



**HEALTH, EDUCATION AND LIVELIHOOD STATUS OF TRIBALS IN TAMIL
NADU¹**

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Summary

This paper aims to find out the current status of tribal population in the core social sectors of health, education and livelihood. For assessing the human development status of the tribal population, 8 hill groups comprising 225 revenue villages in 7 districts, were selected. At grossroot level, 640 sample respondents were interviewed from 118 sample villages. The study revealed that 97% of inhabitants belonged to Malayali. Health wise, PHCs at best served as dispensaries distributing medicines; and patients with serious ailments referred to higher health care units outside the hills. The literacy gap between ST and general population varied from 10.2 points to 29.5 points and the GTR institutions were established in the hill groups without relation to its tribal population. As far as livelihood, the inhabitants were cultivators but the dry land agriculture limited their period of cultivation. In the absence of alternate income in and around their habitates, they adopted multi-throng strategies even to maintain their wellbeing and improve their economic conditions.

Key Words: Tribals; Malayali; Household; Health; Education; Livelihood.

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Health, Education and Livelihood Status of Tribals in Tamil Nadu

Section I

Introduction

In Tamil Nadu, the 7 districts, Dharmapuri, Namakkal, Salem, Tiruvannamalai, Tiruchirappalli, Vellore and Villupuram, had the highest concentration of tribal population. The paper aimed at assessing the human development status of the tribal population, living in the 8 hill groups comprising 225 revenue villages in 7 districts, specifically in the spheres of health, education and livelihood. Sample villages covered are 118 and sample respondents interviewed are 640.

Relevance of the Study

The Constituent Assembly, which was the precursor of the Constitution of India, concerned with the miserable conditions of the tribal population and as a consequence introduced several ameliorative provisions in the Constitution of India to improve their socio-economic conditions. First and foremost, it recognized the tribal population in India as one of the weaker sections of the Indian society and imposed a duty on the States to promote their educational and economic interests and protect from social injustice and exploitation (Article 46). Further, States were protected from the legal scrutiny of the courts on the ground of 'discrimination' in respect of measures implemented for advancement of Social, Economic and Educational interests of the tribal population (Article 15(4)). Other crucial measures included reservation of seats in Panchayats, State and Parliament, special grant from the consolidated fund for their administrative advancement, special concessions in recruitments etc., (Articles 40, 275, 330, 332, 335, and 338).

The paper assumed significance that despite the fact there was clear recognition about the tribals weaker conditions among the Indian society and incorporation of several special provisions to improve their wellbeing; they, even after the lapse of 7 decades of independence, remained below the level of the general population in socio economic development. Hence this paper aims to find out current status of the tribal population in the core social sectors so that appropriate remedial measures and development efforts could be planned and programmed.

Special Features of Tribal in Tamil Nadu

The identification of tribal communities in India as Scheduled Tribe' (ST) vested with the President of India under Article 342 of the Constitution of India. The "tribal population had been traditionally concentrated in about 15 per cent of the country's geographical area, mainly forests, hills, undulating inaccessible areas." The census 2011 indicated that, the tribal population in Tamil Nadu was 7.94 lakh comprising 36 notified STs and total tribal population constituted 1.1 per cent of the State's population (721 lakh). Majority of tribal population (83.1per cent) resided in rural areas and 16.9 per cent in urban conglomeration. (Sivasubramaniyan and Teekaraman: 2018: 164).

Apparently, the tribal population of Tamil Nadu was small and constituted 0.77 per cent of the total tribal population of India. Despite its feeble strength in the State, the tribals' had scattered across all the districts and the distribution pattern showed that it had less concentration in the coastal and delta districts of southern parts and high concentration in western and northern parts of the State where the hill groups of Eastern Ghats situated.

Of the 36 notified tribal communities in Tamil Nadu, 6 of them designated as "Particularly Vulnerable Tribal Groups" (PTGs) comprising of Toda, Kota, Kurumba, Kattunayakan, Paniyan and Irular. Another aspect of the tribal communities in the State was that out of 36 communities, only seven had a population of 10,000 and above and communities like Malayali, Irular, Kattunayakan, Kurumans, Malakkuravan, Uraly and Paniya qualified under this category. Among them, only Malayalis had the single largest, 45 per cent, of the total tribal population of the State. The papercovers on two aspects: (i) it focused on the habitat of the tribal community mainly hilly and mountainous region and (ii) it covered the single largest tribal community of the State.

The tribes' in India were generally "accepted as the oldest population of the land" however 'Malayali' ST community was concerned, Edgar Thurston in 'Castes and Communities of Southern India' (1909:406), had observed that "they [Malayalis] have not, like the Todas of the Nilgiris, have any claim of an ancient hill tribe, but Tamil speaking people, who migrated from the plains to the hills comparatively in recent times" The origin of the Malayali tribe, was thus, shrouded with mystery and attributed versions about their origin were many but the district manuals and Gazetteers of the then Provincial Government

of the Madras Presidency, threw light on the subject (For details see Sivasubramaniyan and Teekaraman: 2018: 165-166).

According to Surjit Sinha⁴ (1967:37), the tribal population characterized by “isolated in ecology, demography, economy, politics and other social behavior from other ethnic groups”. It was due to their remoteness from the mainstream, suffered economic backwardness as accessibility to education, healthcare, employment and other income generation opportunities limited. They lived for centuries a simple life based on natural environment and forest played a pivotal role in shaping and supporting their cultural, spiritual and economic wellbeing. The tribal population, by virtue of their long association with the forests, identified as the people of hills. However, in the Indian context, 'Adivasi' generally attributed to tribals but internationally dubbed as 'indigenous' people.

Objectives of the Study

The primary objective of the study was to assess the human development status of the tribals inhabited in the hill groups of Eastern Ghats specifically in the spheres of health, education, livelihood, identify constraints if any in improving their socio-economic conditions and explore potential opportunities for growth. Following are specific objectives of the study.

- 1) To study the population and their basic characteristics of sample households.
- 2) To assess the level of education of the respondents / sample households.
- 3) To understand the Health status of the tribal population.
- 4) To find out the consumption pattern of major food and non- food items of the tribal population of the sample households.
- 5) To identify social practices which have bearings on tribal health and education.
- 6) To examine the livelihood status of the respondents / sample household, and
- 7) To suggest measures for improvement in related areas of the study on the basis of findings.

Methodology - Sampling Design

The study covered 225 revenue villages in 8 hill groups of Eastern Ghats. These hills are: Arunthumalai, Kalrayan hills, Pachamalai, Yercaud hills, Jawadhu hills, Yelagiri hills, Sitheri hills and Kolli hills. The number of villages and also the households in each hill group varied. Hence, the total number of households in each village is grouped hill wise

using class frequency viz. (i) Less than 50 households;(ii) between 51 and 100; (iii) between 101 and 250, (iv) between 251 and 500; (v) between 501 and 750; (vi) between 751 and 1000; (vii) between 1001 and 1500 and finally (viii) above 1500 householdsadopting Probability, Proportional to Size (PPS) sampling technique. This approach has provided equal probability of sample selection under each segment of the hill group. From each such group, sample villages are selected on the following criteria:

- a) Remote village unconnected with road / transport facility.
- b) Village having panchayat road but without public transport facility.
- c) Village with public transport facility.

After selecting the sample villages, the households were selected on the following basis: (i) households belonging to marginal farm, (ii) small, (iii) medium, (iv) big farm and (v) landless. Similarly, selection of households covered: (a) pregnant and lactating woman, (b) children in the age group of 0-5 years, (c) persons with chronic diseases and (d) family planning households. In view of these factors, sample households were selected on the spot adopting purposive random sampling technique. This was necessary to collect information in proportion to the areas of the study. The field survey covered 118 sample villages, (52%) of the total villages. The number of villages in each hill classified according to the class frequency is given in [table 1](#).

Table 1 Classification of Sample Villages According to Class Frequency and Number of Sample Villages Selected

District/Hill	Number of revenue villages and frequency distribution of households															Total		
	Less than 50 - Total	Sample Selected	Bet.21-100 - Total	Sample Selected	Bet. 101-250 - Total	Sample Selected	Bet. 251-500 - Total	Sample Selected	Bet. 501-750 - Total	Sample Selected	Bet. 751-1000 - Total	Sample Selected	Bet. 1001- 1500 - Total	Sample Selected	Above 1500 - Total	Sample Selected	Total villages	Total Sample Selected
Salem: Arunuthumalai	2	1	3	1	6	3	1	1	0	0	0	0	0	0	0	0	12	6
Kalrayan	1	0	0	0	0	0	1	1	0	0	0	0	1	1	1	1	4	3
Pachamalai	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	2	1
Yercaud	12	6	12	5	30	16	7	3	0	0	0	0	0	0	1	1	62	31
Vellore: Jawadhu	3	1	3	1	2	1	1	1	2	2	0	0	5	2	1	1	17	9
Yelagiri	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1
T.V. Malai: Jawadhu	6	3	6	3	8	3	12	5	1	1	3	1	1	1	1	1	38	15
T.V. Kalrayan hills	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1
Villupuram: Kalrayan	1	1	3	2	29	15	13	8	2	1	0	0	0	0	0	0	48	27
Dharmapuri: Sitheri	3	2	7	3	5	2	1	1	1	1	0	0	1	1	1	1	19	11
Namakkal: Kollihills	0	0	1	1	3	1	3	2	4	2	2	1	5	3	0	0	18	10
Trichy: Pachamalai	0	0	0	0	0	0	0	0	1	1	2	2	0	0	0	0	3	3
Total	28	14	36	13	83	42	40	22	11	8	7	4	15	10	5	5	225	118

Source: Survey data as specified by the State Planning Commission, GoTN, 2016.

The households' selection in the 8 hill groups adopting class frequency is presented in **table 2**.

Table 2 Distribution of Number of Sample Households

Sl no.	Frequency distribution	HHs
1	Less than 50	20
2	Between 51 to 100	29
3	Between 101 to 250	114
4	Between 251 to 500	115
5	Between 501 to 750	66
6	Between 750 to 1000	38
7	Between 1001 to 1500	142
8	Above 1500	116
	Total	640

Source: Field Survey, 2016

Limitation

Tribal population by nature was shy and suspicious due to isolation and tradition. Difficulties surfaced while ascertaining the farmer's classification as most of the respondents were covered by age-old joint pattas issued about 2-3 decades ago. There was no way to find the actual extent of agriculture land under one's occupation or in operational use and most of them claimed to have possessed only a small extent of agricultural holding due to fragmentation by inheritance. In Kalrayan hills of Villupuram district, encroachment of forest / revenue lands rampant and the cultivator of encroached land claimed such land also as its own lands. The sensitive areas in collecting household information seemed to be on income from sources, wage employment, indebtedness and liabilities and outcome of the analysis subject to these limitations.

Structure of the Paper

Following the introduction, section 2, describes the salient features of the study area including basic characteristics of the households. Section 3 dwelled upon the educational status of the respondents. Section 4 dealt with health infrastructure in the study area and analysis on their utilization pattern of the targeted respondents and accessibility to drinking water and sanitation including impact of the tradition and customs on health. Section 5 analyzed the sources of income of the respondents' and their dependents, and livelihood services provided by government organizations, and Section 6 contained findings and suggestions therefor.

Section- 2

Profile of the Study Area

Composition of the Population in the Study Area

It may be observed that mere birth from a tribal family did not bring statutorily entitlement as a matter of birth and a community certificate from a competent authority assumed significance. The total population of the sample households was 2786 in which ST population alone constituted 97 per cent; and only the remaining 3 % related to 'other' communities.

Structure and Composition of the Household

The expression 'household' referred to a single family living together and share the meals under one roof. A family could be 'nuclear' or 'joint family'. The nuclear family comprised of a husband, wife and their children including the parents of the Head of the Family. On the other hand, a Joint family covered not only the members of the nuclear family, unmarried sons and daughters, married sons, sons' wives and their unmarried children including dependent relatives living together under the same roof sharing common meals.

The survey result shows two aspects of the respondents' family: (i) the type of sample households and (ii) classification of the respondents' family members according to age. Among the types of family, 21 per cent of the respondents' followed Joint family system as against 79 per cent nuclear type. In regard to size of the family, about 26 per cent of the respondents' family consisted of less than 4 members (165); In so far as the family size is concerned, the majority of the respondents (55%) belonged to 4-5 members segment and 19 per cent (120) belonged to more than 6 members'. The mean size of the overall sample respondents was 4.3.

Respondents: By Education and Occupation

Of the sample respondents of 640, about 52.3 per cent were literates. The illiterate represented 47.7 per cent. Among the hill groups, Pachamalai of Trichy district had the highest percentage of educated respondents, followed by Yercaud hills of Salem district. Out of 640 sample respondents, about 80% were cultivators, followed by agricultural laborers (15%). About 5 per cent associated with non-agricultural activities such as skilled, semi-skilled and white collared jobs.

Respondents: By Income

Majority of respondents earned their income through agriculture and allied activities, either by cultivation or livestock. However, the quantum of income derived from cultivation or livestock, was insignificant mainly due to rainfed cultivation. However, to supplement their agricultural income, they resorted to work as wage laborers' either locally or outside their region.

Gender and Sex Ratio

The sex ratio refers to the number of males to females in a given population. Among the sample households it was 1124 which indicate the absence of gender discrimination across the hill groups.

Child Marriage

Child marriage refers to a formal or informal marriage occurs to an individual irrespective of the sex before attains the legal age of 18 years for a female and 21 years for a male. In tribal tradition, child marriages are common. There is a curious custom prevailed among the Malayali community, where sons when young married to matured females in order to perpetuate their off springs. This practice has slowly vanished due to tribes' interaction with non-tribals.

Dependency Ratio

'Dependency' refers to persons who are dependent for basic necessities to breadwinner of a family. In demographic structure, it refers, the ratio of the sum of the population of the young (0-14 years) and elderly (61 years and above) to the working-age population (15-60 years). In other words, it refers to the ratio of economically active or the productive population, to economically inactive population or dependents for food, education, clothing and health care.

The survey disclosed that persons in age group of 15-59 who considered as economically active population as 73 per cent to the total sample population and persons in the inactive age group at 27 per cent. The overall dependency ratio stood at 37 per cent indicating that every 100 persons within the economically active population, 37 persons were inactive. The figures and inferences were based on age group data collected. However, in the case, hill dwellers, these theoretical notions seemed to be inapplicable. Even a lad of 12-14 years, and those who

crossed the age of 60 years, of both sexes involved in economic activities to support their family. In essence, they, notwithstanding of the age factor, continued the economic activities to lend support to their family.

Section- 3

Educational Status

Introduction

Education is the key aspect of socio-economic development at both micro and macro levels and it is the easiest means of achieving self-development. The more intensively one acquires it, high are his accomplishments in life. According to GOI, “Education is a critical input in human resource development and is essential for the country’s economic growth. Though the major indicators of socio-economic development, viz the growth rate of economy, birth rate, infant mortality rate and literacy rate etc., are all interconnected, the literacy rate has been the major determinant of the rise or fall in other indicators” (GOI, 2002:23) Essentially, education is a driving force or a growth engine for many social and economic development indicators.

In India, free and compulsory education, has become the fundamental right to children in the age group of 6-14 years with effect from 1st April, 2010. The incorporation of Article 21-A to the Constitution of India provides, “State shall provide free and compulsory education to all children of the age of six to fourteen years, in such manner, as the State may, by law, determine.” In addition, Article 45 of the Constitution of India amended to provide early childhood care and education to all children below the age of 6 years. According to Article, 46, States have been given the responsibility of promoting educational and economic interests of the weaker sections of the society and to protect them from social injustice and exploitation.

In a country like India, with wide diversity of religion, language, culture and environment, imparting education uniformly to its people is fraught with difficulties and it is more so in respect of tribal population. Living in remote and inaccessible regions, majority of the tribal people are culturally exclusive and ecologically different and thus, they stand in a different footing. Hence, implementation of educational programs to all alike is critical. In fact, the

problems confronting tribal education differ from area to area and even between tribes, specifically tribes belonging to Particularly Vulnerable Tribal Groups (PVTGs).

School Education Structure and Incentives

In Tamil Nadu, School education is structured into four levels, namely Primary, Upper primary, Secondary and Higher Secondary. The incentives extend to all students, irrespective of the fact whether the student is a tribal or non-tribal provided if s/he studies in government or government aided Institutions. The slew of incentives includes, free textbooks, notebooks, free uniform (eligibility linked to noon-meal scheme), laptops to 11th and 12th standards and educational kits consist of school bag, geometry box, color pencil, crayons and atlas. Free footwear distributed to 1 to 10 standards, bus passes to 1 to 12th standard students (travel in buses run by State Transport Corporations) and bi-cycles to 11th standard students. Noon meal to students provided up to 10th standard and special cash incentive from 10th to 12th standards. Students who lost bread-winning parents while pursuing education in schools granted lump sum financial assistance.

Additional Incentives to Tribal Children

In addition to the concession and incentives, the other, tribal focused schemes include: (i) Post Matric Scholarship for students pursuing 10th Standard and above, (ii) Scheme for pursuing plus one in reputed private schools, (iii) Admission in reputed residential schools to VI standard for bright students (iv) Cash incentives to girl students from III to VIII standards (v) Special coaching's to students in X and XII standards and (vi) coaching for Common Admission Test.

Education Levels

Table 3 shows that the total population of the sample respondents was 2786 including infants and children below 6 years. The effective population of the sample respondents was 2557 after deducting the number of infants and children below 6 years. It may be observed that of the four levels of school education, persons qualified up to primary level were the highest. It shows easy accessibility to primary level institutions at the local level. It is further observed that the percentage of educational attainments over and above primary levels tapered down in proportion to higher levels of education. This might either due to not-so-easy accessibility to higher levels of educational institutions or students might not be interested in pursuing the

higher education from distance villages; perhaps due to lack of transport facilities. May be also, it was due to parents who were disillusioned about the shallowness of the knowledge of their wards in government-oriented institutions coupled with their backwardness ought to have discouraged them to send their children to pursue higher standards. They perform made use of their wards to lend economic support.

Table 3 Educational levels of the population

Hill	Population (Effective)	Illiterates	Literates	% of literates	Educational level (No)									
					Read & write	Primary	Middle	Secondary	Hr. Secondary	UG/PG	Diploma	Teaching	Engineering	Medical
Arunuthumalai	63	30	33	52	1	11	7	4	4	2	2	2	0	0
Salem: Kalrayan	189	89	100	53	4	24	22	18	14	8	7	1	2	0
T.V.Malai: Jawadhu	378	199	179	47	5	49	38	32	22	12	7	9	5	0
Vellore :Jawadhu	346	168	178	51	8	46	33	31	27	18	5	4	6	0
T.V.Malai: Kalrayan	11	6	5	46	0	2	1	1	1	0	0	0	0	0
Villupuram: Kalrayan	398	219	179	45	4	56	45	29	21	11	3	3	7	0
Kollihills	354	134	220	62	3	74	51	39	23	11	8	7	2	2
Salem: Pachamalai	50	23	27	54	1	9	7	4	3	1	1	1	0	0
Trichy: Pachamalai	86	33	53	62	2	21	10	7	4	3	4	0	2	0
Sitheri	235	98	137	58	3	45	27	24	21	10	3	3	1	0
Yelagiri	48	22	26	54	0	9	4	3	4	4	2	0	0	0
Yercaud	399	185	214	54	4	67	53	40	26	14	2	2	6	0
Total	2557	1206	1351	53	35	413	298	232	170	94	44	32	31	2
%	100	47.2	52.8		2.6	31	22	17	13	7	3.2	2.4	2.3	0.1

Source: Field Study, 2016

Literacy Rate

Literacy refers 'ability to read and write'. A literate person is in a position to communicate effectively and understand written information. Literacy rate indicates the measurement levels of literacy on the whole but also the gender gap among different hill groups. The primary data collected in this regard shows the literacy rate of different hill groups across Eastern Ghats. Among the hill groups, Kolli hills of Namakkal district (62.1%) topped the literacy level followed by Pachamalai of the Trichy district (61.6%). Sitheri of Dharmapuri district ranked third (58.3%). Out of 12 hill groups (in accordance with district wise jurisdiction), overall literacy rates of the hill groups of Yelagiri (54.2%), Pachamalai of Salem district (54.0%), Yercaud hills (53.6%), and Kalrayans of Salem district (52.9%) registered higher literacy rates over and above the average rate of 52.8 per cent.

Section- 4

Health Status

The term health, as defined by the World Health Organization (WHO, 1984), refers to “a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity.” Nature is a storehouse of remedies for several diseases afflicted by living beings both men and animals. Despite the fact that introduction of modern medicine (allopathy) was a recent initiative in hilly and secluded tribal areas which had become the habitat of tribal population for over generations. Health oriented necessities had made them to evolve traditional health care on the basis of their beliefs and practices which ensured tribal wellbeing. The WHO has defined the ‘traditional medicine’ as practices, knowledge, and belief system which uses minerals, plants and animal-based remedies, spiritual therapies and exercises to prevent, treat and maintain wellbeing. Over the years, the traditional medicines and methods of treatment had become the integral part of the tribal custom and culture; and survived amidst the influence and popularity of the modern medicine, purely because of its availability at their vicinity and hazel free methods and treatment.

Health is a key indicator of development of a society and more so in a tribal society in view of the fact they live in a remote and inhospitable terrain isolated from main stream of the population. Due to their seclusion and isolation, several development initiatives of the State could not be implemented in full vigor as done in non-tribal areas or perhaps, not designed to suit the conditions of the tribal terrain. Access to modern health care facilities is one area which is weak in tribal areas impacting health conditions of tribal population despite the fact that health care services was free.

Drinking Water and Sanitation

In tribal areas, drinking water associated with diseases and regarded as the serious health threats. Access to safe and adequate supply of drinking water is crucial at household level for the wellness of a family. In hilly areas, seasonal factors influenced the sources of drinking water as there were not any perennial water sources. The survey results show that street tap was the major source (61.6 %) of drinking water, followed by open well (15.5%). Supply of drinking water through mini-pump became the third major source (11.7%). About 5 per cent

of the sample households still relied upon the natural fountains and streams (odai) for quenching their thirst. Drinking water getting through hand pump was insignificant (1%). Sanitation includes the latrine and bathing facilities within the premises; and the type of latrine if provided. Generally, it is rare to find latrine and bathing facilities within the premises but this trend changes gradually mainly because of the States' initiative. For instance, State funded housing scheme, like 'Pasumai Veedu' insisted a provision for a separate latrine as a condition in the approved housing design. Of the 640 sample respondents, about 74% did not have latrine facility. Among them, about 93% practiced open defecation and the remaining 7% made use of community sanitation. About 38% had bathing facility within their premises and 62% did not have even this facility. Here too, lack of water sources within the premises was the contributing factor.

Drainage, Kitchen, Cooking Fuel and Living Space

Provision of in-house drainage facilitates let out the used water. However, due to undulating terrain, there was no network of common drainage system in anywhere of the sample villages. Hence, majority of the sample households (95.2%) did not have in-house drainage facilities. It may be stated that in majority of the households, usage of water restricted to the barest minimum confined to washing of couple of cooking vessels as there was no independent water sources within the premises. Generally, most of the respondents' families had their bath and washed their cloth near the water bodies located outside their houses. Thus, the quantity of water used by the entire family for the whole day miserably low which could not generate flow of waste water at household level. In majority of houses (68 %) firewood is used as cooking fuel and even where LPG gas available, the use of firewood is not altogether dispensed with. Living space in 71 percent of the households is confined to a hall measuring about 8' x 15' and in the sample households, the living space actually served as dormitory where the members of the family slept in the same living room.

Nutrition and Public Distribution System

Health and nutrition are the essential inputs of social development. They are the two sides of a coin. Lack of or inadequate quantity of nutritious food contributed deterioration of health. In tribal situation, intervention of nutritious food improved the health status. Recognized the significance of food security to the needy and downtrodden, the State govt. implemented the

Public Distribution System (PDS). A special package of assistance evolved to meet the needs of the tribal masses.

The PDS in Tamil Nadu by its universal coverage constituted an important poverty alleviation programme and contributed nutritional balance for landless, and vulnerable sections of the society, specifically, the tribal population living in hilly and difficult areas. Essential commodities like wheat, palm oil, kerosene, sugar, pulses etc., have been supplied at subsidized prices to the dietary needs of the population. And particularly, rice supplied free of cost to the target group and those living below poverty line. Mobile Fair Price Shops cater to the needs of tribal population in remote areas wherever feasible, through Large Sized Multipurpose Cooperative Societies (LAMPS).

The PDS covered the entire population of the State and three types of cards distributed to them namely; (i) Cards supplying essential commodities, (ii) Cards supplying commodities except rice (iii) No commodity cards (honor). A noteworthy feature of the system in Tamil Nadu is that no private dealer has been roped into manage distribution outlets. It is the policy of the government that accessibility to the 'ration' shops should not exceed 2 km from one's residence.

Primary Health Centers (PHC) in Tribal Areas

In hilly areas, PHCs provided affordable and available basic health care to tribal people taking care of their curative and preventive aspects. Being the first state sponsored health care unit where sick got treatment directly from a qualified doctor, a PHC acted as a referral unit to attend the medical needs of sub-centers under its jurisdiction as well as refer; complicated cases to higher levels of government health care institutions. According to the National Health Mission, in Tamil Nadu, about 110 tribal PHCs had been established for the welfare of the Tribal population.

Health Insurance

A comprehensive health insurance scheme implemented in Tamil Nadu to cover members of the family whose annual income was below Rs. 72,000/- and a biometric smart card is given to the members of the scheme. The said card holder and the family members are entitled to take cashless treatment for certain specified ailments which include expenses relating to hospitalization, diagnostic procedures and follow up treatment subject to Rs. 1 lakh per

annum and maximum assured amount is Rs. 4 lakh for a period of 4 years. In a few critical ailments, the monetary limit is Rs. 1.5 lakh per annum. The Card holder is free to take treatment either in Government Health care Institutions or recognized private hospitals. To what extent, the State health insurance scheme is useful and benefited the inhabitants of the hill group deserved examination?

The study disclosed that of the 640 sample respondents, 68.1 per cent (436) covered under the state scheme and none covered under any other health insurance scheme. Among the hill groups, coverage was high in Kolli hills (78.9 per cent) followed by Yercaud (78.7%). The lowest in the rung was the residents of Jawadhu hills. The data showed that not even a single respondent received the bio metric card in sample respondents' villages of Anaicut block of Jawadhu hills while coverage was high in Alangayam block of Vellore district. At the same time, not even a single respondent from any hill group covered by the study, made use of the bio-metric card for treatment despite the fact there were cases of serious ailments. Non-utilization of the scheme might perhaps due to (i) lack of specialized treatment facilities at the govt. health care units at the hill groups (ii) absence of recognized private medical institutions or multi-specialty outlets in and around the hills or urban centers nearby and (iii) lack of awareness of the usefulness of the card and absence of proactive role of the para medical staff to educate the tribal population.

Health Care Options

Interaction with the respondents' and their family members indicate that they got treatment in different systems of medicine depending upon their accessibility. Apart from the modern allopathic system, other Sources include traditional system, treatment from individual health care providers (quacks), and private sources including medical practitioners and clinics.

About 59.5 per cent of the sample population approached government health care facilities like HSC / PHC for treatment of their ailments and yet 20.5 per cent of the respondents', however sought treatment from the individual the medicine man, notoriously known as quacks who administered combination of siddha and allopathic systems of medicine with impunity on their patients. For the inhabitants of the hills, he was a doctor as he distributed the medicines which in majority of the cases gave them relief. He might be a pseudo medicine man or quack, but still he delivered the health services at their door steps maintaining cordiality though his way of treatment lacked any diagnostic methods. He

distributed tablets and medicines blindly based on patients oral feedback; at times, he never hesitated to administer steroid injections without rhyme or reason with the object of immediate relief overlooking the side effects. It may however, be pointed out that most of the ailments treated were common category like cold, fever, body pain, diarrhea etc. The traditional or customary methods practiced by about 11.3 per cent in treatment of their ailments. A very insignificant percentage (8.7) got treatment at private outfits.

Section – 5

Livelihood Status

The term, 'livelihood' refersto “means of securing necessities of life or simply ‘whatever a person does to support the life’”. Livelihood, being, a dynamic term, its meaning varied subject to time and place and factors like existence of income earning options within the geographical area, economic activities and assets which were capable of meeting the necessities of life.

Every community had its own strategy to fulfill the basic necessities of its members in order to ensure survival and in the process acquired the art of harnessing the nature, however, fashioned by custom, traditions, demographic structure etc. Malayalis, the dominant community of the Eastern Ghats, was no exception. They lived either deep inside forests or surrounded by forests and by virtue of their habitat maintained a close relationship with forests. Their livelihood and economy once revolved around the forest resources and relied upon flora and fauna to fulfill their food requirements. As a consequence, the socio-economic conditions of the inhabitants of the hills markedly different from non-tribals in plain area and adopted simple indigenous technology that suit their environment.

Malayalis, recent settlers of the Eastern Ghats, traditionally agriculturists followed primitive agronomic practices in rain fed environment in the absence of perennial sources of irrigation facilities. Also, the age old mutual relationship with forest and dependency on its resources had seriously eroded due to (i) unabated deforestation and (ii) implementation of forest conservation legislations. Consequently, their customary and communal rights over the forest

resources took a serious beating and their rights drastically restricted to 'usurps' right. Adding fuel to the fire, the strict implementation of regulations in effect curtailed even those fragile rights. As livelihood options from natural resources became scarce and insufficient to meet their basic necessities of life, they adopting variety of strategies to fulfill their livelihood. Hence, it is examined the livelihood status of the hill groups in terms of tribal initiatives in promotion of their livelihood and the efficacy of the government sponsored or aided livelihood programs in the hilly areas.

Livelihood Activities of Sample Respondents

The inhabitations of the hill groups were basically cultivators with fragmentations of operational land holdings and limited duration of agronomic practices in a year hardly adequate to meet their basic food requirements. In the absence of alternate income sources in and around their habitat, adopted multi throng strategies to maintain their wellbeing and to improve socio economic conditions which included intensification as well as diversification of income bearing activities, migration, and adjustment with consumption pattern.

Operational Holdings - Agriculture

Hill cultivation was once predominant in the study area as the inhabitants subsisted on slash-and burn cultivation. Cow-dung was increasingly used by the Malayalai community as manure and majority of the sample respondents' had no means to go in for chemical fertilizers. Since, 80 percentage of the inhabitants depended on agriculture, it became the primary source of livelihood. Attempt is made to classify the sample respondents as per their operational holding size, viz., marginal, small, semi-medium, medium and large farmers' as well as the total extent of area under each category of farmer.

Table 4 showed that out of 640 sample respondents, 512 (80%) had a total operating area of 1297.7 ha. Of them, marginal farmers (area less than 1 ha) accounted for 41.8 per cent with a total operating holdings of 147.05 ha (11.3%). Small farmers (1 ha to 2 ha) accounted for 149 (16.7%) with a total operational holdings of 216.55 ha (16.7%). Thus, the marginal and small sample farmers i.e., less than 2 ha holdings, together accounted for 70.9 per cent but they (363) held only 28% of landholdings. The semi – medium (2 to 4 ha) and medium farmers (4 to 10 ha) jointly count 135 (26.4%) possessed a total operational holding of 52.6 per cent.

Large farmers (more than 10 ha) constituted 14 persons (2.7%) and yet held total operational holdings of 250.7 ha (19.3%). Average size of the sample operating holding was in the order of 2.5 ha.

Ownership Status of Land Holdings

Although 80 per cent of the sample respondents were cultivators and owned lands but not all of them possessed ownership document known as ‘Patta’ - an official document declaring the ownership over the land. The information collected from the sample respondents’ revealed that

Table 4 Distribution of respondents according to the size of operational holdings (ha)

Hill	Marginal		Small		Semi-Medium		Medium		Large		Total	
	No	Area	No	Area	No	Area	No	Area	No	Area	No	Area
Arunuthumalai	7	4	5	6.50	2	7.55	1	8.75	1	19.70	16	46.50
Kalrayan: Salem:	19	15.50	15	25.45	9	31.55	1	9.45	2	21.55	47	103.50
Jawadhu: T.V.Malai.	27	18.40	22	19.50	18	57.60	10	90.50	2	49.50	78	235.50
Jawadhu: Vellore	31	27.15	21	27.90	12	67.70	6	57.25	2	39.00	72	219.00
Kalrayan: T.V. Malai	0	0	2	3.55	1	3.45	0	0	0	0	3	7.00
Kalrayan: Villupuram	27	14.10	23	39.50	13	48.55	7	64.50	1	22.15	71	188.80
Kollihills	31	24.70	24	41.55	13	45.50	8	41.40	2	36.45	78	189.60
Pachamalai; Salem	5	4.60	3	4.65	2	7.50	1	8.25	0	0.00	11	25.00
Pachamalai: Trichy	10	5.25	6	10.25	5	17.30	2	16.55	1	25.15	24	74.50
Sitheri	12	7.75	10	17.90	8	29.55	4	32.50	0	0.00	34	87.70
Yelagiri	3	2.55	1	1.25	0	0.00	0	0.00	1	12.20	5	16.00
Yercaud	42	23.05	17	18.55	8	16.55	4	21.45	2	25.00	73	104.60
Total	214	147.05	149	216.55	91	332.80	44	350.60	14	250.70	512	1297.7
%	41.8	11.30	29.1	16.70	17.8	25.60	8.6	27.00	2.7	19.30	100	100.00

Source: Field Study, 2016

the Revenue department of the State government issued patta in two formats, namely (i) single patta for a single owner of land holding and (ii) joint patta where land ownership is shared by more than one farmer. In securing loan, single patta holder stood in vantage position over the joint patta holders. In the hill groups, joint pattas’ issued before 1980s in the names of more than one person but remained without any mutations in the revenue records despite the fact that many of the co-owners of the joint patta during the interregnum period either expired or extent of holdings covered by joint patta notionally fragmented due

inheritance in accordance with tradition. It may be observed that change of names in the revenue records and mutations in patta required supportive documents and close contact with the revenue units. Fragmentation of lands involved resurvey and assigning sub-divisions of the original survey number - a long drawn and in the point of view of the inhabitants an irksome process. The anomalous situation paved way for the existence of large number of joint pattas' and consequently, many of the sample respondents or their family members could not avail of the loan facilities in the government sponsored financial institutions on par with single patta holder. Out of 512 sample respondents, about 224 (44%) were single patta holders and the rest (56%) joint holders who held 797.61 ha (61.05%) of operational holdings.

Sources of Irrigation

Irrigation played a crucial role in cropping pattern and agricultural production of a region including hilly areas. However, the hill groups of Eastern Ghats did not endow with any perennial sources of irrigation and rightly revenue department classified the physical quality of the agriculture lands in the entire hill groups as 'dry' type. Consequently, seasonal rains had become the main source for types of irrigation and aptly agriculture activities almost come to stand still with stoppage of rains the exception being part of Kolli and major part of Yercaud hills. It may, however, be observed that even the scanty precipitation in terms of rainy days spread evenly during a year which facilitated required soil moisture conditions to sustain dry land crops.

Attempt made to assess the irrigation sources of the sample respondents. Out of 512 land holders about 141 sample respondents' (27.5%) had some kind of water sources such as open well, bore well, odai stream and pond for irrigation benefitting about 207.15 ha (16%). At the same time, major respondents' (72.5%) lacked any type of water sources except seasonal rains.

Cropping Pattern

The food crops were cultivated across the hill groups both under irrigated and rain fed conditions. Wherever, water sources available, water intensive crop like paddy, sugarcane and vegetables were cultivated otherwise dry land crops predominant. The food crop basket consisted of cereals like paddy, ragi, maize, samai, and pulses, sugarcane, fruits, tapioca, vegetables, and pepper. The total area under food crops in respect of sample respondents'

was 768.1 ha. The major food crops grown and extent of cultivated area across the hill groups are presented in **Table 5**.

Among the cereals, samai had the highest area (179.9 ha) coverage (23.4 %), closely followed by tapioca (17.9%). It may be observed that samai and other small millets like ‘thinai’ pearl millet, ragi and cholam were once the staple food across the inhabitants of Eastern Ghats. However, after the introduction of free rice scheme in the hills, their food habits changed and the inhabitants became the rice eaters which had become the de facto staple food. Despite the fact, they were traditionally consumed small millets but forgo their preference solely because of their marketability as cash crops triggered by their economic backwardness. Happily, small millets like samai, and thinai were in high demand from traders from north India who purchased them through

Table 5 Area under Food Crops (ha)

Hill	Paddy	Ragi	Maize	Pearl millet	Samai	Other Cereals	Sugarcane	Horse gram	Other pulses	Fruits	Tapioca	Other Vegetable	Pepper	Total
Arunthumalai	6.5	4.0	0.5	0	0	2.0	0	0	0	0	21.5	2.5	0	37.0
Kalrayan: Salem	15.5	2.5	2.5	6.5	3.5	15.5	2.5	1.0	1.3	1.5	5.2	2.5	0	60.0
Jawadhu: T.V.Malai	26.5	5.4	5.5	8.2	91.5	3.9	4.5	8.5	2.3	3.5	10.5	3.5	0	173.8
Jawadhu: Vellore	12.2	7.5	6.5	3.3	62.4	2.5	3.2	10.5	2.3	2.5	15.5	0	0	128.3
Kalrayan: T.V. Malai	1.0	0	0	0	0	0.3	0	0	0	0	2.3	0	0	3.5
Kalrayan: Villupuram	18.5	9.5	2.5	1.5	3.5	15.5	7.7	0.0	7.3	3.5	10.5	2.5	3.5	85.9
Kollihills	9.5	5.5	0	0	1.5	9.5	3.5	1.5	0.5	7.5	15.5	3.5	15.5	73.5
Pachamalai: Salem	3.5	1.5	2.5	0	0	0	0	0.0	0.0	1.5	4.5	0.0	2.5	16.0
Pachamalai: Trichy	11.3	0	0	0.5	0	1.2	0	1.3	0.0	1.5	35.0	1.5	2.5	54.7
Sitheri	10.7	7.5	3.5	2.5	12.5	1.5	3.5	7.5	1.8	3.5	8.5	1.5	0	64.5
Yelagiri	1.2	0.5	1.5	0.5	1.5	1.2	2.0	0.0	0.0	0	0.0	3.5	0	11.9
Yercaud	7.5	4.5	2.5	0.8	3.5	0	2.5	0.0	5.5	0	8.5	3.5	20.5	59.3
Total	123.8	48.4	27.5	23.7	179.9	53.1	29.3	30.3	20.9	25.0	137.5	24.5	44.5	768.1
%	16.1	6.3	3.6	3.1	23.4	6.9	3.8	3.9	2.7	3.3	17.9	3.2	5.8	100.0

Source: Field Study, 2016

local agents at unremunerated price. The discussion with the millets tribal farmers’ revealed, though they knew they were exploited by the agents but had no other alternative than to become the victim of such exploitation. It may be observed that the processed small millets like samai was priced double the cost at the urban centers particularly, in departmental stores or grocery shops.

Paddy occupied the 3rd position in area coverage (123.75 ha). Paddy cultivated across the hill groups both under irrigated and rain fed conditions; perhaps even distribution of rain fall might made it possible to grow paddy even under rain fed conditions. Pulses covered about 6.6 per cent of area coverage in which the share of the horse gram alone stood at 3.9 per cent. The inhabitants' used horse gram just like Bengal gram by non-tribals. The pearl net (cumbu) occupied the lowest area coverage among the food crops. Pepper as a plantation crop grew more in Kolli and Yercaud hills. In fact, among the two hills, Yercaud was the top producer of pepper but large area lay in private estates. Tapioca, cultivated almost in all the hills and major area covered by Arunthumalai, Jawadhu hills and Kalrayans. In Kalrayans hills, cultivation of the tapioca had triggered encroachment of forest area as it seemed to grow well in undulating terrain and the tapioca produced at the hills was qualitatively better than it produced in plains, and yet respondents' alleged that price wise both were treated alike. Similarly, fruits wise, different varieties of fruits produced at different hills, but Kolli hills topped in terms of area coverage.

Area under Non-Food Crops

A variety of crops cultivated at the hill groups came under the category of Non-food crops which included tamarind, groundnut, coconut, sun flower, castor, coffee, and silver oak. The total area coverage of Non- food crops was 87.2 ha (12.8%) across the hill groups.

Income: By Livestock

Animal husbandry an integral part of the tribal agriculture supplemented their livelihood by providing nutrient-rich food products, draught power, and organic manure. And in few areas endowed with good network of roads, it facilitated regular income for milk-tribal farmers' from dairying. On the other hand, areas unconnected with network of motorable roads, cattle still utilized as 'draught power'. At the same time, during dry and drought conditions, little income from livestock insulated the tribal families against shocks of crop failure. This is by way of selling the goats or sheep and even poultry for culinary purposes. Thus, in tribal economy, livestock played an important source of livelihood and supplemented about 7 per cent of the sample households. It may however, be observed that constraints such as lack of road connectivity, transport facility, Veterinary health care units and scientific management had widened the gap between the potential and the realized benefits in tribal areas. Also, in many hill groups, lack of access to markets was the greatest bottleneck which had

discouraged dairying and poultry products on commercial scale. Even, wherever network of all-weather roads connecting the urban centers provided, happily the situation profitably made use of by informal market intermediaries due to lack of government initiative.

Migration as a source of livelihood

Most of the inhabitants of the hill groups of Eastern Ghats, dependent upon agriculture and the activities largely confined to 6-7 months in a year and even the income derived from such activities hardly adequate to meet the basic needs of their lives and hence their economy could be named as subsistence type. Three factors were responsible for the low level socio-economic conditions of the inhabitants: (i) fragmentation of operational holdings due to inheritance and rain fed agriculture, (ii) primitive agronomic practices of subsistence type and (iii) lack of remunerative employment options. To overcome these hurdles, they practiced different types of occupations to sustain themselves and one such strategy was migratory employment. Thus, in tribal land space, migratory employment became the inalienable part of tribal livelihood. Also, government sponsored employment scheme (100-days program–MGNREGA), could hardly cover all the habitations across the hill groups and offered limited coverage. Moreover, the employment scheme focused on engagement of females. They preferred economics of regular wages instead of sporadic type. At the same time, construction industry which was labour oriented, offered jobs both skilled and unskilled without any gender bias. Generally, such errands were not one time affair and entailed more than one occasion in a year. Apparently, tribal migratory employment was temporal in nature unlike skilled or professional employment which was permanent in nature.

Housing

Owning house and the type of house is an indicator of the socio economic status of the sample respondents'. In so far as tribal population concerned, they attached emotional significance to land and Housing assets and in their cases they together met not only their basic requirements for survival in difficult areas which were subjected to vagaries of extreme climatic conditions, but also the sense of identity and economic status.

The survey data showed that 519 respondents' (81.1 %) had their own houses and the rest (12.1%) resided in houses allotted through government sources. Owned houses included not only houses inherited but also constructed by their self-earned income. However, hardly, 8.7

per cent of the houses (45) constructed by loan. Among the houses allotted under various welfare schemes, 66 per cent of the sample respondents' (80) benefitted under centrally sponsored scheme (IAY) and rest under State scheme (Pasumai illam).

Household Assets

The quality and quantity of household assets indicated the economic robustness of the sample respondents. Information collected in respect of household assets like agri-implements, automobiles, home appliances, mobile, pump sets, jewelry, and households using banking services indicate that of the various items of assets, home appliances constituted about 25.2 per cent of the total assets and scored high among the total assets. In so far as home appliances concerned, it consisted of television, mixer, table fan and grinder which were supplied to the respondents' free of cost by the State Government. Barring these things, there was no other valuable items except a few critical aluminum cooking vessels. Since items included in this category were distributed freely by the state government, its availability in the respondents' family cannot be construed as a sign of richness. Similarly, opening of savings account constituted 17.8 per cent but these accounts were opened exclusively for 100-days wage employment scheme as it was a mandatory condition for disbursement of wages.

It was interesting to note that about 15 per cent of the respondents or their family members used cell phone and it had become an essential media of communication. Those who owned wrist watches accounted for 13.7 per cent while 2-wheelers about 12.6 per cent. Hardly 8 per cent had silver and gold jewelry of some value. About 7 per cent of the respondents owned agricultural implements and pump sets. Around 1.2 per cent of the people covered by sample households either jeep or car which indicated their status of richness as maintenance of these vehicles costly.

Loans and Liabilities

The term 'loan' referred to the amount borrowed by one person from another; and another person might be an individual, financial institutions or banks. Interest charged on the loan component at agreed rate and repayment made at intervals. Circumstances and causes for raising loans might be varied between individuals and occasions arose where such loans were to meet their short or long term commitments. Inhabitants of the hills preferred to obtain

loans from banks or financial institutions like LAMP Societies in view of the fact that interest charged in such institutions is low, in comparison with local moneylender or private individual.

The survey data disclosed, out of 640 sample households, 56 per cent (359) had availed of loans under different sources. Of the total sample loaners, 63 per cent (226) of them borrowed from LAMP Societies'. Out of these, respondents' who availed of crop loan accounted for 18.9 percent and jewel loan about 44 per cent. Sample respondents, who borrowed loans from banking sector constituted 17.3 per cent and the loan was in the nature of mortgaged loan pledging gold jewelry. About 9.5 per cent of the sample respondents' raised loans from local private money lenders. None reported under 'others' category which covered both relatives and friends.

The development approaches of the State and Central Governments towards the uplift of the STs in Tamil Nadu and the State's role in implementation of welfare schemes formulated by the governments could be seen below. At the state level, three departments were mainly involved in implementation of the welfare schemes related to the STs in Tamil Nadu. Of the three, the AdiDravidar and Tribal Welfare (AD&TW) department was exclusively established to improve the socio economic conditions of the weaker sections of the society like ST and SC communities in the State. Similarly, Forest Department, implemented forest based welfare schemes for up lifting the inhabitants of the hill groups of the study area. The Rural Development and Panchayat Raj department on its part implemented several schemes for the improvement of the basic infrastructure and administered a few livelihood promotional activities in the hill groups of Eastern Ghats treating the hilly and mountainous areas as rural.

Role of the AD&TW

The AD&TW of the State Government entrusted with the policy formulation, administration and coordination of tribal welfare programs in Tamil Nadu and major objectives of the department is to uplift the STs on par with the general population of the State who had

achieved higher human development indexes particularly in the spheres of education, economics and livelihood.

Of the various welfare schemes, the Tribal Sub Plan (TSP) was the flagship of the State Government as it met the entire outlay for the sub-plan and implemented by 21 sectoral Officers from various departments of the State and the District Tribal Welfare had to act as its Monitoring Officer. During the year 2014-05, the Directorate had initiated 30 schemes under TSP, at an outlay of Rs. 12588.93 lakh. For the purpose of brevity, the schemes had been grouped under major heads such as (i) schemes relating to Education and construction of school buildings, (ii) Hostels, (iii) providing basic amenities (iv) livelihood activities and (v) miscellaneous schemes.

Centrally Sponsored Schemes

(A) Special Central Assistance (SCA) to TSP

The central assistance under the scheme mainly provided for economic development and income generation schemes and 30 per cent exclusively for creation of infrastructure which would support income generation activities. A sum of Rs. 217.23 lakh was released during the year 2014-15.

Grants in Aid under Article 275 (1) of the Constitution of India

This is a special grant extended constitutionally for promoting the welfare of STs and also for raising their level of living conditions.

Forest Department

In the past, the inhabitants of the hill groups had a close relationship with the forest and its resources but due to vigorous implementation of forest based conservation Acts, it had disturbed their symbiotic relationship with the forest. However, the adoption of Joint Forest Management (JFM) strategy provided scope for increasing involvement of forest dwellers in protection and management of forest and its resources by way of institutional arrangement such as Village Forest Councils (VFCs) and Executive Committees (ECs). Also, the National Afforestation Programme (NAP) provided the platform for peoples' participation. Nursery rising was adopted in select places of the forest area in a small scale and the scope for wage employment is limited. Further, the scope of earning income through collection and sale of

Non-Timber Forest Produce (NTFP) by the inhabitants had come down due to strict forest regulations.

Non Timber Forest Produce (NTFP)

The collection and sale of NTFP played a crucial role in tribal livelihood as it was used as fuel, food, medicine, and forage. Of the 23 items notified by the Forest Directorate, tamarind as a NTFP was dominant in all the hill groups of the Eastern Ghats. It may be observed that prior to the introduction of Indian Forest Policy, 1988, the collection and removal NTFPs vested with the approved contractors and forest dwellers role restricted to mere collection of the produce in deep forests. The Government of Tamil Nadu, permitted the LAMP Societies to buy NTFP at concessional rate up to a particular period (2003), as the concession withdrawn as per the orders issued in G.O. Rt. No. 79, Environment and Forest Department, dated 29.4.2003 and the NTFP declared as free produce tribal population and yet, FD continued to fix the prices of NTFPs annually including tribal VFC. It had been observed that the pricing methodology earmarked certain percentage of amount as profit for contractor, the inference of which was the contractor system persisted despite the government instructions.

Rural Development & Panchayat Raj (RD&PR)

The RD&PR department implemented several welfare programs relating to poverty alleviation, employment generation and capacity building under state and externally funded projects. The schemes implemented by the department were equally applicable to tribal and non-tribal, living either in plain or difficult areas provided if the eligibility norms fulfilled. Among them, In the context of livelihood, specific mention might be made about the Tamil Nadu Empowerment and Poverty Reduction Project (TNEPRP) alias Pudhu Vaazhu project (PVP) funded by World Bank.

Pudhu Vaazhu Project (PVP)

The TNEPRP, familiarly known as Pudhu Vaazhu Project (PVP) launched in 2005 in about 2300 Village Panchayats (VP) in select 70 blocks out of 16 districts and subsequently in the year 2012 extended to 46 block additionally. The blocks chosen based on poverty “backwardness” giving weightage on two aspects (i) weaker sections of the society (SCs and STs) and (ii) Below Poverty Line (BPL) families. Poorest households within each VP identified through a participatory appraisal. And the project interventions included (i) cash grants and credit for target population, (ii) livelihood focused interventions to targeted poor,

(iii) facilitated access to skilled employment by organizing training and placement of the unemployed youths (iv) provided differently abled persons with need-based grants and (v) matched them with appropriate livelihood activities and credit. PVP a multi-dimensional project and implemented through Village Poverty Reduction Committees (VPRC) and essentially covered most of the hill groups of the Eastern Ghats.

The secondary data on this scheme disclosed that financial assistance in the form of grant and loan disbursed both to the disabled tribals and others in proportion of 95.2 to 4.8. A sum of Rs. 77844.0 lakh disbursed for improving the living conditions of the disabled persons and around 4762 persons benefited from the project initiatives. The project identified certain viable economic activities through participatory resource mapping which included: dairy, goat rearing, poultry, farming, floriculture, grass, vegetable, paddy, ragi, and cotton cultivation of leased in lands.

Skill Training

Regarding skill training program for tribals, the data shown in **table 6** indicate that overall 10243 unemployed youths were trained in 14 types of skill trainings. Of them 79.2 per cent secured employment or started their own venture. Among the hill groups, Kalrayans (Villupuram) trained maximum youths (23.8%) followed by (17.9%) Jawadhu hills (Tiruvannamalai). Kolli hills (17.2%) very closely behind Tiruvannamalai in performance. The lowest among the hill groups is Arunuthumalai (2.1%) and Sitheri (2.2%).

Table 6 Overall Percentage of Skill Training

Sl. No	Type of Skill Training	Trained (No)	% to the total	Employed (No)	% employed
1	Light Motor Vehicle (LMV)	3315	32.4	2631	79.4
2	Heavy Motor Vehicle (HMV)	1016	9.9	743	73.1
3	Joseph Cyril Bamford	233	2.3	178	76.4
4	Hardware	602	5.9	409	67.9
5	Mobile service	18	0.2	10	55.5
6	Catering	51	0.5	51	100
7	Nursing	149	1.5	120	80.5
8	Tailoring	1396	13.6	1086	77.8
9	Welding	23	0.2	15	65.2
10	Carpentry	61	0.6	61	100
11	Masonry	2311	22.6	2109	91.2
12	Two Wheeler Mechanic	45	0.4	33	73.3
13	Motor & pump	136	1.3	115	84.6
14	Others	887	8.6	547	61.7
	Total	10243	-	8108	79.2

Source: Secondary information from the implementing Project Managers

The identified skill trainings proved to be easily employable. Of the 14 skill trainings, cent percent got employed in trainings such as catering and carpentry. Of all the trainings, the LMV topped (32.4%), of them 79.4 per cent employed followed by masonry skill trainings (22.6%), of them 91.2 per cent employed. Strangely, youths trained in welding (0.2%), mobile servicing (0.2%) and two-wheeler mechanic (0.4%) were the lowest. The ground reality is the demand for two-wheeler mechanics offered scope as the hill groups flooded with two-wheelers due to lack of proper transport facilities. Apart from the above interventions, the project facilitated direct employment to qualified but unemployed youths in the tribal areas by organizing '*jobmelas*'. The recruitment covered both public and private sector.

Overall, the project facilitated direct employment to 2543 unemployed youths across the hills. Of them, 659 secured employment under public sector and the remaining 1884 in private sector. About 174 youths secured employment under 'education' industry, followed by 94 in police recruitment. Absorption in Transport is equally good (91). In private sector, absorption is high in agriculture (377), followed by 'transport and communication' (332).

Section 6

Conclusion and Suggestions

This section highlights the findings of the empirical study on human development status of the tribal population inhabited in the hill groups of Eastern Ghats specifically in the spheres of health, education and livelihood, followed by a slew of suggestions. The study assumed significance that despite the fact there was a clear recognition about the weaker socio-economic status of the tribal population in India, and incorporation of several special provisions to improve their wellbeing, even after the lapse of 7 decades of independence; they remained below the level of general population in core human development indices.

The study area consisted of 7 major hill groups of the Eastern Ghats namely, (i) Sitheri hills, of Dharmapuri, (ii) Kolli hills of Namakkal, (iii) Yercaud hills of Salem, (iv) Kalrayan hills of Salem, Tiruvannamalai and Villupuram districts, (v) Pachamalai of Salem and Trichy districts and (vi) Jawadhu hills of Tiruvannamalai and Vellore districts including two disjointed hills viz., Arunthumalai of Salem and Yelagiri hills of Vellore district and occupied about 22 per cent of the total forest area of the State. The study focused on the hilly and mountainous habitat of the tribals and covered the single largest (97%) ST community of the State, namely, 'Malayali'.

Regarding the occupational structure, 80 per cent of the sample respondents were cultivators, followed by agricultural labourers (15%). Hardly 5 per cent was engaged in secondary sector as masons, automobile drivers and in salaried jobs. Overall sex ratio was 1124 indicating the absence of gender discrimination among the sample respondents. Though the tradition of the Malayali community permitted 'child marriage' not a single case enumerated, thanks to the direct impact of the implementation of the incentive scheme like 'marriage' and 'child birth.'

The Consumption expenditure on cereals was very low (1%) on account of two factors, viz., free supply of rice and 80% are cultivators. In Tamil Nadu, a tribal classified as BPL, got

about 35 kg of free rice monthly and entitlement for others varied from 16 kg to 20 kg on the basis of family members. Prior to this scheme (2011), the staple food for the tribal population was Samai and small millets like, ragi, cholam, cumbu, Varagu or Thinai. Regarding consumption expenditure on non-food items, expenditure on education stood first (21.6%).

The study revealed that the literacy gap between ST and general population varied from 10.2 points to 29.5 points notwithstanding of the fact the data on general population was old (2001). Most of the residential schools at primary and middle levels, did not have separate hostel facilities and the students were asked to stay and sleep in the same structure. Mats facilitated easy make shift arrangements. Consequently, sacredness attributed to the institutions diluted. In GTR institutions, Head Master performed dual roles names (i) Head Master for the institutions and (ii) warden for the feigned hostels. The dual responsibility of the HM caused serious dent in his teaching role especially, in two teachers' primary level schools. As a consequence, such institutions virtually managed by a single teacher with adverse repercussions on teaching and the students were worst affected. Variation in staffing pattern both in teaching and nonteaching staff noticed between institutions run by the government and private aided despite the fact both type of institutions prepared the students for common public examinations.

In tribal land space, drinking water associated with many diseases and regarded as the serious health threats. Among various sources of drinking water, street tap connected with OHT was the major source. About 25 per cent of the respondents' suffered water borne diseases like diarrhea, jaundice, cold and fever. Of the 640 sample respondents' 473 did not have latrine facility within their premises and practiced open defecation. Also, the sample villages did not have network of underground drainage system due to undulating terrain. It may be observed, due to lack of in-house drainage facility, usage of water was barest minimum confined to washing vessels and had their bath and cloth washing near the water bodies which were located outside their households.

PHC provided accessible, affordable and available basic health care to the inhabitants of the hills. However, the number of PHCs established in the hill groups of the study area was 27, despite the fact it had the high concentration of tribal population in the State.

Although 68.1 per cent of sample respondents are covered with State Health Insurance scheme, not even one respondent had utilized the facility. It is not due to lack of serious ailments in the study area, but perhaps due to lack of specialized treatment facilities at the government run health care units across the hill groups and absence of recognized private health care institutions in and around the hills. Lack of awareness of the usefulness of the card might also be a reason. The inhabitants of the hill groups got treatment under various sources, though 59.5 per cent of them from government health care units. The respondents used the traditional system of medicine that accounted for 11.3 per cent. A very insignificant percentage (8.7) treated through private outfits.

The inhabitants of the Eastern Ghats were basically cultivators (80%) but unabated fragmentations of operational holdings, and dry land agriculture limited their period of agronomic practices. In the absence of alternate income sources in and around their habitat, they adopted multi-throng strategies even to maintain their wellbeing and improve their economic conditions. There was no perennial source of irrigation across the hill groups and seasonal rains were the main source of irrigation. Out of 512 sample holders, 141 (27.5%) had some kind of irrigation sources. Of them, wells both open and bore types constituted 85.1 per cent.

Lack of infrastructure facilities such as road, transport and milk chilling units and milk cooperative societies had drastically impacted the income from livestock. As far as the government role, TSP was the flagship scheme for the improvement of the tribal population and State government had identified tribal concentration in 10 pockets of the study area. But in the plan focused was not given for livelihood promotional activities. Allocations were made without taking into the aspirations and needs of the inhabitants of the ITDP projects

Suggestions

1. In the identified ITDP pockets, a few villages located in plains or under the foothills were included while a few other hamlets located in the uphill left out. As development strategies applicable to hilly areas differ from plains, an exercise may be attempted to demarcate the ITDP areas covering all the hamlets / villages in the hill groups of the Eastern Ghats.

2. The multi-fold administrative arrangements over the hill villages may be streamlined so that inhabitants of the hills like their counterparts in other areas of the same hill stand to gain tribal tag and associated welfare benefit applicable to ST communities.
3. The middle and primary level GTR institutions were used both as educational institution as well as hostels. As this had diluted the sacredness of the education, it is desirable they may be separated.
4. Road connectivity between block headquarters / urban centers was a serious handicap in the development perspectives of the hill villages. In almost all the hill areas, mud roads were widened under 100-days employment scheme. But lack of maintenance coupled with frequent usage of heavy vehicles had caused damage to several roads. The infrastructure thus created need not be wasted. Hence formation of BT roads on those muds roads in a phased manner is suggested.
5. Quarters with reasonable facilities for the teachers and medical officers of the PHCs /para medical staff will have to be created to prevent unauthorized movement of the functionaries.
6. PHCs across the hill groups at best served as dispensaries distributing medicines and tablets and patients with serious ailments referred to higher health care units outside the hills. This tendency need to be stopped and attempt made wherever possible to equip a unit with specialists to undertake surgical interventions or at least extended their services to the hill units on fixed date of a week.
7. Herbal based traditional medicine to be encouraged and a section might be started in PHCs.
8. TSP may be formulated from the grass root level following the bottom up approach. Present practice of thrusting uniform schemes across all the hill groups may be dispensed with.
9. Life style diseases like diabetics and hypertension widespread across the hill groups and the clinical lab facilities to be strengthened in PHCs to meet the upward swing of these diseases.
10. The para medical staff and ASHA workers may create awareness of the state health insurance scheme so that the inhabitants of the hill access the benefits of the scheme.

Conclusion

The study reveals that major inhabitants (97%) belonged to Malayalai community. Health wise, PHCs across hill groups at best served as dispensaries distributing medicines and tablets; and patients with serious ailments referred to higher health care units outside the hills. The literacy gap between ST and general population varied from 10.2 points to 29.5 points and the GTR institutions were established in the hill groups without relation to its tribal population. As far as livelihood, the inhabitants were cultivators but the dry land agriculture limited their period of agronomic practices. In the absence of alternate income sources in and around their habitat, they adopted multi-throng strategies even to maintain their wellbeing and improve their economic conditions.

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