



**DETERMINANTS OF POVERTY IN TRIBAL HOUSEHOLDS IN
ANDHRA PRADESH (A Study on Visakhapatnam District)**

Prof. M. Sundara Rao

Department of Economics
Andhra University, Visakhapatnam

Dr. Surya Prakasa Rao Gedela

Associate Professor, Dept. of Economics
G.V.P.College for Degree & P.G.Courses
Visakhapatnam

1.Introduction:

In India during post independence period special policy initiative were taken towards the improvement of the all round development of tribes. Economic Planning since First Five Year Plan, recommended that a positive policy for assisting the tribals should be formulated in order to develop their natural resources and evolve a productive life, which can prevent exploitation by more organized economic forces. In the Second Plan it was emphasized that all welfare programmes should be made in the context of tribal culture reviewing their psychological and economic problems. In the Third Plan, it was accepted in principle that in facilitating the development of agriculture, communication, health and education services, the tribal people should be able to develop their own traditional culture without pressure or imposition from outside. Under the Fourth Plan six pilot projects for tribal development known as Tribal Development Agencies were taken up in central sector. The Fifth, Sixth and Seventh Plans saw the emergence of the Tribal Development Strategy in the country in a minimum scale. The tribal Sub-Plan envisaged pooling of all available physical and personal resources. The Eighth and Ninth Plans emphasized a total integrated effort for all round tribal development. For future planning for tribal development, the study of the past endeavors seems to be essential.

The planning process for tribal development in Andhra Pradesh can be broadly divided into pre-independence and post-independence periods. In both the periods the approach adopted and schemes implemented are based on certain events happening in various tribal areas of the country and the consequent approach enunciated for time to time on and all India basis. Again, the two approaches in the two periods can be broadly be characterized as development oriented taking the basic objective and nature of measures introduced. In spite of much emphasis on tribal development, the benefits of plan development have not fully percolated in to the tribal areas. The tribal people remained backward both economically and socially.

Though none deny that development has taken place in tribal areas, when we analyse the expenditure incurred during the plan years Vis-à-vis the changes brought into the quality of socio-economic life of tribals, the results are not very encouraging. Still tribals in India are in lowest rung of the ladder in terms of socio economic development. In this context few studies such as those of Bardhan, Minhas, Subramanyam etc have brought out the main features of tribal economy and its agro forest base. Though the studies and the reports of the Tribal Cultural Research Institute, Hyderabad etc., attempted to analyse the credit needs of tribal areas, most of these



studies identified that requirements of different regions differ depend upon the stage of development. Also even in the same region we can find inter-tribe variations among the tribals, particularly among the tribals living in the interior hill tracts Primitive Tribal Groups (PTGs) and plain tribes living in plains. Hence In this context region studies has its significance and they are useful for formulating different policies. Against this background an attempt is made in this study to examine the inter-tribe variations in the poverty levels among the tribes in Visakhapatnam district of Andhra Pradesh.

2. Methodology and Collection of Data:

Multi stage stratified random sampling method is used in the present study. The selection process is carried out in four stages, they are relating to district, mandal, villages and households. The Visakhapatnam district is selected for the study. The Paderu mandal is selected for the study because it is the only tribal mandal that is having a high proportion of tribal population and also the ITDA is placed at Paderu. Also the Paderu mandal is selected because it is having a high proportion of tribal population and different tribes are residing in this mandal.

To examine the inter tribe variations among the poverty levels among the PTGs and plain tribes Kondh PTG and Konda Dora plain tribe are selected and they are equally proportioned in the selected Paderu mandal of Visakhapatnam district. To examine the living and the conditions of poverty 40 households are selected from each tribe from their concentrated selected villages based on the random sampling procedure. The villages are selected depending upon the higher concentration of specific tribes. With a stratification procedure based on the specific tribe population concentration the panchayats are classified into categories. From the Kondh PTG concentrated panchayats of Paderu mandal 40 tribe households are selected from 2 villages and other 40 Konda Dora plain tribe households are selected from 2 villages from the roadside plains of the Paderu mandal. As a whole 80 households are selected for the in depth study. From the Kondh and Konda Dora concentrated panchayats of Paderu mandal 80 tribe households are selected. Among them 40 Kondh PTG households are selected from Minumualuru and Talarsingi villages of Paderu mandal. Similarly 40 Konda Dora plain tribe households are selected from Sangodi and Dubbaputtu villages from the roadside plains of the Paderu mandal.

Information relating to the socio economic conditions of the selected households is collected while canvassing a pre designed and structured household schedule in the selected villages during August 2007 to July 2008 in different visits. The secondary data has been obtained from Annual Reports and Action Plans of ITDA Paderu, District hand book of statistics of different years published by the Chief Planning Officer, Visakhapatnam, MRO and MDO offices of Paderu Mandals, GCC office Visakhapatnam, Tribal Cultural Research and Training Institute Hyderabad. Census data are used to collect population data. Tabular analysis with averages and percentages re used to explain the general profile and their different economics patterns.



3. Inter- tribe Variations in Socio-Cultural Dimensions:

Forest policy (1952), implementation of Multi Purpose Projects (1956), establishment of GCC, introduction of GDA and tribal Sub-Plan approach through ITDA is expected to bring rapid socio-cultural and economic transformation in the tribal society of Visakhapatnam district. The selected tribes in Paderu mandal responded differently towards the exogenous change agents and modern forces. The degree of response towards these change agents is found higher in case of Konda Dora plain tribe who are relatively residing in the plain areas. However, the response to change agents is less in case of Kondh PTG who are living in remote and hilly areas. Also majority of the tribals in remote and hilly areas is still poor, illiterate and ignorant and they are still in favors of traditionalism.

The impact of change agents as well as Hindu and Christian traditions have not made any dent on the life styles of tribes in hilly and remote tribal areas. On the other hand the modern forces and change agents actively influenced the tribes in plain areas particularly Konda Dora plain tribe responded to the imitative effect of these forces of change is felt through their changing food habits, type of family life style, material culture, social relations, political organization and rituals. The interaction with Hindu and Christian traditions the culture of Konda Dora tribe in plains resulted in the diffusion. Even the traditional patterns of music and dance of the tribals in the plain area also under going change in some aspects, mainly due to the impact of education. It is expected that the differences in the socio-cultural dimensions of different tribes will reflect in their poverty levels.

4. Poverty among Different Tribes:

High incidence of poverty in tribal areas is one important fact unfolded by many studies. These studies brought out the fact that absolute mass poverty is an important economic phenomenon of areas causing great concern for the planners and policy makers. Hence an attempt is made in this study to analysis the incidence, magnitude and determinants of poverty among tribals. At the conceptual level, a distinction is frequently drawn between absolute and relative poverty. A household is considered to be poor, in the absolute sense when it is unable to provide itself with the minimum subsistence, usually determined in terms of nutritional standard.

4.1 Measurement of Poverty:

The first step in the measurement of poverty is the determination of a particular level of income or expenditure (which constitutes the minimum level of living) as the poverty line, which distinguishes the poor from the non-poor. In various studies on poverty, different methods have been employed while fixing the poverty line. Important among them are: The first method is taking the norm fixed by a working group set-up by the planning commission in 1962 and adjusting it for temporal and spatial price variations. The second method estimates expenditure on calories intake relationship



and derives the expenditure required to meet the given calories requirement from this relationship. The third method based on optimum food basket arrived by minimizing the food costs, subject to the fulfillment of the nutritional norm.

Thus on the basis of minimum nutritional requirements of some conventionally determined consumption basket which constitutes the minimum level of living, a particular level of consumption expenditure is considered as poverty line, or poverty threshold. People, whose consumption expenditure falls below defined level, come under the category of poor. The pioneering studies on poverty in India are conducted by Dandakar and Rath, Minhas, Ahluwalia, DT Lakadawala and SP. Gupta. Among these studies there are wide differences in the methodologies used for fixing the norm to identify the poverty line. The methodology used in the present study is discussed below.

4.2 Poverty Estimating Procedures Adopted in the Study:

In this study, the levels of poverty among tribal households in the study area are estimated for 1998-99 by using primary household expenditure data. There are many alternative ways of measuring poverty, as employed by researchers in this area. Many of these studies have considered the income dimension of poverty. There are also differences among researchers as to how to adjust a given poverty line to the changes in relative prices over different periods and also across different regions. The poverty line adopted in this study is in accordance with the Planning Commission's Head Count Ratio (HCR) method.

The Planning Commission has estimated poverty on the basis of the household consumption expenditure. The poverty is computed based on a fixed basket of 1973-74, which satisfied the minimum calories requirement of 2,400. Hence all the poverty estimates since the early 1970s are critically linked with that of the base year 1973-74. The poverty lines for rural areas in 1973-74 were Rs. 49/- per person per month. The estimation of poverty line by Planning Commission for different years is based on the consumption basket of 1973-74 evaluated at the relevant current year prices. The estimates are derived by using the poverty line Rs. 264/- per capita per month for urban areas and Rs. 228/- per capita per month expenditure for rural areas at 1992-93 prices. As there is no specific estimates for observing poverty in tribal areas, to estimate the individual poverty for tribals for the study year 2007-08, the poverty line for rural area as given by the Planning Commission. It is adjusted with the help of Consumer Price Index for Agricultural Laborers (C.P.I.A.L) for the year 2007-08, The poverty line for 2007-08 is estimated at Rs. 416.87 (Rs.417) per capita monthly expenditure month for rural areas. In the absence of region specific poverty line the above national poverty line for rural areas is adopted. Further, the national rural poverty line is adopted and obtained with the help of CPIAL.

4.3 Incidence of Poverty:

The incidence of poverty in the study area is estimated and presented in Table

I.



TABLE - I
INCIDENCE OF POVERTY AMONG SELECTED TRIBES
 (Percentage terms)

S.No.	Tribe	No. of House holds with		Total number of households
		Below poverty line	Above poverty line	
	Tribes:			
1.	Kondh PTG	70.00	30.00	40 (100)
2.	Konda Dora	41.67	58.33	40 (100)
3	All Tribes	53.33	46.67	80 (100)

From the Table it is observed that about 53 percent of the tribal households are found to be living below the poverty line, majority of those households who are above the poverty line, are also not so well off. Further, it shows that the incidence of poverty among tribals is very high in case of Kondh PTG households (70 percent) . This high incidence of poverty among tribals is a clear evidence of low living conditions of sample tribal households. The reasons for these are manifold and important among them are high incidence of poverty, unemployment and under employment, low income and high prices of commodities. The wages received by these households are not only low and take a long time to adjust to the hike in prices of food and other items. 58.33 percent of Konda Dora plain tribe households are obtained more than the average monthly per capital expenditure. The monthly percapita expenditure of all the tribal households is estimated at Rs.417 and it is quite below the average per capita consumption expenditure, indicating widespread incidence of poverty among the tribal households, particularly among Kondh PTG tribe households.

4.4 Spectrum of Poverty:

The spectrum of poverty of the households by different expenditure groups is presented in Table 2. This analysis would help to understand the concentration of poor households in different expenditure groups. All the households living below the poverty line are distributed into four expenditure groups, which are mentioned below.

Rs. 0 ~ 104.25 (25 percent poverty line expenditure Rs.417)

Rs.104.25 ~ 208.50 (50 percent poverty line expenditure Rs.417)

Rs. 208.50 ~ 312.75 (75 percent poverty line expenditure Rs.417)

Rs. 312.75 ~ 417

The distribution of tribal households by specific expenditure groups presented in Table 2.



TABLE - 2
INCIDENCE OF POVERTY BY EXPENDITURE GROUPS
 (In Percentage terms)

S.No.	Tribe	Expenditure Groups in Rupees Per Month				Total
		Upto 104.25	104.25 - 208.50	208.50 - 312.75	312.75 - 417	
	Tribes:					
1.	Kondh PTG	-	17.23	36.52	46.25	100.00
2.	Konda Dora	"	"	24.32	75.68	100.00
3	All Tribes	"	11.28	30.00	58.72	100.00

The above Table shows that a majority of the households are concentrated in the expenditure range Rs. 312.76~ 417. In the case of Kondh PTG (25 percent) the percentage of households concentrated in the low expenditure range i.e. Rs. 104.25 to 208.50 and 208.50 to 312.75 is higher when compared to Konda Dora tribe households. The situation reveal the incidence of poverty is very high among the Kondh PTG households, which may be attributed to various non-economic factors.

5. Determinants of Poverty:

The foregoing analysis reveals that the incidence of poverty is very high in the study area. Hence an attempt is also made to identify the determinates of poverty. Such analysis will be useful to understand how far the selected variables influence the incidence of poverty among the selected PTG and plain tribes. The incidence of poverty is generally measured in terms of a minimum acceptable level of expenditure. Therefore, per capita expenditure per month is considered as the relevant dependant variable. Literacy rate of head of the sample household (LIT) per capita income of the household per month (PCY), dependency ratio (DR) and per capita assets value (PAV) are identified as the important factors which are assumed to have influenced on the incidence of poverty among the tribals. In order to analyze the functional relationship and determinants of poverty, multiple regression model is employed by using package SPSS 13.0 in the present study.

$$Y = b_0 + b_1 \text{LIT} + b_2 \text{PCY} + b_3 \text{DR} + b_4 \text{PAV}$$

Where Y= Percapita monthly expenditure of households,

LIT = Literacy of the head of the household,

PCY= Percapita monthly income,

DR = Dependency Ratio and

PAV = Percapita asset value.

Literacy of the head of the household is expected to have a positive correlation with the percapita expenditure, as the literacy helps to improve the income level. The variable LIT takes two values it takes the value zero if the head of household is illiterate and one if the head of household is literate. The other variables percapita



income and percapita asset value are expected a positive sign. The variable dependency ratio is expected to have a negative sign since there exists an inverse relationship between dependency ratio and per capita expenditure. The regression results are presented in Table 3.

TABLE - 3
RESULTS OF ESTIMATED REGRESSION EQUATIONS INDICATING THE DETERMINANTS OF POVERTY

S.No.	Tribe /	Intercept	Coefficient of independent variable				R ²	F. Value
			LIT	PCY	DR	PAV		
1	All Tribes	184.07	0.82** (2.01)	0.24* (2.82)	-0.36* (3.27)	0.03 (0.29)	0.71	123.82
2.	Kondh PTG	197.32	0.64 (0.32)	0.51* (2.87)	-0.42 (0.69)	0.06 (0.47)	0.63	216.34
3.	Konda Dora	193.60	0.71* (2.82)	0.42* (2.96)	-0.26 (2.32)	0.08 (0.62)	0.69	271.38

- Note: 1. Figures in the parenthesis are t-ratios
 2. *Coefficients are significant at 1 per cent level
 3. **Coefficients are significant at 5 per cent level
 4. ***Coefficients are significant at 10 per cent level

The regression results presented in the above Table 3 indicate that the coefficient of multiple determination is found significant in all equations and it varies from 0.71 to 0.63 percent. All the independent variables possessed with theoretically expected signs in almost all equations. Except the coefficient of per capita asset value all the remaining three independent variables found with statistical significance in many equations. The coefficient of the rate of literacy variable is found significant a 1 percent level in case of Konda Dora tribe households. It is significant at 5 percent level of all tribes. However, either in the case of Kondh PTG households' literacy variable is not influencing any variation in the independent variable.

The coefficient of per capita income variable emerged as significant determinant of per capita monthly expenditure of selected tribal household. The variable is found significant in all the equations. In all other equations the variable per capita income possessed statistical significant is at 1 percent level. The coefficient of the dependency ratio variable is found significant at 1 percent level in the equation of all tribes. It is statistically significant at 5 percent level in case of Konda Dora tribe households. In case of Kondh PTG households this variable fails to show any variation in the dependent variable. The coefficient of per capita asset value variable though it possessed theoretically expected sign in all equations however, it is not possessed with any level of statistical significance in any equation. The above analysis indicates that, per capita monthly income variable is the major determinant of the per capita monthly expenditure of the selected tribe households, which in turn determine the poverty level. Literacy variable is emerged as important determinant in case of Konda Dora tribe households. On the other hand the per capita asset value variable failed to explain any variation in the dependant variable.



6. Summary and Policy implications:

The above inferences of this study ultimately confirms that, the levels of poverty levels of the PTG households in the interior villages are relatively higher than the poverty levels of the plain tribe households live in the villages in the plain areas. Similarly the major findings of this study reveals that the socio-economic conditions of the selected Kondh PTG households in the villages in the interior areas are relatively poor when compared to the Konda Dora households living in the villages in the plain areas. Hence the study advocates that the selected households living in the villages in the interior areas need much intensive development policy package for to resolve them from the chronic and persistent poverty.

The analysis relating to incidence of poverty on the basis of per capita consumption expenditure indicating widespread poverty among the selected tribe households. The distribution of households by specific expenditure groups shows that the majority of the households are concentrated in the lower expenditure range. The Kondh PTG households are found more in the lower expenditure range. The regression results analyze the determinants of poverty reveal that coefficients of literacy of the head of the households, per capita income, dependency ratio and per capita asset value are emerged as significant determinants of poverty at the level of all households and the influence of these independent variables vary across the two selected tribe households.

As a whole the above analysis ultimately reveals that poverty is concentrated more among Kondh PTG households who live in the interior hill tracts rather than Konda Dora plain tribe households who live in roadside plain villages. Hence there is need for further intensification of anti poverty programmes in the interior hill tracts of the tribal areas. The study identifies that the important reason for the poverty of Kondh PTG households is due to their cultural heterogeneity, low level of awareness and indifferent attitude. Hence the heterogeneity and lack of mutual interaction between these groups and developmental agencies has to be reduced by official policy so as to remove poverty in the interior hill tracts. Also to reduce poverty, literacy rate of the tribal people especially of female literacy among the Kondh PTG households should be increased. The study also suggests that to reduce poverty it is necessary to further intensity the ISB activities and to implement area development programs by the developmental agencies to generate gainful employment opportunities during the slack seasons. Hence this study advocates the need for the further intensification of the anti poverty and employment generation programmes intended for the eradication of poverty in the villages in the interior areas. In this context both governmental and non-governmental institutional agencies has to make concentrated efforts and to implement a comprehensive strategy with an optimum mix of both area and target group approaches to eradicate poverty particularly in the villages in the interior areas.



References:

1. Govt. of India, Report of the Expert Group on Estimation of Proportion and number of Poor, Planning Commission, Government of India, New Delhi, 1993 July, pp.3 to 7.
2. Bhanoji Rao, V.V., Measurement of Deprivation and Poverty Based on the Proportion spent on Food: An exploratory exercise world development, 1981, Vol. 9, No.4, pp.337-53.
3. Montek S. Ahluwalia, "Rural Poverty and Agricultural Performance in India", 1978, Vol. 9, pp. 22.
4. "Food and Agricultural Organisation" : The Dynamics of Rural Poverty Rome, 1986, pp.3 to 19.
5. Martin Revallion, "Food Prices and Poverty in India", Economic and Political Weekly, 1998, Vol. XXXIII, No. 1 and 2, pp.29-35.
6. Subramanyam, S., "Poverty unemployment and Perspective of Development", Chugh Publications, Alhabad (India), 1987, pp.26-28.
7. Dandakar, V.M. and Rath, N. "Poverty in India", Indian School of Political Economy, 1971.
8. Dantawala, M.C. "Poverty in India" Then and Now", 1870-1970, Macmillan, 1973.
9. Minhas, B.S. "Rural Poverty and Land Re-distribution and Development", Sankhya series, C Vol.36, 1974 pp 255-263.
10. Bardhan, P.K. "On the incidence of Poverty in Rural India in the sixties", Sankhya series, C parts 2 and 4 Vol.36, 1974, pp. 264-280.
11. Perspective Planning Division, Planning Commission perspective of Development (1971-76) "Implications of Planning for a Minimum Level of Living; A decade of Development" Sankhya, series C, The Indian Journal Of Statistics, Vol 1971, p. 13.
12. Government of India, Planning Commission, 1984, Report of the Study Group on the concepts and Estimation Poverty line, November 1984.