poverty by various committees, according to 50 per cent of SPCI, 90 per cent farmers are living in the below poverty in Palnadu and Guntur region, except in Delta region. The persons living in below poverty line decreases with increasing farm size. On the basis of $2 per day, incidence of persons living below poverty in Guntur region is 97.01, 94.68 per cent in Palnadu and 76.03 per cent in Delta region. There is inverse relationship between farm size and person living in below poverty line. The contribution of the explanatory variables such as family size, income from subsidiary occupation number of earners and farm size is positive and statistically significant, where as the regression coefficient pertaining to expenditure on education is positive and not significant in Palnadu region.

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