

CHAPTER - I
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Statement of the Problem

Diverse resources of the earth, increasing population, pressure on resources and man's differing cultures or ways of life are the major inter-related factors which involve in the interaction pattern of man with his planet. In the course of technological development by increasing his range of action, man has intervened more and more with the rest of the organic world. The increasing population and its wants have imposed severe constraints on the natural resources. Constant pressure connected with the increasing requirements for food, fibre and fuel for human, fodder for cattle population and raw materials for industries have led to an increasing rate of destruction of the forests since the turn of the century.

Historically, a tribal community as an isolated group confined mostly to forests or to other remote regions away from the mainstream populations. Forests remained their chief source of livelihood, but at later stages of their development they switched over to settled agriculture and to other manual jobs. As their requirements were limited and the resources including land were abundant they evolved a system of property relations and ownership pattern different from that of non-tribal population. They also evolved a unique culture and life style, traditions and practices, which could be quite often referred to as 'backward' and 'irrational' by outsiders.

The forest ecosystem and tribal life.

The ecosystem of forest has an intimate relationship with the life of forest dwellers. Their cultural pattern and economic activities such as food-gathering, pastoral life, cultivation, handicrafts and other labour activities are largely based on the forests. Various forest policies and developmental plans, implemented during the British period and after the Independence, have disturbed the fragile life support system and self reliant autonomy of these forest dwellers (Mukherjee, 1997)¹. Such impacts have triggered changes in the life styles of these communities and brought them to a stage of being neither in the modern life style nor of remaining unchanged to their original mode of life.

Although, the post-Independence policies have provisions to the protection and development of the tribal people, the indigenous age-old customs and their way of life have already been threatened to a great extent. Astonishing communication network and the economic oriented interactions of adjacent non-tribal communities (Mukherjee, 1955)², also played a vital role in the intrusion of modernity to the tribal settlements (Shashi, 1995)³. But it is a fact that most of the tribals are not able to withstand the onslaught and demands of the modern economic and social forces (KFRI & KFD, 1994)⁴.

Thus, their survival continues at the cost of over consumption of resources and exploitation human values. Understanding the extent of such situations requires knowledge of the existing social set up, human values, equipment of artefacts, interaction patterns and the utilisation pattern of the surrounding resources. However, such up to date scientific information is lacking for most of the Western Ghat regions where the tribals had been anthropologically subscribed to but their role in the forest eco-system is not sufficiently elucidated (Nair & Jayson, 1988)⁵.

Forest dwelling tribes of Kerala

On the average 26.48 percent of State's geographical area is under the forest cover, when the national average of forest cover required is 33 percent. Some of the important forest dwelling tribes in the state are the Cholanaickans, Irular, Kadars, Kuruchians, Kurumbas, Kanikars, Muthuvans, Mannans, Malavedans, Malapandarams, Paniyas, Hill Pulayas, Uralis and Ulladans (Govt of Kerala, 1986)⁶. According to 1991 census Scheduled Tribe population in Kerala is 3,20,967, and more than 50 percent of them live in the forests and still depend on it for means of livelihood.

TABLE 1.1
DISTRICT WISE AREA OF FOREST COVER AND TRIBAL POPULATION
(1991 CENSUS)

Sl.No	District	Forest cover (1991 Assessment) (Areas in acres)				Tribal population 1991			
		Dense	Open	Total	% cover	Male	Female	Total	%
1	Alappuzha	7	-	7	0.37	1407	1394	2801	0.87
2	Kannur	-	-	-	-	9167	9076	18243	5.68
3	Kozhikode	1322	356	1678	17.96	2654	2753	5407	1.69
4	Wayanad	62	24	86	-	57386	57583	114909	35.82
5	Kasarode	-	-	-	-	14841	14442	29283	9.1
6	Ernakulam	251	21	272	11.29	2551	2390	4941	1.54
7	Kottayam	-	-	-	-	8902	9094	17996	5.6
8	Pathanamthitta	-	-	-	-	3459	3463	6922	2.26
9	Malappuram	724	103	827	22.50	3213	5392	10555	3.29
10	Palakkad	945	428	1373	31.26	17927	17538	35465	11.05
11	Kollam	1755	510	2265	49.02	1943	1941	3884	1.21
12	Thrissur	807	42	849	23.00	1990	2061	4051	1.26
13	Thiruvananthapuram	317	77	394	17.97	7860	8321	16181	5.04
14	Idukki	2226	310	2536	30.10	25512	24757	50269	15.66
	Total	8416	1871	10287	26.48	160812	160155	320967	100.00

Source: 1. Govt. of India, The State forest Report, 1991. Forest Survey of India (Ministry of Environment and Forests, 25, Subhash Road, Dehra Dun)
2. Census of India, Kerala, 1991.

Tribals are directly depending on forests for survival and for their requirements ranging from medicine and nutrition to fuel and recreation. About ten percent of the population of India are forest dwellers and over 70 percent of them belong to the Scheduled Tribes (Deshpande, 1992)⁷. Majority of the tribals are predominantly forest dwellers, are poor, illiterate and unexposed to the outside world. They live in clusters of villages mainly in the hilly areas, dependant primarily on shifting cultivation and non-timber forest products (NTFP). In other words, they depend on the forests for their very survival (Fernandes et. al, 1988)⁸.

The history of forest legislation in India begins with a Memorandum issued by the British in 1855. Later in 1878, this was amended and divided the forests into Reserve, Protected and Village forests.(Govt. of India, 1952)⁹. Government restricted the movement of the forest dwellers through this Act, and empowered itself to prohibit any act that damaged trees, even on lands that did not belong to it.

But this law was not implemented in the area which later formed the state of Kerala. Till 1896 the forests of this area remained in a state of nobody's or anybody's property (Adriel, 1961)¹⁰. The extraction of timber from forest passed through different stages from that in olden days when 'each man cut and utilise whatever he wanted', to Govt. levying a nominal fee for every tree or candy of timber removed and finally to the system of extracting timber by government agencies and sale in government depots (Adriel, 1961)¹¹.

Deforestation: Causes and its impact on tribals

The decrease in the land-man ratio has brought pressure on forestland for agricultural, industrial and settlement needs. Massive deforestation and exploitation of other natural resources have taken place for the purpose of industrialisation, which is seen as a solution to all economic and social problems. During the period from

1951 to 1979, it is estimated that about 4.5 million hectares of land was deforested for non-forestry purposes in India. Estimates have shown that the annual rate of deforestation was about 0.15 million hectares during 1950 to 1970 and it may have increased to about 1 million hectares since the later part of the seventies (Joshi, 1987)¹².

Human – environment relations are confronted with major problems due to degradation of forests. Local communities mainly the tribals are usually the most immediate and the adversely affected by such degradation. Millions of people live inside or in the periphery of forestland depending on its resources for their subsistence. Of these, the tribals are the numerically dominant group. With the degradation of forests, life of these local communities has deteriorated as the socio-economic and cultural systems of these people are inter linked with the ecology of the forest (Anitha and Muraleedharan, 1995)¹³. During the period from 1850 to 1980, above 43 percent of the forests in the South Asian regions were cleared for various purposes. In India, the current deforestation rate is 1.5 – 2.0 million hectares per year (Poyyamoli and others, 1992)¹⁴.

The tribals who once lived in isolation, deep in the forests and away from the mainstream of life, had their own traditional social fabric and culture. Subsequently, contact with outsiders developed, which had harmful as well as progressive effects on the tribal economy. While on the one hand, there was an upheaval in their traditional outlook as they were exposed to the alien features of modern life which brought about changes in their social, economic and cultural life.

Deforestation particularly affects the tribals and their ecosystems as follows (Agarwall and Sunitha, 1990)¹⁵.

- Reduction in soil cover, leading ultimately to the major ecological disasters such as reduction in bio diversity, increased soil erosion, droughts, floods, albino and CO₂ emission adding to global warming, reduction in evapo-transpiration, cloud and fog stripping and condensation nuclei (Mehor-Homji, 1991)¹⁶.
- Destruction of traditional life-support systems of the tribes and the consequent cultural alienation.
- The conflicts between the 'tribal' (for whom the forest is a life supporting system) and the 'outsiders' (for whom forest is only a source of raw materials) leading ultimately to the alienation/displacement of tribal people for example, development projects for national interest like big dams, mining operations, industries and roads.
- Land alienation consequent on total lack of bargaining power, reduction in income and the lands taken over by the money-lenders and the middlemen.
- Poverty, indebtedness and bonded labourers - poverty – environmental nexus.
- Physical deterioration by a fall in the nutritional content of the food

There are forty eight tribal communities throughout Kerala, of which thirty-five are scheduled tribals (Appendix 1.1) and the remaining are unrecognised tribal communities (Appendix 1.2). In the past, the tribes remained isolated from the mainstream of national life perhaps due to their innate desire for self-sufficiency. They retained their traditions and values even though they were found inconsistent with modern life. They used the available natural resources sparingly and with utmost care. They practised shifting cultivation and subsisted by the collection of forest produce. The tribals remained beyond governmental control for long due to their inaccessible and perilous location. Most of the tribal communities are at various stages of transition. They have discarded their traditional way of life of hunting and

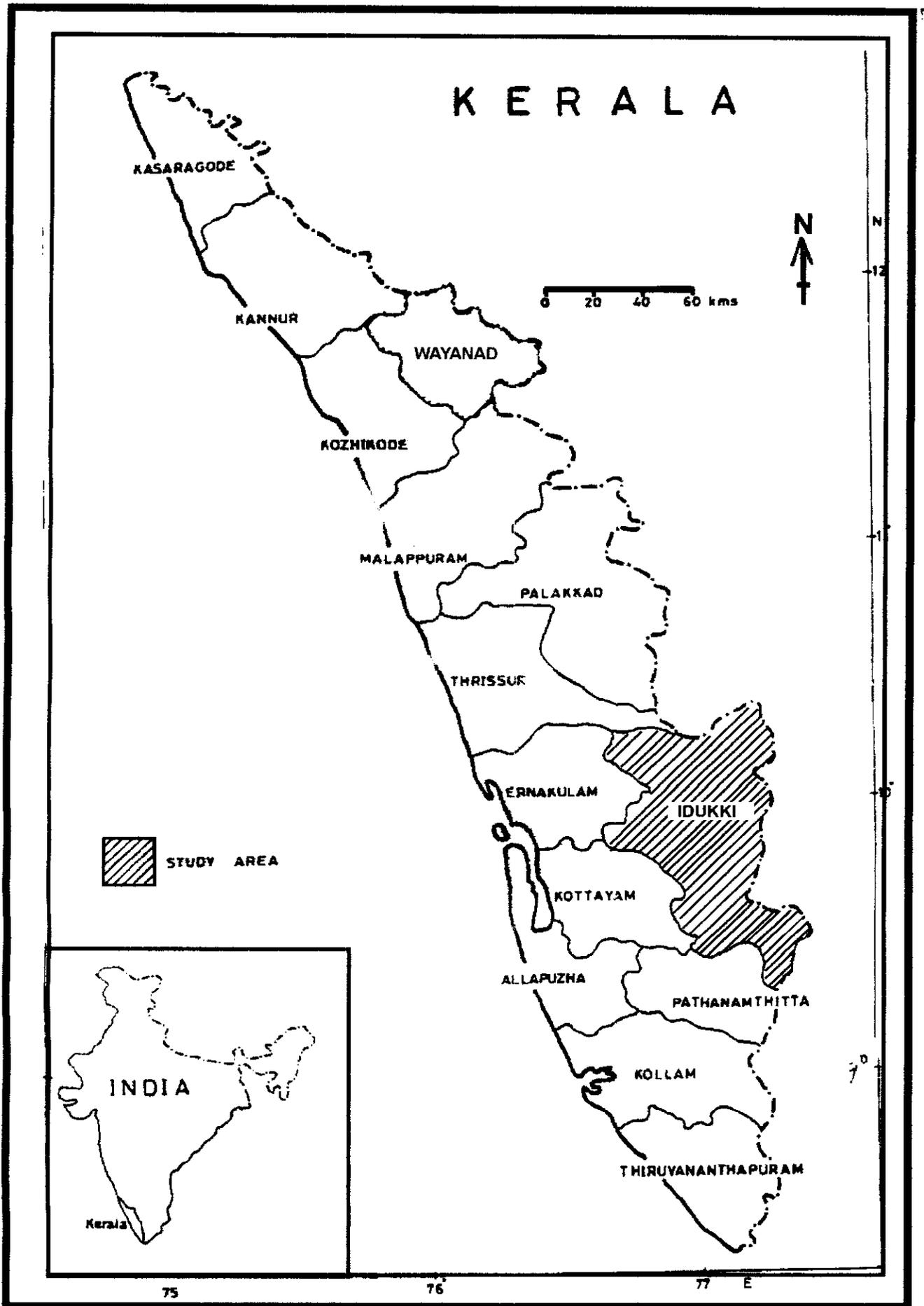
gathering to a great extent and have more or less settled down as cultivators. They however, lack the desire to amass wealth and lead a contented life if they have enough to eat. They are thus a vulnerable community.

The most prominent problem faced by the tribals was the progressive land alienation and consequent proletarianisation* and the large scale influx of settlers from the plains of Malabar and Travancore (Tharakan, 1978)¹⁷. The impact of deforestation on land use changes varies from region to region and also within a region. It also affects different sections of the society in different ways. However, much attention has not been paid to record these changes and their possible impacts on the socio-economic conditions of the tribals, who constitute the most under privileged section in the society. An adequate forest cover is ecologically necessary to sustain cultivation on a hilly terrain. Ruthless exploitation of forest wealth and subsequent change in the land use resulted in economic distress and social deprivation of the tribal people who depend on the forests in a multitude of ways.

In order to understand the full implications of the problem, a micro level study was considered most appropriate. Idukki district (Map 1.1) was selected for intensive study for two reasons. Firstly, there has been a high rate of deforestation and consequently a change in income from agriculture in the course of the last century. The percentage of forests to total geographical area of the district in the early decades of the century clearly validates this point. Chattopadhaya (1984)¹⁸, estimates that Idukki district lost 22 percent of the forest area between 1905 and 1965 and a further 32 percent between 1965 and 1973. This has adversely affected the socio-economic

* Proletarianisation: Reduction to the lowest economic status where labour is sold in the absence of own means of production.

Map (1-1) Location of the Study Area



conditions of the tribals living there. Secondly, this district has the second largest concentration of tribal population in the state.

Objectives

The study aims at examining the changes that have occurred in the deforestation of Idukki district and its impact on the socio-economic conditions of the tribal. The study comes to sharper focus on the following specific objectives.

1. To trace the history and modes of deforestation in Idukki.
2. To analyse the tribal development and the socio-economic conditions of the tribal communities in Kerala.
3. To study the impact of deforestation on tribals in the study area.

Methodology

Both primary and secondary data have been utilised for the study. The available historical records and gazetteers were consulted. An attempt has been made to put the historical information in an analytical framework which contribute to the analysis of deforestation and socio-economic data collected during the field survey. In the face of unavailability of certain original historical records and published materials, the study relied upon primary data and sampling design. For the collection of primary data a multi-stage stratified random sampling method was adopted while selecting the samples, the unit of which is household.

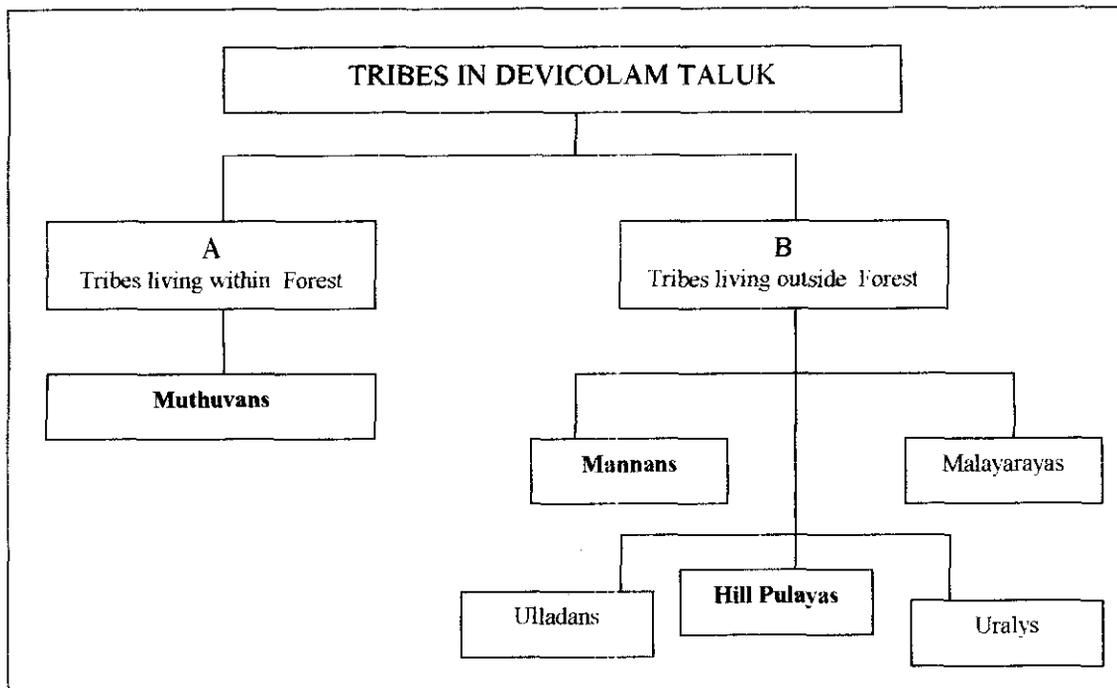
The collection of primary data was confined to a single taluk in Idukki district. Of the four taluks in the district, Devicolam taluk was selected purposefully due to the following reasons.

1. Devicolam is the largest taluk in Idukki in terms of geographical area (1,774.2 Sq. Kms)

2. Population of tribals is the highest in Devicolam, represented by all communities in the district.
3. Large scale deforestation has occurred in this taluk.

The major tribal communities in Devicolam taluk are the Hill Pulayas, Mannans, Muthuvans Malayarayas, Ulladans and Uralys. Considering the nature of the study, they are classified into two categories on the basis of forest living.

DIAGRAM - 1.1
TRIBES IN DEVICOLAM TALUK



Participant observation method was employed in the study to gather data from the selected tribal communities. In addition, data relating to the various parameters were collected using a structured questionnaire.

The socio-economic parameters selected in order to facilitate a comparative analysis of the standard of living of the selected communities are land ownership, cropping pattern, income, employment, housing structure, literary level, social

organisation, custom and rituals, healthcare and medicine and the degree of dependence on forests.

A pilot survey and pre-testing of the questionnaire was conducted followed by Primary data collection during the period August 1997 to November 1998. Extensive field visits were conducted and discussions were held with the tribal leaders, local communities, the taluk officer, panchayat and village officers, tribal development officers, tribal extension offices and various other departmental officials. A historical overview of deforestation in the High Ranges since the beginning of the eighteenth century could be attempted using the data obtained from the records and published accounts of various Departments.

Tools and Techniques

Simple statistical tools were employed for the analysis of the data. In order to measure the socio-economic standards of the selected communities, conventional yardsticks like income, employment and the extent of land holdings were used.

For a comparative analysis of the ownership of land, the three selected tribal communities namely, the numerically dominant Hill Pulayas, Mannans and Muthuvans have been classified into marginal holders (0-1.0 ha), small holders (1.0 – 2.0 ha), semi-medium (2.0-4.0), medium (4.0-10 ha) and large holders (10.0 –50.0 and above ha). This classification is in accordance with the pattern followed by the Department of Economics and Statistics. In this study, to project the landlessness prevalent among the tribes, a no land category has also been added.

Assessment of the impact of deforestation on the social life of the tribals was done through intensive interaction with the heads of families, and the older generation among the selected communities, non-tribals and various resource personnel.

Limitation of the study

The study is confined to the socio-economic conditions of three selected Tribal communities and the impact of *deforestation* on their welfare. Analysis of the identified parameters is only to the extent that contributes to the overall objectives. Detailed research on any of those parameters is outside the scope of this study. Absence of historical records on the origin and the life styles of the selected communities during the ancient period and the illiteracy among the sample population came in the way as difficulties during the progress of the study. However every attempt has been made to overcome these shortcomings.

Structure of the thesis

The thesis is presented in eight chapters. The second chapter is a review of related works. Chapter three provides an overview of the tribal development and the socio-economic status of the tribal communities in Kerala. Chapter four contains the profile of the study area and the selected tribal communities, covering the early history, physiography and climatic conditions, geological conditions of the soil, important rivers, forest cover and demographic characteristics of the District. This chapter also covers the way of life, traditional practices, settlement pattern, migration, customs and rituals, of the selected Tribal communities.

The fifth chapter gives a macro view of the nature of deforestation in Kerala. A historical overview of deforestation and the process of settlement and development that took place over centuries have been presented in Chapter six. The immigration in Idukki is traced, which is a decisive factor in the proletarianisation and displacement of the tribal. Subsequent sections focus on the periods from 1750 to 1860 (the early phase), 1860 to 1940 (the plantation era), and 1940 to 1965 (the settlement phase).

To supplement the above, a micro level analysis of the present socio-economic status of the selected three communities based on data gathered from the samples is done in the seventh Chapter. The summary of the major findings and conclusion of the study are brought together in the eighth chapter.

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