



**POVERTY AMONG PANIANS –
A PRIMITIVE TRIBAL GROUP IN THE NILGIRIS DISTRICT**

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ABSTRACT

Economic growth with social justice' or 'growth with equity' has been the basic objective of public policy in India since independence. It refers to a broad based strategy of development with an emphasis on reduction of poverty. The extent to which the poor have actually benefited from the growth process has always been an issue of academic debate. The available data shows that the percentage of poor in India had declined from 54.9 percent in 1973-74 23.6 percent in 2004 (National Sample Survey, 2004). But in a plural society like India, with people of different castes and religions, it is equally important to focus on 'horizontal inequalities', (i.e.) disparities between certain identifiable groups in the economy. In India, 'scheduled tribes' is a historically marginalized social group. In 2004-05 the scheduled castes and scheduled tribes constituted 25.4 percent of the total population of India (NSS, 61st Round). Among these two groups, while scheduled castes suffer from social stigma due to untouchability scheduled tribes have been characterized by their primitive traits, distinct culture, geographical isolation and general backwardness. Against this backdrop, the present study analyses the prevalence of poverty among the Panians a primitive tribal groups in the Nilgiris district in Tamil Nadu.

KEYWORDS: Poverty, Tribal, Untouchability.

INTRODUCTION

Tribal population is one of the weaker sections of the society and lies at the lowest rung of the process of development. The overall scenario and the conditions of tribal regions in India are just pathetic. In India, the tribal population, as per the 2001 Census was 8.43 crores, constituting 8.2 percent of the total population. There are over 573 tribes as notified under Article 342 of the Constitution of India, spread over different states and union territories of the country. While some tribal communities have adopted a mainstream way of life at one end of the spectrum, there are 75 Primitive Tribal Groups (PTGs) at the other, who are characterized by (i) pre agriculture level of technology, (ii) a stagnant or declining population, (iii) extremely low literacy and (iv) a subsistence level of economy. Most of these PTGs are small communities and in the past and at present their growth rate has been abnormally low in relation to the rest of the population (Jakka Parthasarathy, 2007). The PTGs in India are beset by yet another problem: indebtedness and poverty. An overview of the trends in the incidence of income poverty in India views chronic poverty in terms of severity, extended duration and multidimensional deprivation. It tries to identify the states and regions that have a high incidence of people with incomes severely below the poverty line so as to focus attention on areas that are spatial poverty traps. Attention is also drawn to the importance of identifying those who are vulnerable to extreme poverty due to inability to absorb the impact of shocks.

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The Paniyans are found in the southern part of India in the states of Tamil Nadu, Kerala, and Karnataka. In all these three states they are referred as Paniyans. In the list of the approved primitive tribal groups (PTGs) by the Government of India, the Paniyans are identified as a primitive tribal group only in Tamil Nadu but not in Kerala and Karnataka. In Tamil Nadu the Paniyans are found only in Gudalur and Pandalur taluks of the Nilgiris district. They are famous for hunting tigers and panthers with spears and nets, and in these operations they rival the Hamron lion hunters of Africa. In the Nilgiris district, at present the chief occupation of the Paniyans is agriculture. Most of the Paniyans are employed in the agricultural farms owned by the Chettis, Oplas and the Syrian Christians.

As per the tribal census carried out by the Tribal Research Centre (TRC) in the year 2003-2004, the total number of households in the Panian PTG was 1197 with a total of 5541 persons. Among the total 1197 households 91 households were surveyed. The required data for the study is mainly of primary in nature. A detailed interview schedule was prepared. Apart from this, the primary data documentations prepared by the Tribal Research Centre, in the Nilgiris district were used as guidelines in the selection of the sample households. The data were collected from 17th February of 2008 to 31st October of 2008. This year was normal and free from abnormal climatic condition. Data was collected by administering the pretested interview schedule.

MEASUREMENT OF POVERTY

The tribal people are more vulnerable to environmental degradation. To design policies that protect the tribals, it is important to understand the nature of poverty of the tribals. An attempt is made to estimate and assess the extent of poverty among the selected sample households in the Panian tribal group. The intensity of poverty is measured in terms of income. Income is a simple way to define poverty. As a first step to classify the households under various income group levels, the per capita income of the tribal households is calculated. The distribution of the households based on the average percapita income is given in the following table 1.

TABLE 1

ANNUAL PERCAPITA INCOME

| ANNUAL PERCAPITA INCOME(Rs) | ≤ 10,000 | 10,001-20,000 | >20,001 | Average Annual Percapita Income (Rs) |
|-----------------------------|---------------|---------------|---------|--------------------------------------|
| Number | 86 (94.51) | 5 (5.49) | 0 | 5,827 |

Source: Estimates based on field survey 2008.

All the households in the selected Panian tribal group have their average annual per capita income less than Rs 20001/-. Panians are in a poor condition with an average annual per capita income of Rs 5,827/-. The data on the average annual per capita income shows that the Panians are economically very poor.

The World Bank measures poverty using income as an indicator. It uses a uniform poverty line of \$ 1 per day across all countries. For India in 2005, the World Bank determined that Rs 15 is equivalent to \$ 1 based on the purchasing power parity. Based on the classification of the National Commission for Enterprises in the Unorganized sector (NCEUS, 2007), the sample households are grouped under 6 categories based on their per capita annual income as shown in the following table 2.

TABLE 2

CLASSIFICATION OF HOUSEHOLDS

| S.No | Classification | Annual percapita income(Rs) |
|------|-----------------|-----------------------------|
| 1 | Extremely poor | ≤ 4050 |
| 2 | Poor | 4051-5400 |
| 3 | Marginally poor | 5401-6750 |
| 4 | Vulnerable | 6751-10800 |
| 5 | Middle income | 10801-21600 |
| 6 | High income | > 21600 |

NCEUI, 2007

CLASSIFICATION OF HOUSEHOLDS

Based on the classification given in table, the tribal households are placed under different income groups. The following table 3 gives the classification of the households based on their annual percapita income.

TABLE 3

CLASSIFICATION OF THE TRIBAL HOUSEHOLDS

| Category Tribe | Extremely Poor | Poor | Marginally Poor | Vulnerable | Middle Income | High Income |
|-------------------|-------------------|---------------|--------------------|---------------|------------------|----------------|
| Paniyans | 11 (12.09) | 31 (34.07) | 27 (29.67) | 17 (18.68) | 5 (5.49) | 0 (0) |

Source: Estimates based on field survey, 2008; Figures in brackets denote percentage to row total

Among the Paniyans 12.09 percent are extremely poor, 34.07 percent are poor and 29.67 percent are marginally poor. The remaining 24.17 percent fell under the non poor category; with 18.68 percent being vulnerable; 5.49 percent in the middle income group and none in the high income group. From the above findings one could infer that 48.35 percent of the non-poor households could be deemed border line households. They could be shifted to below poverty line

group at any time. When income range increases, the percentage of non-poor households is expected to decrease. Hence, nearly 48 percent of the households are in the economic transition.

In the following section an attempt has been made to measure the prevalence of poverty on the chosen tribal group.

ESTIMATION OF POVERTY

Poverty is a multi dimensional concept which is expressed in terms of both income and non income measures. Any discourse on poverty is centered on two themes such as (i) identifying the poor among the total population and (ii) construction of an index for poverty using the available information on poor (Sen, 1976). The first issue is essentially concerned with the choice of criterion (selection of poverty line) for identifying the poor. The measurement of poverty can be made on the basis of either income or the minimum caloric intake norm. The poverty line, based on the minimum consumption of 2400 calories per day per person in rural areas and 2100 calories per day per person in urban areas, can be regarded as a physical subsistence measure of poverty. Those who are unable to reach this level have a high risk of not having a long life. A widely used measure of the presence of poverty is whether an individual's daily consumption per head is less than the purchasing power equivalent of US \$ 1 per day. This is widely used in developing economies to determine poverty line. Here as explained in the beginning paras of this section the poverty line of \$ 1 per day based on purchasing power parity is followed.

The level of poverty is estimated in this section using the following methods:

- i. Head count ratio – Poverty incidence ratio
- ii. Poverty gap ratio – Poverty intensity ratio
- iii. Squared poverty gap ratio – Poverty severity ratio
- iv. Sen-Shorrocks-Thon index – Poverty deprivation index.

The following table4 gives the estimated income poverty measurements using head count ratio, poverty gap ratio , squared poverty gap ratio and SST index of poverty.

TABLE 4

INCOME POVERTY ESTIMATES

| Measures Tribe | Head Count Ratio | Poverty Gap Ratio | Squared Poverty Gap Ratio | SST index |
|-------------------|---------------------|----------------------|------------------------------|-----------|
| Paniyans | 0.4615 | 0.20169 | 0.0214 | 0.1317 |

Source: Estimates based on field survey, 2008

The head count ratio which is otherwise known as the poverty - incidence ratio shows that the probability of being poor is high among the Paniyans (46.15 percent). The head count ratio has some demerits. The measure of poverty should increase when income of the poor households decreases (monotonicity axiom) or when income of a poor household is transferred to a less poor household. (Transfer axiom). But the requirement is to find out the distribution of income among the poor and not simply to indicate how many people are poor. Besides the head count ratio does not take account of the depth or the severity of poverty amongst the poor themselves.

The poverty gap ratio which is also known as the poverty intensity ratio considers both intensity and incidence. The aggregate and average gaps have something to do with the measurement of the extent of poverty. The poverty gap ratio measures the proportionate gap between the average income of the poor and the poverty line income. This shows how much income would have to be transferred to the poor to bring their incomes up to the poverty line. From the poverty gap ratio it is known that for the Paniyans to come above the poverty line, their income has to be increased by 20 percent.

The poverty gap ratio is insensitive to the transfer of income between the persons who are poor and continue to be poor, even after the transfer. It is also insensitive to the number of people sharing the gap. It does not take into account the inequality among the poor. The simple poverty gap ratio indicates the mean distance below the poverty line as a proportion of the poverty line. It measures severity of poverty. The squared poverty gap ratio (SPG ratio) or the weighted poverty gap ratio (WPG ratio) is derived as weighting individual poverty gap by the gaps themselves to reflect the average gap between the income of those below the poverty line and the poverty line itself. This gives the severity of the poor as it is more sensitive to redistribution among the poor. From the squared poverty gap, it is inferred that the Paniyans have a high incidence of poverty with the squared poverty gap ratio being 0.0214.

Sen-Shorrocks-Thon index was based on the pioneering work of Sen (1976). The index is normalized to take values between zero and one. It is equal to zero when all the incomes are above the poverty line and so there are no poor people. It reaches a unit value in the extreme case where all the individuals are poor. From the table it is noted that the SST index was 0.1317.

The SST index has the advantage that it does not depend on the income levels of the non poor. It depends only on the vector of ordered incomes and not on the identity of the individuals. Further it satisfies monotonicity axiom that a reduction in the poor person's income, holding other incomes constant, increases the poverty index. The index is a continuous function of individual incomes (continuity axioms). It satisfies the transfer axiom by which the index increases whenever a pure transfer is made from a poor person with more income.

SST index can be expressed as $SST = \frac{1}{n} \sum_{i=1}^n [1 + G(X)]$ where X is the poverty gap

$\left(\frac{\sum_{i=1}^n (Z - y_i)}{nZ} \right)$ for the entire population, $x=0$ for non-poor population and $G(X)$ is the Gini

coefficient of the poverty gap ratios with the poverty gaps sorted in the non descending order. SST index can be expressed as

SST index = (poverty rate)* (average poverty gap ratio of the poor)

*(inequality of the poverty gap ratios of the population)

Interpretation of the above expression is that SST index can measure poverty incidence, intensity and inequality jointly, while permitting the index to be decomposed into commonly used measures.

The SST index of poverty and its decomposition of the tribal groups are given in the following table 5.

TABLE 5

DECOMPOSITION OF SST INDEX

| Tribe | Measure SST | Decomposition Level | | |
|----------|----------------|---------------------|---------|------|
| | | Rate | Gap | I+G |
| Paniyans | 0.1317345 | 0.4615 | 0.20169 | 1.41 |

Source: Estimates based on field survey, 2008

SST index helps to decompose poverty into three aspects.

- Are there poorer?
- Are the poor poorer? And
- Is there higher inequality among the poor?

The percentage change of poverty intensity (SST) can be expressed as the sum of the percentage change in poverty rate, the average poverty gap ratio (among the poor) and Gini index of inequality in the poverty gap ratio (among the total population).

HUMAN DEVELOPMENT INDEX

The Human Development Index is a summary measure of human development. United Nations Development Programme (UNDP) quantifies the human development on the basis of two approaches (a) conglomerative approach and (b) deprivational approach. Conglomerative approach has an achievement base and deprivational approach has a deprivational base. Conglomerative perspective focuses on the advances made by all groups in each community from the rich to the poor. The deprivational perspective is in which the development is judged by the way the poor and deprive face in each community. Interest in the process of development concerns both perspectives. At a very basic level, the lines and successes of everyone should count, and it would be a mistake to make the understanding of the process of development completely insensitive to the gains and losses of those who happen to face better than others. It

would go against the right of each citizen to be counted, and also clash with the comprehensive concerns of universalist ethics. Yet a part-a big part- of the general interest in the progress of a nation concentrates specifically on the state of the disadvantaged (Human Development Report, 1990).

CONGLOMERATIVE APPROACH

The current study uses conglomerative approach. Based on the methodology of the UNDP, Human Development Index (HDI) is constructed. Human development index shows the overall development. It measures the average achievement of a region in basic human capabilities. The human development index indicates whether people lead a long and healthy life, are educated and knowledgeable and enjoy a decent standard of living. Human development index examines the average condition of all people in a country. According to the UNDP methodology, three indicators are used to construct the human development index. They are health, educational status and standard of living. For health, life expectancy at birth is taken as an indicator. For educational status, adult literacy and school enrolment ratio are the proxy variables. For standard of living real percapita income is the indicator.

The formula used for the construction of an index is given as

$$\text{Dimension index} = \frac{\text{Actual value} - \text{Minimum value}}{\text{Maximum value} - \text{Minimum value}}$$

The following table 6 gives the maximum and minimum values for calculating the human development index.

TABLE 6

MAXIMUM AND MINIMUM VALUES FOR CALCULATING HUMAN DEVELOPMENT INDEX

| Indicator | Maximum value | Minimum value |
|----------------------------------|---------------|---------------|
| Life expectancy at birth (years) | 85 | 25 |
| Adult literacy rate (%) | 100 | 0 |
| Gross enrolment ratio (%) | 100 | 0 |
| Per capita income (Rs) | 40,000 | 100 |

Source: Human Development Report 2007/2008, p 356.

To construct the human development index for the tribals, the actual values have to be converted into an index form. Based on the maximum and minimum values given in table 6, the required index values for the Panian tribal households are calculated and are given in the following table 7.

TABLE 7

HUMAN DEVELOPMENT INDEX OF THE PANIANS

| Average life expectancy index | Average education index | Average income index | Average HDI |
|-------------------------------|-------------------------|----------------------|-------------|
| 0.227 | 0.383 | 0.671 | 0.427 |

Source: Estimates based on field survey, 2008

The table shows that the Paniyans have their human development index less than 0.70 and are deprived of health, education and income.

CONCLUSION

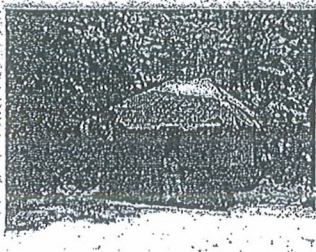
Despite the developments that have taken place in the rural areas, the Panian tribals are cut-off from these developments. The current study has brought out that the Panian tribal groups in the Nilgiris district, by and large are extremely poor. The income of the tribal population is meager not even substantial to meet the basic needs. Tribal development is a constitutional obligation and therefore, all concerted efforts must be made to ensure that there is no significant gap in the levels of development among the tribals. Therefore, policy intervention should focus on these factors and implementation should be result oriented.

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PANIYAN OF THE NILGIRIS DISTRICT



Paniyan's typical house



Paniyan children with their mother



Paniyan women in their traditional dress



Paniyan women working in tea estate



Paniyan family