

**HUMAN DEVELOPMENT RESEARCH AND CO-ORDINATION UNIT**

**STATE PLANNING COMMISSION  
EZHILAGAM, CHEPAUK, CHENNAI 600 005.**

**DISTRICT HUMAN DEVELOPMENT REPORT  
THE NILGIRIS DISTRICT**

**DHAN Foundation  
Madurai**



Date: 25.02.2011

## **Foreword**

Many yardsticks have been applied to evaluate and measure the progress found in the economies of different countries. Human development approach has been evolved by the United Nations in 1990 to ascertain the impact of economic growth on poverty, income and employment. Since the publication of the Human Development Report in 1990, Human Development Index has been widened by including life expectancy, literacy, per capita income, maternal mortality, infant mortality, gender equality, environment issues, cultural and language rights. So far 20 Human Development Reports have been published by UNDP. The Union Planning Commission published its first National Report in 2001, in which Tamil Nadu's achievements in education, health, family welfare were highly commended. States in India have also been publishing Human Development Reports following the UNDP model. To ascertain the inter-district inequalities found among the population and to take appropriate policy intervention programmes, district human development reports have been published by many states in India. This approach may yield good results to design appropriate policies and strengthen the micro level and micro level area planning to address the crucial issues of the backward regions.

The State Planning Commission with the cooperation of the UNDP and Union Planning Commission is seeking the assistance of the academia, scholars and policy makers to study, analyse and prepare reports on human development of different districts. These studies would be helpful to design and apply meaningful intervention programmes to alleviate poverty and to ensure social equalities and social justice in the backward regions.

Already Human Development Reports for Cuddalore, Nagapattinam, Thiruvannamalai, Dindigul, Sivaganga districts have been published by the State Planning Commission in 2009. I feel happy that Human Development Reports for Nilgiris, Dharmapuri and Kanyakumari are being published in 2011.

I commend the services of the District Collectors and officers of District Administrations for the help they rendered to collect data and required information in the preparation of the District Human Development Reports. I convey my thanks to the Chief Secretary, Principal Secretary, Planning Development, Principal Secretary - Member-Secretary, State Planning Commission and senior officers of the Steering Committee for their valuable suggestions in this regard. I congratulate the efforts of the HDRC team at the Planning Commission, Department of Economics, University of Madras and DHAN foundation, Madurai.

பிணியின்மை செல்வம் விளைவின்பம் ஏமம்

அணியென்ப நாட்டிற்கிவ்வைந்து - குறள் 738

(Rich yield, delight, defence and wealth

Are jewels of land with blooming health – Kural 738)

Surprisingly Thiruvalluvar had elegantly pleaded for the enhancement of human development indices of the current era about 2000 years ago and he was of the firm opinion human development alone constitute a vibrant society and a nation. In this context, the District Human Development Reports of Nilgiris, Dharmapuri and Kanyakumari will form a milestone in the overall planning and development of the state of Tamil Nadu.



**(M.NAGANATHAN)**





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## **FOREWORD**

“Human Development” is an alternative development thinking which puts the people at the center of development, by expanding their choices and enhancing their capabilities. With the focus of development shifting to human development globally, many countries have also brought out Human Development Reports including India.

Tamil Nadu released its first Human Development Report in 2003. Taking this concept of Human Development further, the State has prepared District Human Development Reports for five districts with the funding from United Nations Development Programme and the support of the Union Planning Commission, under the Project “Strengthening State Plans for Human Development” and released them in October 2009. These reports served as a tool to identify the status of development of the district in human development framework and prescribe appropriate remedial actions.

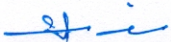
Encouraged by the response of the State, the Union Planning Commission and UNDP, provided funds for taking up this exercise in three more districts – district with the least HDI ranking, district with the highest HDI ranking and district with unique geographical terrain. Accordingly, the Human Development Reports of Dharmapuri District,



Kanniyakumari District, and The Nilgiris District have been prepared. These reports measure the status of human development in terms of literacy, health and income parameters in the districts. The flow of Government funds for social sectors into the districts have also been analysed which is a unique feature of these reports.

All these attempts will lead to in-depth knowledge of the intra district disparities, with understanding of the bottlenecks involved so as to enable reorientation of the development strategies. These reports will serve as a useful tool for inclusive growth of the districts.

I place on record my sincere gratitude and appreciation to all the stakeholders for their contributions in bringing out these reports.

  
242 2011  
(K.ARULMOZHI)





### **FOREWORD**

The first Human Development Report in 1990 stated that "People are the real wealth of a nation". Its relevance has not diminished. The development strategy envisaged by the Tamil Nadu Government gives importance to equity and social justice besides economic upliftment.

There is no single path for sustainable progress for the simple reason that each region has its own specific issues. The State Planning Commission has been analysing and preparing reports of different districts under the UNDP-UPC assisted project by utilising the services of researches and scholars.

Nilgiris District is distinct from other Districts especially on account of its the geographical conditions. Nilgiris was declared as the first biosphere reserve of India. The percentage of Scheduled Tribe population is the highest in the state. It is also home to six primitive tribal groups. Any planning has to incorporate these varied issues for a balanced development.

I thank the State Planning Commission for the continuous monitoring and guidance in preparation of the District Human Development Report for Nilgiris District. I appreciate the researchers of DHAN Foundation, Madurai for the systematic collection of data and the analysis thereof.

  
(ARCHANA PATNAIK)

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<b>Chapter No</b>	<b>Chapter Name</b>	<b>Page</b>
<b>1</b>	<b>District Profile</b>	<b>1</b>
<b>2</b>	<b>Flow of Government Funds</b>	<b>9</b>
<b>3</b>	<b>Health</b>	<b>19</b>
<b>4</b>	<b>Literacy and Education</b>	<b>33</b>
<b>5</b>	<b>Livelihood</b>	<b>73</b>
<b>6</b>	<b>Environment</b>	<b>121</b>
<b>7</b>	<b>Summary</b>	<b>125</b>

# Chapter 1

## District Profile

### 1.1 Introduction

The concept of Human development indicates that the basic purpose of development is to enlarge people's choices and build human capabilities. By 'choices', it refers to the following: greater access to knowledge; better nutrition and health services; secured livelihoods; security against crime and physical violence; satisfying leisure hours; political and cultural freedoms; sense of participation in community activities

The objective of development is to create an enabling environment for people to enjoy long, healthy and creative lives with freedom and dignity. The Human Development concept places human beings and their wellbeing at the core of development thinking and emphasises that people's development is an end in itself and not a means for development. Central to human development are participation, especially of the vulnerable sections in the process of change and equity in development gains.

The Human Development concept focuses on the diversity of human needs by highlighting that people do enjoy, cherish and value self-respect, dignity and a sense of belongingness to one's own community apart from the income they earn. It considers efficiency, equity, freedom and empowerment, and the sustainability as the four important pillars. These pillars are considered as prerequisites for achieving the human development outcomes.

The characteristics of human development concept reveal that it is dynamic and that it keeps evolving; it is multidimensional; it is inter-disciplinary and pragmatic in nature. Overall, the concept of Human Development emphasises on the three aspects: building of human Capabilities; enhancement of Freedom; process of achieving Outcomes.

The progress in the human development framework is judged not by the expanding prosperity of the rich, but by how well the poor and socially disadvantaged are faring in society. Implicit in this perspective is not only a strong concern for equity and social justice but also a strong conviction that improvements in the wellbeing of the poor are fundamental to ensuring a better life not just for them but for all.



As the 73<sup>rd</sup> and 74<sup>th</sup> constitutional amendments mandate the preparation of district level plans, it is envisaged that this DHDR will give an opportunity for preparing district plans from a human development perspective. In other words, it would do so by analysing the status of human development attainment and key human development challenges faced with a special focus on efficiency of delivery systems and financial allocations. The DHDR is viewed as an instrument for policy making on social development expenditure to improve the HD indices.

The specific objectives envisaged through the DHDR are: to provide a comprehensive view of the status of human development and gender development at the district level; to highlight the critical concerns and issues so as to examine emerging challenges and also solutions; to highlight and analyse policy intervention of government in the arena of human development in the district, to improve human development and gender development at the district level; to promote deeper understanding of the challenges; to advocate policy dialogue in recognition of the need for equity, people centred policy focus and to create an environment for achieving human development.

Above all, the preparation of a district human development report would mark the beginning a process whereby district plans are designed and implemented through a human development prism.

## **1.2 Nilgiris – Choice of the district**

The Nilgiris is one of the hilly districts which attracts many tourists from India, which in turn accelerates the economy of the district to a considerable extent and increases the earning capacity of the people in the district. Ooty otherwise called Udhagamandalam, capital of the district, is the queen of hill stations in India. The district is located in the Western Ghats, surrounded by Karnataka on northern side, Kerala by western side and Coimbatore district by southern side. The district has waterfalls, rivers and streams. Natural forest wealth is a key factor for the beauty of the district. But it is one of the disaster prone districts affected by the natural calamities such as landslide, forest fire, and heavy rainfall.

The Nilgiris performs well in relation to life expectancy at birth (LEB), positioned within top five districts. Regarding Human Development Index (HDI), The Nilgiris ranks 6<sup>th</sup> among the thirty districts in Tamil Nadu (SHDR, 2003) next to Coimbatore, which is 0.685. Similar is the case with Gender Development Index (GDI), which is 0.686. Both HDI and GDI are greater than those the state (0.657 and 0.654) and the country (0.571 and 0.553). The performance of HDI and GDI is the same, which shows gender equality in Human Development.

The district ranks in top five districts regarding female literacy rate and life expectancy at birth, which show the importance given by the district to female literacy and health. Within the classification of high, medium and low HDI and GDI values, The Nilgiris falls under the high faring category. Out of 14 districts with HDI rank higher than the per capita GDP rank, The Nilgiris falls into 6<sup>th</sup> rank, implying that in the district higher income has been converted into human development very effectively.

### **1.3 History**

The history of Nilgiris dates back to eleventh and twelfth century. The Name 'Nilgiris' means Blue hills (Neelam – Blue and giri – Hill or Mountain) the first mention of this name has been found in the *Silappadikaram*. There is a belief that the people living in the plains at the foot of the hills, should have given the name, the Nilgiris, in view of the violet blossoms of 'kurinji' flower enveloping the hill ranges periodically. The Nilgiris was part of the Kingdoms ruled by most of the rulers of South India viz. the Cheras, the Cholas, the Pandiyas, the Rashtrakutas, the Gangas, the Pallavas, Kadambas, and the Hoysalas. The illustrious king of Hoysalas Vishnuvardhana (A.D. 1111-1141) had conquered Nilgiris and turned the Blue Mountains into a city.

The Nilgiris was part of the Vijayanagar Kingdom from 1336 to 1565. After its fall in 1565, the rulers of Mysore gained control over the Nilgiris. Later it came under the rule of Hyder Ali and Tipu Sultan (1760 to 1799). A Treaty of Srirangapattanam ceded the Nilgiris to the East India Company in 1799. However, this beautiful mountainous region was unknown to the British until 1818.

It was John Sullivan, an Englishman and Collector of Coimbatore, who was destined to have greater cultural impact on the Nilgiris hills than any other single person, Indian or European. He was a lover of Nature and had propensity for agriculture and gardening. He was the first European official to build a house and settle there.

He introduced a number of varieties of exotic plants from Europe and South Africa, which form part of the Nilgiris flora today. He is responsible for developing the Nilgiris and Udthagamandalm in particular.

The Ootacamund was further developed by Lord Lytton, Governor General of India who visited the hills in September 1877. He loved the rainy and muddy roads in Ootacamund.



#### **1.4 Geography and Administrative Set-up**

The district is situated in the elevation of 900 to 2636 metres above the Mean Sea Level. Its latitudinal and longitudinal dimensions are 130 KM and 185 KM. The topography is rolling and steep. About 60 per cent of the cultivable land falls under the slopes. The general climate condition is cool. The temperature ranges from minimum 10 degree Celsius to 29.8 degree Celsius (2007-08). The district enjoys both southwest monsoon and northeast monsoon. There are 16 rainfall-registering stations in the district. The normal annual rainfall ranges from 1500mm to 3000 mm. During the year 2008-09, it recorded as 1872.4mm.

The geographical area of the district is 2,543 sq.km. The district has six taluks, which are located at the altitude ranging from 3000 feet to 6500 feet. The peak of Doddabetta is the second highest elevation in south India with an altitude of 2595 meters. There are other hills namely Elk hills, Devarshola hill, Hulical hill and Cairn hill. It has a number of botanical gardens in different tourist spots. The famous sanctuary – Mudumalai Tiger Reserve is located in the district. Wellington is the only cantonment in the district.

There are two revenue divisions, 6 revenue taluks and 55 revenue villages in the district. It has 11 Town panchayats, 35 village panchayats, 4 panchayat unions and 4 municipalities as part of the development units.

#### **1.5 Demography**

The Nilgiris has the population of 7,62,141 (census 2001) with the male population of 3,78,351 and female population of 3,83,790 with sex ratio of 1016 which shows the gender balance in the district, which is higher than the state and the country. The decadal population growth in the district is 7.31 per cent. The population density varies, but the average population density is 300 per sq.km. The rural population is 3,07,532 and the urban population is 4,54,609. It shows that the district is characterised by more of urban culture. However, the decadal population growth in rural areas is negative (- 16.02 per cent) and very positive in urban areas (22.26 per cent) which implies that the migration is high from rural areas to urban areas. The Scheduled Caste population ranges from 24.8 per cent to 39.3 per cent among the taluks and Scheduled tribe ranges from 0.20 per cent to 7.60 per cent. It can be inferred that though the district is characterised by forest and hill area, the ST population is very low in the district. The people in the district speak nine languages mostly south Indian. The literacy rate in the district is 71 per cent (as per 2001 census).

## **1.6 Religion**

People of different religions such as Hindus, Christians, Muslims, Sikhs, Jains and Buddhists live in the district. Of all the religions, as per 2001 census Hindu population more with 599047 and it constitutes 78.6 per cent, Christians with 87272 constitute 11.45 per cent, Muslims with 72766 constitute 9.54 per cent and other religions account for 0.41 per cent. The district has a number of more Hindu temples and churches with some mosques.

## **1.7 Agriculture**

The district enjoys both Northeast and South- West monsoon, which favours cultivation of various crops. The crops cultivated in the district are both high yielding and local rice varieties. Mostly potato, pepper, garlic, ginger and orange are being cultivated. In addition, cold vegetable crops such as cabbage, carrot, beetroot, radish, peas, beans, cardamom and cloves are being cultivated. The climate is highly favourable for raising Eucalyptus, acacia, rubber, lime grass, silver oak and seegai.

The main source of irrigation is wells (779) which irrigate about 300 hectares of agriculture lands. Moyyar river is also a source of irrigation. There is no other major source of irrigation except wells. The area under agriculture is 77520 hectares. The land under current fallows and other fallow land constitute 10161 hectares (2008-09, Handbook). Sericulture activities are taken up in a small scale in four blocks.

## **1.8 Animal Husbandry**

According to the district handbook 2008-09, the district has the livestock population of cattle – 48875, buffalo – 2542, sheep – 3671, goat – 27785 and poultry of both broilers and layers is 90493. The data reveals that the people depend on the livestock for their livelihoods; moreover, the climate is suitable in rearing the animals. The veterinary services are made available through two veterinary hospitals and 12 veterinary dispensaries. One clinical centre is available in the district. The milk production during the flush season is about 66 lakh litres and during lean season is about 26 lakh litres in the district. There exist 102 milk cooperative societies and one milk chilling plant for milk collection, process and sale.

## **1.9 Fisheries**

In the district, the inland fish production is 4228 tonnes (average catch) in four reservoirs. There is no private fish production unit in the district. Trout fish hatchery is maintained in crystal clear water of Avallanchi reservoir.



### **1.10 Forest**

The area under forest in the district is 142577 hectares of which the reserve forest belongs to 137192 hectares and reserved lands belong to 5777 hectares. The district produces different forest products such as timber – 9584 cu.metre, pulp wood – 6911 MT, wattle bark – 743.14 MT and other products such as fire wood, data leaves, eacham grass, Gall nut, Amla, soapnut and tamarind. Forest resources are good income sources for the district.

### **1.11 Industries**

Various types of industries are there in the district. There are 223 registered working factories with 126 registered trade unions. These factories provided 25.87 lakh mandays of employment during 2007-08. There are large scale, small scale and cottage industries, which generate employment for a large number of people in the district. Some of the important industries present in the district include Hindustan Foto Films, Needle Industry, Sterling Bio-tech Ltd, Tea factories, TANTEA, 17 INCO Serve tea factories and Cordite factory. The products of cottage industries and small industries are being sold through Khadi and Village Centres for about Rs 33 lakh in the district.

### **1.12 Tourism**

The Nilgiris has 21 tourist places, which attract tourists from other parts of the state and country, of which the famous places are boathouse, botanical gardens, valley viewpoints, waterfalls, wild life sanctuaries, and national parks. The Tourism is one of the important sources of revenue for improving the economy of the district.

### **1.13 Infrastructure**

Despite the fact there is high literacy and education rate which ranges from 85 per cent to 95 per cent, colleges are limited to four arts and science colleges and one engineering college in the district. The district enjoys good road connections of 109.2 km length of national highways (2005) and 114.6 km length of state highways. Panchayat union and panchayat roads are well connected with a length of 670.88 km. The district also has 184 km length of forest roads for better accessing of the forest resources by the people for their livelihoods.

The district exports important commodities such as coffee, Eucalyptus, flowers, herbs, vegetables, rice and wheat and imports tea, coffee, flowers and grams. It shows that the market with good transport facilities promote the growth of the economy in the district. There are 2435 non-commercial and 952 commercial motor vehicles in the district. The district provides railways

services through narrow gauge to the length of 46 km. It has eight railway stations. The district is connected with good postal and telephone services with other districts in the state.

There is no cooperative apex bank in the district, but it has different cooperatives for providing financial services to the people. The district has five registration offices providing registration services for land, asset etc. A few government housing schemes are implemented for Scheduled caste and Scheduled tribe communities and two major welfare schemes such as old age pension and marriage assistance are being implemented by the district. There are 96 commercial bank branches (belonging to 17 government banks and 10 private bank) and 74 primary agril. cooperative societies cater to the financial needs of the farmers and other people.

The district has 726 police and armed reserve personnel to provide security services for the people.

#### **1.14 Human Development Situation of the District**

As per the Handbook, 2008-09, the district registered the birth rate of 14.11, death rate with 5.2 and Infant Mortality Rate with 16.03, which is better than the state and the country. The per capita income in the district (1996-97, SHDR, 2003) ranges from Rs 10,000 – Rs 14,000 with other seven districts contributes one fifth of the state per capita income. The poverty level in the district is observed as less than 30 per cent (SHDR, 2003). The overall Gini Index in relation to inequality is 24.22, which is better than the state (28.2). Overall, the situation implies that the district is in a better position in Human Development indicators.





## Chapter 2

### FLOW OF GOVERNMENT FUNDS

Funds play a vital role in ensuring human development. The government is the important stakeholder to arrange funds in this regard. The present chapter deals with the status of the flow of government funds under different heads of social services and overall in the Nilgiris district during 2008-09 and 2009-10. Moreover, the behaviour of those variables has been compared with the state as a whole. This chapter gives an overview of the fiscal behaviour (particularly the expenditure) of the district, which helps to set the base for other chapters.

#### Details of Data Used

The fund flow data for the district was collected from the district treasury, which includes the expenditure made through the treasury only. The similar data for Tamil Nadu state was collected from the Reserve Bank of India portal<sup>1</sup>. As per the standard format, there were twelve specific heads of social services<sup>2</sup> under the development expenditure. But, keeping the available data and comparison with the state, the twelve heads of social services expenditure have been categorised under the following nine headings such as: (1) education; (2) medical, public health and family welfare; (3) water supply and sanitation; (4) housing; (5) urban development, labour and employment; (6) welfare of SC, ST and OBC, and social security and welfare; (7) nutrition; (8) other social services, information and publicity; and (9) relief on account of natural calamities. The expenditure data analysed in this chapter is at current prices. The data includes both plan and non-plan expenditure. It also includes both revenue account and capital account expenditure. The analysis is also made by excluding the expenditure on relief on account of natural calamities from the social sector expenditure.

#### Total Expenditure

The total flow of government funds to the different departments and programmes in the Nilgiris was Rs. 88823.88 lakh in 2008-09. It increased to Rs. 92223.23 lakh (3.83 per cent) in the next year. Similarly, the amount of total expenditure in the state as a whole was Rs. 5540256

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<sup>1</sup> <http://rbidocs.rbi.org.in/rdocs/Publications>. Retrieved on 30 July 2010

<sup>2</sup> Twelve specific heads of social services are: (1) education, art & culture; (2) medical and public health; (3) family welfare; (4) water supply and sanitation; (5) housing; (6) urban development; (7) welfare of Scheduled Castes, Scheduled Tribes and other backward classes; (8) labour and employment; (9) social security and welfare; (10) nutrition; (11) relief on account of natural calamities; and (12) other social services, information and publicity.

lakh in 2008-09, which increased to Rs. 5929528 lakh in 2009-10. It shows that the rate of increase in total expenditure in the district was lower (3.83 per cent) than that in the state as a whole (7.03 per cent) (Table-2.1).

**Table-2.1: Government expenditure with respect to the social services (excluding the component of relief on account of natural calamities) in the Nilgiris and Tamil Nadu during 2008-09 and 2009-10 (In Rs. Lakh at current prices)**

Sl. No.	Social services*	2008-09 (RE)	2009-10 (BE)	% Change in 2009-10 as compared to 2008-09
<b>The Nilgiris</b>				
1	Education	10597.10	11666.89	10.10
2	Medical, public health and family welfare	2372.96	4554.18	91.92
3	Water supply and sanitation	14.23	8.61	- 39.49
4	Housing	NA	NA	NA
5	Urban development, labour and employment	262.34	265.38	1.16
6	Welfare of SC, ST and OBC, and social security and welfare	2636.84	2719.58	3.14
7	Nutrition	1197.32	1436.73	20.00
8	Other social services, information and publicity	24.46	28.29	15.63
9	<b>Expenditure on social services</b>	<b>17107.88</b>	<b>21804.15</b>	<b>27.45</b>
10	<b>Rural Development</b>	<b>2809.60</b>	<b>2447.19</b>	<b>-12.9</b>
	<b>Total expenditure</b>	<b>88823.88</b>	<b>92223.23</b>	<b>3.83</b>
<b>Tamil Nadu</b>				
1	Education	931177	1063207	14.18
2	Medical, public health and family welfare	247427	299549	21.07
3	Water supply and sanitation	23615	19844	-15.97
4	Housing	131190	39782	69.68
5	Urban development, labour and employment	98248	114186	16.22
6	Welfare of SC, ST and OBC, and social security and welfare	390986	405587	3.73
7	Nutrition	149003	173828	16.66
8	Other social services, information and publicity	86391	61732	-28.54
9	<b>Expenditure on social services</b>	<b>2207994</b>	<b>2182069</b>	<b>-1.17</b>
10	<b>Rural Development</b>	<b>144700.03</b>	<b>146181.09</b>	<b>1.01</b>
10	<b>Total expenditure</b>	<b>5540256</b>	<b>5929528</b>	<b>7.03</b>

Note: 1. RE-Revised estimate

2. BE-Budget estimate

3. The given figures are at current prices and made through the district treasury only. It includes both plan and non-plan, and revenue and capital expenditure through the District Treasury. It does not include the amount of money, which directly comes to the district departments, e.g. Hill Area Development Programme.

4. The housing data is not included under social services as it was not available.

5. \*Social services includes: (1) education, art and culture, sports; (2) medical and public health, (3) family welfare; (4) water supply and sanitation; (5) housing - but due to unavailability of data, it is not included here; (6) urban development; (7) labour and employment; (8) welfare of SC, ST and OBC; (9) social security and welfare; (10) nutrition; (11) relief on account of natural calamities; (12) other social services, information and publicity.

Sources: 1. Office of the District Treasury Officer, The Nilgiris, Udthagamandalam.

2. Reserve Bank of India, Mumbai.

## Expenditure on Social Services

In 2008-09, the total development expenditure<sup>3</sup> on social services in the district was Rs. 17107.88 lakh. This amount was increased to Rs. 21804.15 lakh in 2009-10, which gives 27.45 per cent increase over the year. Unlike the district, the amount of development expenditure on social services in Tamil Nadu has declined from Rs. 2207994 lakh in 2008-09 to Rs. 2182069 lakh in 2009-10. Among the expenditure on social services in the district, the rate of increase in expenditure was higher in relief on account of natural calamities as last year the district experienced a devastating cyclone. While Rs. 2.63 lakh was spent on calamity relief was spent during 2008-09 (RE), this amount has increased to Rs. 1124.50 lakh during 2009-10. Excluding the amount of expenditure on natural calamities, the rate of increase in social sector expenditure in the district during 2008-09 and 2009-10 was less than 21 per cent (Table 2.1). However, this share continues to be higher in the district than that in the State as a whole.

During 2008-09 and 2009-10, the rate of increase in expenditure was 10.10 per cent in education (including sports, art and culture) (Table-2.1). But within the different heads of the social services, the share of expenditure has declined by 8.43 per cent point from 61.94 per cent in 2008-09 to 53.51 per cent in 2009-10 (Table-2.2 and Figure-2.1). The similar declining rate of expenditure was observed in the following social services: (1) welfare of scheduled castes (SC), scheduled tribes (ST), other backward classes (OBC), social security, and welfare; (2) nutrition; (3) urban development, labour and employment; (4) water supply and sanitation; and (other social services, information and publicity (Table-2.2 and Figure-2.1). It was almost opposite in case of Tamil Nadu as a whole (Table-2.2 and Figure-2.2).

On the other hand, the share of expenditure was found to be increased in medical, public health and family welfare in both the Nilgiris and Tamil Nadu.

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<sup>3</sup> Development expenditure includes the expenditure on social services and expenditure on economic services. Economic services includes: (1) agriculture and allied activities; (2) rural development; (3) special area programmes of which hill areas; (4) major and medium irrigation and flood control; (5) energy; (6) industry and minerals; (7) transport; (8) communication; (9) science, technology and environment; and (10) general economic services.



**Table-2.2: Percentage of government expenditure on different heads of social services with respect to the total social services expenditure in the Nilgiris and Tamil Nadu during 2008-09 and 2009-10**

Sl. No.	Social services*	2008-09	2009-10
<b>The Nilgiris</b>			
1	Education, sports, art and culture	61.94	53.51
2	Medical, public health and family welfare	13.87	20.89
3	Water supply and sanitation	0.08	0.04
4	Housing	NA	NA
5	Urban dev., labour and employment	1.53	1.22
6	Welfare of SC, ST and OBC, and social security and welfare	15.41	12.47
7	Nutrition	7.00	6.59
8	Other social services, information and publicity	0.14	0.13
9	Expenditure on social services	100.00 (19.26)	100.00 (23.64)
<b>Tamil Nadu</b>			
1	Education, sports, art and culture	42.17	48.72
2	Medical, public health and family welfare	11.21	13.73
3	Water supply and sanitation	1.07	0.91
4	Housing	5.94	1.82
5	Urban development, labour and employment	4.45	5.23
6	Welfare of SC, ST and OBC, and social security and welfare	17.71	18.59
7	Nutrition	6.75	7.97
8	Other social services, information and publicity	3.91	2.83
9	<b>Expenditure on social services</b>	100.00 (39.85)	100.00 (36.80)

Note: Figures in parentheses show the percentage of the expenditure on social services to total expenditure.

Source: As in Table-2.1.

Figure 2.1 Share of Government Expenditure on different Heads of Social Sectors - Nilgiris

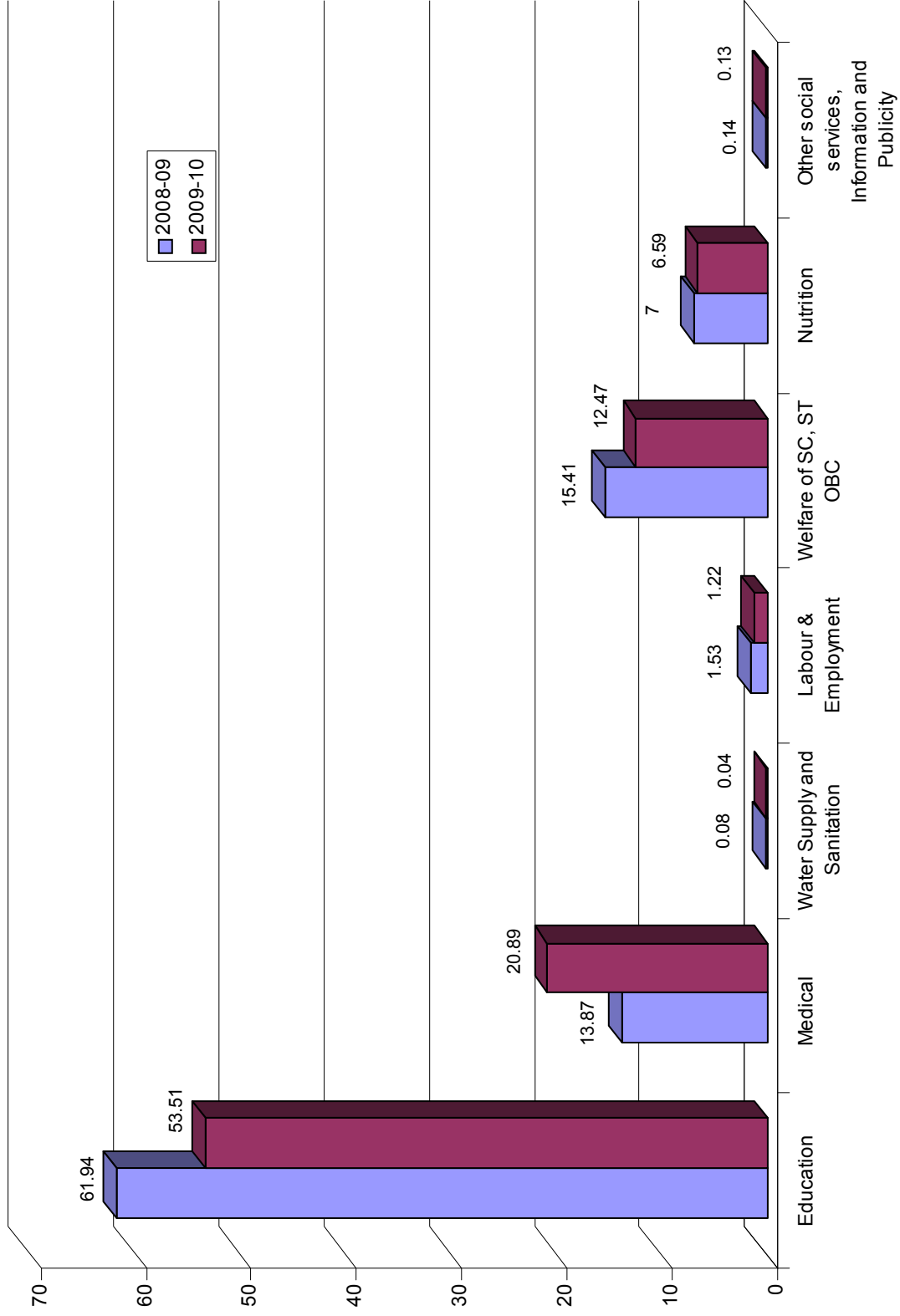
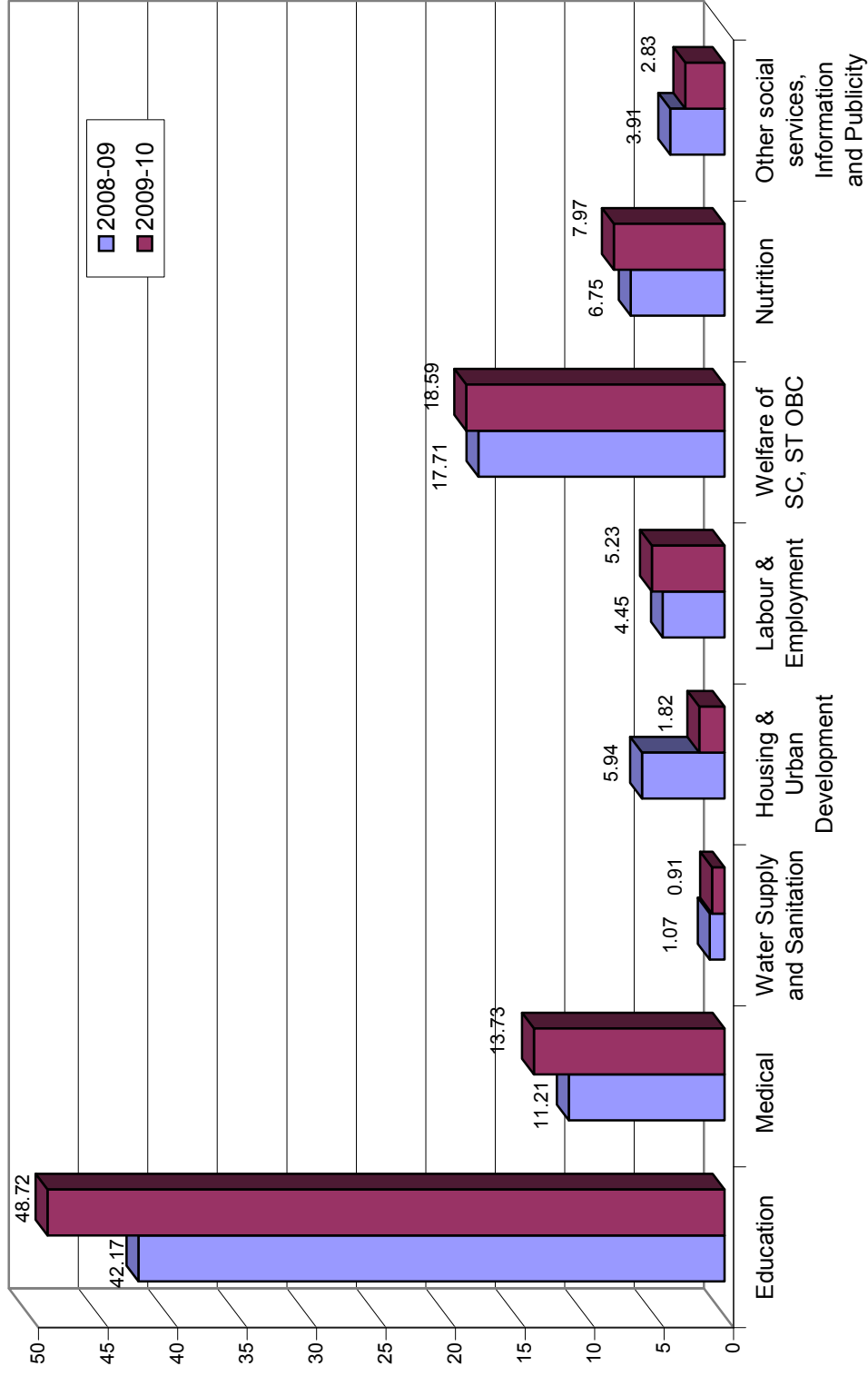


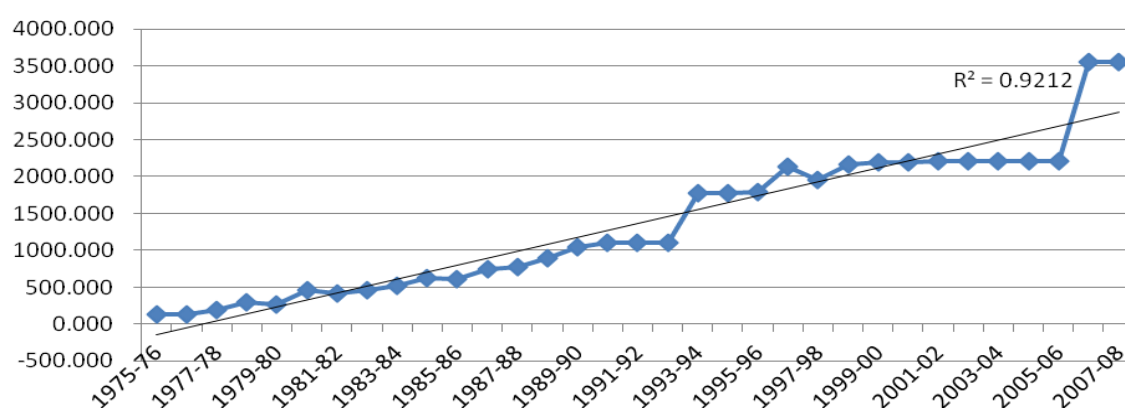
Figure 2.2 Share of Government Expenditure on different Heads of Social Sectors – Tamil Nadu



## Hill Area Development Programme (HADP)

The Nilgiris, having the status of hill district, has been benefited through the Hill Area Development Programme (HADP). The important activities under this programme include: welfare of Scheduled Caste and Scheduled Tribes; human resources development; soil conservation; forestry, horticulture; construction of roads; medicine and health services; and tourism. Funds allocated under HADP to the district were found to be increasing consistently ( $R^2=0.921$ ) from 1975-76 to 2007-08 (Figure-2.3). Savings amount are utilised in the subsequent years in the in the same sector. Hence, amount allotted can be taken as amount utilised.

**Figure 2.3: Financial allocation under HADP to the Nilgiris district from 1975-76 to 2007-08 (in Rs. lakh)**



Source: Hill Area Development Programme, Ooty, The Nilgiris.

## Education

The elementary (primary and upper primary) education is considered as one of the important pillars of human development. Various innovations and initiatives have been taken from time to time for not only universalising the primary education but also for improving the quality of education in India. Fund plays an important role in this regard, though the other factors such as motivation and involvement of teachers and parents matter a lot.

The overall trend of the percentage of fund utilised to total fund allotted through Sarva Shiksha Abhiyan (SSA) was found to be declining with inconsistency ( $R^2=0.312$ ) from 2005-06 to 2009-10. Particularly, under the head of *research, evaluation, monitoring and supervision*, around 70 per cent of allotted fund was spent during 2009-10. This percentage was less than 30 per cent in 2008-09. The other heads with lower percentage of fund utilisation were: (i) cluster resource centre; (ii) block resource centre; and (iii) community mobilisation (Annexure 2.1).



**Annexure**

**Annexure 2.1: Budget allotted and spent (in Rs. lakh) under annual work plan and budget of Sarva Shiksha Abhiyan (SSA) in the Nilgiris by different heads and years**

S.No.	Activity	2005-06			2006-07			2007-08		
		Allotted	Spent	% of allotted Fund Spent	Allotted	Spent	% of allotted Fund Spent	Allotted	Spent	% of allotted Fund Spent
1	Block Resource Centre	72.940	68.271	93.60	96.940	47.744	49.25	38.380	38.380	100.00
2	Cluster Resource Centre	4.555	4.555	100.00	2.660	2.660	100.00	73.080	53.238	72.85
3	Civil Works	230.690	230.353	99.85	NA	NA	NA	NA	NA	NA
4	Interventions for out of school Children	24.748	24.743	99.98	24.740	23.315	94.24	56.159	56.159	100.00
5	Innovative Activities									
	ECCE	12.500	12.469	99.75	15.000	14.861	99.07	NA	NA	NA
	Girls Education	10.000	10.000	100.00	10.000	9.800	98.00	NA	NA	NA
	SC/ST	12.500	12.416	99.33	10.000	9.768	97.68	NA	NA	NA
	Computer Education	15.000	7.302	48.68	15.000	15.000	100.00	NA	NA	NA
6	Interventions of Disabled Children	8.796	8.796	100.00	9.900	9.827	99.26	NA	NA	NA
7	Maintenance Grant	25.400	25.400	100.00	25.450	25.450	100.00	25.650	25.650	100.00
8	Management	36.300	27.344	75.33	40.850	30.597	74.90	28.500	27.783	97.48
9	Research and Evaluation (per school)	3.955	3.955	100.00	3.980	3.980	100.00	5.121	5.121	100.00
10	School Grant	13.080	13.080	100.00	13.260	13.260	100.00	13.280	13.270	99.92
11	Teachers Grant	12.680	12.540	98.90	13.900	11.080	79.71	11.570	11.570	100.00
12	Teachers Salary	128.040	128.040	100.00	113.520	113.520	100.00	127.920	127.120	99.37
13	Teaching Learning Equipment	7.900	7.900	100.00	1.500	1.500	100.00	-	-	-
14	Teachers Training	32.718	32.718	100.00	35.320	34.441	97.51	32.452	31.295	96.43
15	Community Mobilisation	2.034	2.034	100.00	0.810	0.810	100.00	NA	NA	NA
	<b>Grand Total</b>	<b>653.836</b>	<b>631.916</b>	<b>96.65</b>	<b>432.830</b>	<b>367.613</b>	<b>84.93</b>	<b>412.112</b>	<b>389.586</b>	<b>94.53</b>

Contd...

S.No.	Activity	2008-09			2009-10		
		Allotted	Spent	% of allotted Fund Spent	Allotted	Spent	% of allotted Fund Spent
1	Block Resource Centre	44.560	34.982	78.51	84.160	47.812	56.81
2	Cluster Resource Centre	84.420	68.829	81.53	158.670	105.283	66.35
3	Civil Works	NA	NA	NA	NA	NA	NA
4	Interventions for out of school Children	37.375	31.501	84.28	20.278	19.067	94.03
5	Innovative Activities						
	ECCE	NA	NA	NA	NA	NA	NA
	Girls Education	NA	NA	NA	NA	NA	NA
	SC/ST	NA	NA	NA	NA	NA	NA
	Computer Education	NA	NA	NA	NA	NA	NA
6	Interventions of Disabled Children	NA	NA	NA	NA	NA	NA
7	Maintenance Grant	31.550	31.450	99.68	31.950	31.700	99.22
8	Management	41.465	37.103	89.48	NA	NA	NA
9	Research and Evaluation (per school)	6.828	2.018	29.55	5.967	4.248	71.19
10	School Grant	37.380	37.340	99.89	37.270	36.895	98.99
11	Teachers Grant	10.855	10.855	100.00	10.485	10.485	100.00
12	Teachers Salary	132.720	110.666	83.38	142.920	142.920	100.00
13	Teaching Learning Equipment	2.500	2.500	100.00	2.500	2.500	100.00
14	Teachers Training	32.645	28.692	87.89	NA	NA	NA
15	Community Mobilisation	NA	NA	NA	1.351	0.972	71.95
	<b>Grand Total</b>	<b>462.298</b>	<b>395.936</b>	<b>85.65</b>	<b>889.336</b>	<b>770.073</b>	<b>86.59</b>

Source: Office of the SSA, Ooty, The Nilgiris.



## Chapter 3

### HEALTH

This chapter deals with the demography, health and nutrition aspects of the Nilgiris district. Understanding the population size, composition and distribution, and growth rate helps to get an overview of the district and it forms the base for any development planning. In addition, this chapter attempts to understand the performance of the district and its blocks on various health and nutrition parameters over the period.

#### Population size

According to the population census 2001, the total population of the Nilgiris district is 9,06,324 (Annexure ). This accounts for 1.45 per cent of the total population of the Tamil Nadu state. The district has a total geographic area of 2589.51 sq.km with the population density of 350 persons per sq.km (Annexure ). It reveals that the density of population is much lower than the state which is 478. Among all the districts, the Nilgiris district ranks fifth from the bottom districts having low population density.

The total population of Tamil Nadu, as per the 2001 Census, was 62,405,679. Of this, 19 percent belonged to Scheduled Castes (SCs). The Scheduled Castes in the Nilgiris form 30.59 per cent of total district population, while ST population form 3.19 per cent as shown in Annexure . It also reveals that the percentage of SC population to the total population has shown an increase from 23.87 per cent in 1991 to 30.59 per cent in 2001, whereas the percentage of Scheduled Tribe population has shown a decline from 3.30 per cent in 1991 to 3.19 per cent in 2001.

#### Sex Ratio

The sex ratio is an important demographic parameter which depicts the number of females per 1000 males at a given point in time and a particular area. The difference shows the status of women in the society and is widely used as an indicator for gender discrimination. The overall sex ratio of the district is 1016 (District Statistical Handbook 2000- 2001). This is well above the sex ratio of the state (987) and the nation (933).

Among the 30 districts in the state, thirteen districts have a sex ratio of more than 1000 and the Nilgiris district is one among the top ten and has secured sixth rank. The district shows a



consistent improvement in the sex ratio over the last three decades i.e. 1971-1981 (957), 1981-1991 (991), 1991-2001 (1016).

The overall sex ratio of the blocks and municipalities in the Nilgiris district shows that all the four blocks has the overall sex ratio more than 1000 ranging from 1008 in Gudalur block to 1037 in Kothagiri block. Similar is the status with the two municipalities of Udthagamandalam (1000) and Conoor (1022) Annexure .

### **Social-group wise sex ratio**

The Nilgiris district shows that the sex ratio of both scheduled tribe (1027) and scheduled caste (1023) population are more or less close with little difference. It is as well above the sex ratio of the scheduled caste and scheduled tribes of Tamil Nadu state which is 998 and 977 respectively.

When analysed for block specifics, the block of Coonoor has the ST population sex ratio as 978. Except this block, all other blocks and the municipality has the sex ratio more than 1000 (Annexure 3.2).

### **Sex ratio (0-14years)**

While the overall sex ratio of the district shows an improvement, the sex ratio of 0-14 years population irrespective of social group and region, shows 977 (Table 3-1) with rural (971) and urban (980).

**Table 3-1: Sex ratio (0-14 years)**

<b>Particulars</b>		<b>Total</b>	<b>Rural</b>	<b>Urban</b>
Nilgiris	Total	977	971	980
	Scheduled Caste	990	973	1000
	Scheduled Tribe	984	954	1053
Tamil Nadu	Total	947	939	959
	Scheduled Caste	962	960	968
	Scheduled Tribe	931	927	953

Source: Calculated from data available at Population Census 2001.

Among the scheduled tribes and Schedule castes, the sex ratio of 0-14 years children in rural areas is lower and is less than 1000. Compared to the state, the sex ratio (0-14 years) of the Nilgiris district was better.

### Juvenile sex ratio (0-6 years)

The Juvenile sex ratio which is calculated for the 0-6 years population of the district shows 979 as of 2001. It also reveals that the Nilgiris has the highest juvenile sex ratio among all the other districts in the Tamil Nadu state. The Juvenile sex ratio of the state is only 939.

Taluk wise, the juvenile sex ratio was found to be the highest in Gudalur with 996 and lowest in Panthalur with 958 (Table 3-2).

**Table 3-2: Sex Ratio**

<b>Taluks / District</b>	<b>Overall</b>	<b>0-6 years</b>
Panthalur	1012	958
Gudalur	1010	996
Udhagamandalam	1005	986
Kotagiri	1038	975
Coonoor	1004	980
Kundah	1049	976
Nilgiris District	1016	979

Source: Calculated from Census 2001 data

### Population Density

The Nilgiris district has the population density of 350 persons per sq.km as per census 2001 which is lower than the Tamil Nadu state (478) At the same time, the geographic area remaining constant, the population density of the district shows an increasing trend compared to the state as well as all India (Annexure 3.2).

Among the four blocks, Coonoor block has the highest population density of 833 persons per sq.km and the lowest is in Udhagamandalam (208 persons per sq.km). Between the two Municipalities, the Coonoor municipality is densely populated with 3335 persons per sq.km (Annexure 3.2).

### Population Growth Rate

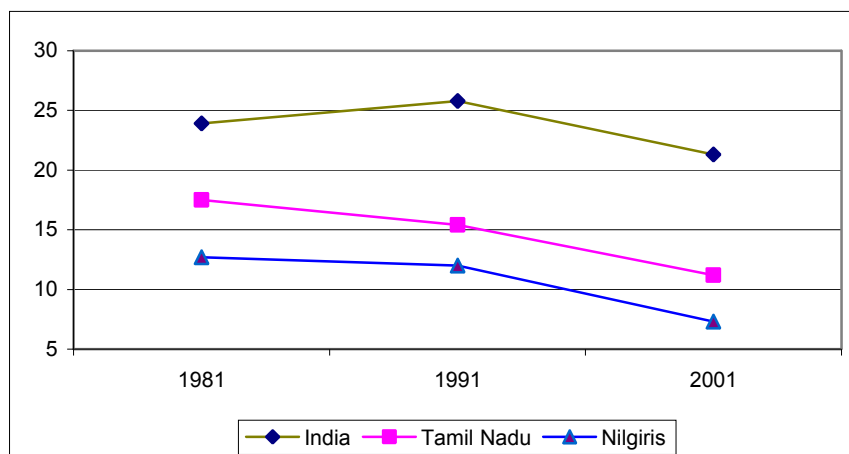
The decadal population growth rate of the district is 7.31 percent (1991-2001) which is lower than the state (11.2 percent) and the country (21.3 percent). In the last two decades from 1991, the population growth rate of the district shows a declining trend from 11.99 percent during 1981-1991 to 7.31 percent during 1991-2001.

**Table 3-3: Decadal Growth Rate Of Population**

	1981	1991	2001
India	23.9	25.8	21.3
Tamil Nadu	17.5	15.4	11.2
Nilgiris	12.7	11.99	7.31

Source: Nilgiris District Statistical Handbook 2000-2001 and 2007-2008

**Figure 3-1: Decadal Growth Rate of Population**



### Level of Urbanisation

Increase in urban population is a recognised fact in both the nation and in state. The same trend is noticed in the Nilgiris district too. The proportion of urban population in the Nilgiris district shows an increasing trend from 49.76 per cent in 1991 to 59.65 per cent in 2001 (Table 3-4).

**Table 3-4: Proportion of Urban population**

India/District	1971	1981	1991	2001
India	19.9	23.3	25.7	27.8
Tamil Nadu	30.2	32.9	34.2	43.9
Nilgiris	NA	NA	49.76	59.65

Source: Nilgiris District Statistical Handbook 2000-2001 and 2007-2008

### Population by Religion

Even though people of all religions live in the Nilgiris district, the Hindus are found in major proportion as it is in the state. The percentage of Hindus is 78.60, Christians is 11.45 and then comes the Muslims with 9.55 only. The Sikhs, Buddhists, Jains and others constitute a meagre proportion. The religion-wise share of district to the state reveals that 10.66 percent of the state's Buddhist live in the Nilgiris district. Similarly 3.58 percent of Sikhs and 1.47 per cent

of Jains of the state live in the Nilgiris, whereas only 1.09 per cent of Hindus of the state live in the Nilgiris (Table 3.5).

**Table 3-5: Religion-wise Distribution of Population**

S.No.	Religions	Nilgiris*	Tamil Nadu	Population		% Share in state population
				Nilgiris	Tamil Nadu	
1	Hindus	599047	54985079	78.60	88.11	1.09
2	Muslims	72766	3470647	9.55	5.56	2.10
3	Christians	87272	3785060	11.45	6.07	2.31
4	Sikhs	342	9545	0.04	0.02	3.58
5	Buddhists	348	3265	0.05	0.01	10.66
6	Jains	1229	83359	0.16	0.13	1.47
7	Others	167	68724	0.02	0.11	0.24
8	Religion Not Stated	970	NA	0.13	NA	NA
Total		762141	62405679	100	100.00	1.22

\*It excludes Municipality Population

The data of 'Religion not stated' in Tamil Nadu is not available

Source: District Statistical Handbook 2007-2008; Page No.22.

### Health and Nutrition

The human development concept envisages a long and healthy life of individuals where long life is measured in terms of life expectancy at birth. The life expectancy at birth is considered as an important indicator as it has a direct bearing on the status of morbidity and longevity. And for the long life, the prerequisite is the healthy life which is measured in terms of various parameters like mortality rate / ratios of infant mortality, maternal mortality, under-five children mortality, still birth, abortion etc and fertility rates, and prevalence rates of various diseases of both communicable and non-communicable nature.

The scenario of health sector reveals that Tamil Nadu state fares well when compared to the status of the health in the country as a whole. The inter and intra-district disparities in health and nutrition parameters in the Nilgiris district are dealt with in this chapter.

### Life Expectancy at Birth

Life expectancy at birth (LEB) by definition refers to the average number of years a newborn child would be expected to live if the child is subject to the age pattern of mortality prevailing at the time of its birth.

Overall, the LEB of the Nilgiris district is 69.19 years and it stands fifth next to Chennai (74.21 years), Kanyakumari (72.65 years), Coimbatore (69.30) and Kancheepuram (69.26) as

stated in Vital statistics 1997, DANIDA. This is again well above the State (66.74 years) and the country (63.4 years as on 2007 with female LEB – 64.9 years and male LEB – 62 years).

### Birth Rate

The Birth rate of all the blocks in the Nilgiris district shows a declining trend. But it continues to be higher in Gudalur block. In 2010, it was as high as 16.52 followed by 11.63 in Gudalur and Coonoor blocks respectively (Table 3.6).

**Table 3-6: Birth Rate**

Region	2006	2007	2008	2009	2010
<b>Block</b>					
Coonoor	13.95	7.69	12.20	11.98	11.63
Gudalur	19.99	12.65	18.42	18.32	16.52
Kotagiri	12.59	7.22	11.80	12.03	11.00
Udhagamandalam	15.68	8.32	12.96	11.90	10.81
<b>Municipality</b>					
Coonoor	12.60	7.44	12.87	11.68	10.69
Udhagamandalam	12.39	7.10	9.25	9.89	9.74
Municipality Total	12.54	7.22	10.43	10.47	9.40
District	14.33	8.38	13.99	13.85	12.60

Source: Office of the Deputy Director, Health and Family Welfare Department, The Nilgiris

When compared for the birth rates between the blocks and Municipalities, it is found that the two Municipalities seems to perform better with Uthagamandalam municipality having the lowest birth rate of 9.74 followed by Coonoor municipality with 10.69.

### Death rate

The overall death rate of all the blocks and municipalities shows a decline since 2006. It was as low as 1.59 in Udhagamandalam municipality in 2010. The death rate by block and municipalities from 2006 to 2010 is given in Table 3-7.

**Table 3-7 Death Rate**

Block /Municipality	2006	2007	2008	2009	2010
Coonoor (B)	5.42	5.61	3.59	4.41	3.73
Gudalur (B)	5.41	5.74	4.29	4.36	4.91
Kotagiri (B)	5.32	5.45	4.53	4.72	4.78
Udhagamandalam (B)	5.37	5.70	4.86	5.62	4.67
Coonoor (M)	4.42	4.67	4.46	3.70	4.48

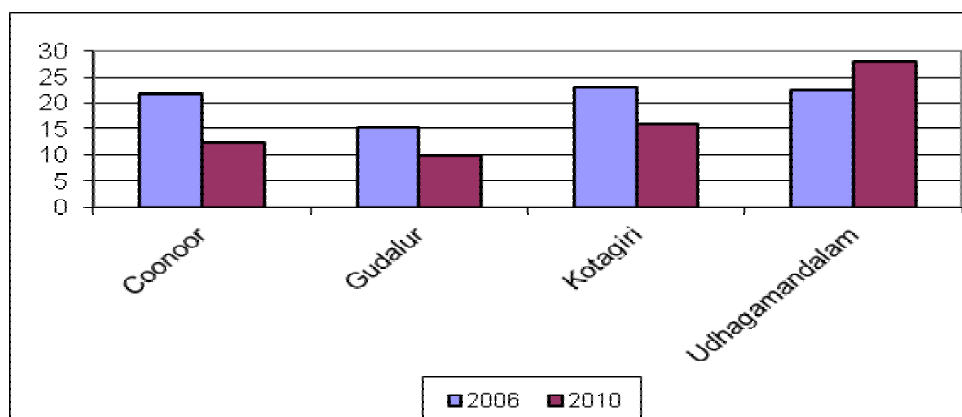
Block /Municipality	2006	2007	2008	2009	2010
Udhagamandalam (M)	2.65	2.91	2.08	2.00	1.59
Municipality Total	1.51	3.75	2.86	2.55	2.37
District	4.28	4.49	4.08	4.38	4.09

Source: Deputy Director, Health and Family Welfare Department, The Nilgiris

### Infant Mortality Rate

The Infant Mortality Rate of the district as a whole is 14.98 which is far below the state IMR (30.1). This clearly depicts not only the state of health, nutrition and health care accessible to the infants below one year of age, but also the general well-being of the society. It is also observed that the Gudalur block show the lowest IMR of 9.75 in 2010 and it has been consistently maintaining the lowest position over the last three years.

Figure 3-2: Infant Mortality Rate



Source: Deputy Director, Health and Family Welfare Department, The Nilgiris.

It is to be noted that while the district overall IMR show a declining trend since 2006, the IMR of Municipality total show an increasing trend which is due to the significant increase found in Connor Municipality from 16.10 in 2006 to 27.67 in 2010 (Figure 3-2). Similarly, it is also found Udhagamandalam block show an increase, while other blocks are showing a declining trend.

### Still Birth Rate

The overall still birth rate of the district was found to be 10.37 in 2010. This rate has been declining across the blocks and municipalities with a varying rate and consistency since 2006-07.



**Table 3-8 Still Birth Rate**

<b>Region</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Block</b>					
Coonoor (B)	10.14	9.74	14.48	9.93	12.25
Gudalur (B)	10.59	11.63	9.12	11.46	10.41
Kotagiri (B)	15.79	6.61	9.35	13.72	11.50
Udhagamandalam (B)	20.26	11.98	17.91	25.21	9.77
<b>Municipality</b>					
Coonoor (M)	22.73	14.93	16.16	12.50	9.78
Udhagamandalam (M)	6.59	8.20	13.13	16.33	7.31
Municipality Total	12.16	10.58	14.35	14.94	8.17
District	13.29	10.70	12.30	14.50	10.37

Source: Deputy Director, Health and Family Welfare Department, The Nilgiris.

It is also to be noted that the stillbirth of the two municipalities are lower than the different blocks in the district.

### **Post Neo- natal Mortality**

The post neo-natal mortality rate is defined as the number of resident newborns dying between 28 days and one year of age in a given geographical area divided by the number of live births for the same area for the specified time period, usually a year, and multiplied by 1000.

The inter block analysis of the post neo-natal mortality rate in the Nilgiris was found to be varying widely ranging between 14.74 in Udhagamandalam Municipality and 27.67 in Coonoor municipality (Annexure 3.4). It is to be noted that the Udhagamandalam Municipality shows a declining trend since 2008.

### **Late Neo-natal Mortality Rate**

Late neo-natal refers to the number of infant deaths after seven days but upto 28 days after delivery per 1000 live births. It is to be noted that all the blocks as well as municipality as a whole in Nilgiris district shows varying trend across the blocks in the last five years (Annexure 3.5). Among all, it is to be noted that the Coonoor municipality has been consistently increasing over the last three years from 1.64 in 2008 to 5.93 in 2010. The overall district late neo-natal mortality has been increasing from 1.90 in 2006 to 2.20 in 2010 (Annexure 3.5).

### Early Neo-natal Mortality rate

Early neo-natal mortality rate is defined as the number of infant deaths up to seven days after delivery per 1000 live births. Coonoor municipality has the highest early neo natal mortality rate of 17.79 in 2010. The data from 2006 to 2010 reveal a fluctuating rate of early neo-natal mortality across the blocks and municipalities (Annexure 3.6). However, it shows an overall declining trend in Coonoor. Gudalur, Udthagamandalam block and municipality show an marginal increase in the early neo-natal mortality rate. It may be explore further to understand the reasons of such variation within the district.

### Peri natal mortality rate

The peri natal mortality rate reflects the prenatal, intrapartum and neo natal care. It gives the peri natal deaths which comprises of still births plus early neonatal deaths (infants that die within seven days of birth). It is calculated as the number of peri natal deaths per 1000 live births.

Peri natal mortality rate was found to be declining in municipalities and the blocks closer to municipalities. On the other hand, it was found to be increased during 2010 in Gudalur block (Annexure 3.7).

### Maternal Mortality Ratio

The maternal mortality ratio (MMR) is defined as the number of women who die as a result of child bearing in a given year per 1000,000 live births. Generally, it refers to the maternal deaths that are caused by complications of pregnancy and childbirth.

The Maternal Mortality Ratio of the Nilgiris district is 1.26 in 2010. Among all blocks and municipalities, it is found that the Kothagiri block has the highest MMR of 3.58 and Gudalur block the lowest MMR of 0.51 (Table 3.9). It is also to be noted that the maternal mortality of Kothagiri block is increasing overall.

**Table 3.9: Maternal Mortality Rate**

Blocks / Municipalities / District	2006	2007	2008	2009	2010
Block					
Coonoor (B)	1.21	1.09	0.67	-	2.07
Gudalur (B)	0.47	0.37	2.53	0.46	0.51
Kotagiri (B)	1.53	2.66	2.36	2.45	3.58
Udthagamandalam (B)	0.92	2.60	1.52	-	1.23

Blocks / Municipalities / District	2006	2007	2008	2009	2010
Municipality					
Coonoor (M)	7.16	-	1.64	-	-
Udhagamandalam (M)	-	-	-	-	1.05
Municipality Total	2.46	-	0.66	-	0.69
District	1.08	1.08	1.79	0.49	1.26

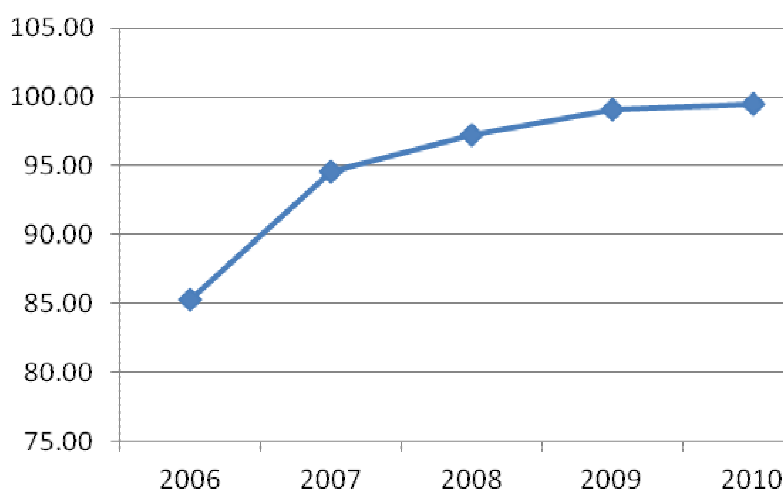
Source: Deputy Director, Health and Family Welfare Department, The Nilgiris

### Birth Attended

Institutional deliveries are encouraged over the domiciliary deliveries. Equally important is the person who conducts the delivery, to reduce the mortality rates. Generally, the births are attended by different people such as nurses, trained and untrained birth attendants (TBAs), relatives and by doctors.

In Nilgiris district, it is found that the percentage of births attended by the doctors has been increasing over the years and is almost closer to 100 percent during 2010 (Figure 3-3). During the year 2010, the number of births attended by doctors is 9568, nurses is 16, trained TBAs is 17, untrained TBAs is 5 and the relatives is 7 (Annexure 3.8).

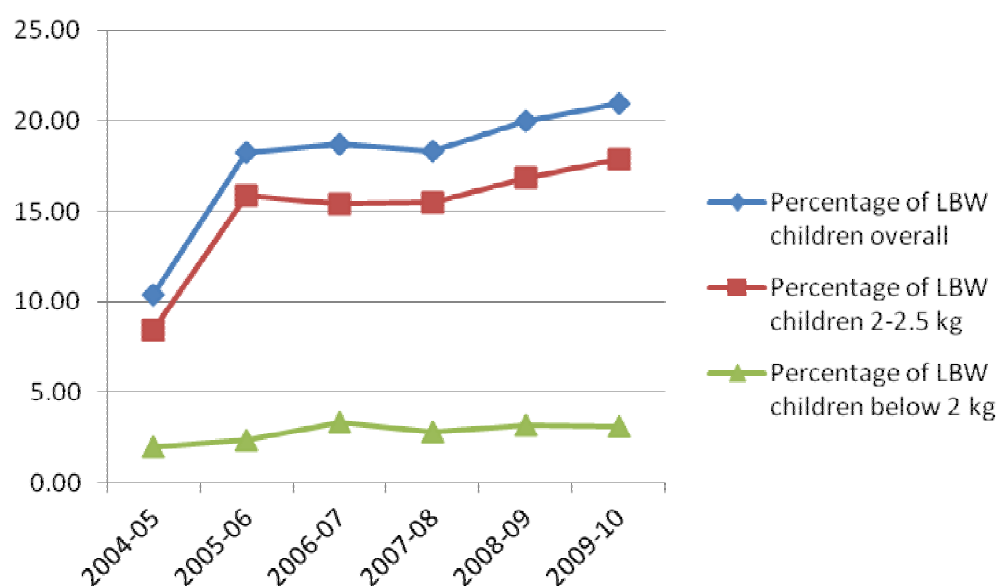
**Figure 3-3: Percentage of births attended by doctors in the Nilgiris**



### Low Birth Weight

The total low birth weight children in the district during 2009-2010 is 2003. Further analysis revealed that the percentage of Low birth weight children overall (below 2.5 Kg) is increasing and that the increase is more in LBW children between 2-2.5 kg (Figure 3.4).

Figure 3-4: Percentage of low birth weight children



### Health Infrastructure

According to the data shared by the Department of Health, it is found that there were totally 26 hospitals in the district and all were following modern medicines. The Nilgiris district has 17 private hospitals, 6 dispensaries (two each in Indian medicine, modern medicine and homeopathy). There are around 28 primary health centres and 194 health sub centres in the district. The total bed strength of the hospitals in the Nilgiris district is 809 with the total number of doctors 75 and nurses 105 during 2007-2008 (Table 3-10).

Table 3-10: Health Infrastructure in Nilgiris district in 2007-08

Classification	Modern Medicine	Indian Medicine					Homeopathy	Grand Total
		AyurVedic	Siddha	Unani	Ayurvedic Siddha Unani Combined	Total		
1	2	3	4	5	6	7	8	9
1. Hospitals	26	-	-	-	-	-	-	26
2. Dispensaries	2	-	14	-	-	14	2	16
3. Primary Health Centers	28	-	-	-	-	-	-	28
4. Health Sub Centers	194	-	-	-	-	-	-	194
5. Other Medical Institutions	-	-	-	-	-	-	-	-
6. Bed Strength	-	-	-	-	-	809	-	809
7. No. Of Doctors	74	-	15	-	-	89	1	90
8. Number of Nurses	105	-	-	-	-	105	-	105

Source: Deputy Director, Health, the Nilgiris.

## Annexure

**Annexure 3.1: Social group wise distribution of population and density of population in different blocks and municipalities of Nilgiris district in 1991 and 2001 Census**

Blocks / Municipalities	Total Population		% of SC population to total population		% of ST population to total population	
	1991	2001	1991	2001	1991	2001
Udhagamandalam	138282	249531	24.92%	30.43%	2.61%	1.73%
Coonoor	140138	189744	24.85%	32.35%	1.41%	1.26%
Kotagiri	100117	98920	13.48%	26.67%	4.74%	6.26%
Gudalur	201911	223946	31.24%	33.18%	6.38%	6.90%
Udhagamandalam Municipality	81763	93987	28.97%	28.47%	0.30%	0.42%
Coonoor Municipality	48003	50196	NA	24.82%	NA	0.24%
District Total	710214	906324	23.87%	30.59%	3.30%	3.19%

Source: District Statistical Hand Book - 2007 - 2008, page No. 21  
 District Statistical Hand Book - 2000-2001,  
 Coonoor Municipality SC, ST Population for the year 1991 is not available

**Annexure 3.2: Demographic profile - Nilgiris**

Blocks / Municipality	Area [sq.km]	Population Density		Sex Ratio					
				Overall		SC		ST	
		1991	2001	1991	2001	1991	2001	1991	2001
Udhagamandalam	1197.64	115	208	999	1016	991	1019	1002	1044
Coonoor	227.79	615	833	980	1018	1011	1028	949	978
Kotagiri	396.65	252	249	697	1037	1019	1032	971	1016
Gudalur	721.71	280	310	1163	1008	989	1013	963	1030
Udhagamandalam Municipality	30.67	2666	3064	960	1000	998	1044	1086	1226
Coonoor Municipality	15.05	3190	3335	961	1022	NA	1025	NA	1000
District Total	2589.51	274	350	991	1016	997	1023	971	1027

Coonoor Municipality SC, ST Population for the year 1991 is not available  
 Source: Nilgiris District Statistical Handbook 2000-2001 and 2007-2008

### Annexure 3.3: Year wise Population density (per sq.km)

Particulars	1971	1981	1991	2001
India	171	212	267	324
Tamil Nadu	317	372	429	478
Nilgiris			274	350

Source: Nilgiris District Statistical Handbook 2000-2001 and 2007-2008

### Annexure 3-4: Post neo-natal mortality in different blocks, municipalities and district

Region	2006	2007	2008	2009	2010
<b>Block</b>					
Coonoor (B)	21.70	19.67	28.06	20.06	20.68
Gudalur (B)	19.32	13.97	15.18	17.16	16.93
Kotagiri (B)	25.97	17.31	18.87	23.73	23.28
Udhagamandalam (B)	33.09	21.65	30.90	36.32	23.44
<b>Municipality</b>					
Coonoor (M)	23.26	27.27	27.91	23.51	27.67
Udhagamandalam (M)	6.63	23.14	24.39	23.86	14.74
Municipality Total	12.31	24.60	25.81	23.73	19.23
District	22.14	18.07	21.88	22.70	19.70

Source: Office of the Deputy Director, Health and Family Welfare Department, The Nilgiris

### Annexure 3-5: Late neo-natal mortality in different blocks, municipalities and district

Region	2006	2007	2008	2009	2010
<b>Block</b>					
Coonoor (B)	4.22	1.09	2.00	3.58	0.69
Gudalur (B)	1.16	1.10	2.07	1.39	1.54
Kotagiri (B)	2.29	1.33	3.93	5.73	0.90
Udhagamandalam (B)	2.76	1.73	3.04	6.05	4.32
<b>Municipality</b>					
Coonoor (M)	-	-	1.64	5.42	5.93
Udhagamandalam (M)	-	1.65	2.22	3.11	1.05
Municipality Total	-	1.07	1.99	3.96	2.75
District	1.90	1.24	2.45	3.41	2.20

Source: Office of the Deputy Director, Health and Family Welfare Department, The Nilgiris

**Annexure 3.6: Early neo-natal mortality in different blocks, municipalities and district**

<b>Region</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Block</b>					
Coonoor (B)	11.45	9.84	13.36	10.03	8.27
Gudalur (B)	8.61	2.21	5.98	5.56	6.41
Kotagiri (B)	9.93	10.65	9.43	9.82	11.64
Udhagamandalam (B)	12.41	9.52	12.66	10.46	13.57
<b>Municipality</b>					
Coonoor (M)	-	12.12	11.49	10.85	17.79
Udhagamandalam (M)	-	14.88	11.09	7.26	7.37
Municipality Total	-	13.90	11.25	8.57	10.99
District	8.68	7.26	9.43	7.99	9.22

Source: Office of the Deputy Director, Health and Family Welfare Department, The Nilgiris

**Annexure 3.7: Peri-natal mortality in different blocks, municipalities and district**

<b>Region</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>Block</b>					
Coonoor (B)	21.24	19.29	27.29	19.66	20.26
Gudalur (B)	18.95	13.78	14.95	16.87	56.99
Kotagiri (B)	25.32	17.02	18.52	23.18	17.76
Udhagamandalam (B)	32.03	21.19	29.98	35.05	9.71
<b>Municipality</b>					
Coonoor (M)	22.73	26.55	27.16	22.97	14.66
Udhagamandalam (M)	6.59	22.62	23.81	23.30	8.60
Municipality Total	12.16	24.01	25.16	23.18	54.05
District	21.66	17.75	21.41	22.19	120.82

Source: Office of the Deputy Director, Health and Family Welfare Department, The Nilgiris

**Annexure 3.8: Number of births attended**

<b>Births attended by</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Doctors	10,498	5,218	9,090	9,938	9,568
Nurses	1,485	166	179	41	16
Trained TBAs	170	73	47	22	17
Untrained TBAs	74	26	10	12	5
Relatives	87	36	21	17	7
Total	12,314	5,519	9,347	10,030	9,613

\* Data not available for Municipalities.



## Chapter 4

### LITERACY AND EDUCATION

The Seventh General Secretary of United Nations, Mr. Kofi Annan said, “Literacy is the heart of sustainable development”. Literacy is one of the three core areas to measure the human development. To measure the human development in terms of literacy, the census report 2001 and details obtained from authenticated sources within the district were extensively utilised.

#### 4.1 Literacy Performance

Literacy rate is one the basic indicators to measure the performance of literacy. The literacy across the years, female literacy rate, literacy rate in urban-rural areas and literacy rate among various social groups are considered to assess the literacy performance of the district in comparison with that of the state and nation.

##### 4.1.1 Literacy Rate

The literacy rate of The Nilgiris is 80.0, which is higher than the state (73.5) and nation (65.4), as per the census 2001. The male literacy is 88.5, which is also higher than state average (82.3) and national average (75.9). The female literacy is 71.6, which is comparatively lower than the male literacy within the district. But still the female literacy is higher than that of the state (64.6) and national (54.2) literacy rate. Among the blocks, Coonoor performs better in overall literacy and male and female literacy. The literacy rate is the lowest in Udhagamandalam (Ooty) taluk in the district, but still it is higher than the national and state literacy rates. The lowest female literacy is observed in Kotagiri. The overall literacy indicates that awareness on literacy is high when compared with other districts in Tamil Nadu. But still a considerable gap of 16.9 percent exists between the male and female literacy within the district. The efforts of state and district to improve the literacy rate are explicit.

**Table 4.1: Literacy Rate**

Area	Persons	Males	Females
Panthalur	80.9	88.4	73.6
Gudalur	80.1	87.1	73.2
Udhagamandalam	77.1	86.0	68.1
Kotagiri	77.2	87.8	67.1
Coonoor	85.1	92.8	77.5

Area	Persons	Males	Females
Kundah	78.4	88.5	68.7
<b>The Nilgiris</b>	<b>80.0</b>	<b>88.5</b>	<b>71.6</b>
<b>Tamil Nadu</b>	<b>73.5</b>	<b>82.3</b>	<b>64.6</b>
<b>India</b>	<b>65.4</b>	<b>75.9</b>	<b>54.2</b>

Source: Census of India, 2001.

#### 4.1.2 Literacy in Rural and Urban Areas

Similar to the trend existing in the state, the urban literacy rate in The Nilgiris district (83.9) is higher than the rural literacy rate. The male (91.1) and female literacy (76.8) in urban area is higher than male (84.8) and female literacy (64.4) in the rural areas. The literacy rate of the district both in urban and rural is higher than the literacy rate of state in both rural and urban areas. The difference between rural and urban literacy of male is found to be 6.3, whereas the difference between the female literacy between the urban and rural population is found to be 12.7. This indicates that the gap existing between urban female and rural female literacy is wider. Refer Table 4.2 for details.

**Table 4.2 Rural - Urban literacy rate**

Taluks	Persons			Males			Females		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Panthalur	80.9	79.6	83.3	88.4	87.0	91.1	73.6	72.5	75.6
Gudalur	80.1	64.7	81.3	87.1	72.3	88.2	73.2	57.1	74.5
Udhagamandalam	77.1	68.8	83.3	86.0	80.9	89.9	68.1	56.9	76.8
Kotagiri	77.2	72.5	84.6	87.8	84.8	92.5	67.1	60.8	77.1
Coonoor	85.1	79.0	86.4	92.8	89.4	93.5	77.5	69.0	79.4
Kundah	78.4	78.0	79.0	88.5	88.4	88.8	68.7	68.2	69.8
<b>The Nilgiris</b>	<b>80.0</b>	<b>74.3</b>	<b>83.9</b>	<b>88.5</b>	<b>84.8</b>	<b>91.1</b>	<b>71.6</b>	<b>64.1</b>	<b>76.8</b>
<b>Tamil Nadu</b>	<b>73.5</b>	<b>66.2</b>	<b>82.5</b>	<b>82.4</b>	<b>77.2</b>	<b>89.0</b>	<b>64.4</b>	<b>55.3</b>	<b>76.0</b>
<b>All India</b>	<b>64.84</b>	<b>58.49</b>	<b>79.85</b>	<b>75.85</b>	<b>70.54</b>	<b>86.22</b>	<b>54.16</b>	<b>45.79</b>	<b>72.76</b>

Source: Census of India, 2001.

#### 4.1.3 Ratio of Male Literacy Rate to Female Literacy

The male literacy ratio to female literacy, which gives the proportion of male literates per female literate is used as a measure of gender disparity in literacy. The Nilgiris district fares better in terms of male-female ratio when compared with those of the state and country. Within the district the Gudalur taluk is having better male to female literacy ratio and Kotagiri block is ranking last as the male literacy ratio is found to be high. The gender inequality in education in the district is comparatively less than the state and nation.

The male to female literacy rate in urban area is 1.19 which is better than rural areas (1.32). The figures clearly indicate that female literacy rate is to be improved in rural areas. Though the overall ratio is found to be better than the state, the male to female literacy rate is

found to be high in rural areas and this indicate that inequality is high in rural areas. Within the district, Uthagamandalam taluk ranks first in male to female literacy ratio in urban areas and last in rural areas. In rural areas, Panthalur taluk is ranking first with lowest ratio.

**Table 4.3 Ratio of male literacy rate to female literacy rate**

Area	Total	Rural	Urban
Panthalur	1.20	1.20	1.21
Gudalur	1.19	1.27	1.18
Udhagamandalam	1.26	1.42	1.17
Kotagiri	1.31	1.39	1.20
Coonoor	1.20	1.30	1.18
Kundah	1.29	1.30	1.27
<b>The Nilgiris</b>	<b>1.24</b>	<b>1.32</b>	<b>1.19</b>
<b>Tamil Nadu</b>	<b>1.28</b>	<b>1.40</b>	<b>1.17</b>

Source: Census of India, 2001.

#### 4.1.4 Percentage Distribution of Literates

As per the Census 2001, number of graduates per 100 persons in The Nilgiris district is only 6.06 percent against the district literacy rate of 80 percent, but it is better than the state. The concern is the female graduates are lower in percent than the males both in the district and the state. This clearly indicates that the dropout rate is high at metric and secondary level among both boys and girls. At below metric / secondary level the female literacy is 63.89 and it is higher than the male literacy rate (58.97). The figures indicate that females in the district are getting better access to education comparatively. Though the female literacy is high within the district, it is comparatively lesser than the state literacy rate. The literacy level at metric and secondary is 29.1 and it is less than 50% when compared with below metric / secondary level literacy rate. The female school dropout rate is high when compared with male literacy rate. But still the district level literacy rate is higher than the state. Number of individuals getting diploma or certificate not equal to degree is 0.97 percent. It is less than the state literacy rate. At this level the female literacy level is less than 25% to the male literacy (refer Annexure 4-1 for details).

**Table 4.4 Percentage Distributions of Literates by Level of Education**

Educational level	The Nilgiris			Tamil Nadu		
	Persons	Males	Females	Persons	Males	Females
Literates without educational level	1.87	1.92	1.81	10.33	10.40	10.23
Literate but below metric/secondary	61.19	58.97	63.89	61.97	59.59	65.04
Metric/secondary but below graduate	29.91	30.50	29.20	21.20	22.23	19.88
Technical diploma or certificate not equal to degree	0.97	1.48	0.35	1.08	1.68	0.31
Graduate and above other than technical degree	6.06	7.14	4.75	5.42	6.10	4.54

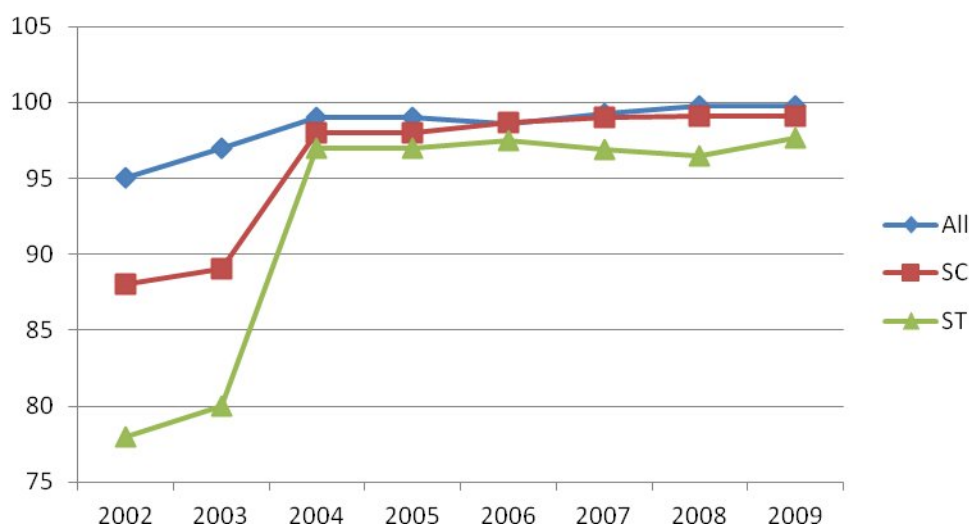
Source: Census of India, 2001.

## 4.2 Primary Education

### 4.2.1 Net Enrolment Rate (NER)

The NER is in increasing trend and as per the data available as on 2009 (refer figure 4.1), the NER is just below 100%. Minor fluctuations are noticed in the enrolment of students from ST communities during the year 2007 and 2008. Vast changes are noticed in the enrolment of student from SC and ST communities from the year 2002 (Refer Annexure 4-2).

Figure – 4.1 Net Enrolment Rate (NER) - Primary



Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty.

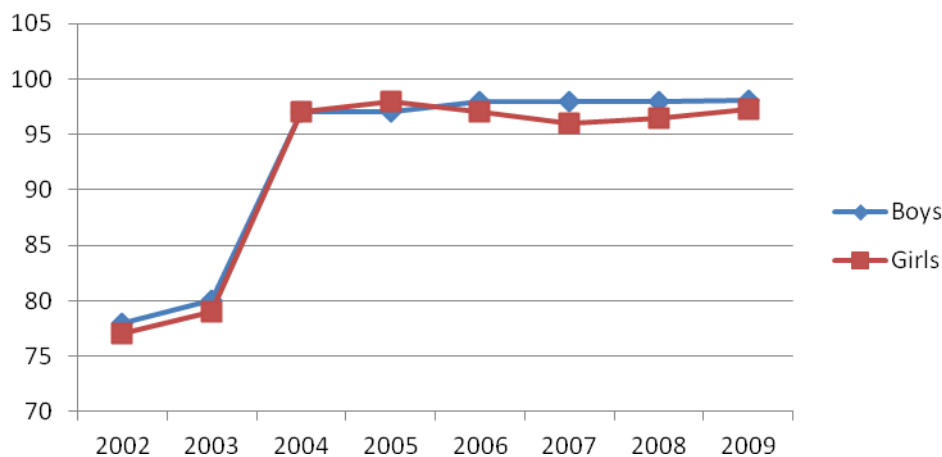
The overall Net Enrolment Rate of Boys and girls is 99.81 and the enrolment of boys is higher than girls (Refer Annexure 4-2). The difference between the enrolment of boys and girls is very minimal. The Gudalur block, which was having the lowest NER, has witnessed positive growth in the past seven years from 2002 to 2009. Though there are minor fluctuations in the growth, all the blocks in the district are heading towards achieving 100% Net Enrolment Rate.

The NER of students from Scheduled caste communities is very similar to the district growth. The NER of students from SC community has increased from 88 to 99.11, which is very close to the NER of district (refer Annexure 4-2). Despite the fluctuations in the rate, all the blocks in the district are heading towards 100. The performance in Ooty is very positive and there is significant change in NER (from 81 to 98.94).

The NER of students from ST community is 97.65 and the district has maintained over 96 since 2004. The NER of boys (98.09) is higher than the NER of girls (97.22). Though the

enrolment of students from ST community is in an increasing trend (refer figure 4.2 and Annexure 4-4), it is less the NER of district.

**Figure – 4.2 NER - ST**

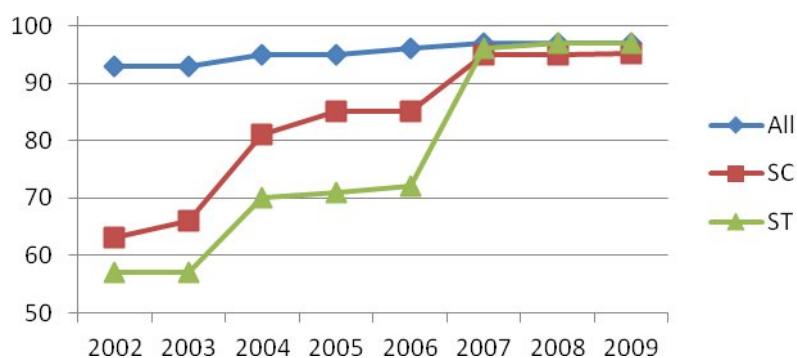


Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty.

#### 4.2.2 Attendance Rate of Students

The attendance rate of the students in the district is in positive trend (refer figure 4.3). The attendance rate of students from SC community has increased from 63 percent to 95.2 percent and the attendance rate of students from ST community has increased from 57 percent to 97 percent (Refer Annexure 4.5). The trend indicates the effectiveness of government programmes and performance of schools. But the increase is not uniform across the blocks. In Gudalur among SCs and STs, the attendance has increased very significantly from 55 percent to 94 percent among SCs and from 46 percent to 96 percent among STs. The increase of attendance rate in the last three years (2007 onwards) is due to the conscious efforts by the government and the district administration.

**Figure – 4.3 Attendance Rate**

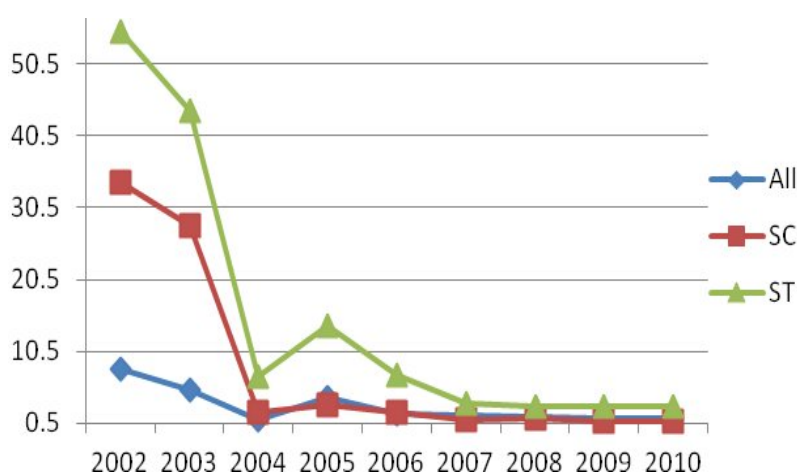


Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty.

### 4.2.3 Dropout Rate among various Social Groups

The overall dropout rate in the district is decreasing refer (figure 4.6). The decrease is almost uniform across the blocks. The dropout rate of students from ST community has declined from 55 to 3 in the past 9 years. The dropout rate of students from SC community has declined from 34 to 1. The dropout rate of district has declined from 8 to 1. Gudalur block in Nilgiris district is having the highest dropout rate when compared with other blocks (Refer figure 4.4 and Annexure 4-6) particularly among STs.

Figure – 4.4 Dropout rate - Primary



Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty.

#### 4.2.3.1 Block wise Dropout Rate across Gender in various Blocks

The overall dropout rate of boys and girls is in similar trend at district level. The dropout rate of girls is high among SCs in Gudalur followed by Ooty and the dropout rate is the highest among girls in Gudalur compared to boys and girls in other blocks. (refer Table 4.5). Among the social groups, both in boys and girls, the dropout rate is high in STs compared to SCs.

Table 4.5 : Dropout rate - Primary

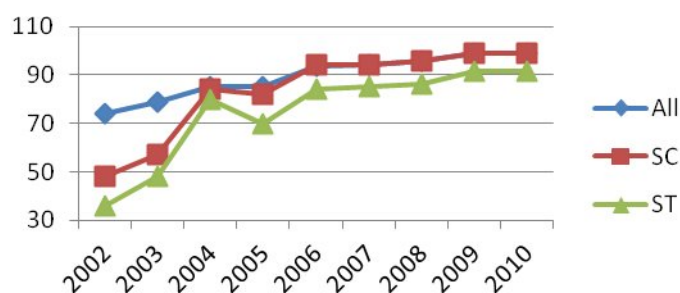
S. No.	Blocks	ALL			SC			ST		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Ooty	0.81	0.76	0.78	0.79	1.24	0.99	2.34	2.77	2.55
2	Coonoor	0.74	0.68	0.71	0.50	0.87	0.68	2.24	2.67	2.45
3	Kotagiri	0.87	0.84	0.85	0.27	0.53	0.40	2.14	2.57	2.36
4	Gudalur	1.68	1.78	1.73	0.86	1.42	1.14	3.33	3.76	3.54
<b>District</b>		<b>1.03</b>	<b>1.02</b>	<b>1.03</b>	<b>0.59</b>	<b>1.02</b>	<b>0.81</b>	<b>2.52</b>	<b>2.95</b>	<b>2.74</b>

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty.

### 4.2.3.2 Completion Rate in Primary Schools

The overall completion rate of students in primary schools is 98.73 (refer Table 4.6). The completion rate of students is found to be high in Coonoor and low in Gudalur. The completion rate of ST students has increased from 36 to 92 within a period of nine years. The completion rate of SC students has increased from 48 to 99. Though the overall completion rate is close to 100, a considerable gap exists in the performance of students from ST community (Refer Figure 4.5 & Table 4.6). The completion rate of ST students is comparatively low in Gudalur block. The overall completion rate is almost similar across the blocks.

**Figure – 4.5 Completion Rate - Primary**



**Table 4.6 Completion Rate - 2009 – 2010**

S. No	Blocks	ALL			SC			ST		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Ooty	98.64	99.20	98.93	97.00	98.10	98.58	90.98	90.76	90.88
2	Coonoor	98.84	99.29	99.07	99.38	98.64	98.94	93.09	93.12	93.11
3	Kotagiri	98.68	99.13	98.91	99.53	98.85	99.19	92.79	92.77	92.78
4	Gudalur	97.91	98.20	98.06	98.92	97.84	98.38	89.46	89.16	89.32
<b>District</b>		<b>98.51</b>	<b>98.95</b>	<b>98.73</b>	<b>99.21</b>	<b>98.35</b>	<b>98.78</b>	<b>91.57</b>	<b>91.44</b>	<b>91.51</b>

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty.

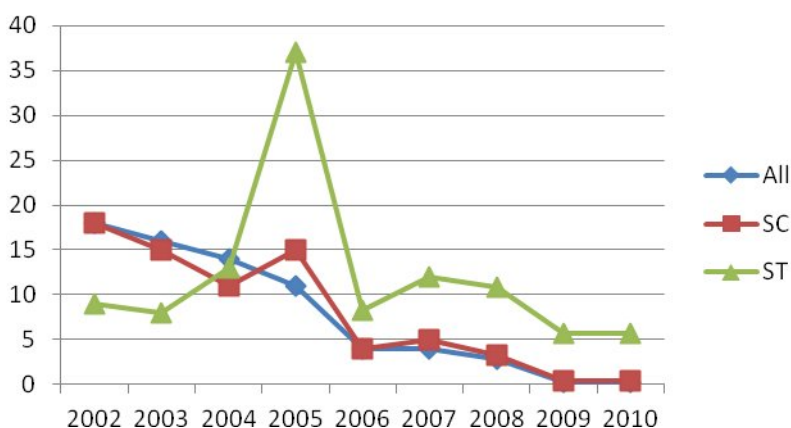
### 4.2.3.3 Repetition Rate among Social Groups

The overall repetition rate of the students has shown a decreasing trend for the last nine years (refer figure 4.6 and Annexure 4.8). The repetition rate has declined from 18 to 4 at district level. The repetition rate of students from SC community has declined from 18 to 0.41. More fluctuations are noticed in the performance of students from ST community. The repetition rate of ST students has increased during the year 2004 and crossed the peak in the year 2005. A steep fall in the repetition rate is noticed in the year 2006 and the rate declined below 6 during the year 2009. But still a significant gap exists between the repetition rate of ST students and overall repetition rate at the district level.



In Gudalur block, among the SCs and STs of both boys and girls the repetition rate is high followed by Ooty. The gap is very significant among social groups and the overall at the district level (refer Table 4.7).

**Figure – 4.6 Repetition Rate - Primary**



**Table 4.7 Repetition Rate - Primary (2009 – 2010)**

S. No.	Blocks	ALL			SC			ST		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Ooty	0.55	0.04	0.29	0.21	0.66	0.43	6.68	6.47	6.57
2	Coonoor	0.42	0.03	0.22	0.17	0.49	0.33	4.67	4.21	4.44
3	Kotagiri	0.45	0.03	0.24	0.20	0.62	0.41	5.07	4.66	4.86
4	Gudalur	0.41	0.02	0.21	0.22	0.74	0.48	7.21	7.08	7.14
<b>Total</b>		<b>0.46</b>	<b>0.03</b>	<b>0.24</b>	<b>0.20</b>	<b>0.63</b>	<b>0.41</b>	<b>5.91</b>	<b>5.61</b>	<b>5.76</b>

Source: Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty..

#### 4.2.4 School Infrastructure

##### A. Number of Schools under different Managements

The total number of schools in the district is 724. Out 724 schools existing, 57 percent of the schools are managed by the government and the remaining schools are private aided and unaided schools. The number of private schools not aided by the government has increased from 101 to 137. The number of schools functioning is in declining trend since 2007 – 08. The number of government schools functioning has declined from 428 to 416 within two years.

**Table 4.8 No. of schools Managementwise, 2009-10**

		Govt. / Local Body	Private Aided	Private Unaided	Others/ KGBV	Total Schools
1	Ooty	150	40	50	11	251
2	Coonoor	68	61	30	13	172
3	Kotagiri	62	20	16	4	102
4	Gudalur	136	18	41	4	199
<b>The Nilgiris</b>		<b>416</b>	<b>139</b>	<b>137</b>	<b>32</b>	<b>724</b>

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty..

### Availability of Primary Schools in Habitations across the District

There are 1202 habitations and primary schools are present in all the eligible habitations, except 3, within 1 km radius. Among the six habitations, which are not having primary schools, three are not eligible as per the norms. The three habitations which are eligible for the establishment of primary school are located in Gudalur block.

**Table 4.9 Access to Primary schools**

S. No	Blocks	Total No. of habitations	Habitations covered by Primary School	Habitations without Primary schools	No. of Habitations	
					Eligible for Primary Schools as per Norms	Not Eligible for Primary Schools as per Norms
1	Ooty	363	363	0	0	0
2	Coonoor	255	255	0	0	0
3	Kotagiri	216	214	2	0	2
4	Gudalur	368	364	4	3	1
<b>Total</b>		<b>1202</b>	<b>1196</b>	<b>6</b>	<b>3</b>	<b>3</b>

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty.

### B. Availability of Basic Infrastructure Facilities

The infrastructure facilities are essential to create conducive learning environment for the children. The schools established must demonstrate and build the culture of using toilets, access to safe drinking water. Out of 245 schools in the district, only two schools are not having own buildings. All the schools have classrooms and out of this 3.5 % rooms need to be carried out with major repairs and 39.4% of the rooms need to be repaired. Though the need for repair work is minor, the percentage of class rooms that are in need of repair work is very high. More than 47% of the schools do not have HM rooms and this indicates that sufficient infrastructure facilities are to be established. 100% of the schools have drinking water facility. Out of 593 (refer Table 4.10) toilets constructed, 87.35% of the toilets are functional. Though, non-functional toilets are a few in number, it is essential to make them functional to ensure sanitation in the schools.

**Table 4.10 Infrastructural Facilities in Schools – Primary (Government)**

S. No.	Blocks	Total No. of schools	No. of schools without own building	Total No. of Pucca Class rooms	No. of schools with major repair class rooms	No. of repairable class rooms	No. of PS with HM room	No. of schools with Drinking water facility	Toilets	
									No. available	No. Functional
1	Ooty	93	1	209	3	87	46	93	202	180
2	Coonoor	42	-	107	-	20	16	42	96	94
3	Kotagiri	39	-	74	-	15	18	39	103	84
4	Gudalur	71	1	166	17	97	36	71	192	160
The Nilgiris		245	2	556	20	219	116	245	593	518

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty..

### C. Availability of Teachers

As on March 2010, the number of teachers employed in primary schools is 2761. The graph presented below clearly indicates increase in number of teachers employed. In the year 2009 – 2010 alone, 1298 teachers were employed in the primary schools. A sudden rise in number of teachers employed is noticed. The increase in number of teachers will have positive impact on literacy rate and pupil-teacher ratio.

### Gender Composition of Teachers

The percentage of female teachers employed to educate the children has shown an increasing trend. Percentage of women employed is high in Ooty and Coonoor blocks. Percentage female teachers in the state is 48.9 percent (Source: TNHDR), while in Nilgiris district it is 80.41.

**Table 4.11 : Percentage of Female Teachers in Primary Schools**

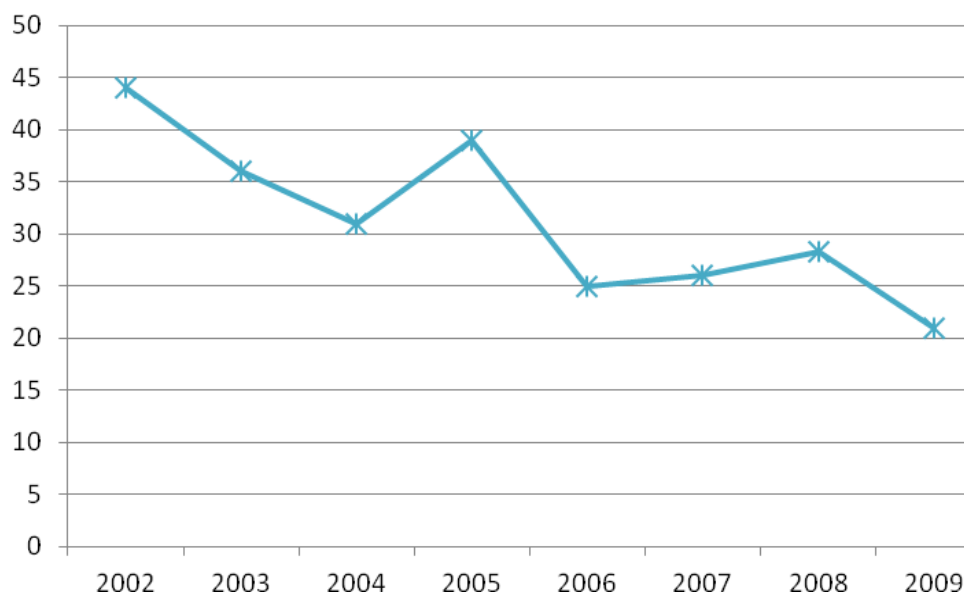
S. No.	Blocks	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
1	Ooty	72.4	58.4	55.8	62.4	77.83	77.4	75.41	78.56	83.54
2	Coonoor	50.2	53.7	57.5	78.3	77.63	74.1	75.71	87.16	83.54
3	Kotagiri	79	53.8	60.1	51.4	65.23	68.9	72.51	69.28	77.63
4	Gudalur	68.2	69	66.2	70.2	65.23	81.4	84.91	76.86	76.25
The Nilgiris		66.57	59.96	59.72	67.37	72.23	77	78.51	78.88	80.41

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty.

### Pupil Teacher Ratio in Primary Schools

Pupil-teacher ratio is a vital indicator that provides information on attention of teacher on students' development and performance. This indicator has direct impact on literacy rate. The pupil-teacher ratio in Nilgiris district is 21 (Refer Annexure 4.10). Within the district Kotagiri block has the lowest pupil-teacher ratio. The overall ratio of the district has been decreasing for the past eight years, which is a positive trend.

**Figure 4.7 Pupil-Teacher Ratio**



Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty.

### Teachers Attendance Rate in Primary Schools

It is another important indicator that indicates the performance of teachers. The attendance rate of the teachers is given below.

**Table 4.12 Teacher Attendance Rate**

Sl. No	Blocks	Attendance Rate
1	Ooty	89.47
2	Coonoor	99.29
3	Kotagiri	94.53
4	Gudalur	84.40
Total		92.00

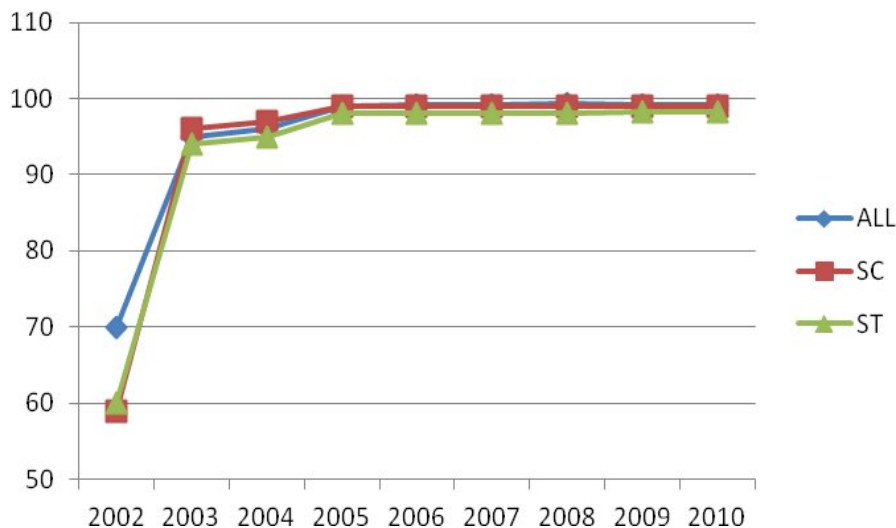
Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty..

Overall, the attendance rate is 92 percent at the district level, whereas it is the highest in Coonoor closer to 100 percent and the lowest in Gudalur 84.4 percent. It may be one of the reasons for the highest dropout rate in Gudalur.

### 4.3 Upper Primary

The transition rate from 5th standard to 6th standard has increased from 72 percent (2002) to 99 percent in the year 2005 and same level is maintained for the past five years even among the boys and girls (Refer Annexure 4-11, Annexure 4-12, Annexure 4-13). All the social groups in the district the transition rate is closer to 100 percent.

**Figure – 4.8 Transition Rate**

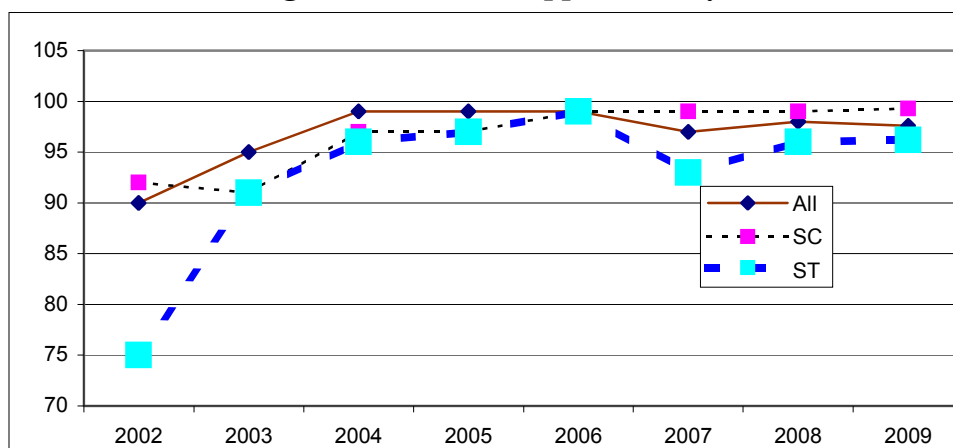


Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty..

#### 4.3.1 Net Enrolment Rate

The overall NER rate in the upper primary schools in the district has slightly declined. The NER reached peak (99) in the year 2006 and from then the rate is inconsistent and fluctuating. The NER of students from SC and ST community has declined during the year 2007. Though a considerable increase is noticed from the year 2008, it never crossed the NER reached during the year 2006 (Refer Annexure 4-14).

**Figure – 4.9 NER - Upper Primary**



Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty.

The NER of boys and girls is fluctuating and it never declined below 97 after the year 2004. The NER of boys and girls was maximum during the year 2006 and from then on the NER is inconsistent. Though there is fluctuation in the enrolment rate, the trend is very similar for boys and girls (Refer Annexure 4-14).

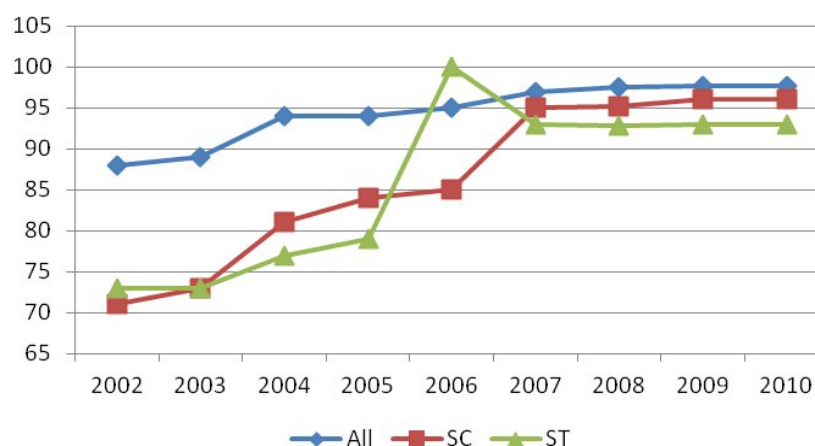
Overall NER of students from SC community has reached 99 in the year 2006 and it never declined after 2006. Boys NER 99.9 is found to be high in Gudalur block in the district and Girls NER 99.5 is found to be high in Kotagiri block. Though the boys' enrolment rate in Kotagiri block declined to 91 in the year 2006, it climbed to 99 in the year 2008 (Refer Annexure 4-15).

The enrolment of students from ST community has declined from 99 percent to 94 percent in the year 2007. Though the improvement is noticed in the year 2008, the NER never reached 99 percent again. The enrolment of boys and girls is in same trend (refer Annexure 4-16).

#### 4.3.2 Attendance Rate of Students

The overall attendance rate at the district level is in increasing trend. The attendance rate of students from ST community reached maximum of 100 percent during the year 2006 and declined to 93 percent in the year 2007. The attendance rate of ST students never increased above 93 percent after 2007. The attendance rate of students from the SC community is ever increasing. The attendance rate of SC students is maintained above 95 percent from 2007 (Refer Figure 4.10 & Annexure 4-17).

Figure – 4.10 Attendance rate



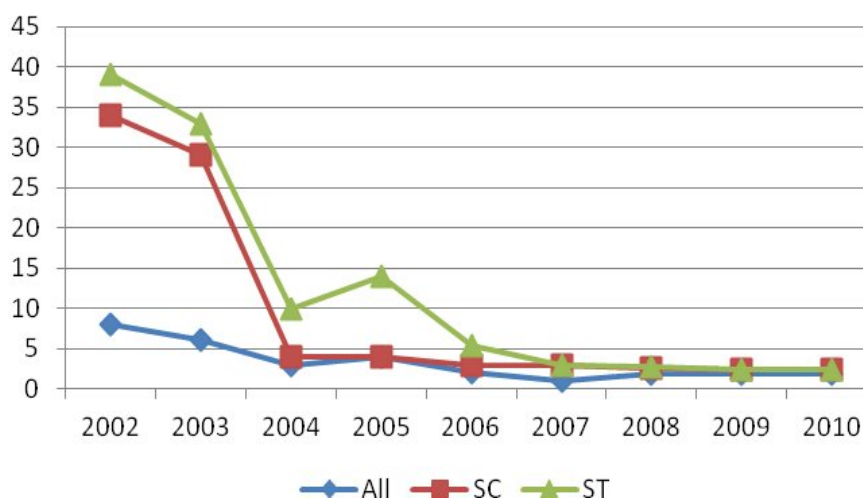
Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty.

### 4.3.3 Retention in Upper Primary Schools

#### 4.3.3.1 Dropout Rate of Students

The overall dropout rate in the district is in declining trend. A steep fall in dropout rate of students from SC community and ST community is noticed during the year 2004 and 2005. This could have been due to the impact of government programmes. The difference between the dropout rate at district level and dropout rate of various social groups is found to be very minimal.

**Figure 4.11 Dropout Rate - Upper Primary**



Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty..

In the district, Ooty block has the maximum dropout rate of 2.63 percent and Gudalur block has the lowest dropout rate (0.94). The dropout rate of students from SC and ST community student is very high in Kotagiri block (see Table 4.13 and refer Annexure 4-18). While comparing the dropout rate of boys and girls at district level with the dropout rate of boys and girls from the SC and ST community, it is noticed that dropout rate of students from ST and SC is high.

**Table 4.13 Dropout Rate - Upper Primary**

Sl. No	Blocks	ALL			SC			ST		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Ooty	2.72	2.55	2.63	2.79	2.85	2.82	1.79	1.79	1.79
2	Coonoor	1.53	1.36	1.44	2.50	2.56	2.53	2.65	2.65	2.65
3	Kotagiri	2.15	1.98	2.06	3.09	3.15	3.12	3.90	3.90	3.90
4	Gudalur	1.03	0.86	0.94	1.26	1.33	1.29	1.51	1.51	1.51
<b>Total</b>		<b>1.86</b>	<b>1.69</b>	<b>1.78</b>	<b>2.41</b>	<b>2.47</b>	<b>2.44</b>	<b>2.47</b>	<b>2.47</b>	<b>2.47</b>

Source: Cohort Study 2009

### 4.3.3.2 Completion Rate

The overall completion rate has shown an increasing trend in the last nine years. The completion rate of students from SC and ST community is in increasing trend. Kotagiri block in Nilgiris district has the lowest completion rate of SC and ST students. Completion rate of ST students is high in Ooty block and Completion rate of SC students is high in Gudalur block. Though the completion rate of SC and ST students is comparatively lower than the overall completion rate, it shows an increasing trend.

The blockwise completion rate indicates that the completion rate of girls is high in all the blocks when compared with the completion rate of boys. Completion rate of ST students has to be improved in Kotagiri and Coonoor blocks (refer Table 4.14 and Annexure 4-19) as it is comparatively lower than the district completion rate. The completion rate of SC students is found to be low in Kotagiri block. It is also noticed that, completion rate of SC and ST students at block level is lower than overall completion rate of the respective block.

**Table 4.14 Completion Rate –Upper Primary 2009 - 2010**

S. No.	Blocks	ALL			SC			ST		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Ooty	94.46	96.66	95.56	91.64	95.47	93.56	95.92	96.93	96.43
2	Coonoor	95.27	97.68	96.50	92.72	96.51	94.61	89.67	90.71	90.19
3	Kotagiri	94.56	97.12	95.85	90.45	94.32	92.39	88.03	89.10	89.82
4	Gudalur	95.94	98.29	97.12	93.67	97.46	95.57	95.22	96.25	95.74
Total		95.05	97.42	96.24	92.12	95.94	94.03	92.20	93.23	92.72

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty.

### 4.3.3.3 Repetition Rate

The overall repetition rate of the district is in declining trend. However the declining rate varies for different social groups. The repetition rate of students from SC and ST community is 3.53 percent and 4.8 percent respectively, which is higher than the overall repetition rate 1.99 at the district level (refer Annexure 4-20).

The repetition rate of students from SC community has come down drastically from 18 percent to 3.53 percent during the last nine years, but it is higher in Kotagiri block followed by Ooty. The repetition rate of students from ST community has declined from 11 percent to 4.8 percent, but it has increased in Coonoor over a period. It is found that there is still the higher repetition rate in Kotagiri followed by Coonoor. While comparing the repetition rate of students from SC and ST communities with the overall repetition rate of the block, none of the blocks is



having lower repetition rate of students from SC and ST community, which is an area of concern and it has to be improved. The repetition rate of boys is comparatively higher than the girls in all the blocks. Within the district, repetition rate is found to be comparatively low in Ooty and Gudalur blocks. Despite higher enrolment, good infrastructure and favourable teacher-pupil ratio, the quality of education and the performance of the students are a matter of concern, which need attention from the education department.

**Table 4.15 Repetition Rate – Upper Primary 2009 – 2010**

S. No.	Blocks	ALL			SC			ST		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Ooty	2.82	0.79	1.81	5.57	1.68	3.62	2.29	1.28	1.78
2	Coonoor	3.20	0.96	2.06	4.78	0.93	2.86	7.68	6.64	7.16
3	Kotagiri	3.29	0.90	2.09	6.46	2.53	4.49	8.07	7.00	7.53
4	Gudalur	3.03	0.85	1.94	5.07	1.21	3.14	3.27	2.24	2.75
<b>Total</b>		<b>3.09</b>	<b>0.89</b>	<b>1.99</b>	<b>5.47</b>	<b>1.59</b>	<b>3.53</b>	<b>5.33</b>	<b>4.30</b>	<b>4.81</b>

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty..

#### 4.3.4 School Infrastructure

##### 4.3.4.1 Access to Upper Primary Education

The table given below indicates that students in all 1202 habitations in the district are able to access upper primary education within three kilometres from their village. This also communicates that sufficient infrastructure has been established to educate children.

**Table 4.16: Habitation and access – Upper Primary**

S. No	Blocks	Total Habitations	No. of Habitation having UPs facility in 3 Km area
1	Ooty	363	363
2	Coonoor	255	255
3	Kotagiri	216	216
4	Gudalur	368	368
<b>The Nilgiris</b>		<b>1202</b>	<b>1202</b>

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty.

##### 4.3.4.2 Basic Infrastructures

###### A. Availability of Teachers

The number of teachers available for teaching the students in upper primary school has declined drastically from 2110 to 920 in the year 2008. The number of teachers employed to

educate upper primary students is highly fluctuating since 2002. Particularly the female teacher percent has gradually decreased since 2007 except in 2009. The implications of the situation on the students need to be understood and it has its impact on pupil-teacher ratio too.

**Table 4.17 Teachers - Upper Primary**

S. No.	Blocks	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
1	Ooty	571	576	362	664	486	823	641	599
2	Coonoor	373	552	300	446	488	741	462	538
3	Kotagiri	209	336	156	344	177	556	406	333
4	Gudalur	434	458	371	421	479	761	621	640
The Nilgiris		1587	1922	1189	1855	1630	2881	2130	2110

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty.

### Gender Composition of Teachers

The percentage of female teachers employed for educating the upper primary students is comparatively high in Coonoor block, whereas it is found to be the lowest in Gudalur (60 percent). Irrespective of fluctuations, the percentage of female teachers employed has increased, when compared with the status as on 2001 – 02 (Refer Table 4.18 and Annexure 4-21).

**Table 4.18 Female teachers (%) - Upper Primary**

S. No.	Blocks	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
1	Ooty	53.14	53.1	59.4	57.1	63.2	72.8	71.6	72.45	63.64
2	Coonoor	54.42	57.4	62.3	66.1	78.5	77.6	71	76.95	80.27
3	Kotagiri	52.66	56.9	59.6	59	59.9	72.1	69.2	78.08	73.17
4	Gudalur	63.44	69.9	55.3	69.8	75	72.7	76.5	69.69	60
The Nilgiris		56.14	59	58.87	62.53	70.86	73.86	72.44	73.65	67.82

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty.

The Government schools and private aided schools have employed maximum number of female teachers to educate upper primary students. The total number of female teachers employed in government and local body schools is found to be high in Ooty and Gudalur. The percentage of female teachers employed is found to be very low in Kotagiri block. The overall percentage of female teachers (67.8 percent) employed in the district is higher than the state (56.22 percent) and it is notable that proportion of female teachers employed is high in all the blocks.

## Pupil-Teacher Ratio

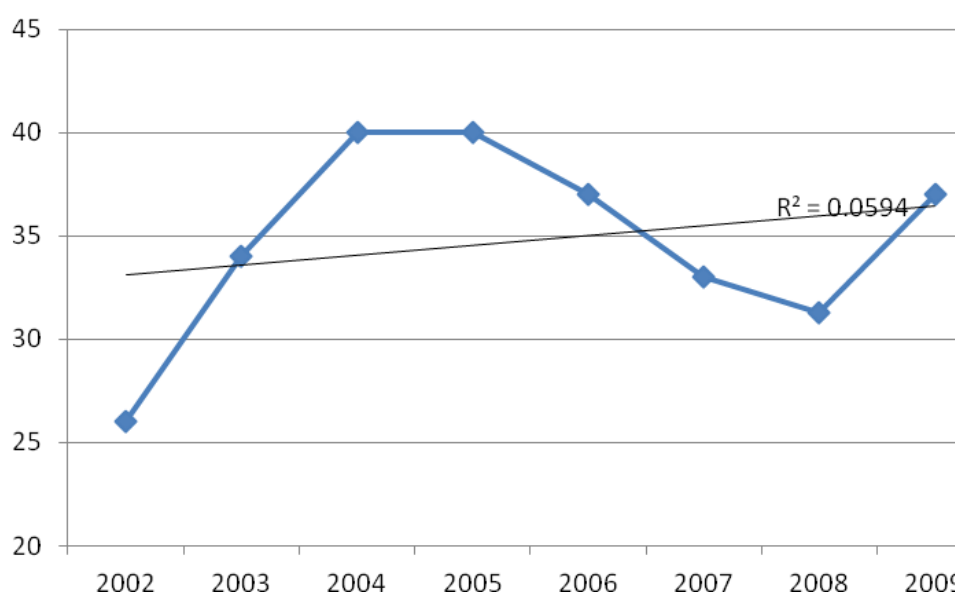
It is a critical indicator that has influence on completion rate of students. After comparing the pupil-teacher ratio for the period of eight years starting from 2002, it is found that the ratio has declined in Ooty and Coonoor blocks. The ratio has increased in Kotagiri and Gudalur blocks. The pupil-teacher ratio of the district is 37.02 (2009), which is higher than the ratio in 2002 (refer Table 4.19 and figure 4.12). It has reached maximum of 40 and minimum of 26, and fluctuating over a period of eight years.

**Table 4.19 Pupil-Teacher Ratio Upper primary schools**

S. No.	Blocks	Upper Primary							
		2002	2003	2004	2005	2006	2007	2008	2009
1	Ooty	27	32	32	40	36	30	28.4	26.23
2	Coonoor	24	30	30	40	34	26	24.7	23.57
3	Kotagiri	19	36	43	40	32	31	29.4	25.42
4	Gudalur	32	39	55	40	44	45	42.7	41.32
The Nilgiris		26	34	40	40	37	33	31.3	37.02

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty..

**Figure – 4.12 Pupil-teacher ratio in Upper Primary**



Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty..

## Teacher Attendance

Out of four blocks in the district, three (Ooty, Coonoor and Kothgiri) blocks have better teacher attendance rate when compared with the district. The lowest teacher attendance rate was found in Gudalur block.

**Table 4.20: Teachers Attendance Rate -2009**

No.	Blocks	Teachers attendance
1	Ooty	94.53
2	Coonoor	99.01
3	Kotagiri	98.50
4	Gudalur	86.50
Total		92.00

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty..

## 4.4 Secondary Education

### Transition Rate

The overall transition rate of students from VIII to IX is 96.90. This rate is lower than the transition rate of primary education to upper primary education. The transition rate of students from SC and ST community is found to be low when compared with the transition rate of the district. The transition rate among girls is higher than that of the boys, which shows the importance given for girls education. Among the social groups, the better transition rate is found among boys in SCs and girls in STs.

Overall the transition rate is good in Kotagiri but is the lowest in Gudalur. In Gudalur the lowest transition rate is found among the SCs and STs.

**Table 4.21 Transition Rate – Std. VIII to Std. IX – 2009**

S. No.	Blocks	All			SC			ST		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Ooty	95.97	96.36	96.17	90.46	90.16	90.31	90.18	90.25	90.22
2	Coonoor	96.91	97.31	97.11	91.41	91.11	91.26	90.96	91.20	91.08
3	Kotagiri	98.27	98.67	98.47	92.78	92.48	92.63	92.32	92.58	92.45
4	Gudalur	95.69	96.05	95.86	90.16	89.86	90.01	89.72	89.99	89.86
Total		96.70	97.10	96.90	91.20	90.90	91.05	90.75	91.00	90.88

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty..

## 4.5 Trainings

The BRC and CRC centers have conducted training events for the teachers. The BRC has organized one training in each block whereas the CRC has organized 7 – 14 trainings per block.

**Table 4.22 Trainings conducted**

S. No	Blocks	BRC	CRC
1	Ooty	1	14
2	Coonoor	1	10
3	Kotagiri	1	7
4	Gudalur	1	14
The Nilgiris		4	45

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty..

The table given below communicates the in-service teacher trainings organised since 2002-03. The number of in-service teacher training is found to be low in Kotagiri and Coonoor but the highest in Gudalur (Refer Table 4.23-1). It is observed that despite much in-house training, Gudalur did not perform well in many education indicators. The reasons need to be further explored.

**Table 4.23-1 In-Service Teacher Training**

Sl. No	Blocks	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
1	Ooty	3511	7971	17628	26475	13920	13380	12700	10401
2	Coonoor	928	4961	15038	14845	11000	9460	8880	7913
3	Kotagiri	1267	4352	9307	10390	9700	8140	7460	5087
4	Gudalur	1592	6646	16533	26689	15420	15300	14380	11200
The Nilgiris		7298	23930	58506	78399	50040	46280	43420	34601

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty..

## 4.6 Special Schools

### 4.6.1 Low performing children

There are 5307 low performing children in Nilgiris district, and the the number is found to be very high (42.3 percent) in Gudalur block. The performance improvement has been noticed among 426 students.

**Table 4.23-2: Low-performing children covered (Remedial teaching)**

S. No	Blocks	Achievement in 2009-2010	
		No. of Low Performing Children in STD I – VIII	percent
1	Ooty	1440	27.2
2	Coonoor	945	17.8
3	Kotagiri	681	12.8
4	Gudalur	2241	42.2
<b>The Nilgiris</b>		<b>5307</b>	<b>100</b>

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty..

The interventions are made by the district administration to enhance the learning of the students in 426 government schools.

#### 4.6.2 Out of School Children

The total number of children out of school is found to be is 527. The number of children out of school is high (52.94 percent) in the age group of 11 – 13 when compared with the age group of 5 – 10. The proportion of girls is found to be high among out of school children.

**Table 4.24: Out of School Children 2010-2011**

S. No	Blocks	Out Of School children								
		5-10 Age Group			11-13 Age Group			5-13 Age Group		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Ooty	20	20	40	20	19	39	40	39	79
2	Coonoor	25	20	45	25	22	47	50	42	92
3	Kotagiri	36	30	66	38	47	85	74	77	151
4	Gudalur	45	52	97	47	61	108	92	113	205
<b>Total</b>		<b>126</b>	<b>122</b>	<b>248</b>	<b>130</b>	<b>149</b>	<b>279</b>	<b>256</b>	<b>271</b>	<b>527</b>
<b>Percent</b>				<b>47.06</b>			<b>52.94</b>			<b>100</b>

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty..

Among the blocks, the number is found to be high (38.9 percent) in Gudalur followed by Kothagiri (28.6 percent) among the age group of 5-13.

### 4.6.3 Enrolment of out-of-children

The table given below indicates the efforts to enrol the children who are out of school through AIE centres and NCLP. The percentage of enrolment is fluctuating and it is declining in Ooty, Kotagiri and Gudalur blocks when the 2010 data is compared with 2004 data (Refer Table 4.25 and Annexure 4-22). The gaps in enrolment of students have to be addressed in these three blocks. 100% enrolment is achieved in Coonoor block.

**Table 4.25 Enrolment of out-of-school children**

S. No	Blocks	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
1	Ooty	34.7	61.33	48.76	47.5	64.93	69.7	43	15
2	Coonoor	31.89	67.62	63.99	46.4	32.95	69.2	44	100
3	Kotagiri	6.57	79.43	53.78	56.5	69.86	81.9	23	56
4	Gudalur	34.09	59.73	79.48	47.9	100	59.3	35	56
The Nilgiris		30.16	65.47	64.07	49.26	71.21	62.17	34	59

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty..

### 4.6.4 Physically Challenged Children

The total physically challenged children in the district is 1303. The percentage of disabled children enrolled in school is 47.8 percent in Ooty followed by Gudalur (36.5 percent) and Coonoor (30.1 percent). Measures need to be taken to enrol all the disabled children in the school.

**Table 4.26: Number of disabled children**

S. NO	Blocks	In School between age of 5-13	Out of School between age of 5-13	Total Disabled Children
1	Ooty	112	513	625
2	Coonoor	161	241	402
3	Kotagiri	59	88	147
4	Gudalur	190	285	475
<b>The Nilgiris</b>		<b>522 (40.06 )</b>	<b>781 (59.94)</b>	<b>1303</b>

The figures in parentheses indicate percentage.

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty..

The percentage of out-of-school disabled children is very high in Ooty which needs more attention. Overall only 40 percent of the disabled children are enrolled in the school.

#### 4.6.5 Early child care and Education centres

The number of education centres has increased from 334 to 437. Further figure given below indicates that sufficient care has been taken to upgrade the centres. The number of children enrolled is in increasing trend till the year 2009 and a short fall is noticed in the year 2010.

**Table 4.27 Early child care and education centres**

Sl. No	Years	No. of existing centres	Upgraded centres	No. of children enrolled
1	2005-06	389	335	9135
2	2006-07	97	335	10064
3	2007-08	432	730	10961
4	2008-09	437	335	12996
5	2009-10	437	335	11025

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty..

#### 4.6.6 Girls' education – beneficiaries

Various innovative activities are adopted in full swing to attract the attention of the girls towards education which is the prime role of SSA to root out gender disparity. Vocational skill development activities are provided with the focus of elimination of dropouts among girls at the upper primary level. The table given below indicates that the vocational training given to girls is in declining trend from 20120 in 2002-03 to 140 in 2008-09. Life skill education was initiated in 2006-06 with 1200 girls and the number increased to 1953 in 2009-10.



Table 4.28: Trainings given for girls education beneficiaries

Sl. No	Blocks	2002-2003		2003-2004		2004-2005		2005-2006		2006-2007		2007-2008		2008-2009		2009-2010	
		Vocational Trg	Life Skill Trg	Vocational Trg	Life Skill Trg	Vocational Trg	Life Skill Trg	Vocational Trg	Life Skill Trg	Vocational Trg	Life Skill Trg	Vocational Trg	Life Skill Trg	Vocational Trg	Life Skill Trg	Supply of Learning Materials/ work books/ Maths & Science Kit	Life Skill Trg
1	Ooty	0	0	6481	0	6418	0	5089	0	300	300	1200	295	35	475	35	490
2	Coonoor	0	0	4519	0	4404	0	2948	0	200	300	850	295	35	475	40	485
3	Kotagiri	0	0	2584	0	2537	0	870	0	200	300	850	295	35	475	38	480
4	Gudalur	0	0	6536	0	6819	0	5544	0	300	300	1200	295	35	475	40	498
<b>The Nilgiris</b>		<b>0</b>	<b>0</b>	<b>20120</b>	<b>0</b>	<b>20178</b>	<b>0</b>	<b>14451</b>	<b>0</b>	<b>1000</b>	<b>1200</b>	<b>4100</b>	<b>1180</b>	<b>140</b>	<b>1900</b>	<b>153</b>	<b>1953</b>

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty.

#### **4.6.7 Minority Children Education**

The table given below indicates that sufficient care has been given to the students to develop their communication skills. Further learning materials, workbooks and kits were also supplied to improve their performance. Such initiatives are vital and essential for the minority children education.

#### **4.6.8 Computer Aided Learning (CAL)**

This method is widely used to educate the children. The use of computers in primary and middle schools is an opportunity to provide computer literacy to the children. Introduction of CAL is an opportunity to enhance the learning of the students. It is an attractive method to improve the performance and motivation for learning among the children. In Nilgiris district 38 schools have CAL centres. Further there is a plan to establish CAL centres in 133 schools. So far 640 teachers have been trained in Computer Aided Learning.

**Table 4.29 Schools covered, Teachers trained and beneficiaries**

Sl. No	Blocks	2005-06			2006-07			2007-08			2008-09			2009-10		
		No. of schools covered	No. of Teachers trained	No. of beneficiaries	No. of schools covered	No. of Teachers trained	No. of beneficiaries	No. of schools covered	No. of Teachers trained	No. of beneficiaries	No. of schools covered	No. of Teachers trained	No. of beneficiaries	No. of schools covered	No. of Teachers trained	No. of beneficiaries
1	Ooty	2	13	297	2	56	71	17	175	226	9	36	2541	13	120	1648
2	Coonoor	2	4	127	2	45	95	15	125	221	6	24	1204	6	105	751
3	Kotagiri	2	8	61	3	45	243	15	125	209	7	28	1115	5	105	693
4	Gudalur	3	11	215	3	55	483	20	175	223	8	32	2630	14	310	1852
<b>The Nilgiris</b>		<b>9</b>	<b>36</b>	<b>700</b>	<b>10</b>	<b>201</b>	<b>892</b>	<b>67</b>	<b>600</b>	<b>879</b>	<b>30</b>	<b>120</b>	<b>7490</b>	<b>38</b>	<b>640</b>	<b>4944</b>

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty.

#### 4.6.9 Community Mobilisation

The prime purpose of formation of VEC is to involve the community in the field of education. The number of VECs in Nilgiris district is 563 and the total membership is 11260. During the year 2009-10, 2252 members were trained by organising training for 4504 days and Rs. 11.10 lakhs were mobilized as contribution from the members, which is a healthy sign of member participation.

**Table 4.30 Details on Community Mobilisation - 2009 – 10**

S. No	Blocks	Training					
		Total No. of VECs	Total Members	No. of Members Trained	No. of training days	No. of meeting held	Contribution (in Rs.)
1	Ooty	194	3880	776	1552	4268	195000
2	Coonoor	130	2600	520	1040	2860	500000
3	Kotagiri	84	1680	336	672	1848	115000
	Gudalur	155	3100	620	1240	3410	300000
	<b>The Nilgiris</b>	<b>563</b>	<b>11260</b>	<b>2252</b>	<b>4504</b>	<b>12386</b>	<b>1110000</b>

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty.

#### 4.7 Quality of Education

##### 4.7.1 Pass Percentage

The pass percentage of students in standard five is 99.74 percent, which is very close to 100. An interesting fact is that the pass percentage of SC students in the standard five exams is above the district, whereas it is lower in case of ST students. About 66 percent of the students were able to succeed with score above 60% in standard five. The percentage of students belonging to various social groups passing standard eight is 98.77. 44.36 percent of the students in standard eight was able to succeed with above 60% score in the exam. While categorising the passed percentage of students of standard VIII with more than 60 percent scores, it is noticed that students from SC and ST community perform relatively lower than the overall population. The girls from the ST community score better than boys. At district level, the success rate of girls is high.

**Table 4.31 Pass percentage of students among all social groups**

S. No	Blocks	V Std						VIII Std					
		Pass %			Passed with more than 60% marks			Pass %			Passed with more than 60% marks		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Ooty	99.20	98.42	98.81	71.42	74.78	73.1	97.66	99.85	98.76	42.12	38.51	40.32
2	Coonoor	98.94	99.62	99.28	63.29	68.12	65.70	97.51	98.97	98.24	34.99	44.22	39.61
3	Kotagiri	98.68	99.34	99.01	59.33	69.99	64.66	98.63	99.57	99.10	57.99	52.87	55.43
4	Gudalur	99.51	99.34	99.43	59.70	64.92	62.31	99.41	99.42	99.41	46.97	46.13	46.55
<b>Total</b>		<b>99.67</b>	<b>99.80</b>	<b>99.74</b>	<b>63.12</b>	<b>68.86</b>	<b>65.95</b>	<b>98.10</b>	<b>99.45</b>	<b>98.77</b>	<b>42.67</b>	<b>46.06</b>	<b>44.36</b>

Source: As in figure 5.1.

**Table 4.32 Pass Percentage of Students in standard V and VIII among SCs**

S. No	Blocks	V Std.						VIII Std.					
		Pass %			Passed with More Than 60% Marks			Pass %			Passed with more than 60% Marks		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	Ooty	98.82	97.67	98.24	68.31	74.50	71.41	98.16	97.38	97.77	34.20	36.56	35.38
2	Coonoor	99.71	98.90	99.31	62.37	67.87	65.12	96.19	98.19	97.19	28.06	45.38	36.72
3	Kotagiri	99.65	99.62	99.63	57.44	71.72	64.58	99.62	99.99	99.81	39.92	47.89	43.91
4	Gudalur	99.99	99.20	99.93	62.24	64.77	63.51	99.28	99.23	99.26	48.92	48.84	48.88
<b>Total</b>		<b>99.92</b>	<b>99.87</b>	<b>99.90</b>	<b>63.35</b>	<b>68.89</b>	<b>66.02</b>	<b>98.88</b>	<b>99.44</b>	<b>99.17</b>	<b>39.20</b>	<b>44.06</b>	<b>41.64</b>

Source: As in figure 5.1.

**Table 4.33 Pass Percentage of Students in standard V and VIII among STs**

S. No	Blocks	V Std						VIII Std					
		Pass %			Passed with more than 60% Marks			Pass %			Passed with more than 60% marks		
		B	G	T	B	G	T	B	G	T	B	G	T
1	Ooty	99.99	96.94	98.46	62.85	73.68	68.27	99.99	99.99	99.99	54.10	46.03	50.07
2	Coonoor	95.65	99.94	97.78	54.61	72.00	63.31	96.67	99.99	98.33	17.24	36.36	26.80
3	Kotagiri	94.28	96.14	95.21	59.15	60.53	59.84	89.13	76.47	82.80	36.58	42.31	39.44
4	Gudalur	98.66	94.68	96.67	46.50	49.65	48.08	99.99	99.47	99.73	35.36	34.39	34.87
<b>The Nilgiris</b>		<b>99.30</b>	<b>96.76</b>	<b>98.02</b>	<b>50.83</b>	<b>55.02</b>	<b>52.91</b>	<b>99.03</b>	<b>99.44</b>	<b>99.25</b>	<b>37.46</b>	<b>39.20</b>	<b>38.39</b>

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan (SSA), The Nilgiris, Ooty.

## Annexure

**Annexure 4-1: Population by level of education in The Nilgiris and Tamil Nadu**

Educational level	The Nilgiris			Tamil Nadu		
	Persons	Males	Females	Persons	Males	Females
Literates without educational level	10,115	5,682	4,433	4,184,273	2,372,243	1,812,030
Literate but below matric/secondary	331,109	174,882	156,227	25,112,423	13,591,518	11,520,905
Matric/secondary but below graduate	161,847	90,453	71,394	8,591,469	5,070,148	3,521,321
Technical diploma or certificate not equal to degree	5,240	4,392	848	438,918	383,604	55,314
Graduate and above other than technical degree	32,785	21,162	11,623	2,196,698	1,391,600	805,098
Unclassified	3	2	1	764	549	215

Source: Census of India, 2001.

**Annexure 4-2: Progress in NER – Primary – ALL**

All																									
S. No.	Block	Boys								Girls								Total							
		2002	2003	2004	2005	2006	2007	2008	2009	2002	2003	2004	2005	2006	2007	2008	2009	2002	2003	2004	2005	2006	2007	2008	2009
1	Ooty	97	98	98	98	98	99.9	99.9	99.95	91	94	98	99	98.5	99	99.6	99.61	94	96	98	98	98.8	99.5	99.91	99.78
2	Coonoor	98	98	99	99	99	99.7	99.9	99.94	96	95	99	99	99.3	99	99.7	99.73	97	97	99	99	99	99.3	99.77	99.84
3	Kotagiri	97	98	99	99	96	99.5	99.9	99.9	99	96	99	99	99.6	99	99.6	99.68	98	97	99	99	99	99.4	99.86	99.79
4	Gudalur	92	98	99	99	99	99.1	99.9	99.9	86	95	99	99	99.1	99	99.9	99.73	89	97	99	99	99.01	99.1	99.56	99.82
<b>The Nilgiris</b>		<b>96</b>	<b>98</b>	<b>99</b>	<b>98</b>	<b>99</b>	<b>99.8</b>	<b>99.9</b>	<b>99.92</b>	<b>93</b>	<b>95</b>	<b>99</b>	<b>99</b>	<b>99.2</b>	<b>99</b>	<b>99.7</b>	<b>99.69</b>	<b>95</b>	<b>97</b>	<b>99</b>	<b>99</b>	<b>98.6</b>	<b>99.3</b>	<b>99.78</b>	<b>99.81</b>

Source: DISE.

Annexure 4-3: Progress in NER – Primary – Students from SC community

S. No	Blocks	Boys								Girls								Total							
		2002	2003	2004	2005	2006	2007	2008	2009	2002	2003	2004	2005	2006	2007	2008	2009	2002	2003	2004	2005	2006	2007	2008	2009
1	Ooty	81	82	97	96	98	98	98.4	98.46	81	82	96	96	97.72	99.3	99.36	99.42	81	82	96	96	97.9	99.1	98.9	98.94
2	Coonoor	92	92	99	98	99	98	98.3	98.31	87	88	98	99	98.92	100	99.96	99.97	90	90	98	98	98.7	98.3	99.1	99.14
3	Kotagiri	91	93	98	97	99	98	98.5	98.57	90	91	98	98	98.45	99.3	99.38	99.43	91	92	98	98	98.5	98.8	98.9	99
4	Gudalur	88	89	99	98	99	99	99.2	99.26	90	91	98	99	99.6	99.4	99.38	99.44	89	90	99	99	99.5	99.5	99.3	99.35
The Nilgiris		88	89	98	97	99	99	98.6	98.67	87	88	98	98	98.67	99.5	99.52	99.58	88	89	98	98	98.7	99	99.06	99.11

Source: DISE.

Annexure 4-4: Progress in NER – Students from ST community

S. No.	Districts	Boys								Girls								Total							
		2002	2003	2004	2005	2006	2007	2008	2009	2002	2003	2004	2005	2006	2007	2008	2009	2002	2003	2004	2005	2006	2007	2008	2009
1	Ooty	77	79	96	96	98	99	98	99.59	77	79	95	95	95	96	96.2	96.92	77	79	96	96	96.7	96.2	97.7	98.26
2	Coonoor	78	80	96	97	98	98	98	98.29	75	77	94	96	97	97	96.3	97.02	77	79	95	97	97.2	96.9	97.1	97.66
3	Kotagiri	79	81	98	98	98	97	97	97.18	79	81	99	98	98	98	97.5	98.23	79	81	99	98	98	97	97.2	97.71
4	Gudalur	78	80	98	98	98	97	97	97.29	77	79	98	98	98	98	96	96.72	78	80	98	98	98.7	97.4	96.5	97.01
The Nilgiris		78	80	97	97	98	98	98	98.09	77	79	97	98	97	96	96.5	97.22	78	80	97	97	97.5	96.9	96.5	97.65

Source: DISE.

Annexure 4-5: Trend in Attendance rate of the students in Primary schools among social groups and across gender in various blocks

S. No.	Districts	All								SC								ST							
		2002	2003	2004	2005	2006	2007	2008	2009	2002	2003	2004	2005	2006	2007	2008	2009	2002	2003	2004	2005	2006	2007	2008	2009
1	Ooty	94	94	95	95	95	97	97	97	63	65	83	86	86	96	94.7	94.9	57	58	79	74	75	99	97.8	98
2	Coonoor	92	92	95	96	97	98	98	98	69	71	83	91	91	99	96.1	96.3	64	59	76	76	77	99	97.9	98
3	Kotagiri	93	94	98	96	96	97	96	96	66	68	94	87	88	97	95.4	95.6	60	61	73	69	70	95	96.1	96
4	Gudalur	92	92	93	93	94	96	96	96	55	61	62	76	77	87	93.8	94	46	49	51	65	68	93	95.8	96
	The Nilgiris	93	93	95	95	96	97	97	97	63	66	81	85	85	95	95	95.2	57	57	70	71	72	96	96.9	97

Source: Annual work plan and Budget 2010-2011, Sarva Shiksha Abhiyan(SSA), The Nilgiris, Ooty.

Annexure 4-6: Dropout rate among the various social groups in The Nilgiris district

S. No.	Districts	All									SC									ST								
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	Ooty	6	4	1	3	2	1	1	1	1	35	33	2	4	3	1	1	1	1	50	35	7	13	7	3	3	3	3
2	Coonoor	7	3	1	1	0	1	1	1	1	32	26	1	1	1	1	1	1	1	59	48	1	14	7	3	3	2	2
3	Kotagiri	9	5	1	9	2	1	0	1	1	31	28	2	4	2	1	1	0	0	54	46	17	15	9	3	2	2	2
4	Gudalur	10	8	2	3	2	3	1	2	2	38	24	4	2	1	2	2	1	1	57	47	4	15	7	4	4	4	4
	The Nilgiris	8	5	1	4	2	2	1	1	1	34	28	2	3	2	1	1	1	1	55	44	7	14	7	3	3	3	3



Annexure 4.7: Completion Rate In Primary Schools

S. No	Districts	All										SC										ST									
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010			
1	Ooty	75	79	86	85	89	93	95	99	99	47	55	82	81	88	95	96	99	99	40	57	81	77	80	83	85	91	91			
2	Coonoor	74	81	89	87	98	96	98	99	99	51	61	88	82	96	94	95	99	99	33	43	88	80	89	89	90	93	93			
3	Kotagiri	73	80	86	79	95	93	95	99	99	48	53	82	78	98	95	97	99	99	36	46	72	43	88	86	87	93	93			
4	Gudalur	74	76	79	87	94	94	96	98	98	46	59	83	85	95	93	94	98	98	35	46	78	82	81	82	84	89	89			
	The Nilgiris	74	79	85	85	94	94	96	99	99	48	57	84	82	94	94	96	99	99	36	48	80	70	84	85	86	92	92			

Annexure 4.8: Repetition Rate

S. No	Districts	All										SC										ST									
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010			
1	Ooty	19	17	13	12	9	5	3.6	0.29	0.29	18	12	16	14	9	5	3.4	0.43	0.43	10	9	12	16	13	13	12.4	6.57	6.57			
2	Coonoor	19	16	10	12	1	4	2.6	0.22	0.22	17	13	11	17	3	4	2.7	0.33	0.33	8	7	12	15	5	9	8.53	4.44	4.44			
3	Kotagiri	18	15	13	12	2	4	2.8	0.24	0.24	21	19	16	18	1	5	3.2	0.41	0.41	10	9	10	16	4	10	9.15	4.86	4.86			
4	Gudalur	16	16	20	10	4	4	2.5	0.21	0.21	16	16	14	13	5	5	3.7	0.48	0.48	8	7	18	16	12	14	13.4	7.14	7.14			
	The Nilgiris	18	16	14	11	4	4	2.9	0.24	0.24	18	15	11	15	4	5	3.3	0.41	0.41	9	8	13	37	8.3	12	10.8	5.76	5.76			

**Annexure 4-9: Availability of Teachers**

S. No.	Districts	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
1	Ooty	409	445	1021	410	733	505	475	499	960
2	Coonoor	339	335	887	323	308	324	304	327	541
3	Kotagiri	205	173	509	177	302	228	200	166	380
4	Gudalur	381	423	885	469	515	591	561	471	880
The Nilgiris		1334	1376	3302	1379	1858	1648	1540	1463	2761

**Annexure 4-10 Pupil Teacher Ratio in Primary Schools in over the years**

Sl.No	Districts	2002	2003	2004	2005	2006	2007	2008	2009
1	Ooty	38	32	29	39	22	23	25.2	19.2
2	Coonoor	34	32	28	39	23	21	25	16.9
3	Kotagiri	43	31	27	39	20	24	23.9	13
4	Gudalur	59	47	40	39	36	36	35.4	28
The Nilgiris		44	36	31	39	25	26	28.2	21

**Annexure 4-11: Trend in Transition Rate at Primary level in All Category**

S. No.	Districts	Boys									Girls									Total								
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	Ooty	74	95	95	100	99.5	99	99	99	99	68	96	96	100	100	99.8	100	100	100	71	96	96	100	99.6	99	100	99	99
2	Coonoor	73	94	98	99	98.9	99.5	100	100	100	59	97	97	99	99	99.5	100	100	100	66	96	98	99	98.9	99	100	100	100
3	Kotagiri	71	96	96	99	99	99	99	99	99	74	96	96	98	99	98.5	99	99	99	73	96	96	99	99	99	99	99	99
4	Gudalur	70	91	96	98	98.7	98.5	99	99	99	67	95	97	99	99	98.8	99	99	99	66	93	97	99	98.8	99	99	99	99
The Nilgiris		72	94	96	99	99	99	99	99	99	67	96	97	99	99	99.2	99	99	99	70	95	96	99	99.1	99	99	99	99

Source: As in Annexure 5.3.

**Annexure 4-12: Trend in Transition Rate at Primary level – Students from SC community**

S. No.	Districts	Boys									Girls									Total								
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	Ooty	55	96	97	99	100	99	100	100	100	62	97	98	100	100	100	100	100	100	59	97	98	100	100	100	100	100	100
2	Coonoor	60	95	96	98	98	99	99	99	99	64	96	97	100	100	99	99	99	99	62	96	97	99	99	99	99	99	99
3	Kotagiri	54	96	97	99	99	99	99	99	99	62	96	96	99	99	99	100	99	99	58	96	97	99	99	99	99	99	99
4	Gudalur	55	93	96	97	98	97	97	97	97	64	95	96	98	98	98	98	98	98	60	94	96	97	98	98	98	98	98
The Nilgiris		56	95	97	98	99	99	99	99	99	63	96	97	99	99	99	99	99	99	59	96	97	99	99	99	99	99	99

**Annexure 4-13: Trend in Transition Rate at Primary level – Students from ST community**

S. No.	Districts	Boys									Girls									Total								
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	Ooty	72	92	93	97	95	99	99	99	99	63	96	94	98	100	98	98	99	99	68	94	94	98	97	99	99	99	99
2	Coonoor	62	91	98	97	100	99	99	99	99	61	95	98	98	95	99	99	99	99	62	93	98	97	98	98	99	99	99
3	Kotagiri	61	95	95	99	99	98	98	98	98	53	95	95	98	99	98	98	98	98	57	95	95	98	99	98	98	98	98
4	Gudalur	53	94	94	98	99	97	97	97	97	55	94	95	98	99	98	98	98	98	54	94	95	98	99	98	97	97	97
	The Nilgiris	62	93	95	98	98	98	98	98	98	58	95	96	98	98	98	98	98	98	60	94	95	98	98	98	98	98	98

Source: As in Annexure 4.3.

**Annexure 4-14: Net Enrolment Rate in Upper primary among various social groups across gender in different blocks of The Nilgiris**

S. No	Districts	Boys								Girls								Total							
		2002	2003	2004	2005	2006	2007	2008	2009	2002	2003	2004	2005	2006	2007	2008	2009	2002	2003	2004	2005	2006	2007	2008	2009
1	Ooty	93	95	99	99	99	98	98	98.3	93	94	98	98	99	98	98	97.7	93	95	99	99	99	97	98	98
2	Coonoor	92	96	99	99	99	98	98	98.1	94	98	99	99	99	97	97	97.4	93	97	99	99	99	98	98	97.7
3	Kotagiri	95	97	98	98	99	97	97	97.4	93	94	97	98	98	97	97	97.5	94	96	98	98	99	97	97	97.4
4	Gudalur	88	96	99	99	99	97	97	97.2	76	90	98	99	99	97	97	97.1	82	93	99	99	99	98	97	97.1
	The Nilgiris	92	96	99	98	99	98	98	97.7	89	94	98	96	99	97	97	97.4	90	95	99	99	99	97	98	97.6

Source: DISE.

Annexure 4-15: Net Enrolment Rate in Upper primary Level – Students from SC community

S. No.	Districts	Boys								Girls								Total							
		2002	2003	2004	2005	2006	2007	2008	2009	2002	2003	2004	2005	2006	2007	2008	2009	2002	2003	2004	2005	2006	2007	2008	2009
1	Ooty	84	84	97	98	98	99	99	99.3	83	81	100	95	96	99	99	99.2	84	83	97	97	97	99	99	99.3
2	Coonoor	95	95	98	99	99	99	99	99.4	95	95	98	98	98	99	99	99.3	95	95	98	99	99	99	99	99.4
3	Kotagiri	95	95	98	96	91	98	99	98.5	95	95	96	96	97	100	99	99.5	95	95	97	97	94	99	99	99
4	Gudalur	94	94	99	99	100	100	100	99.9	95	97	97	97	97	99	99	99.1	95	95	98	98	98	99	97	99.5
The Nilgiris		92	92	98	98	99	99	99	99.3	92	92	97	97	99	99	99.3	92	91	97	97	99	99	99	99.3	

Source: DISE.

Annexure 4-16: Net Enrolment Rate in Upper primary Level – Students from ST community

S. No.	Blocks	Boys								Girls								Total							
		2002	2003	2004	2005	2006	2007	2008	2009	2002	2003	2004	2005	2006	2007	2008	2009	2002	2003	2004	2005	2006	2007	2008	2009
1	Ooty	76	85	96	97	98	95	97	96.8	73	83	95	98	98	93	97	97.1	75	84	96	97	98	91	97	97
2	Coonoor	75	92	94	96	96	93	96	95.5	74	92	95	96	97	93	97	96.9	75	92	95	96	96	95	96	96.2
3	Kotagiri	76	95	96	97	98	95	97	96.7	75	94	96	96	97	92	96	96	76	95	96	97	97	93	96	96.8
4	Gudalur	73	96	98	100	100	94	96	95.8	74	95	98	99	99	91	95	95	74	96	98	99	99	97	95	95.4
The Nilgiris		75	92	96	97	99	94	96	96.2	74	91	96	97	99	92	96	96.2	75	91	96	97	99	93	96	96.2

Source: DISE.

Annexure 4-17: Attendance Rate of Students in Upper Primary Schools

S. No.	Districts	All									SC									ST								
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	Ooty	93	94	96	96	96	98	99	99.2	99.2	65	68	89	88	89	99	97	98	98	71	71	75	77	77	90	93	93	93
2	Coonoor	91	92	96	94	95	97	99	99.1	99.1	67	69	84	86	87	97	96	97	97	77	75	84	86	86	99	95	95	95
3	Kotagiri	87	88	98	96	97	98	97	97.3	97.3	80	79	75	86	88	98	95	96	96	74	75	75	78	78	91	92	92	92
4	Gudalur	82	83	84	89	90	96	95	95.3	95.3	73	74	76	75	76	86	93	94	94	69	72	75	77	77	90	90	91	91
The Nilgiris		88	89	94	94	95	97	98	97.7	97.7	71	73	81	84	85	95	95	96	96	73	73	77	79	100	93	93	93	93

Source: As in Annexure 5.3.

Annexure 4-18: Dropout Rate of Students – Upper Primary Schools

S No	Block	All									SC									ST								
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	Ooty	6	3	2	4	3	3	3	2.6	2.6	30	23	4	6	7	3	3	2.8	2.8	24	24	12	7	2	2	2	2	2
2	Coonoor	9	8	3	3	2	3	2	1.4	1.4	30	27	3	3	2	3	3	2.5	2.5	35	31	2	14	4	3	3	3	3
3	Kotagiri	4	4	4	6	4	2	2	2.1	2.1	39	36	4	5	4	3	3	3.1	3.1	41	35	12	23	14	4	4	4	4
4	Gudalur	13	9	5	4	1	1	1	0.9	0.9	37	30	2	2	2	2	1	1.3	1.3	56	42	12	13	4	2	2	2	2
The Nilgiris		8	6	3	4	2	1	2	1.8	1.8	34	29	4	4	3	3	3	2.4	2.4	39	33	10	14	5	3	3	2	2

Source: As in Annexure 4.3.

Annexure 4-19: Completion Rate in Upper Primary Schools Across Social Groups in Different Blocks of The Nilgiris District

S. No.	Districts	All									SC									ST								
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	Ooty	84	88	89	91	95	95	97	95.6	95.6	48	57	86	88	89	90	91	93.6	93.6	63	67	77	91	98	92	93.5	96.4	96.4
2	Coonoor	81	83	90	92	94	95	96	96.5	96.5	53	57	90	91	96	93	94	94.6	94.6	58	64	93	76	96	93	94.2	90.2	90.2
3	Kotagiri	82	83	84	89	91	93	95	95.9	95.9	46	50	85	88	90	93	94	92.4	92.4	49	57	82	67	84	91	92.1	89.8	89.8
4	Gudalur	77	82	87	90	95	94	95	97.1	97.1	45	56	82	92	95	95	96	95.6	95.6	30	48	70	83	92	89	90.2	95.7	95.7
The Nilgiris		81	84	88	91	94	94	96	96.2	96.2	48	55	86	90	93	93	94	94.6	94	50	59	80	0	89	91	92.4	92.7	92.7

Source: As in Annexure 4.3.

Annexure 4-20: Repetition rate in upper primary schools across social groups in different blocks of The Nilgiris

S. No.	Districts	All									SC									ST								
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	Ooty	10	9	8	5	2	3	2.08	1.81	1.81	22	20	12	6	4	5	3.71	3.62	3.62	13	9	12	2	0	3	1.8	1.8	1.8
2	Coonoor	10	9	7	5	4	4	2.68	2.06	2.06	17	16	9	6	2	4	2.91	2.86	2.86	7	5	5	10	0	7	7.3	7.2	7.2
3	Kotagiri	14	13	12	6	5	4	2.98	2.09	2.09	15	14	12	7	7	5	4.61	4.49	4.49	10	7	6	10	2	9	7.7	7.5	7.5
4	Gudalur	10	9	8	6	4	4	2.49	1.94	1.94	18	14	13	6	4	4	3.21	3.14	3.14	14	11	18	4	4	4	2.8	2.8	2.8
The Nilgiris		11	10	9	5	3.7	3.9	2.56	1.99	1.99	18	16	11	6	4.35	4.85	3.61	3.53	3.53	11	8	10	0	5	6.2	4.9	4.8	4.8

Source: As in Annexure 4.3.

Annexure 4-21: Total No. of Teachers and percentage of female teachers in Upper Primary schools in different blocks of The Nilgiris

S. No.	Districts	2001-02		2002-03		2003-04		2004-05		2005-06		2006-07		2007-08		2008-09		2009-10	
		Total	% of Female	Total	% of Female	Total	% of Female	Total	% of Female	Total	% of Female	Total	% of Female	Total	% of Female	Total	% of Female	Total	% of Female
1	Ooty	571	53.1	576	53	362	59.4	664	57.1	486	63.2	823	72.8	641	71.6	599	72.5	319	63.6
2	Coonoor	373	54.4	552	57	300	62.3	446	66.1	488	78.5	741	77.6	462	71	538	77	218	80.3
3	Kotagiri	209	52.7	336	57	156	59.6	344	59	177	59.9	556	72.1	406	69.2	333	78.1	123	73.2
4	Gudalur	434	63.4	458	70	371	55.3	421	69.8	479	75	761	72.7	621	76.5	640	69.7	260	60
The Nilgiris		1587	56.1	1922	59	1189	58.9	1855	62.5	1630	70.9	2881	73.9	2130	72.4	2110	73.7	920	67.8

Source: As in Annexure 4.3.

Annexure 4.22: Out-of-school children with Target and Achievement

S.No	District	2002-2003			2003-2004			2004-2005			2005-2006			2006-2007			2007-2008			2008-2009			2009-2010		
		Target	Achievement	Percentage	Target	Achievement	Percentage	Target	Achievement	Percentage	Target	Achievement	Percentage	Target	Achievement	Percentage	Target	Achievement	Percentage	Target	Achievement	Percentage	Target	Achievement	Percentage
1	Ooty	9440	1039	34.7	1955	1199	61.3	644	314	48.8	364	173	47.5	211	137	64.9	740	516	69.7	125	55	43	71	11	15
2	Coonoor	2258	720	31.9	1538	1040	67.6	586	375	64	237	110	46.4	261	86	33	451	312	69.2	275	120	44	103	103	100
3	Kotagiri	1249	82	6.57	1167	927	79.4	476	256	53.8	232	130	56.5	219	153	69.9	353	289	81.9	370	85	23	110	62	56
4	Gudalur	3048	1039	34.1	2009	1200	59.7	960	763	79.5	257	123	47.9	404	404	100	819	486	59.3	587	206	35	284	158	56
The Nilgiris		9549	2880	30.2	6669	4366	65.5	2666	1708	64.1	1088	536	49.26	1095	780	71.2	2363	1603	62.2	1357	466	34	568	334	59

Source: As in Annexure 4.3.





## Chapter 5

# LIVELIHOOD

Since independence of India, the focus and strategy of development plans have been changing with respect to the dynamics of different geographical contexts, and national and international economic situations. But, the economy, irrespective of the sectoral or sub-sectoral priority, continues to be the central focus of almost all the Five-Year Plans in India. On the other hand, it is confirmed, empirically, that the economy and human development are mutually dependent on each other (Ranis and Stewart, 2005). To make human development sustainable, it is argued that the development plans have to facilitate the process of enhancing the capabilities of people (Sen, 1985, 1987; Dasgupta, 1993).

The economy represented by the per capita income has been one of the three core areas of human development since the UNDP's first human development report (UNDP, 1990). At the district level, however, understanding the human development perspective of the other economic indicators such as net domestic product and its composition, wage and employment, nature and extent of poverty, indebtedness, homelessness, child labour, migration, and infrastructure are vital. This chapter attempts to capture the above dimensions of human development in the Nilgiris district. Intra-district (taluk and block level) comparison of different indicators has been emphasised in the chapter.

As tea cultivation is very prominent in the district, due importance has been given to it under the agriculture section in this chapter.

### 5.1 Income

It is observed that the benefit of the economic growth does not percolate to poor and marginalised section of the population automatically (Ghosh, 2006; Jena, 2010). The Government of India, through the Eleventh Plan Document (Planning Commission, 2008) has revealed that a special approach has to be taken to include the poor in the growth process. The important role of economic growth, however, cannot be denied in ensuring human development.

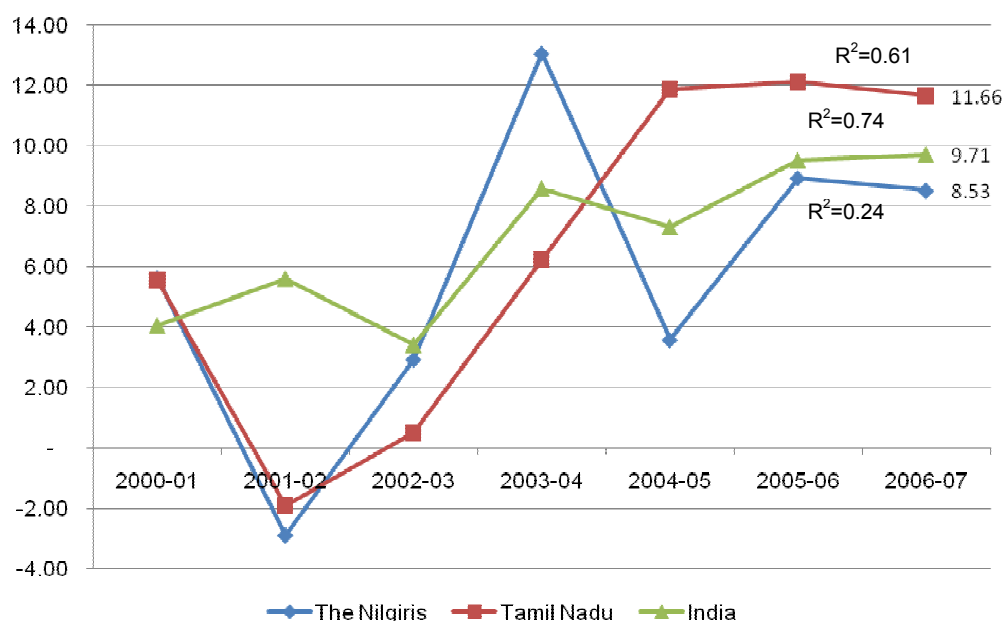
This section analyses the district income (net domestic product and its sectoral composition, and per capita net domestic product) from 1999-00 to 2006-07 at constant (1999-00) prices in comparison with the state (Tamil Nadu) and India. It is to be mentioned here that

the district is the lowest unit with income data and it is disaggregated from the state income. The sub-district level income comparison, therefore, is not possible.

### 5.1.1 Net District Domestic Product (NDDP)

During 2006-07, the net district domestic product (NDDP) of the Nilgiris was Rs. 199,083 lakh. During the same year, the NSDP of Tamil Nadu was Rs. 18,530,974 lakh. The annual growth rate of the NDDP of the Nilgiris (8.53 per cent) was found to be lower than that of the state (11.66 per cent) and India as a whole (9.71 per cent) during 2006-07. Interestingly, in spite of the fact that district endowed natural resources and ample opportunity of tourism sector, the overall NDDP growth rate continued to be lower in the district over the state during 2000-01 and 2006-07 (except the years 2002-03 and 2003-04) (Figure 5- 1 and Table 5- 1). Moreover, the growth rate of NDDP is more inconsistent in the district ( $R^2=0.245$ ) as compared to that of the state ( $R^2=0.611$ ) and India ( $R^2=0.740$ ) (Figure 5- 1). It might be due to the fluctuated growth of tertiary sector ( $R^2=0.064$ ) and secondary sector ( $R^2=0.118$ ) (Figure 5- 3) in the district.

Figure 5- 1: Growth Rate at constant (1999-00) prices



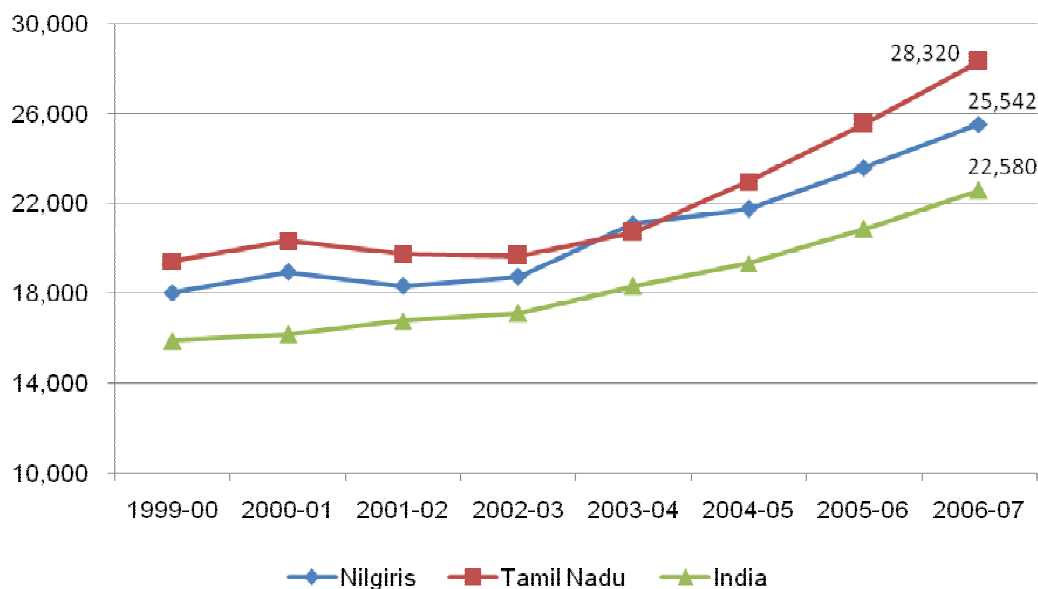
Source: Compiled from the data available at *Department of Economics and Statistics, Government of Tamil Nadu, Chennai.*

### 5.1.2 Per capita income

As mentioned in the earlier chapter the decadal population growth rate in the Nilgiris (11.99 and 7.31 during 1981-1991 and 1991-2001 respectively) was lower than that of Tamil Nadu and all-India. Despite the lower population growth rate in the district, its per capita income (Rs. 25,542) was lower than that of the state (Rs. 28,320), though it has been increasing over the

years (Figure 5- 2). It reveals that as compared to the state, the lower population growth rate of the district did not outweigh lower economic growth. Moreover, it is found that this gap of per capita income between the district and the state has been increasing (Figure 5- 2).

**Figure 5- 2: Per capita income at constant (1999-00) prices (in Rs.)**



Source: Compiled from the data available at Department of Economics and Statistics, Government of Tamil Nadu, Chennai.

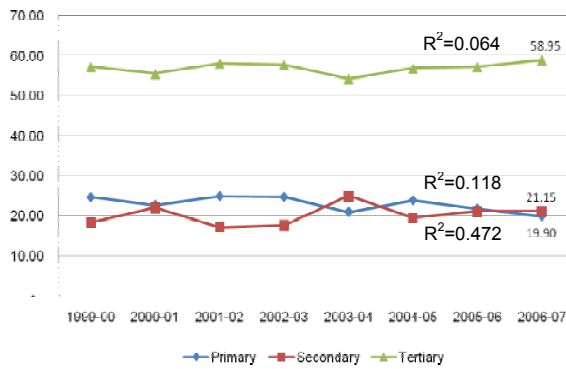
The better performance of the key economic indicators viz. NDP and per capita income of the district are not enough to understand about the human development perspective of economic condition in detail. It is because both the indicators are silent on distributional aspects (such as sectoral and regional distributions).

### 5.1.3 Sector wise contribution to NDDP

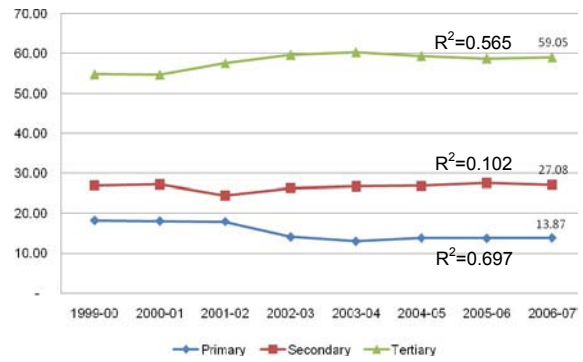
#### *Primary sector*

The primary sector (which includes agriculture and allied activities, forestry and logging, fishing, and mining and quarrying) is mostly unorganised in nature and its contribution to the total NDP of the country as a whole has been declining. The contribution from this sector has been declining over the years. During 2006-07, its contribution to the total NSDP of Tamil Nadu was 14 per cent. But in the Nilgiris, this contribution was much higher, i.e. about 20 per cent. It might be due to the contribution of tea crops in the district, which is unique in the state. However, the annual growth rates of the primary sector show a declining trend over the years (Figure 5- 3, Annexure 5- 2 and Annexure 5- 3). Again, it could be due to the sluggish growth in the index number of tea production and tea yield (Tea Board of India, 2006, pp.176-178).

**Figure 5- 3: Sector wise contribution to NDDP and NSDP at constant (1999-00) prices**



**The Nilgiris**

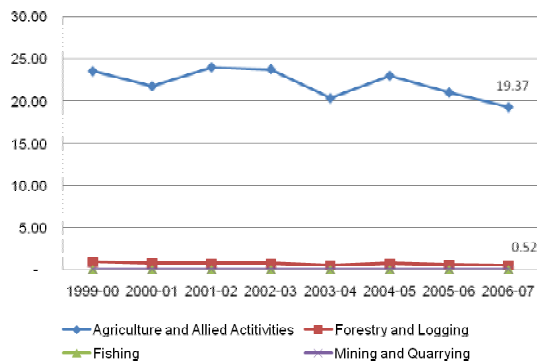


**Tamil Nadu**

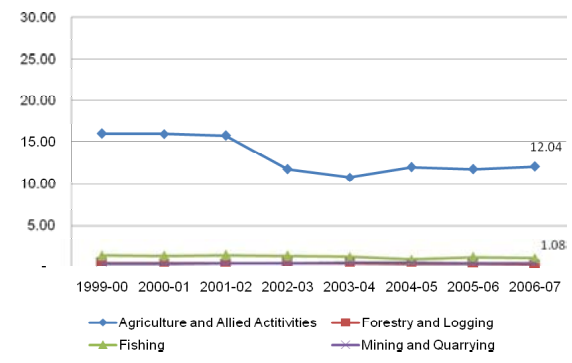
Source: Compiled from the data available at Department of Economics and Statistics, Government of Tamil Nadu, Chennai.

Though the district is rich in forests, it contributes less than one per cent of the total district’s NDDP. The contribution from the fisheries (inland) sector is less than that of the forests. Agriculture and allied dominated by the tea crops contributes 19.37 per cent of the districts NDDP in 2006-07, though it has come down from 23.61 in 1999-00 (Figure 5- 4 and Annexure 5- 4). This share (19.37 per cent) of the district was more than that of the state (12.04 per cent). As compared to the employment in terms of work participation rate (which is explained in the next section), the contribution of agriculture and allied sector is better in the Nilgiris.

**Figure 5- 4: Contribution (in %) of primary sector at constant (1999-00) prices**



**The Nilgiris**



**Tamil Nadu**

Source: Compiled from the data available at Department of Economics and Statistics, Government of Tamil Nadu, Chennai.

## Secondary sector

The contribution of secondary the sector to NDDP, which includes manufacturing, electricity, gas and water supply, and construction, is lower in the district (21.15 per cent) than that of the state (27.08 per cent) in 2006-07. This share in the district has been increasing at a very sluggish rate during 1999-00 and 2006-07, while it has become almost stagnant at the state level (Figure 5- 3). Moreover, the secondary sector growth rate in the district was much inconsistent ( $R^2=0.118$ ).

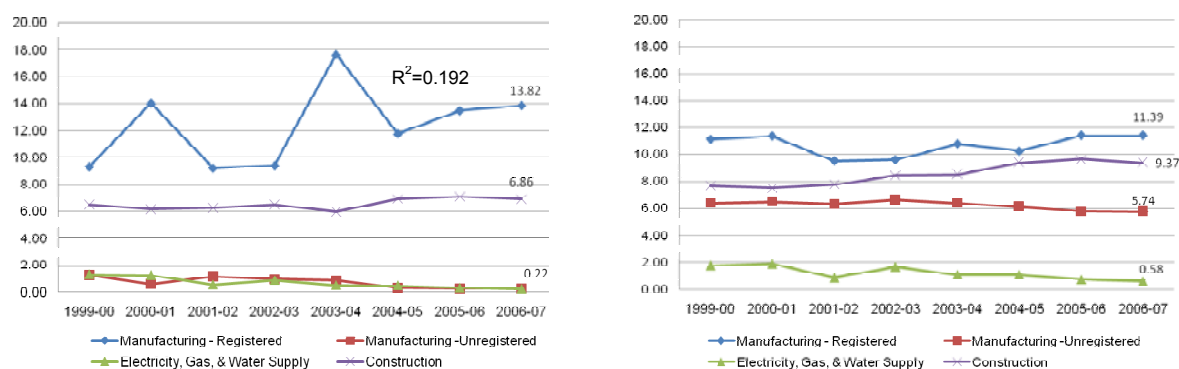
The manufacturing-registered sector's contribution to the total NDDP in 2006-07 was more in the district (13.82 per cent) than that of the state as a whole (11.39 per cent). Moreover, overall an increasing trend during 1999-00 and 2006-07 has been observed in the district (Figure 5- 5 and Annexure 5- 5). It might be due to the operation of the tea factories in the district.

The manufacturing-unregistered sector, which constitutes most of the household-based industry such as cottage and other traditional industries, has contributed a meager share (0.25 per cent) to the total NDDP of the district as against around six per cent in Tamil Nadu.

The contribution of the construction sector of the district in 2006-07 was 6.86 per cent as against about 10 per cent in the state a whole. Further, this share has been increasing since 2002-03 (Figure 5- 5 and Annexure 5- 5).

The contribution from electricity, gas and water supply is less than one per cent of NDDP and NSDP in both the district and state, and it shows a declining trend (Figure 5- 5 and Annexure 5- 5).

**Figure 5- 5: Contribution of secondary sector to at constant (1999-00) prices (%)**



The Nilgiris

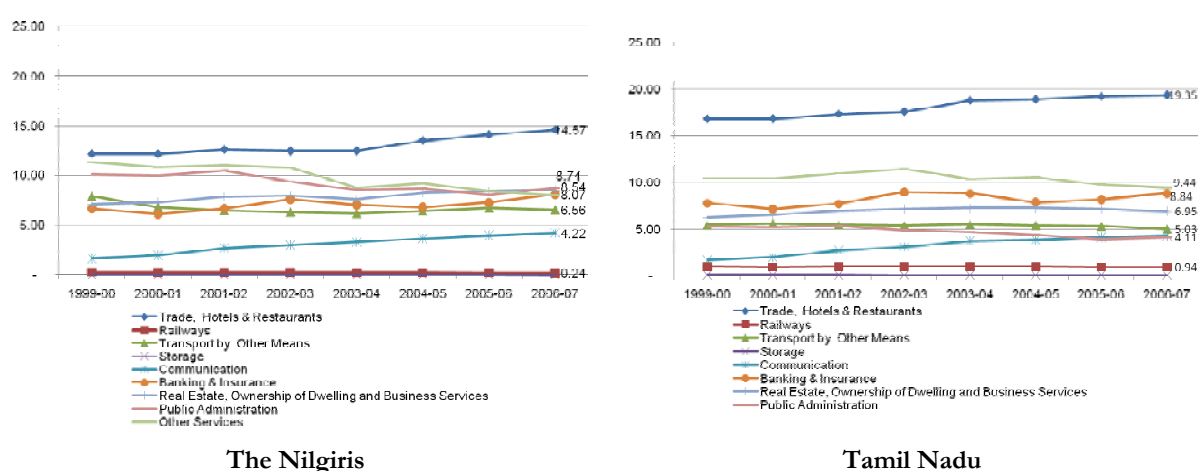
Tamil Nadu

Source: Compiled from the data available at Department of Economics and Statistics, Government of Tamil Nadu, Chennai.

## Tertiary sector

The tertiary sector, which includes trade, hotels and restaurants, banking, insurance and real estate, contributes 58.95 per cent to the total district's NDDP. This share of the district was almost same to that of the state (Figure 5- 3, Annexure 5- 2 and Annexure 5- 3). Unlike in the state, the contribution of tertiary sector in the district has been increasing consistently particularly since 2003-04 (Figure 5- 6 and Annexure 5- 6). It was mainly because of the fast growing trade, hotels and restaurants sector of the district. One can associate the tourism with such growth of trade, hotels and restaurants in the district.

Figure 5- 6: Contribution (in %) of tertiary sector at constant (1999-00) prices



Source: Compiled from the data available at Department of Economics and Statistics, Government of Tamil Nadu, Chennai.

From the given information in this section, another point worth noting here is that the contribution of the secondary sector to the NSDP of the state was 27.08 per cent in the state. But its contribution to the NDDP was 21.15 per cent in the district, which is very close to its primary sector contribution (19.90 per cent). It is observed that the agriculture and manufacturing sectors in the Nilgiris go together. It could be due to the extensive tea cultivation and tea factories in the district. It is discussed in detail in the agriculture section. **However, an independent study could be taken up to understand the reasons and dynamics of the stagnant secondary sector and declining primary sector in the district, which is almost dependent on the tea cultivation.**

It is revealed from this section that the performance of district economy is below that of the state as a whole. Moreover, with respect to the monthly per capita consumer expenditure particularly in urban areas (where 60 per cent of the total population live), a higher percentage of

population (31.70 per cent) in the district spend below Rs. 580 per month per capita<sup>1</sup> as compared to that of 16.10 per cent in the state as a whole (Govt. of Tamil Nadu, 2009). It may be mentioned here that the average monthly per capita consumer expenditure particularly in urban areas of the district was Rs. 875. Thus, it indicates a relatively higher economic inequality in the district than that in the state as a whole.

## 5.2 Employment and wages

There has been a change in income and its composition of the district, but it does not provide clarity on the section of population who are being benefited or affected in the above said structural changes. This section deals with employment and its sectoral and socio-geographical composition, and actual wages vis-a-vis the minimum wages fixed by the government.

### 5.2.1 Employment

Along with the extent, the quality of employment matters in human development (Bhaduri, 2008). The overall work participation rate<sup>2</sup> (WPR) of the Nilgiris was 45.06 per cent in 2001, which was marginally higher than that of the state (44.67 per cent) and much higher than that of India as a whole (39.13 per cent). Taluk wise, it varies from 39.07 per cent in Gudalur to 51.96 per cent in the Kotagiri (Table 5- 1). Similarly, the female WPR in the district (35.39 per cent) was more than that of the state (31.54 per cent). It was also observed that the WPR in the taluks with municipalities such as (Coonor, Udhagamandalam and Gudalur) was less than that of the other taluks (Table 5- 1).

**Table 5- 1: Overall Work Participation Rate (WPR)**

Taluk/ District/Tamil Nadu/ India	Total	Male	Female	Gender disparity of employment
Panthalur	44.27	52.33	36.30	16.03
Gudalur (with municipality)	39.07	51.17	27.09	24.08
Udhagamandalam ( <i>with municipality</i> )	44.05	55.52	32.64	22.88
Kotagiri	51.96	58.53	45.63	12.90
Coonoor (with municipality)	43.65	55.31	32.04	23.27
Kundah	51.68	55.49	48.05	7.44
<b>The Nilgiris District</b>	<b>45.06</b>	<b>54.86</b>	<b>35.39</b>	<b>19.47</b>
<b>Tamil Nadu</b>	<b>44.67</b>	<b>57.64</b>	<b>31.54</b>	<b>26.10</b>
<b>India</b>	<b>39.13</b>	<b>51.67</b>	<b>25.62</b>	<b>26.05</b>

Source: Census of India 2001.

<sup>1</sup> It was given as a cutoff amount by the National Sample Survey Organisation, India.

<sup>2</sup> Work participation rate is calculated as total workers divided by the total population and multiplied by 100.



One of the important observations on work participation is that the overall gender disparity<sup>3</sup> of work participation rate in the district (19.47) was lower than that in the state as a whole (26.10) and the country (26.05). Moreover, it was found that this disparity was more in the taluks with municipalities than those without (Table 5- 1).

### ***Rural-urban WPR***

As mentioned earlier, that the taluks with municipalities had lower WPR than those without. The overall WPR was found to be higher in rural areas (50.68 per cent) than in urban areas (41.25 per cent) of the district. This difference has been observed across the taluks except panthalur (Table 5.2). It was more or less the same with respect to marginal workers in the district (Table 5.3). Overall the proportion of main workers to total workers was found to be marginally higher in urban areas (90.84 per cent) than in rural areas (89.64 per cent), though a mixed result was observed across the taluks (Table 5.3).

**Table 5- 2: Rural-urban Work Participation Rate**

S. No.	Taluks	Overall			Rural			Urban		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
1	Panthalur	44.27	52.33	36.30	44.09	53.28	35.06	44.58	50.63	38.56
2	Gudalur	39.07	51.17	27.09	40.61	54.34	26.65	38.94	50.91	27.12
3	Udhagamandalam	44.05	55.52	32.64	51.68	58.09	45.36	38.22	53.57	22.83
4	Kotagiri	51.96	58.53	45.63	56.48	59.96	53.13	44.77	56.26	33.75
5	Coonoor	43.65	55.31	32.04	51.12	55.34	47.04	42.07	55.31	28.80
6	Kundah	51.68	55.49	48.05	52.40	55.62	49.34	50.17	55.21	45.34
	The Nilgiris	45.06	54.86	35.39	50.68	56.69	44.82	41.25	53.64	28.95

**Table 5- 3: Distribution of Main and Marginal workers**

S. No.	Taluks	Main workers			Marginal workers		
		Overall	Rural	Urban	Overall	Rural	Urban
1	Panthalur	85.67	83.07	90.30	14.33	16.93	9.70
2	Gudalur	82.74	85.21	82.54	17.26	14.79	17.46
3	Udhagamandalam	91.40	88.03	94.88	8.60	11.97	5.12
4	Kotagiri	93.52	94.95	90.65	6.48	5.05	9.35
5	Coonoor	93.18	97.32	92.11	6.82	2.68	7.89
6	Kundah	91.02	88.33	96.93	8.98	11.67	3.07
	The Nilgiris	90.30	89.64	90.84	9.70	10.36	9.16

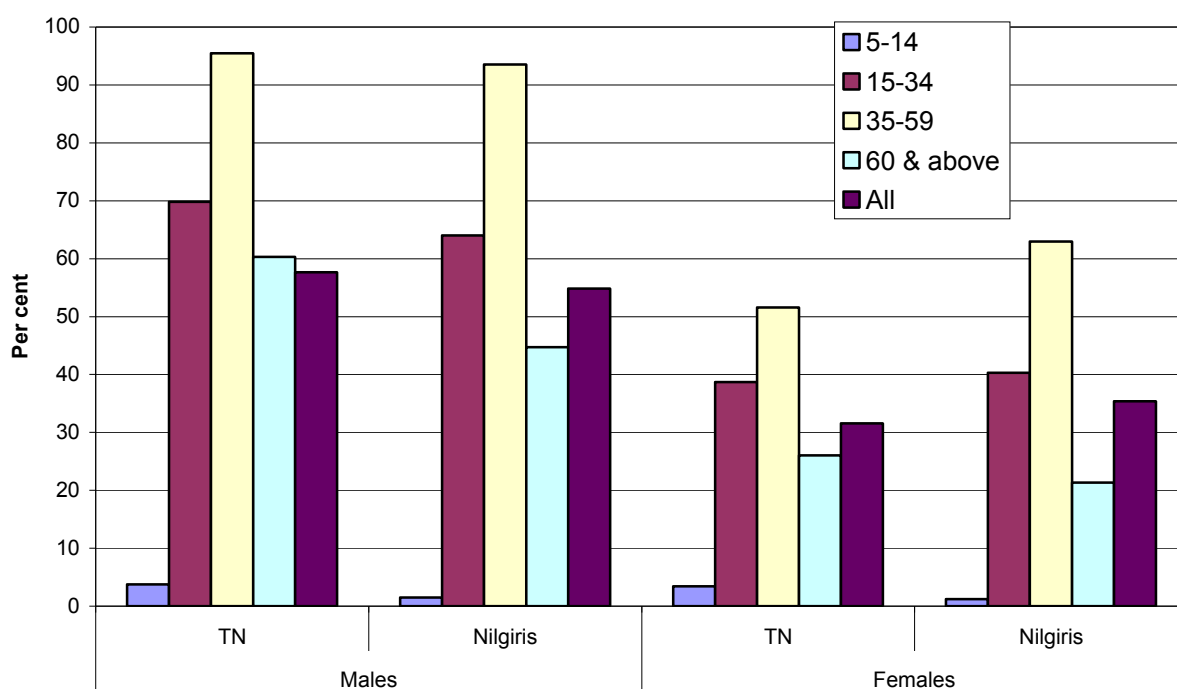
Source: Calculated from Census of India 2001

<sup>3</sup> Gender disparity of work participation rate (WPR) is calculated as the difference between male WPR and female WPR.

### Age wise WPR

Compared to the state, the WPR across the age groups especially among males was found to be lower in the Nilgiris district. (Figure 5- 7, Annexure 5- 7 and Annexure 5- 8). On the other hand, interestingly, the female WPR particularly in the working age group (i.e. 15-34 years and 35-59 years) was more in the district than that of the state as a whole (Annexure 5- 7 and Annexure 5- 8).

Figure 5- 7 Age wise distribution of workers

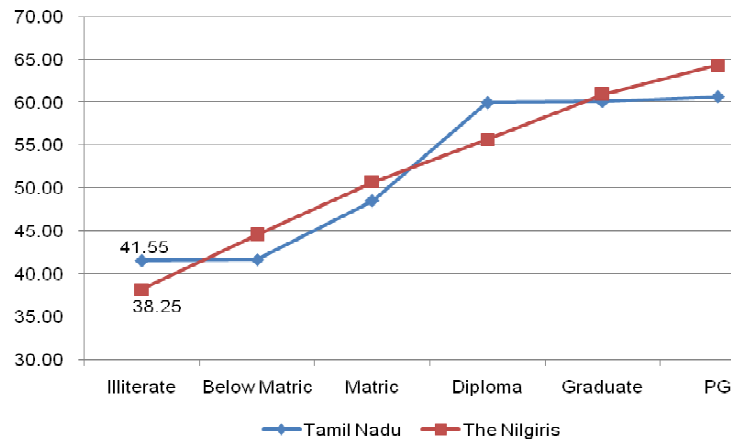


Source: Census of India 2001

### Level of education and WPR

It is commonly understood that education is one of the criteria to get employment. The consistent ( $R^2=0.991$ ) and a very significant positive relationship between the level of education and WPR in the district (Figure 5.8, Annexure 5- 9 and Annexure 5- 10) corroborates the above statement. Moreover, the WPR among illiterate population was found to be lower (38.25 per cent) in the Nilgiris as compared to Tamil Nadu (41.55 per cent).

**Figure 5- 8: Overall WPR by the level of education**



Source: Census of India 2001

### ***Main and marginal workers***

The share of main workers to the total workers in the district (90.30 per cent) was found to be more than that in the state (85.25 per cent) and the country as a whole (77.81 per cent). The opposite is the case with marginal workers (Table 5- 4). In fact, it is good from economic perspective. Taluk wise, Gudalur had as low as 82.74 per cent of main worker to total workers as against 93.52 per cent in Kotagiri (Table 5- 4). The share of main workers among females was found to be lower than their male counterparts except in Kundah taluk (Table 5- 4). The opposite is the case with marginal workers.

Despite the higher share of main workers, the district's NDDP as well as its growth was found to be lower, which implies the overall lower productivity of workers in the district.

**Table 5- 4: Proportion of main and marginal workers**

S. No	Taluks	Main workers			Marginal workers		
		Total	Male	Female	Total	Male	Female
1	Panthalur	85.67	88.24	82.00	14.33	11.76	18.00
2	Gudalur	82.74	85.11	78.32	17.26	14.89	21.68
3	Udhagamandalam	91.40	93.59	87.68	8.60	6.41	12.32
4	Kotagiri	93.52	94.53	92.28	6.48	5.47	7.72
5	Coonoor	93.18	94.45	90.99	6.82	5.55	9.01
6	Kundah	91.02	90.96	91.10	8.98	9.04	8.90
	<b>Nilgiris District</b>	<b>90.30</b>	<b>91.95</b>	<b>87.77</b>	<b>9.70</b>	<b>8.05</b>	<b>12.23</b>
	<b>Tamil Nadu</b>	<b>85.25</b>	<b>90.27</b>	<b>76.24</b>	<b>14.78</b>	<b>9.93</b>	<b>23.76</b>
	<b>India</b>	<b>77.81</b>	<b>87.32</b>	<b>57.26</b>	<b>22.19</b>	<b>12.67</b>	<b>42.73</b>

Source: Calculated from Census of India 2001

Among the main workers in the district, cultivators and agricultural labourers constitute merely 3.68 per cent and 12.51 per cent respectively (Table 5- 5). The shares of cultivators and the agricultural labourers in the district were much less than those of the state. Sexwise, among the main workers, the percentage of female cultivators was lower than their male counter parts. On the other hand, the share of female agricultural labourers was higher than that of the males (Table 5- 5).

Taluk wise, the share of cultivators varies from 1.61 per cent in Kotagiri to 6.36 per cent in Udhagamandalam. Similarly, the share of agricultural workers varies from 3.45 per cent in Kotagiri to 24.26 per cent in Udhagamandalam (Table 5- 5). It reveals that with respect to employment in agriculture, Kotagiri taluk is at the bottom and Udhagamandalam is on the top.

**Table 5- 5: Percentage distribution of total main workers by industrial category**

S. No.	Taluk	Cultivators			Agricultural Labourers			Others		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
1	Panthalur	4.61	5.75	2.88	10.93	10.06	12.25	84.46	84.20	84.87
2	Gudalur	5.32	6.32	3.29	11.79	10.96	13.49	82.88	82.72	83.21
3	Udhagamandalam	6.36	6.52	6.07	24.26	20.79	30.52	69.38	72.69	63.40
4	Kotagiri	1.61	1.70	1.51	3.45	3.03	3.99	94.93	95.27	94.50
5	Coonoor	1.28	1.28	1.28	6.01	4.85	8.08	92.71	93.88	90.64
6	Kundah	2.43	2.68	2.17	15.84	15.58	16.12	81.73	81.74	81.71
	The Nilgiris	3.68	4.10	3.01	12.51	11.15	14.68	83.81	84.76	82.31

Source: Calculated from Census of India 2001

## 5.2.2 Registration in Employment Exchange

There are around 35 employment exchange/registration offices in the state of Tamil Nadu, including the one in the Nilgiris district located at Udhagamandalam. In 1999-00, on an average 7.13 persons got placement for every 1000 persons registered in employment exchange in the district; now it has come down to 2.79 (Table 5.6). The area of concern is that the change in employment (besides its meagre share to total number of registered cases), which has been facilitated by the employment exchange, is found highly inconsistent.

**Table 5.6: Placements through Employment Exchange**

Year	Nilgiris		Tamil Nadu	
	Number of placements during the year	Placements per 1000 registrations	Number of placements during the year (in 000)	Placements per 1000 registrations
1999-00	474	7.13	24.0	4.01
2000-01	249	3.81	18.2	3.90
2001-02	147	2.08	15.6	3.18

Year	Nilgiris		Tamil Nadu	
	Number of placements during the year	Placements per 1000 registrations	Number of placements during the year (in 000)	Placements per 1000 registrations
2002-03	164	2.51	8.6	1.64
2003-04	476	7.25	31.6	6.34
2004-05	NA	NA	17.7	4.61
2005-06	107	2.06	16.2	4.30
2006-07	807	11.94	11.3	2.60
2007-08	158	2.01	37.0	7.46

Source: District Statistical Handbooks (different years), The Nilgiris

### 5.2.3 Wages

The data for actual wages for different categories of workers was collected from April 2007 to June 2010 from sample villages in each block of the Nilgiris by the Office of the Assistant Director, Statistics, Udthagamandalam. The blockwise name of the sample village covered is given in Annexure 5- 11. As given in Table , the actual wages across the categories of works particularly for males were more than the minimum wages fixed by the government. But it was not similar among the female workers. In most of the blocks and work categories, the actual female wages were less than the minimum wages fixed by the government. Moreover, one can observe that there was a high degree of gender disparity of wages across the blocks. It is also observed that the actual wages of a few cases has declined in absolute terms over a period of two years. One can also find that the real wages (converting the money wages to real wages at constant 2007 prices with the help of consumer price index of agricultural labourers) of most of the works has declined. One such case is given in Table , where one can see that in spite of increasing the money wages from Rs. 90 in 2007 to Rs. 110 in June 2010, the real wages has declined by Rs. 14 (from Rs. 90 to Rs. 74) over a period of four years.

**Table 5.7: Actual wages at constant prices**

Year	Wage at current prices**	Consumer price index for agricultural labourers (CPI <sub>AL</sub> )#	Wages at constant (2006-07) prices
2006-07	90	371	90
2007-08	110	403	101
2008-09	100	455	82
June 2010	110	534*	76

Note: Annual CPI<sub>AL</sub> for the years 2006-07, 2007-08 and 2008-09 are used here.

Source: #For the years 2006-07, 2007-08 and 2008-09: *Consumer Price Index Numbers for AL/RL on base 1986-87=100*, Annual Report 2008-2009, Govt. of India, Ministry of Labour & Employment, Labour Bureau, Shimla.

\*For June 2010: <http://labourbureau.nic.in/indtab.html>. Retrieved on 22 July 2010.

\*\* Office of the Assistant Director of Statistics, the Nilgiris, Udthagamandalam.

**Table 5.8: Worker category wise minimum wages fixed by the government and actual wages in sample villages of different blocks in the Nilgiris from 2007 to 2010**

S. No.	Type of agricultural labourers	Year	Minimum wages		Udhagai		Coonoor		Kotagiri		Gudalur		Average	
			Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	Sowers	Apr-07	Rs.80/6h	Rs.70/5h	90.00	52.50	-	-	-	-	-	-	90.00	52.50
		Jun-08	Rs.80/6h	Rs.70/5h	110.00	50.00	90.00	50.00	-	-	75.00	40.00	91.67	46.67
		Jun-09	Rs.80/6h	Rs.70/5h	100.00	50.00	-	-	-	-	90.00	50.00	95.00	50.00
		Jun-10	Rs.80/6h	Rs.70/5h	110.00	60.00	110.00	75.00	130.00	75.00	110.00	60.00	115.00	67.50
2	Pluckers & Seedlings	Apr-07	Rs.80/6h	Rs.70/5h	-	-	-	-	-	-	-	-	-	-
		Jun-08	Rs.80/6h	Rs.70/5h	-	-	-	-	-	-	75.00	40.00	75.00	40.00
		Jun-09	Rs.80/6h	Rs.70/5h		50.00	-	-	-	-	90.00	50.00	90.00	50.00
		Jun-10	Rs.80/6h	Rs.70/5h	-	-	-	-	130.00	75.00	-	-	130.00	75.00
3	Transplanters	Apr-07	Rs.80/6h	Rs.70/5h	90.00	52.50	70.00	50.00	-	-	-	-	80.00	51.25
		Jun-08	Rs.80/6h	Rs.70/5h	110.00	50.00	90.00	50.00	-	-	75.00	40.00	91.67	46.67
		Jun-09	Rs.80/6h	Rs.70/5h			110.00	60.00	-	-	90.00	50.00	100.00	55.00
		Jun-10	Rs.80/6h	Rs.70/5h	110.00	60.00			-	-	110.00	60.00	110.00	60.00
4	Weeders	Apr-07	Rs.80/6h	Rs.70/5h	90.00	52.50	70.00	50.00	-	50.00	-	-	80.00	50.83
		Jun-08	Rs.80/6h	Rs.70/5h	110.00	50.00	90.00	50.00	-	-	-	-	100.00	50.00
		Jun-09	Rs.80/6h	Rs.70/5h	100.00	50.00	110.00	60.00	-	-	-	-	105.00	55.00
		Jun-10	Rs.80/6h	Rs.70/5h	-	-	110.00	75.00	130.00	75.00	-	-	120.00	75.00
5	Persons employed in harvesting: Other than paddy	Apr-07	Rs.80/6h	Rs.70/5h	-	-	70.00	50.00	80.00	50.00	75.00	38.00	75.00	46.00
		Jun-08	Rs.80/6h	Rs.70/5h	-	-	90.00	50.00	55.00	45.00	75.00	40.00	73.33	45.00
		Jun-09	Rs.80/6h	Rs.70/5h	100.00	50.00	-	-	-	-	90.00	50.00	95.00	50.00
		Jun-10	Rs.80/6h	Rs.70/5h	-	-	-	-	-	-	-	-	-	-
6	Persons employed in harvesting: Other agricultural operations	Apr-07	Rs.80/6h	Rs.70/5h	90.00	52.50	-	-	-	-	75.00	38.00	82.50	45.25
		Jun-08	Rs.80/6h	Rs.70/5h	110.00	50.00	90.00	50.00	55.00	45.00	75.00	40.00	82.50	46.25
		Jun-09	Rs.80/6h	Rs.70/5h	-	-	-	-	60.00	42.50	90.00	50.00	75.00	46.25
		Jun-10	Rs.80/6h	Rs.70/5h	110.00	60.00	110.00	75.00	130.00	75.00	110.00	60.00	115.00	67.50
7	Other operation - Agri. Labour Non-skilled	Apr-07	Rs.80/6h	Rs.70/5h	-	-	-	-	-	-	-	-	-	-
		Jun-08	Rs.80/6h	Rs.70/5h	-	-	110.00	60.00	-	-	-	-	110.00	60.00
		Jun-09	Rs.80/6h	Rs.70/5h	-	-	110.00	60.00	-	-	-	-	110.00	60.00

S. No.	Type of agricultural labourers	Year	Minimum wages		Udhagai		Coonoor		Kotagiri		Gudalur		Average		
			Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
		Jun-10	Rs.80/6h	Rs.70/5h	-	-	-	-	-	-	200.00	-	200.00	-	
8	Non agri. Labour - Carpenter	Apr-07	Rs.150/6h	-	-	-	-	-	200.00	-	-	-	200.00	-	
		Jun-08	Rs.150/6h	-	-	-	210.00	-	200.00	-	-	-	205.00	-	
		Jun-09	Rs.150/6h	-	-	-	-	-	-	-	-	-	-	-	-
		Jun-10	Rs.150/6h	-	200.00	-	-	-	300.00	-	-	-	-	250.00	-

**Note:** \*The minimum wages fixed by the government, Labour and Employment (J1) Department, G.O. No. (2D) 88 dated 01.10.2009.

**Source:** Office of the Assistant Director of Statistics, the Nilgiris, Udhagamandalam.

### 5.3 Poverty

Poverty is multidimensional and complex (Asselin, 2009). Based on the composite method of poverty measurement with head count ratio, the last rural below poverty line (BPL) census was conducted in 2002, though sample surveys on poverty have been conducted by the National Sample Survey Organisation (NSSO) of the government of India from time to time. As NSSO data is not representative at the sub-district level, this section is based on the rural<sup>4</sup> BPL Census 2002 data with block level comparison of poverty scenario. It is broadly divided into two parts such as extent of poverty and characteristics of poverty.

#### 5.3.1 Extent of poverty

About 35 per cent of rural households were living below the poverty line. It was as high as 42.17 per cent in Coonoor block and as low as 32.41 per cent in Kotagiri block. Social groupwise, the percentage of BPL households among scheduled caste (SC), scheduled tribe (ST) and 'others' were 32.56 per cent, 40 per cent and 41.50 per cent respectively in the district (Table 5- 99 and Annexure 5- 12). Table 5 10 depicts the blocks from bottom to top with respect to the poverty ratio.

**Table 5- 9: Extent of poverty (percentage of households)**

Blocks	SC	ST	OBC	Others	Total
Gudalur	34.75	41.78	34.63	34.16	35.39
Udhagamandalam	21.20	23.86	16.36	53.20	33.39
Kotagiri	35.86	38.90	27.78	30.00	32.41
Coonoor	38.31	25.30	30.45	24.77	42.17
The Nilgiris	32.56	40.00	26.65	41.50	34.80

**Source:** Compiled from Rural BPL Household Census, 2002. Retrieved 23 December 2009 from <http://bpl.nic.in>, Department of Rural Development, Government of India, New Delhi.

**Table 5 10: Blocks from bottom to top with respect to the poverty ratio**

1. Coonoor	42.17
2. Gudalur	35.39
3. Udhagamandalam	33.39
4. Kotagiri	32.41

**Source:** Compiled from Rural BPL Household Census, 2002. Retrieved 23 December 2009 from <http://bpl.nic.in>, Department of Rural Development, Government of India, New Delhi.

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<sup>4</sup> As mentioned in the earlier chapter that around 40 per cent of the total population in the district live in rural areas against 56 per cent in the state as a whole (2001 Census).



### 5.3.2 Characteristics of poverty

Poverty in the district and in different blocks has been characterised on the basis of: (i) income; and (ii) size of operational landholding. On each indicator, the overall as well as social groupwise blocks from bottom (poorest) to top (better) have been identified and presented.

#### (i) Income

The distribution of BPL households based on the average household monthly income is one of the criteria through which the intensity of poverty could be understood. Other things remaining the same, the lower the household income, the higher is the intensity of poverty.

It is found that 40.35 per cent of total BPL households were living with less than Rs 499 monthly income. Among the social groups, this was highest among ST (78.57 per cent) followed by SC (51.15 per cent) and OBC (44.66 per cent) (Annexure 5- 13). Table 5- 1111 shows the social groupwise bottom (poorest) to top (better) blocks on the basis of percentage of households with less than Rs 499 monthly household income.

As mentioned in the education chapter that Gudalur block is backward in important educational parameters. Similarly, it is observed here that the same block is backward with respect to income poverty. Especially, nearly 92 per cent of the ST households in the above suffers from income poverty.

**Table 5- 11: Households with less than Rs. 499 monthly household income**

Social groups	Blocks	%
Overall (all social groups)	1. Gudalur	70.70
	2. Kotagiri	28.32
	3. Coonoor	24.28
	4. Udhamandalam	15.29
SC households	1. Gudalur	68.30
	2. Udhamandalam	55.64
	3. Coonoor	50.75
	4. Kotagiri	24.07
ST households	1. Gudalur	91.59
	2. Coonoor	61.90
	3. Udhamandalam	56.57
	4. Kotagiri	39.95
OBC households	1. Udhamandalam	66.40
	2. Kotagiri	62.36
	3. Coonoor	55.93
	4. Gudalur	26.34
Other households	1. Gudalur	54.12
	2. Kotagiri	16.11
	3. Coonoor	7.41
	4. Udhamandalam	1.91

**Source:** Compiled from Rural BPL Household Census, 2002. Retrieved 23 December 2009 from <http://bpl.nic.in>, Department of Rural Development, Government of India, New Delhi.

## *(ii) Size of operational landholding (landless)*

Overall, around 83 per cent of rural BPL households in the district were found landless. It was highest among 'other' castes with 91.00 per cent followed by SC (78.36 per cent), ST (76.52 per cent) and OBC (76.12 per cent) (Annexure ). Table 5-12 shows the social group wise bottom (poorest) to top (better) blocks on the basis of percentage of landless BPL households.

**Table 5-12: Landless BPL households**

Social groups	Blocks	%
Overall (all social groups)	1. Coonoor	95.52
	2. Udhagamandalam	92.32
	3. Kotagiri	91.09
	4. Gudalur	67.46
SC households	1. Coonoor	96.28
	2. Kotagiri	93.82
	3. Udhagamandalam	83.13
	4. Gudalur	58.45
ST households	1. Kotagiri	90.97
	2. Udhagamandalam	86.87
	3. Coonoor	85.71
	4. Gudalur	71.52
OBC households	1. Coonoor	87.87
	2. Kotagiri	81.90
	3. Udhagamandalam	79.16
	4. Gudalur	70.54
Other households	1. Coonoor	98.16
	2. Udhagamandalam	97.32
	3. Kotagiri	96.88
	4. Gudalur	67.96

**Source:** Compiled from Rural BPL Household Census, 2002. Retrieved 23 December 2009 from <http://bpl.nic.in>, Department of Rural Development, Government of India, New Delhi.

## **5.4 Resource endowments and livelihood**

Based on the facts given in the second chapter, the district is endowed with more than 80 per cent of its area under forest and rivers. The district is known for its tea production. Tourism is another area of development in the district. The district is also known for its hill area with more than three per cent of tribal population. Both flora and fauna are abundant in the district. Based on this, the present section covers the status and dynamics of different livelihoods of people in the district.

### 5.4.1 Agriculture, horticulture and allied activities

As mentioned earlier, agriculture and allied activities contribute around 20 per cent to the district's net domestic product at constant (1999-00) prices; this is higher than that at the state level (12.04 per cent).

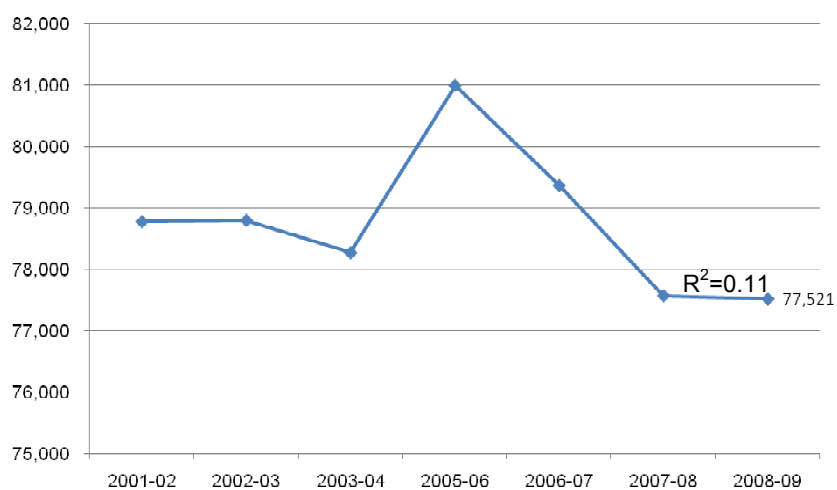
#### *Land utilisation pattern*

The National Forest Policy 1988 suggests that each state has to maintain the minimum of one-third of its geographical area as forest (Govt. of India, 1988). As per the Forest Department, Tamil Nadu state had merely 17.94 per cent of area as forest, whereas it was 56 per cent in the Nilgiris district (i.e. 1425.77 sq. km or 142577 hectare) (Annexure 5- ). During 2000-01 and 2001-02, 772 hectare (7.72 sq. km) of forest area declined in the district (Annexure 5-15).

But as per the remote sensing (satellite) data, which is more appropriate, the district has around 80.35 per cent of forest cover including open degraded forest in 2007 assessment (Forest Survey of India, 2009).

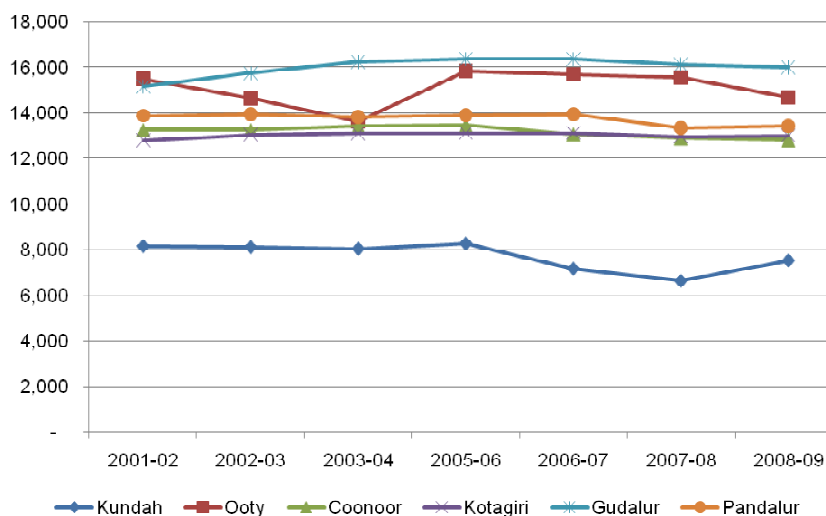
The overall net sown area of the district was found to be declining from 2001-02 to 2008-09 (Figure 5-9). though not consistently ( $R^2=0.11$ ). Ooty (Udhagamandalam), being the biggest taluk (in area) in the district, the decline in the net sown area in this taluk was more prominent (Figure 5.11). It indicates that agricultural lands are being converted to non-agricultural uses in the district.

**Figure 5-9 Net area sown (in ha.)**



Source: District Statistical Handbook, The Nilgiris, different years.

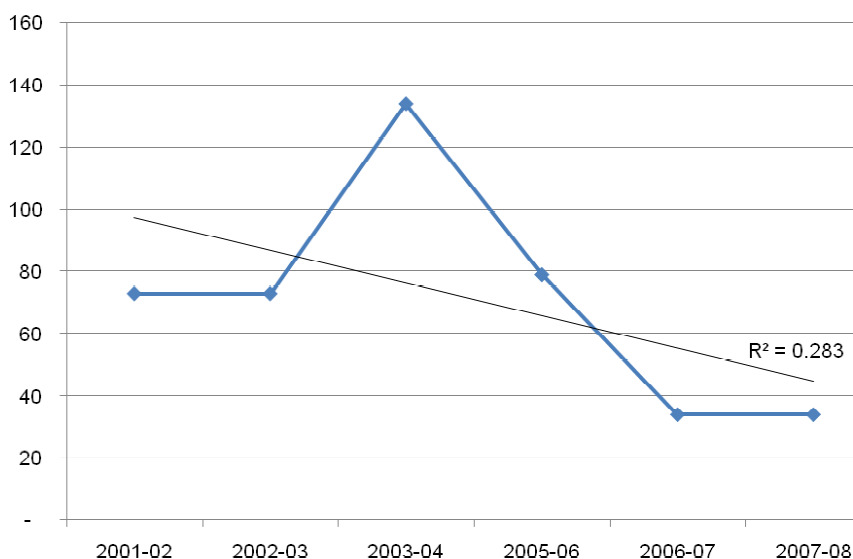
**Figure 5.10 Net area sown (in ha.) – Talukwise**



Source: District Statistical Handbook, The Nilgiris, different years.

Unlike the other parts of Tamil Nadu, the Nilgiris district receives a very good rain fall. There the irrigation facility in the district, the area sown more than once in the district has been declining over the years (Figure 5.11). It is to be noted here that one can find the area sown more than once only in Coonoor taluk.

**Figure 5-11 Area sown more than once (in ha.)**

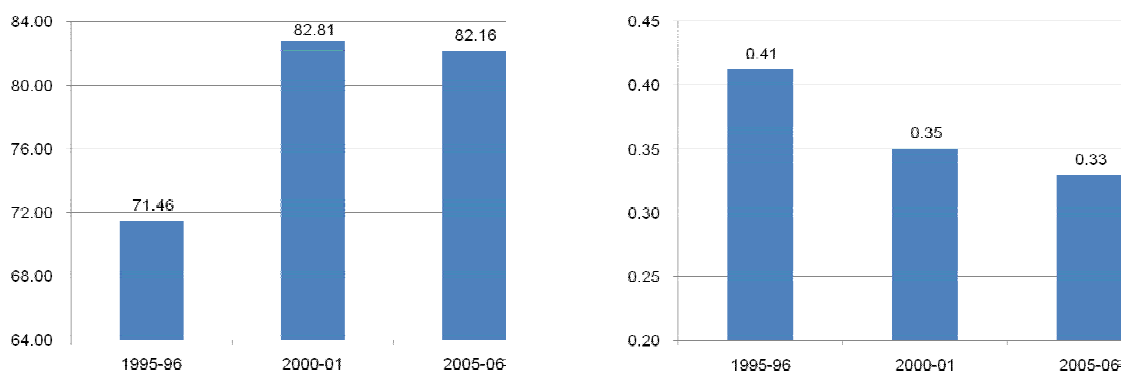


Source: District Statistical Handbook, The Nilgiris, different years.

## Operational landholdings – number and area of holding

More than 82 per cent of operational landholdings in the district were cultivated by marginal farmers in 2005-06 (Agricultural Census 2005-06). Moreover, this share has increased from 71.46 per cent in 1995-96 Agricultural Census (Figure 5.12).

**Figure 5- 12 Share of marginal operational holdings by number and size**



Percentage of marginal operational holdings in The Nilgiris over the agricultural census years

Average size (ha.) of operational holdings by marginal holders in The Nilgiris over the agricultural census years

Source: Agricultural Census, 1995-96, 2000-01, and 2005-06.

Moreover, the farmers have been marginalised over the census periods not only in terms of percentage of marginal landholders (Table 5.13) but also in terms of average size of landholding per marginal farmer (Figure 5.12 and Table 5.14)

**Table 5- 13: Distribution of number and area of operational holdings\* by size groups**

Category	Number of holdings (%)			Average area (%)		
	1995-96	2000-01	2005-06	1995-96	2000-01	2005-06
Marginal	71.46	82.81	82.16	16.07	39.76	37.67
Small	16.65	10.80	11.38	12.41	20.62	21.52
Semi-medium	8.21	4.31	4.33	10.67	16.27	16.26
Medium	2.65	1.74	1.83	8.23	13.59	14.87
Large	1.04	0.34	0.29	52.61	9.75	9.67
All	100.00 (47,650)	100.00 (67,880)	100.00 (69,865)	100.00 [87,380]	100.00 [49,597]	100.00 [50,246]

**Note:** \* It excludes the institutional holdings. There were no joint holdings.

Figures in parentheses show the respective total number of holdings and figures in square brackets show the respective total area in hectare.

**Source:** Agricultural Census 1995-96, 2000-01, and 2005-06.

**Table 5- 14: Average size of holding (in hectare)**

Size of holdings	Average size of holding		
	1995-96	2000-01	2005-06
Marginal	0.41	0.35	0.33
Small	1.37	1.39	1.36
Semi-medium	2.38	2.76	2.70
Medium	5.70	5.71	5.83
Large	93.06	21.03	23.93
All	1.83	0.73	0.72

**Note:** It excludes the institutional holdings. There were no joint holdings.

Source: Agricultural Census 1995-96, 2000-01, and 2005-06.

The average size of operational landholding per marginal holder has been declining over the Agricultural Census (Table 5.14). It has declined from 0.41 hectare in 1995-96 to 0.35 hectare and 0.33 hectare in 2000-01 and 2005-06 respectively.

### ***Irrigation***

Merely 298.42 hectare of land is irrigated by different sources in the Nilgiris district during 2008-09. Dug wells (799 numbers) cover 272.49 hectare of land and the remaining 25.93 hectare were covered by the flow irrigation in the district (Table 5.15).

**Table 5- 15: Irrigated Area by source (2008-09)**

Sources of irrigation	Net area irrigated ( <i>in Ha.</i> )
Surface water ( <i>flow irrigation</i> )	25.93 (8.69)
Ground water ( <i>Dug wells</i> )	272.49* (91.31)
Total	298.42 (100.00)

**Note:** Total 799 dug well were in the district in 2008-09; Figures in parentheses show the percentage to the respective total area irrigated.

**Source:** District Statistical Handbook 2008-09, the Nilgiris.

### ***Irrigation intensity and cropping intensity***

As mentioned earlier, the area under irrigation is limited to 298.42 hectare and area sown more than once is meagre, irrigation intensity<sup>5</sup> in the district is obviously to be very low. It has been reflected in Table 5.16 based on 1995-96 and 2000-01 Agricultural Census data. Similar case was observed with respect to the cropping intensity in the district (Table 5-17).

<sup>5</sup> Irrigation intensity is calculated as gross area irrigated divided by net area irrigated multiplied by 100.

**Table 5- 16: Irrigation intensity**

Size of holdings	Coonoor		Gudalur		Kotagiri		Udhagai		Total (District)	
	1995-96	2000-01	1995-96	2000-01	1995-96	2000-01	1995-96	2000-01	1995-96	2000-01
Marginal	100.00	100.00	100.00	100.00	103.45	147.96	109.17		105.60	130.13
Small	100.00	100.88	100.00	150.00	100.00	114.63	110.71		105.56	103.69
Semi-medium	100.00		100.00		102.88	100.00	101.63		101.62	100.00
Medium	100.00	100.00			106.45		112.41		107.07	100.00
Large							143.75		143.75	
All classes	100.00	100.54	100.00	140.00	102.67	137.24	115.82		109.18	110.94

Source: Agricultural Census 1995-96 and 2000-01.

**Table 5- 17: Cropping intensity**

Size of holdings	Bundalur		Coonoor		Gudalur		Kotagiri		Kundah		Udhagai		Total (District)	
	1995-96	2000-01	1995-96	2000-01	1995-96	2000-01	1995-96	2000-01	1995-96	2000-01	1995-96	2000-01	1995-96	2000-01
Marginal	NA	100.75	101.41	100.53	102.45	101.02	101.95	101.77	NA	100.45	108.43	100.79	104.91	100.90
Small	NA	101.20	100.00	100.33	100.46	100.40	100.05	100.53	NA	100.18	105.29	100.36	102.18	100.49
Semi-medium	NA	100.23	100.05	100.16	101.97	100.14	101.62	100.00	NA	100.28	102.61	100.05	101.72	100.13
Medium	NA	100.59	100.97	100.00	100.06	100.00	104.38	100.16	NA	100.00	113.59	100.09	105.24	100.12
Large	NA	100.00	100.00	100.00	100.73	118.18	100.00	100.09	NA	100.00	132.83	100.00	106.88	100.32
All classes	NA	100.76	100.30	100.29	100.97	100.94	101.12	100.78	NA	100.24	114.72	100.42	105.07	100.54

Source: Agricultural Census 1995-96 and 2000-01.

### **Horticulture**

The favourable climatic conditions in the district allows the cultivation of different horticultural crops. Among others, the important vegetable crops in the district include carrot, potato, cabbage, beans and banana. Similarly, the important spices and condiments produced in the district are pepper, ginger and garlic. Besides, the district has an extensive area (around three-fourth of net area sown) under tea and coffee crops. The details of area and production of select crops are given in Table 5-18.

**Table 5- 18: Area under various horticultural crops (in Ha.) and production (in '000 Kg.)**

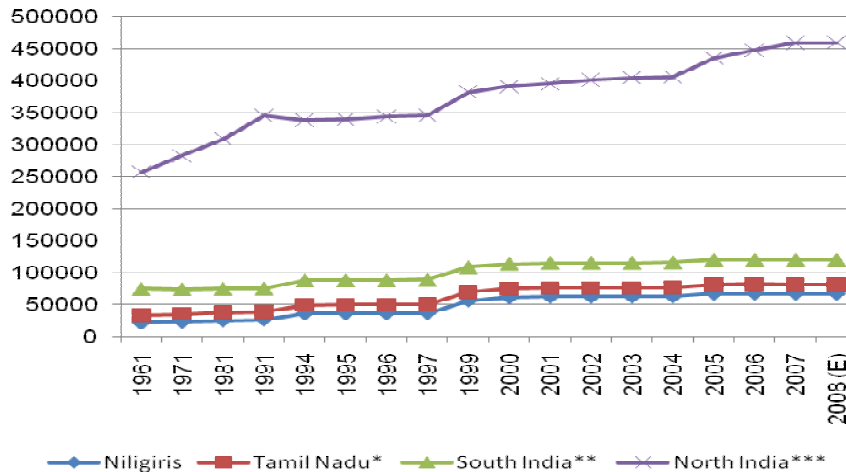
Crops	2004-05		2008-09	
	Area (ha)	Production	Area (ha)	Production
<b>Vegetables</b>				
1. Carrot	2,297.40	64,074.49	2,371.92	68,014.70
2. Potato	2,300.10	48,026.09	1,292.00	30,853.69
3. Cabbage	943.95	78,602.72	699.19	50,436.02
4. Beans	928.60	8,710.27	412.32	4,072.83
5. Fruits				
6. Banana	335.00	13,065.00	916.65	37,538.70
7. Orange	1,005.00	3,256.20	65.00	1,018.48
<b>Spices and condiments</b>				
8. Ginger	675.00	6,243.75	713.60	13,915.20
9. Garlic	90.10	691.07	123.28	862.92
10. Pepper	2,457.00	3,439.80	1,918.74	421.41
<b>Plantation crops</b>				
11. Coffee	7,474.00	4,484.40	7,510.15	5,937.94
12. Tea	58,738.00	687,234.60	58,145.73	606,118.63
<b>Agricultural crops</b>				
13. Paddy	1,507.00	4,521.00	773.48	2,701.28

Source: District Statistical Handbook 2004-05 and 2008-09, the Nilgiris.

**Tea cultivation**

As mentioned earlier that around three-fourth of the net area sown in the district is under tea cultivation. That could be the reason of not increasing the area under tea very fast unlike in North India (Figure 5-13 and 5.16).

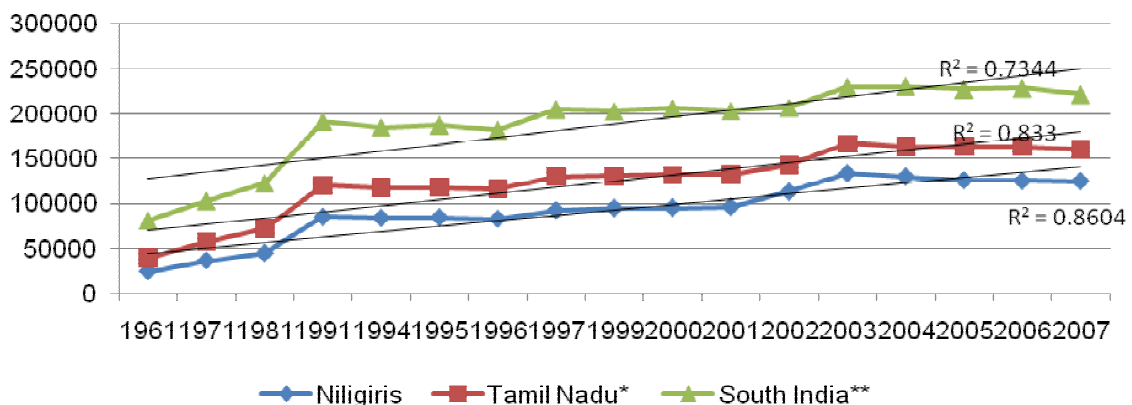
**Figure 5-13: Area under tea in India (in ha.)**



Note: \* Tamil Nadu includes the districts of Kanyakumari, Tirunelveli, Madurai, Coimbatore and Nilgiris  
 \*\* South India includes the states of Tamil Nadu, Kerala and Karnataka  
 \*\*\* North India includes the states of Assam, West Bengal, Tripura, Bihar, Uttaranchal, Himachal Pradesh, Manipur, Sikkim, Arunachal Pradesh, Nagaland, Orissa, Meghalaya, Mizoram  
 Source: Tea Statistics, Tea Board of India, Kolkata, Different years.

**Tea production:** The production of tea in the Nilgiris was found to be increasing over the years, though it has also been increasing in Tamil Nadu and South India as a whole (Figure 5- 14 and Annexure 5- ). The rate of change in the area under tea cultivation in the Nilgiris, Tamil Nadu and South India remaining almost same ( ), the production of tea has been increasing at sluggish rate in the district compared to that in Tamil Nadu and South India as a whole (Figure 5- 14).

**Figure 5- 14: Production of tea in India (in Thousand Kgs.)**

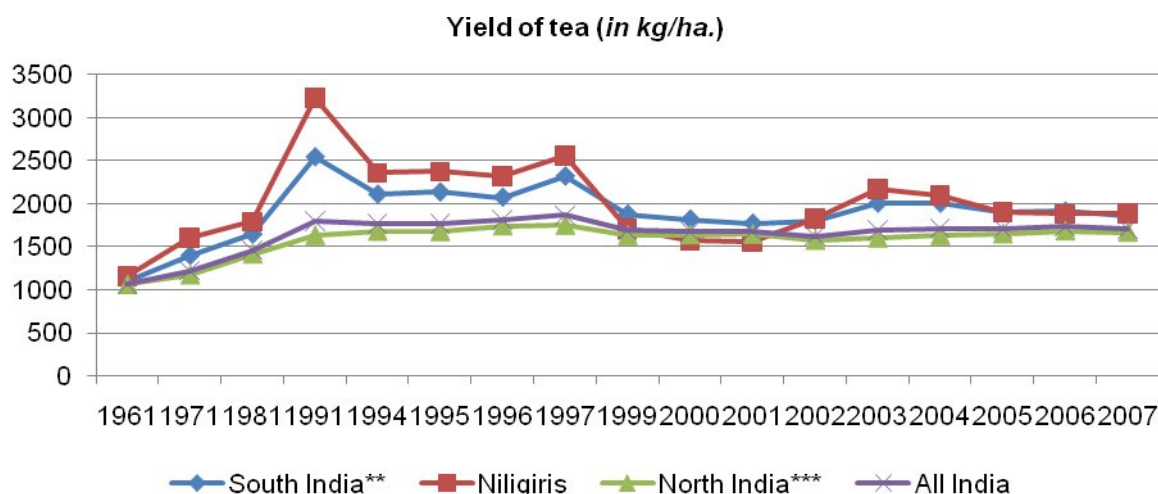


Note: \* Tamil Nadu includes the districts of Kanyakumari, Tirunelveli, Madurai, Coimbatore and Nilgiris  
 \*\* South India includes the states of Tamil Nadu, Kerala and Karnataka  
 Source: Tea Statistics, Tea Board of India, Kolkata, Different years.



**Tea productivity:** Unlike the production, tea productivity (yield in kg per hectare) in the district was found to be better. However, this productivity was found to be declining since 2003 (Figure 5- 1515 and Annexure 5-17).

**Figure 5- 15 Tea productivity in India**



Note: \*\* South India includes the states of Tamil Nadu, Kerala and Karnataka

\*\*\* North India includes the states of Assam, West Bengal, Tripura, Bihar, Uttaranchal, Himachal Pradesh, Manipur, Sikkim, Arunachal Pradesh, Nagaland, Orissa, Meghalaya, Mizoram

Source: Tea Statistics, Tea Board of India, Kolkata, Different years.

**Employment in tea cultivation:** The employment data on tea cultivation was available from 2002 to 2005. As on 31 December 2005, a total of 230572 tea workers were on roll in the district. Among them, 56.45 per cent were the resident of the district. The share of resident workers was found to be lower in the district than that in Tamil Nadu, South India, North India and All India, though it has been increasing over the years (Table 5-19).

**Tea auction - quantity and price:** The quantity of tea auctioned in Coonoor (in the Nilgiris) centre has been increasing over the years as it has also been increasing in other centres of the country. However, the rate of its increase was found to be lower in Coonoor (Figure5. 6).

Similar to the quantity, the auction price of tea has been overall increasing in different auction centres including Coonoor. But the sluggish rate of increase in auction price was found over the years in Coonoor as compared to that in other Centres (Figure5.17). Based on the above observation, an independent study may be taken up to understand the dynamics of the tea market, production and employment for better livelihood of people associated to it.

Table 5- 19: Percentage of total labourers on roll by category and year (as on 31st December)

Districts/ States	Percentage of total labourers on roll by category and year (as on 31st December)															
	Resident				Outside								Total			
					Permanent				Temporary							
	2002	2003	2004	2005	2002	2003	2004	2005	2002	2003	2004	2005	2002	2003	2004	2005
Niligiris	44.82	52.29	55.25	56.45	4.85	5.08	5.17	4.99	50.32	42.63	39.58	38.56	100.00 (244276)	100.00 (233975)	100.00 (230235)	100.00 (230572)
Tamil Nadu*	36.50	57.39	60.30	61.34	29.90	4.60	4.65	4.49	33.61	38.01	35.05	34.17	100.00 (375723)	100.00 (268351)	100.00 (266027)	100.00 (266383)
South India**	58.54	65.96	68.62	69.43	5.08	5.08	5.07	4.94	36.38	28.97	26.31	25.63	100.00 (359200)	100.00 (359938)	100.00 (360893)	100.00 (361300)
North India***	72.11	76.42	77.63	78.03	7.60	7.61	7.60	7.47	20.29	15.97	14.77	14.50	100.00 (895900)	100.00 (896272)	100.00 (896717)	100.00 (897500)
All India	68.23	73.42	75.04	75.57	6.88	6.88	6.88	6.74	24.89	19.70	18.08	17.69	100.00 (1255100)	100.00 (1256210)	100.00 (1257610)	100.00 (1258800)

Note: \* Tamil Nadu includes the districts of Kanyakumari, Tirunelveli, Madurai, Coimbatore and Nilgiris

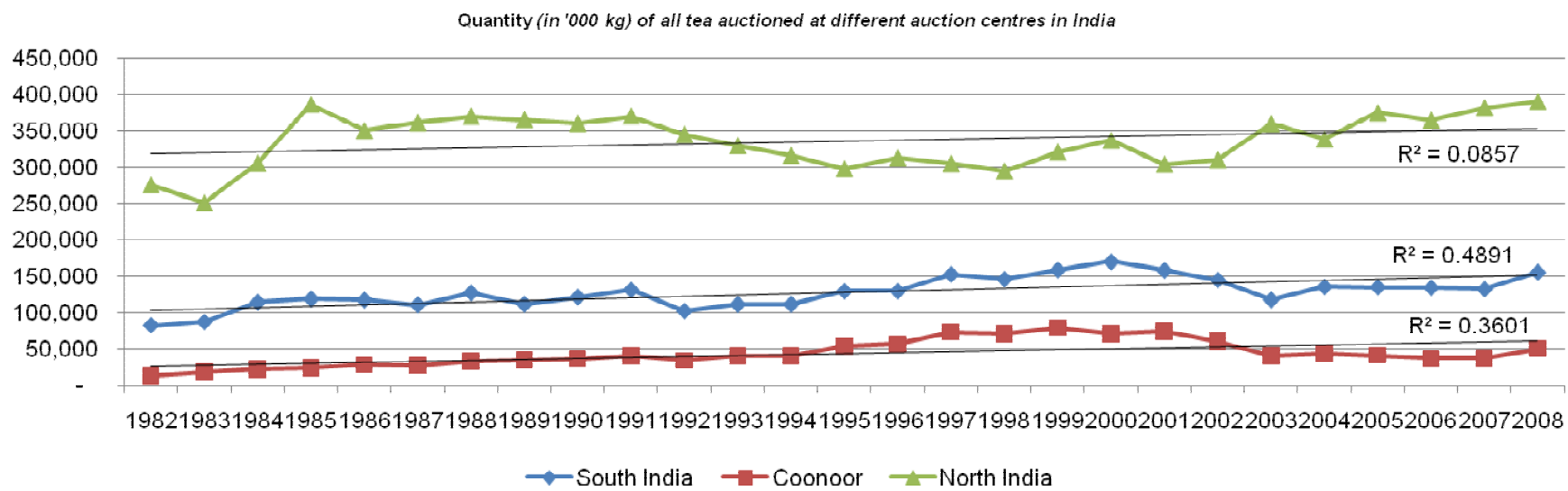
\*\* South India includes the states of Tamil Nadu, Kerala and Karnataka

\*\*\* North India includes the states of Assam, West Bengal, Tripura, Bihar, Uttaranchal, Himachal Pradesh, Manipur, Sikkim, Arunachal Pradesh, Nagaland, Orissa, Meghalaya, Mizoram.

Figure in parentheses show the respective total number of workers.

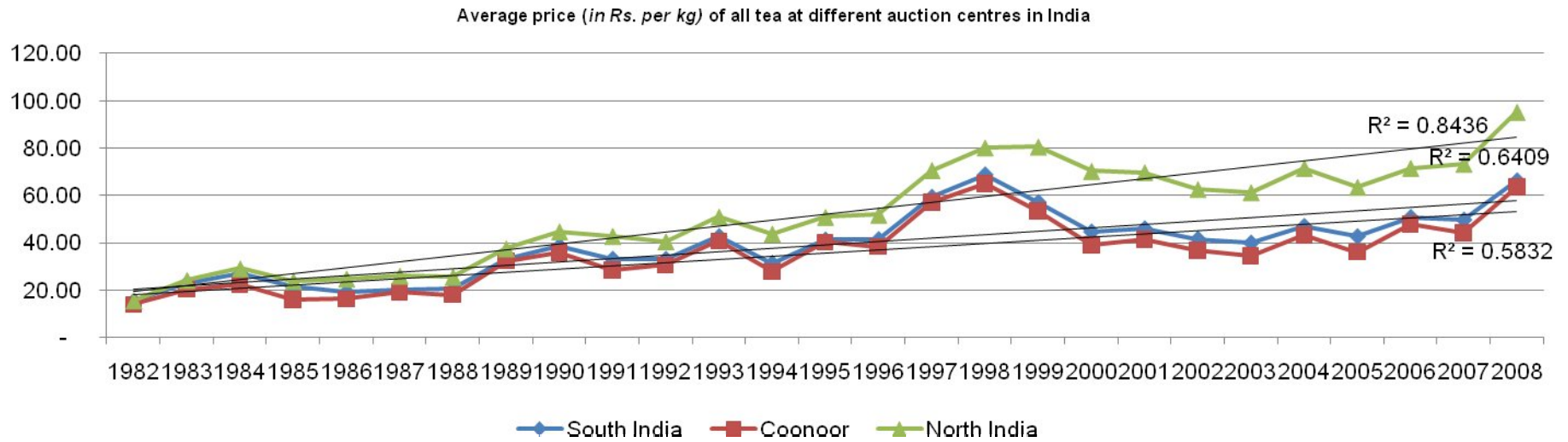
Source: Tea Statistics, Tea Board of India, Kolkata, Different years.

Figure 5- 16 Quantity (in '000 kg) of all tea auctioned at different auction centres in India



Source: Tea Statistics, Tea Board of India, Kolkata, Different years.

Figure 5-17 Average price (in Rs. per kg) of all tea at different auction centres in India



Source: Tea Statistics, Tea Board of India, Kolkata, Different years.

### *Institutional credit for agricultural purposes*

One of the major grey areas in agriculture development in India is timely access to institutional credit particularly among marginal and small farmers. Overall around one-fourth of the total farmers in the Nilgiris had taken institutional credit in 2001-02, as against 46.58 per cent in 1996-97 (Agricultural Input Survey, 1996-97 and 2001-02) This shows a significant decrease in availing institutional credit during a period of five years. Unfortunately, it was observed that the percentage of marginal farmers availing institutional credit for agricultural purposes had declined from 43.73 per cent in 1996-97 to only 21.55 per cent in 2001-02 (Figure 5- 8).

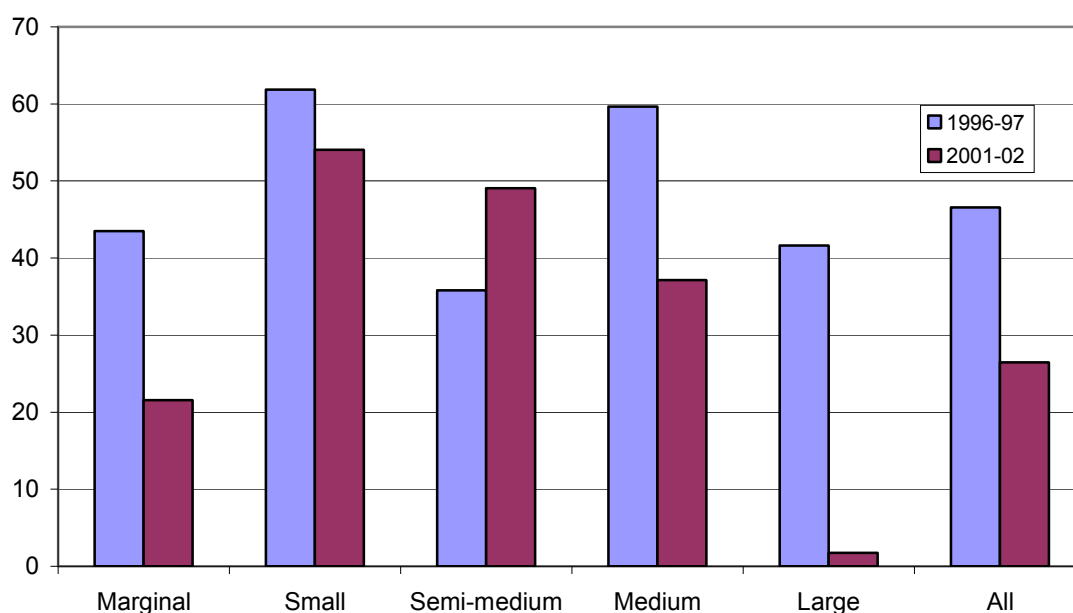
**Table 5- 20: Institutional credit**

Size of holdings	1996-97		2001-02	
Marginal	43.49	(6,346)	21.55	(12,111)
Small	61.87	(2,228)	54.05	(3,963)
Semi-medium	35.79	(690)	49.08	(1,436)
Medium	59.66	(565)	37.12	(438)
Large	41.64	(127)	1.74	(4)
All	46.58	(9,956)	26.45	(17,952)

**Note:** Figures in parentheses show the respective estimated no. of operational holdings that took institutional credit

**Sources:** Calculated from different Input Survey Reports, Department of Agriculture and Cooperation, Govt. of India at [www.agcensus.nic.in](http://www.agcensus.nic.in). Retrieved on 01 January 2010.

**Figure 5- 18: Institutional credit for agricultural purposes by size groups**



## 5.4.2 Forestry

Forest cover of the district based on the remote sensing (satellite) data in 2005 was 2071 sq. km. (including 404 sq. km. of very dense forest) and it constitutes 81.25 per cent of its total geographical area. But over a period of two years, in 2007, the forest area in the district declined to 2048 sq km which constitutes 80.35 per cent of its total geographical area. Moreover, the very dense forest area has declined from 404 sq. km. to 240 sq. km. (41 per cent) during the same period. On the other hand, the percentage of both overall forest cover and very dense forest cover in the state has increased from 17.72 per cent and 2.03 per cent to 17.94 per cent and 2.25 per cent respectively (Table 5-21).

**Table 5- 21: Forest area in the Nilgiris and Tamil Nadu as per 2005 and 2007 assessment (in sq. km)**

Items	The Nilgiris		Tamil Nadu	
	2005 assessment	2007 assessment	2005 assessment	2007 assessment
Geographic area	2,549	2,549	130,058	130,058
Very dense forest	404	240	2,650	2,926
Moderately dense forest	878	998	9,790	10,216
Open forest	789	810	1,604	10,196
Total forest	2,071 (81.25)	2,048 (80.35)	23,044 (17.72)	23,338 (17.94)

**Note:** Figures in parentheses show the percentage of total forest area to total geographical area.

**Source:** State of Forest Report, 2005 and 2009, Forest Survey of India, Ministry of Environment and Forests, Dehra Dun.

## 5.4.3 Industries

As mentioned earlier the primary sector (dominated by agriculture) and the secondary sector (dominated by manufacturing) in the district contribute almost same proportion to the district income. Moreover, the manufacturing sector is mostly agro based, i.e. tea. Table 4.26 reveals that out of the total 282 working factories in the district, 205 are tea factories. These factories together provide direct employment to 4512 persons. Among the other working factories, needles manufacturing and packing (23 nos.), automobile workshops (14 nos.), general engineering (7 nos.) and power houses (8 nos.) are important in terms of generating employment. It may be noted here that one working explosive (Ammunition) factory in the district alone provides the employment to 3200 persons.

**Table 5- 22: Number of and employment in working factories in the Nilgiris (2007-08)**

S. No.	Item	Numbers	No. of Employment
1	Milk and Milk Products	1	60
2	Fruits and Preservation (Jam & Jelly)	1	4
3	Tea Factories (All Types)	205	4512
4	Printing Presses	3	68
5	Essential Oils	1	5
6	Explosives (Ammunition)	1	3200
7	Photo Films MFG	1	1095
8	Watches Assembly	1	35
9	Power Houses	8	342
10	Automobile Work Shop	14	420
11	Biological Scientific research	1	34
12	Mushroom, Growing, Packing	4	282
13	Bakery Products	1	16
14	Instant Tea	1	43
15	Cardomom Processing	1	58
16	Gelatine, ossine products	1	252
17	Rubber Products	2	150
18	Needles Manufacturing & packing	23	1212
19	Tyres retreading	1	12
20	Coffee and tea makers	2	35
21	Tea packing unit	1	35
22	General Engineering	7	402
23	Flower seed production	1	36

Source: Inspector of factories, Ooty, cited in District Statistical Handbook (2008-09)

Village and cottage industries, handicrafts, and small-scale industries (SSI) have a large potential to generate employment. But, in fact, employment generated by these industries in the district was found to be not enough (Table 5- 1).

**Table 5- 23: Employment generated in various industries in The Nilgiris district from 2005-06 to 2009-10**

Year	Micro, Small & Medium Enterprises	Cottage Industries	Handicrafts Industries	PMRY	PMEGP
2005-06	1,254	92	108	582	NA
2006-07	1,492	110	117	888	NA
2007-08	389	128	141	588	NA
2008-09	453	180	206		102
2009-10	1,344	355	181		81

Source: Inspector of factories, Ooty, cited in District Statistical Handbook, different years.

## 5.5 Tourism and livelihood

The Nilgiris has got very good potential for promoting tourism for impacting the district economy and the livelihoods of the local communities. With the objective of increasing the length of stay and also to attract more tourists, the district may prioritise the different tourist promotion initiatives including the approach of public private partnership by involving various stakeholders including the unemployed youth in the district.

## 5.6 Child Labour

The extent of child labour In the Nilgiris district was far lower than the state level. In Tamil Nadu, 6 in every 1000 children were found as child labour, while it was only one in 1000 in the district. But this is not uniform across the district. Places like Devarshola town panchayat and Kotagiri block show above the district average of child labour prevalence (Table 5.24).

**Table 5- 24: Extent of Child Labour**

Administrative Unit	Location	Population 5-14 years *	Child labour 5-14 years#	Child labour per 1000 children
Panchayat Union	Kotagiri	53768	24	3
Town Panchayat	Devarshola	22463	35	6
Town Panchayat	Gudalur	28140	41	1
Town Panchayat	Nelliyalam	31212	64	1
The Nilgiris	The Nilgiris	27512	164	1
Tamil Nadu	Tamil Nadu	11612412	69521	6

Note: \* - Household Survey, 2005 as given in *Annual Work Plan and Budget, 2009-10*, SSA, The Nilgiris.

# - Child Labour Census, March 2003 available at <http://intra.nic.in/chlldlabour>.

Source: <http://intra.nic.in/chlldlabour>. Retrieved on 22 December 2010.

More boys were found as child labourers in the district. This gap was relatively less in the state as a whole (Table 5- 25).

**Table 5- 25: Distribution of child labour**

Administrative Unit	Location	Boys	Girls	Total
Panchayat Union	Kotagiri	54.17	45.83	100.00
Town Panchayat	Devarshola	68.57	31.43	100.00
Town Panchayat	Gudalur	53.66	46.34	100.00
Town Panchayat	Nelliyalam	51.56	48.44	100.00
Nilgiris	Nilgiris	56.10	43.90	100.00
Tamil Nadu	Tamil Nadu	54.36	45.64	100.00

Source: <http://intra.nic.in/chlldlabour>. Retrieved on 22 December 2009



The child labour in the Nilgiris district was highly concentrated in urban areas. Almost 85 per cent of the child labourers were found in urban areas. This is common for both boys and girls. The share of urban population to total population of the district was also higher (around 60 per cent).

**Table 5. 26 Percentage distribution of child labour**

Administrative Unit	Location	Rural			Urban			Total		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Panchayat Union	Kothagiri	100.00	100.00	100.00	-	-	-	100.00	100.00	100.00
Town Panchayat	Devarshola	-	-	-	100.00	100.00	100.00	100.00	100.00	100.00
Town Panchayat	Gudalur	-	-	-	100.00	100.00	100.00	100.00	100.00	100.00
Town Panchayat	Nelliyalam	-	-	-	100.00	100.00	100.00	100.00	100.00	100.00
Nilgiris	Nilgiris	14.13	15.28	14.63	85.87	84.72	85.37	100.00	100.00	100.00
Tamil Nadu	Tamil Nadu	74.69	75.94	75.26	25.31	24.06	24.74	100.00	100.00	100.00

Source: <http://intra.nic.in/childlabour>. Retrieved on 22 December 2009

## 5.7 Banking and Insurance

### 5.7.1 Self Help Groups

The current decade witnessed the 'self-help groups' movement sweep across Tamil Nadu. Various stakeholders like non government organisations (NGOs), bankers, the district administration, and the state government took various initiatives in promoting women's self-help groups (SHGs) considering it as a vehicle for development by providing access to credit facilities and other banking services to the mass, particularly the women.

The target achievement of SHGS (women) and SHGs(men) are given in the Table and Table. It is observed that the number of SHGs have been formed as per the targets.

**Table 5-27: Target and achievements of women self-help groups in the Nilgiris by years**

S. No.	Year	Target	Achievement	%
1	2006-07	370	370	100
2	2007-08	243	271	112
3	2008-09	185	185	100
4	2009-10	400	405 (till 31.03.2010)	101
	<b>Total</b>	<b>1198</b>	<b>1231</b>	

Source: Office of the Project Officer, Mahalir Thittam, The Nilgiris, Ooty.

**Table 5.28: Target and achievements of men self-help groups in the Nilgiris by years**

S. No.	Year	Target	Achievement	%
1	2006-07	265	266	100
2	2007-08	200	160	80

Source: Office of the Project Officer, Mahalir Thittam, The Nilgiris, Ooty.

The amount of revolving fund to SHGs in the district was found to be overall increasing during the last four years (Table 5.29). Interestingly, the target of providing the revolving fund was achieved by 100 per cent over the same period.

**Table 5.29 Revolving fund to SHGs in the Nilgiris by years**

S. No.	Year	Target	Achievement	%	Expenditure (Rs)
1	2006-07	132	132	100	13,20,000
2	2007-08	875	875	100	87,50,000
3	2008-09	2500	2500	100	2,50,00,000
4	2009-10	900	900	100	90,00,000
	<b>Total</b>	<b>4407</b>	<b>4407</b>	<b>100</b>	<b>4,40,70,000</b>

Source: Office of the Project Officer, Mahalir Thittam, The Nilgiris, Ooty.

During 2008-09, a total of Rs. 34.50 crore including Rs. 25.12 crore under Mathi and Rs. 9.38 crore under non-Mathi was provided to SHGs as loan through bank linkage. This amount was increased to Rs. 37.79 crore in 2009-10 (Table 5-30).

**Table 5-30: SHG bank linkage in the Nilgiris (In Rs. Crore)**

Details	2008-09			2009-10		
	Target	Achievement as on 28.02.2009	%	Target	Achievement as on 31.03.2010	%
Mathi	20.00	25.12	126	26.40	27.25	103
Non Mathi	5.00	9.38	188	6.00	10.54	176
	<b>Total</b>	<b>34.50</b>	<b>138</b>	<b>32.40</b>	<b>37.79</b>	<b>116</b>

Source: Office of the Project Officer, Mahalir Thittam, The Nilgiris, Ooty.

## 5.8 Conclusion

Based on the above analysis, the following suggestions are suggested.

An independent study could be taken up to understand the reasons and dynamics of the stagnant secondary sector as whole, declining unregistered manufacturing segment of the secondary sector in particular, and declining primary sector in the district, which is almost dependent on the tea cultivation.

The district has to focus more on decentralised micro- enterprises to generate better livelihoods.

Tourism, transport and communication are other potential areas of further development, which could be approached with livelihood promotion perspective.

An independent study could also be taken up to understand the employment potentiality and market dynamics of tea cultivation in the district, as one can find the district has a large proportion of area under very old tea plants.

Given the skill and basic resources, the SHGs a greater potential to take up entrepreneurship. Clustering of SHGs on the basis of common activity and forming panchayat level federations would be helpful to produce the identified items with a minimum risk, and establish the market linkages (both forward and backward) for their products.

## Annexure

**Annexure 5- 1: Net domestic product and its growth rate for the Nilgiris, Tamil Nadu and India from 1999-00 to 2006-07 at constant (1999-2000) prices**

Year	The Nilgiris		Tamil Nadu		India	
	NDP (in Rs. lakh)	Growth rate of NDP	NDP (in Rs. lakh)	Growth rate of NDP	NDP (in Rs. lakh)	Growth rate of NDP
1999-00	136,156		11,970,394		160,510,400	
2000-01	143,831	5.64	12,634,927	5.55	167,046,600	4.07
2001-02	139,667	-2.90	12,390,102	-1.94	176,413,700	5.61
2002-03	143,758	2.93	12,452,136	0.50	182,460,100	3.43
2003-04	162,550	13.07	13,228,127	6.23	198,131,700	8.59
2004-05	168,370	3.58	14,799,350	11.88	212,626,900	7.32
2005-06	183,434	8.95	16,595,252	12.14	232,867,500	9.52
2006-07	199,083	8.53	18,530,974	11.66	255,471,300	9.71

**Sources:** 1. Department of Economics and Statistics, Government of Tamil Nadu, Chennai.

2. Data for Use of Deputy Chairman, Planning Commission, Government of India, Planning Commission, Retrieved on 22 February 2010 from <http://planningcommission.gov.in>.

**Annexure 5- 2: Sector wise contribution to overall NDP in the Nilgiris and Tamil Nadu from 1999-00 to 2006-07 at constant (1999-00) prices (in Rs. lakh)**

Year	The Nilgiris				Tamil Nadu				India (Rs. In cores)			
	Primary	Secondary	Tertiary	Overall	Primary	Secondary	Tertiary	Overall	Primary	Secondary	Tertiary	Overall
1999-00	33,425	24,792	77,939	136,156	2,185,056	3,221,654	6,563,683	11,970,394	457,953	330,770	816,380	1,605,104
2000-01	32,555	31,507	79,769	143,831	2,289,180	3,432,599	6,913,148	12,634,927	456,575	352,625	861,249	1,670,466
2001-02	34,634	23,798	81,235	139,667	2,229,756	3,021,360	7,138,986	12,390,102	483,253	359,566	921,318	1,764,137
2002-03	35,375	25,348	83,035	143,758	1,753,724	3,271,637	7,426,776	12,452,136	451,108	384,652	988,842	1,824,601
2003-04	34,067	40,424	88,059	162,550	1,718,782	3,533,653	7,975,692	13,228,127	494,443	414,520	1,072,355	1,981,317
2004-05	40,051	32,635	95,684	168,370	2,046,645	3,964,583	8,788,122	14,799,350	496,429	459,493	1,170,348	2,126,269
2005-06	39,796	38,660	104,978	183,434	2,280,023	4,568,176	9,747,053	16,595,252	524,987	508,204	1,295,483	2,328,675
2006-07	39,611	42,113	117,359	199,083	2,570,668	5,018,542	10,941,763	18,530,974	547,608	563,987	1,443,118	2,554,713

Sources: Department of Economics and Statistics, Government of Tamil Nadu, Chennai.

**Annexure 5- 3: Sector wise contribution to overall NDP in the Nilgiris and Tamil Nadu from 1999-00 to 2006-07 at constant (1999-00) prices (in %)**

Year	The Nilgiris			Tamil Nadu			India		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
1999-00	24.55	18.21	57.24	18.25	26.91	54.83	28.53	20.61	50.86
2000-01	22.63	21.91	55.46	18.12	27.17	54.71	27.33	21.11	51.56
2001-02	24.80	17.04	58.16	18.00	24.39	57.62	27.39	20.38	52.22
2002-03	24.61	17.63	57.76	14.08	26.27	59.64	24.72	21.08	54.19
2003-04	20.96	24.87	54.17	12.99	26.71	60.29	24.96	20.92	54.12
2004-05	23.79	19.38	56.83	13.83	26.79	59.38	23.35	21.61	55.04
2005-06	21.69	21.08	57.23	13.74	27.53	58.73	22.54	21.82	55.63
2006-07	19.90	21.15	58.95	13.87	27.08	59.05	21.44	22.08	56.49

Sources: Department of Economics and Statistics, Government of Tamil Nadu, Chennai.

**Annexure 5- 4: Sub-sectoral contribution of primary sector to overall NDP at constant (1999-00) prices in the Nilgiris and Tamil Nadu from 1999-00 to 2006-07**

The Nilgiris

Year	Agriculture and Allied Activities	Forestry and Logging	Fishing	Mining and Quarrying	Overall Primary	Total NDP
1999-00	32,152	1,248	7	18	33,425	136,156
2000-01	31,398	1,141	6	10	32,555	143,831
2001-02	33,609	1,016	5	4	34,634	139,667
2002-03	34,271	1,095	4	5	35,375	143,758
2003-04	33,202	856	3	5	34,067	162,550
2004-05	38,832	1,213	1	5	40,051	168,370
2005-06	38,699	1,090	2	5	39,796	183,434
2006-07	38,568	1,034	3	6	39,611	199,083

The Nilgiris

Year	Agriculture and Allied Activities	Forestry and Logging	Fishing	Mining and Quarrying	Overall Primary	Total NDP
1999-00	23.61	0.92	0.01	0.01	24.55	100.00
2000-01	21.83	0.79	0.00	0.01	22.63	100.00
2001-02	24.06	0.73	0.00	0.00	24.80	100.00
2002-03	23.84	0.76	0.00	0.00	24.61	100.00
2003-04	20.43	0.53	0.00	0.00	20.96	100.00
2004-05	23.06	0.72	0.00	0.00	23.79	100.00
2005-06	21.10	0.59	0.00	0.00	21.69	100.00
2006-07	19.37	0.52	0.00	0.00	19.90	100.00

Tamil Nadu

Year	Agriculture and Allied Activities	Forestry and Logging	Fishing	Mining and Quarrying	Overall Primary	Total NDP
1999-00	1,906,769	60,170	167,689	50,428	2,185,056	11,970,394
2000-01	2,006,753	57,719	172,944	51,763	2,289,180	12,634,927
2001-02	1,942,083	55,092	175,618	56,963	2,229,756	12,390,102
2002-03	1,460,064	60,892	169,179	63,589	1,753,724	12,452,136
2003-04	1,421,512	57,930	161,882	77,458	1,718,782	13,228,127
2004-05	1,770,532	60,589	135,402	80,122	2,046,645	14,799,350
2005-06	1,946,563	60,220	195,408	77,832	2,280,023	16,595,252
2006-07	2,231,698	56,869	199,248	82,852	2,570,668	18,530,974

Tamil Nadu

Year	Agriculture and Allied Activities	Forestry and Logging	Fishing	Mining and Quarrying	Overall Primary	Total NDP
1999-00	15.93	0.50	1.40	0.42	18.25	100.00
2000-01	15.88	0.46	1.37	0.41	18.12	100.00
2001-02	15.67	0.44	1.42	0.46	18.00	100.00
2002-03	11.73	0.49	1.36	0.51	14.08	100.00
2003-04	10.75	0.44	1.22	0.59	12.99	100.00
2004-05	11.96	0.41	0.91	0.54	13.83	100.00
2005-06	11.73	0.36	1.18	0.47	13.74	100.00
2006-07	12.04	0.31	1.08	0.45	13.87	100.00

Sources: Department of Economics and Statistics, Government of Tamil Nadu, Chennai.

**Annexure 5- 5:Sub-sectoral contribution of secondary sector to overall NDP at constant (1999-00) prices in the Nilgiris and Tamil Nadu from 1999-00 to 2006-07**

The Nilgiris (in Rs. Lakh)

Year	Manufacturing - Registered	Manufacturing - Unregistered	Electricity, Gas, & Water Supply	Construction	Overall Secondary	Total NDP
1999-00	12,662	1,637	1,730	8,763	24,792	136,156
2000-01	20,111	826	1,748	8,822	31,507	143,831
2001-02	12,861	1,528	721	8,688	23,798	139,667
2002-03	13,478	1,347	1,256	9,267	25,348	143,758
2003-04	28,668	1,333	776	9,647	40,424	162,550
2004-05	19,776	497	781	11,581	32,635	168,370
2005-06	24,696	486	535	12,943	38,660	183,434
2006-07	27,523	496	432	13,662	42,113	199,083

The Nilgiris (in %)

Year	Manufacturing - Registered	Manufacturing - Unregistered	Electricity, Gas, & Water Supply	Construction	Overall Secondary	Total NDP
1999-00	9.30	1.20	1.27	6.44	18.21	100.00
2000-01	13.98	0.57	1.22	6.13	21.91	100.00
2001-02	9.21	1.09	0.52	6.22	17.04	100.00
2002-03	9.38	0.94	0.87	6.45	17.63	100.00
2003-04	17.64	0.82	0.48	5.93	24.87	100.00
2004-05	11.75	0.30	0.46	6.88	19.38	100.00
2005-06	13.46	0.26	0.29	7.06	21.08	100.00
2006-07	13.82	0.25	0.22	6.86	21.15	100.00

Tamil Nadu (in Rs. Lakh)

Year	Manufacturing - Registered	Manufacturing - Unregistered	Electricity, Gas, & Water Supply	Construction	Overall Secondary	Total NDP
1999-00	1,333,337	763,275	209,470	915,573	3,221,654	11,970,394
2000-01	1,435,570	816,006	234,765	946,259	3,432,599	12,634,927
2001-02	1,177,199	781,095	106,107	956,959	3,021,360	12,390,102
2002-03	1,193,517	821,622	206,944	1,049,554	3,271,637	12,452,136
2003-04	1,424,159	844,136	141,991	1,123,367	3,533,653	13,228,127
2004-05	1,517,023	901,260	158,738	1,387,562	3,964,583	14,799,350
2005-06	1,894,464	956,419	120,673	1,596,619	4,568,176	16,595,252
2006-07	2,111,334	1,062,769	108,333	1,736,106	5,018,542	18,530,974

Tamil Nadu (in %)

Year	Manufacturing - Registered	Manufacturing - Unregistered	Electricity, Gas, & Water Supply	Construction	Overall Secondary	Total NDP
1999-00	11.14	6.38	1.75	7.65	26.91	100.00
2000-01	11.36	6.46	1.86	7.49	27.17	100.00
2001-02	9.50	6.30	0.86	7.72	24.39	100.00
2002-03	9.58	6.60	1.66	8.43	26.27	100.00
2003-04	10.77	6.38	1.07	8.49	26.71	100.00
2004-05	10.25	6.09	1.07	9.38	26.79	100.00
2005-06	11.42	5.76	0.73	9.62	27.53	100.00
2006-07	11.39	5.74	0.58	9.37	27.08	100.00

Sources: Department of Economics and Statistics, Government of Tamil Nadu, Chennai.

**Annexure 5- 6: Sub-sectoral contribution of tertiary sector to overall NDP at constant (1999-00) prices in the Nilgiris and Tamil Nadu from 1999-00 to 2006-07**

The Nilgiris

Year	Trade, Hotels & Restaurants	Railways	Transport by Other Means	Storage	Communication	Banking & Insurance	Real Estate, Ownership of Dwelling and Business Services	Public Administration	Other Services	Overall Tertiary
1999-00	16,570	412	10,724	23	2,295	9,078	9,656	13,779	15,402	77,939
2000-01	17,482	394	9,805	21	2,813	8,811	10,479	14,364	15,600	79,769
2001-02	17,609	402	9,076	20	3,794	9,352	10,970	14,604	15,408	81,235
2002-03	17,913	395	9,074	18	4,304	10,898	11,420	13,521	15,492	83,035
2003-04	20,281	409	10,040	17	5,386	11,427	12,287	13,918	14,294	88,059
2004-05	22,755	437	10,792	19	6,162	11,439	13,892	14,626	15,562	95,684
2005-06	25,870	446	12,346	18	7,241	13,322	15,485	14,841	15,409	104,978
2006-07	29,009	469	13,066	18	8,410	16,057	16,992	17,394	15,944	117,359

Tamil Nadu

Year	Trade, Hotels & Restaurants	Railways	Transport by Other Means	Storage	Communication	Banking & Insurance	Real Estate, Ownership of Dwelling and Business Services	Public Administration	Other Services	Overall Tertiary
1999-00	2,011,853	117,122	654,050	7,932	199,894	934,506	755,108	634,335	1,248,883	6,563,683
2000-01	2,126,651	115,697	709,077	8,246	247,996	904,802	825,263	655,996	1,319,419	6,913,148
2001-02	2,146,470	121,780	680,026	8,246	338,636	958,539	863,733	661,815	1,359,741	7,138,986
2002-03	2,188,757	124,666	670,929	7,155	388,960	1,115,026	896,106	608,168	1,427,009	7,426,776
2003-04	2,484,563	133,527	732,733	7,235	493,041	1,167,779	960,483	621,546	1,374,785	7,975,692
2004-05	2,795,376	149,355	804,657	8,531	571,522	1,167,946	1,078,827	648,697	1,563,211	8,788,122
2005-06	3,187,829	159,539	889,339	8,991	680,282	1,359,737	1,190,202	653,976	1,617,159	9,747,053
2006-07	3,586,460	175,108	931,904	10,035	801,118	1,638,801	1,287,920	761,748	1,748,668	10,941,763

Sources: Department of Economics and Statistics, Government of Tamil Nadu, Chennai.



**Annexure 5- 7: Age and sex wise distribution of total workers – main, marginal and non-workers in Tamil Nadu and the Nilgiris (2001 Census)**

Age Group	Population			Total Workers			Main workers			Marginal workers			Non - Workers		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
<b>Tamil Nadu</b>															
All	62,405,679	31,400,909	31,004,770	27,878,282	18,100,397	9,777,885	23,757,783	16,303,310	7,454,473	4,120,499	1,797,087	2,323,412	34,527,397	13,300,512	21,226,885
5-14	11,612,412	5,962,197	5,650,215	418,801	225,033	193,768	304,339	171,881	132,458	114,462	53,152	61,310	11,193,611	5,737,164	5,456,447
15-34	22,392,020	11,085,828	11,306,192	12,118,114	7,740,272	4,377,842	10,162,577	6,864,607	3,297,970	1,955,537	875,665	1,079,872	10,273,906	3,345,556	6,928,350
35-59	17,366,443	8,773,413	8,593,030	12,804,821	8,374,295	4,430,526	11,153,402	7,708,703	3,444,699	1,651,419	665,592	985,827	4,561,622	399,118	4,162,504
60 & above	5,507,400	2,735,800	2,771,600	2,372,449	1,650,060	722,389	1,995,827	1,458,229	537,598	376,622	191,831	184,791	3,134,951	1,085,740	2,049,211
<b>The Nilgiris</b>															
All	762,141	378,351	383,790	343,385	207,563	135,822	310,064	190,856	119,208	33,321	16,707	16,614	418,756	170,788	247,968
5-14	138,626	70,319	68,307	1,890	1,062	828	1,293	744	549	597	318	279	136,736	69,257	67,479
15-34	284,666	138,265	146,401	147,566	88,550	59,016	130,453	79,441	51,012	17,113	9,109	8,004	137,100	49,715	87,385
35-59	225,524	114,235	111,289	176,915	106,859	70,056	163,177	100,557	62,620	13,738	6,302	7,436	48,609	7,376	41,233
60 & above	51,211	24,181	27,030	16,591	10,819	5,772	14,753	9,860	4,893	1,838	959	879	34,620	13,362	21,258

Sources: Census of India 2001

**Annexure 5- 8: Age and sex wise work participation rate (WPR) in Tamil Nadu and the Nilgiris (2001 Census)**

Age Group	Tamil Nadu			The Nilgiris		
	Persons	Males	Females	Persons	Males	Females
All	44.67	57.64	31.54	45.06	54.86	35.39
5-14	3.61	3.77	3.43	1.36	1.51	1.21
15-34	54.12	69.82	38.72	51.84	64.04	40.31
35-59	73.73	95.45	51.56	78.45	93.54	62.95
60 & above	43.08	60.31	26.06	32.40	44.74	21.35

Sources: Census of India 2001

**Annexure 5- 9: Sex wise distribution of workers on the basis of level of education in Tamil Nadu and the Nilgiris (2001 Census)**

Education Level	Population			Main Workers			Marginal Workers			Non- Workers		
	Persons	Male	Female	Persons	Male	Female	Persons	Male	Female	Persons	Male	Female
<b>Tamil Nadu</b>												
Total	62,405,679	31,400,909	31,004,770	23,757,783	16,303,310	7,454,473	4,120,499	1,797,087	2,323,412	34,527,397	13,300,512	21,226,885
Illiterate	21,881,134	8,591,247	13,289,887	7,216,680	3,346,318	3,870,362	1,875,873	514,797	1,361,076	12,788,581	4,730,132	8,058,449
Literate	40,524,545	22,809,662	17,714,883	16,541,103	12,956,992	3,584,111	2,244,626	1,282,290	962,336	21,738,816	8,570,380	13,168,436
Literate but below matric / secondary	25,112,423	13,591,518	11,520,905	8,995,421	6,829,285	2,166,136	1,466,710	792,270	674,440	14,650,292	5,969,963	8,680,329
Matric / Secondary but below graduate	8,591,469	5,070,148	3,521,321	3,765,061	3,165,961	599,100	403,145	264,724	138,421	4,423,263	1,639,463	2,783,800
Technical diploma or certificate not equal to degree	438,918	383,604	55,314	244,198	226,053	18,145	19,021	17,681	1,340	175,699	139,870	35,829
Graduate and above other than technical degree	1,733,959	1,084,493	649,466	997,038	804,194	192,844	45,296	32,200	13,096	691,625	248,099	443,526
Technical degree or diploma equal to degree or post graduate degree	462,739	307,107	155,632	271,811	198,906	72,905	8,760	6,251	2,509	182,168	101,950	80,218
<b>The Nilgiris</b>												
Total	762,141	378,351	383,790	310,064	190,856	119,208	33,321	16,707	16,614	418,756	170,788	247,968
Illiterate	221,042	81,778	139,264	74,815	25,435	49,380	9,730	2,803	6,927	136,497	53,540	82,957
Literate	541,099	296,573	244,526	235,249	165,421	69,828	23,591	13,904	9,687	282,259	117,248	165,011
Literate but below matric / secondary	331,109	174,882	156,227	132,291	86,133	46,158	15,330	8,602	6,728	183,488	80,147	103,341
Matric / Secondary but below graduate	161,847	90,453	71,394	75,456	57,872	17,584	6,596	4,113	2,483	79,795	28,468	51,327
Technical diploma or certificate not equal to degree	5,240	4,392	848	2,722	2,424	298	194	176	18	2,324	1,792	532
Graduate and above other than technical degree	27,111	17,515	9,596	15,766	12,890	2,876	757	566	191	10,588	4,059	6,529
Technical degree or diploma equal to degree or post graduate degree	5,674	3,647	2,027	3,552	2,514	1,038	99	66	33	2,023	1,067	956

Sources: Census of India 2001

**Annexure 5- 10: Sex wise work participation rate on the basis of level of education in Tamil Nadu and the Nilgiris (2001 Census)**

Education Level	Tamil Nadu			The Nilgiris		
	Persons	Male	Female	Persons	Male	Female
Total	44.67	57.64	31.54	45.06	54.86	35.39
Illiterate	41.55	44.94	39.36	38.25	34.53	40.43
Literate	46.36	62.43	25.66	47.84	60.47	32.52
Literate but below matric / secondary	41.66	56.08	24.66	44.58	54.17	33.85
Matric / Secondary but below graduate	48.52	67.66	20.94	50.70	68.53	28.11
Technical diploma or certificate not equal to degree	59.97	63.54	35.23	55.65	59.20	37.26
Graduate and above other than technical degree	60.11	77.12	31.71	60.95	76.83	31.96
Technical degree or diploma equal to degree or post graduate degree	60.63	66.80	48.46	64.35	70.74	52.84

Sources: Census of India 2001

**Annexure 5- 11: Block wise sample villages for actual wages paid to different categories of workers from 2007 to 2010 in the Nilgiris district**

Month & Year	Udhagai	Coonoor	Kotagiri	Gudalur
April 2007	Udhagai	Melur	Nedugula	Sreemadurai
June 2008	Thuneri	Jagathala	Nandipuram	Sreemadurai
June 2009	Kinnakorai	Burliar	Kallanbalayam	Mudumalai
June 2010	Naduvattam	Hullical	Kotagiri	Masinagudy

Source: Office of the Assistant Director of Statistics, the Nilgiris, Udhagamandalam.

**Annexure 5- 12: Extent of poverty (in terms of percentage of households) among different social groups in different blocks of The Nilgiris District as per rural BPL household census 2002**

Block	Total Rural Households						Total BPL Households						% of BPL Households					
	SC	ST	OBC	Others	No response	Total	SC	ST	OBC	Others	No response	Total	SC	ST	OBC	Others	No response	Total
Gudalur	8,562	6,429	13,428	7,789	1,806	38,014	2,975	2,686	4,650	2,661	482	13,454	34.75	41.78	34.63	34.16	26.69	35.39
Udhagamandalam	4,976	415	12,112	13,669	-	31,172	1,055	99	1,982	7,272	-	10,408	21.20	23.86	16.36	53.20	-	33.39
Kotagiri	5,688	2,136	6,799	6,207	192	21,022	2,040	831	1,889	1,862	192	6,814	35.86	38.90	27.78	30.00	100.00	32.41
Coonoor	3,297	166	2,519	1,873	1,824	9,679	1,263	42	767	464	1,546	4,082	38.31	25.30	30.45	24.77	84.76	42.17
<b>Total</b>	<b>22,523</b>	<b>9,146</b>	<b>34,858</b>	<b>29,538</b>	<b>3,822</b>	<b>99,887</b>	<b>7,333</b>	<b>3,658</b>	<b>9,288</b>	<b>12,259</b>	<b>2,220</b>	<b>34,758</b>	<b>32.56</b>	<b>40.00</b>	<b>26.65</b>	<b>41.50</b>	<b>58.08</b>	<b>34.80</b>

Source: BPL Survey 2002, www.bpl.nic.in. Retrieved on 23 December 2009.

**Annexure 5- 13: Percentage distribution of rural BPL households among various social groups based on income, in the income bracket of less than Rs.250 and Rs.250 to Rs.499 in various blocks of the Nilgiris district**

Block	SC			ST			OBC			Others			All		
	< Rs. 250	Rs. 250-499	Up to Rs 499	< Rs. 250	Rs. 250-499	Up to Rs 499	< Rs. 250	Rs. 250-499	Up to Rs 499	< Rs. 250	Rs. 250-499	Up to Rs 499	< Rs. 250	Rs. 250-499	Up to Rs 499
Gudalur	50.22	18.08	68.30	79.08	12.51	91.59	12.28	14.06	26.34	44.03	10.09	54.12	57.60	13.10	70.70
Udhagamandalam	10.24	45.40	55.64	15.15	41.41	56.57	26.64	39.76	66.40	0.18	1.73	1.91	4.01	11.28	15.29
Kotagiri	5.74	18.33	24.07	18.05	21.90	39.95	24.40	37.96	62.36	8.08	8.03	16.11	10.98	17.35	28.32
Coonoor	8.79	41.96	50.75	26.19	35.71	61.90	17.86	38.07	55.93	1.74	5.67	7.41	4.78	19.50	24.28
<b>Total</b>	<b>24.96</b>	<b>26.20</b>	<b>51.15</b>	<b>62.88</b>	<b>15.69</b>	<b>78.57</b>	<b>18.27</b>	<b>26.39</b>	<b>44.66</b>	<b>11.04</b>	<b>4.99</b>	<b>16.02</b>	<b>26.21</b>	<b>14.14</b>	<b>40.35</b>

Source: BPL Survey 2002, www.bpl.nic.in. Retrieved on 23 December 2009.

**Annexure 5.14 : Percentage distribution of rural BPL households among various social groups based on size of operational landholdings (landless and less than 1 ha. of land) in various blocks of the Nilgiris district**

Block	SC		ST		OBC		Others		All	
	Nil	< 1 ha.	Nil	< 1 ha.	Nil	< 1 ha.	Nil	< 1 ha.	Nil	< 1 ha.
Gudalur	58.45	29.08	71.52	18.95	70.54	16.84	67.96	16.26	67.46	19.83
Udhagamandalam	83.13	13.08	86.87	4.04	79.16	16.25	97.32	1.18	92.32	5.28
Kotagiri	93.82	4.71	90.97	7.70	81.90	13.66	96.88	2.58	91.09	6.91
Coonoor	96.28	3.33	85.71	11.90	87.87	7.95	98.16	1.64	95.52	3.45
<b>Total</b>	<b>78.36</b>	<b>15.56</b>	<b>76.52</b>	<b>15.91</b>	<b>76.12</b>	<b>15.33</b>	<b>91.00</b>	<b>4.72</b>	<b>82.83</b>	<b>11.02</b>

Source: BPL Survey 2002, www.bpl.nic.in. Retrieved on 23 December 2009.

**Annexure 5- 15: Land utilisation pattern of the Nilgiris from 2000-01 to 2008-09 (in ha.)**

S. No.	Classification	1999-00	2000-01	2001-02	2002-03	2003-04	2005-06	2006-07	2007-08	2008-09
1	Forest	143,351	143,351	142,579	142,579	142,577	142,577	142,577	142,577	142,577
2	Barren and uncultivable uses	2,915	2,915	3,368	3,371	3,384	3,375	3,375	3,375	3,375
3	Land put to Non – Agricultural uses	8,562	9,085	9,717	9,732	9,993	9,975	9,975	9,975	9,976
4	Cultivable waste	2,996	2,863	2,749	2,524	2,051	2,018	2,023	2,023	2,018
5	Perm, Pastures and other Grazing Land	4,728	4,996	5,133	5,133	4,742	5,078	5,078	5,078	5,078
6	Land under Misc. Tree Crops and Groces	4,176	3,331	3,437	3,452	3,648	3,538	3,547	3,778	3,779
7	Current Fallows	5,891	5,656	4,363	4,904	6,511	5,069	6,572	8,242	8,304
8	Other Fallow land	4,472	5,187	4,359	3,990	3,305	1,855	1,865	1,865	1,857
9	Net Area shown	77,393	77,101	78,780	78,800	78,274	81,000	79,370	77,571	77,520
10	Geographical area according to village papers	254,484	254,485	254,485	254,485	254,485	254,485	254,485	254,485	254,485
11	Total Cropped Area	77,393	77,104	78,853	78,853	78,408	81,000	79,404	77,571	77,520
12	Area sown more than once	160	3	73	73	134	79	34	34	-

Source: District Statistical Handbooks, The Nilgiris, different years

**Annexure 5.16 : Area under tea in India by year (Area in ha.)**

	1961	1971	1981	1991	1994	1995	1996	1997	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008 (E)
Niligiris	20840	22651	24849	26260	35489	35537	35585	36039	55319	60427	61634	61679	61679	62039	66115	66452	66156	66156
Tamil Nadu*	32723	34646	37073	38634	48854	48958	48984	49671	69103	74398	75625	75619	75619	75978	80939	81276	80462	80462
South India**	74301	73787	74563	75288	87766	87832	87845	88592	108070	113460	114693	114714	114714	115213	119823	119649	119740	119740
North India***	256928	282729	309066	345182	338200	339233	343359	345702	382130	390906	395113	401118	404884	406190	435788	447371	458718	459613
All India	331229	356516	383629	420470	425966	427065	431204	434294	490200	504366	509806	515832	519598	521403	555611	567020	578458	

Note: \* Tamil Nadu includes the districts of Kanyakumari, Tirunelveli, Madurai, Coimbatore and Nilgiris \*\* South India includes the states of Tamil Nadu, Kerala and Karnataka \*\*\* North India includes the states of Assam, West Bengal, Tripura, Bihar, Uttaranchal, Himachal Pradesh, Manipur, Sikkim, Arunachal Pradesh, Nagaland, Orissa, Meghalaya, Mizoram  
Source: Tea Statistics, Tea Board of India, Kolkata, Different years.

**Annexure 5- 17: Production of tea in India (in Thousand Kgs.)**

	1961	1971	1981	1991	1994	1995	1996	1997	1999	2000	2001	2002	2003	2004	2005	2006	2007
Niligiris	24082	36254	44489	84677	83605	84274	82597	92172	94628	95194	96092	112846	133569	129757	125683	124973	124783
Tamil Nadu*	39768	57531	71597	119937	117520	117915	115840	130179	130462	131812	132401	143121	166572	163015	163676	163656	160531
South India**	81092	103137	122637	191266	184940	187385	181999	205334	202676	206166	203116	206726	229852	230781	227554	228562	221685
North India***	273305	332331	437790	562926	567955	568631	598141	604697	623259	640756	650807	631748	648277	662184	718420	753243	764742
All India	354397	435468	560427	754192	752895	756016	780140	810031	825935	846922	853923	838474	878129	892965	945974	981805	986427

As above

**Annexure 5-18: Yield of tea in India (in Kg/Hectares)**

Districts/ States	1961	1971	1981	1991	1994	1995	1996	1997	1999	2000	2001	2002	2003	2004	2005	2006	2007
Niligiris	1156	1601	1790	3225	2356	2371	2321	2558	1711	1575	1559	1830	2166	2092	1901	1881	1886
Tamil Nadu*	1215	1661	1931	3104	2406	2408	2365	2621	1888	172	1751	1893	2203	2146	2022	2014	1995
South India**	1091	1398	1645	2540	2107	2133	2072	2318	1875	1817	1771	1802	2004	2003	1899	1910	1851
North India***	1064	1175	1416	1631	1679	1676	1742	1749	1631	1639	1647	1575	1601	1630	1649	1684	1667
All India	1070	1221	1461	1794	1768	1770	1809	1865	1685	1679	1675	1625	1690	1713	1703	1732	1705

As above

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## Chapter 6

# ENVIRONMENT

### **The Nilgiri Biosphere reserve**

The Nilgiri biosphere was the first one established in India in 1985. It is a big bio-diversity and has been declared as one of the twenty-one biosphere reserves by the UNESCO. It has vast varieties of species of plants and animals. The total area of the bio reserve is 5520 Sq. km. The Nilgiri Biosphere Reserve falls under the biogeographic region of the Malabar rain forest. The Mudumalai Wildlife Sanctuary, Wyanaad Wildlife Sanctuary Bandipur National Park, Nagarhole National Park, Mukurthi National Park, and Silent Valley are the protected areas within this reserve. There are five forest types in the reserve, which are moist evergreen, semi evergreen, thorn, savannah woodland, and sholas and grasslands.

There are 3300 species of flowering plants present in the bio reserve. The Nilgiri Biosphere Reserve includes more than 100 species of mammals, 350 species of birds, 80 species of reptiles and amphibians, 300 species of butterflies and invertebrates. 39 species of fish, 31 amphibians, and 60 species of reptiles endemic to the Western Ghats also occur in the Nilgiri Biosphere Reserve. Fresh water fish and The Nilgiri tahr, Nilgiri langur, slender loris, blackbuck, tiger, gaur, Indian elephant and marten are the animals present in the biosphere reserve.

The natural growth of indigenous population is very low when compared with the migration by outsiders into the district. Some of the tribal communities such as Toads, Kotas, Irullas, Kurumbas, Paniyas, Adiyans, Edanadan Chettis, Cholanaickens, Allar, Malayan, etc., are native to the reserve. Most of them are involved in the agriculture.

The Nilgiris district consists of higher slopes and 75 watersheds. Increase of population demands the use of vast natural resources for its existence. The Biosphere reserve is divided into four major zones viz. Core Zone, Manipulation forestry Zone, Tourism Zone, and Restoration Zone.

There are 457 forest areas in the district of which 434 are reserve forest areas. There is a decrease in the forest cover over the years.

## **Biosphere Reserve and Human Development**

There are NGOs such as Keystone Foundation working in the Nilgai Biosphere Reserve with tribal communities on biosphere conservation through various eco-development initiatives such as apiculture, land development, organic & fair trade marketing, non-timber forest produce etc. In lower Nilgiris, the hunter-gatherer communities involved in honey hunting and subsistence agriculture collect honey and bee wax from the forests through their traditional methods. Biosphere reserve acts as a livelihood source for those communities. It needs value addition to those products collected from the forest for better marketing of those products and ensure sustainable income to those tribal communities.

The Nilgiri forest ecosystem is currently under pressures due to the intensive cultivation of crops such as tea and coffee, felling and logging of commercial tree plantations. Significant proportion of tribal population depends on the forest resources for their livelihood, particularly there are hunter-gatherers who survive only on the forest resources.

### **Concerns**

Introduction of agriculture and horticulture affects the biodiversity of the forest areas. Similarly, intensive felling of trees leads to deforestation and affect the inhabitants of the species of birds and animals. Many of the species endemic to the reserve become endangered. Intensive felling has led to multiple problems like destruction, depletion, degradation and the deforestation and consequent habitat destruction.

Practice of monoculture with the crops such as tea, coffee, potato etc. leads to reduction of soil fertility due to heavy application of fertilizers, which further leads to landslide during heavy rain. Overgrazing, forest fire, development and constructive projects and increase of human settlements reduce the forest area and link the remote forest with nearby towns due to creation of road facilities. The population increase has led to conversion of 22.67 sq. km. of dense forests into non-forest areas.

Increase of outside visitors and tourists to the district leads to emergence of resorts, building and hotels, which lead to water pollution and water scarcity. It affects the biosphere reserve heavily.

There is a declaration on “International Climate Champions – Nilgiri declaration” on January 23, 2010, which emphasises the impacts of Climate Change in the Nilgiri Mountains and the need for necessary action for protection, conservation, livelihood of local community and their

lifestyles. It was expressed as a concern in the declaration that The Nilgiri Biosphere Reserve was undergoing many human induced impacts such as deforestation and degradation of forests, which led to the loss of flora and fauna and caused landslides. The current situation in the Nilgiri Bioreserve is that the climate change has resulted in erratic rainfall and aggravated incidents of landslides taking the lives of many innocent people in recent years.

The biodiversity, microclimate, weather situation, and livelihoods are part of the natural resources and all are interrelated. Changes in any one of the said components will have an impact on the entire ecosystem.

### **Nature of Disasters in the District**

The district experiences two types of disasters viz., natural and human-made. The natural disasters are cyclone, flood, landslides, earthquake and forest fires, whereas humanmade disasters are fire at house or forest, road or railway accidents and chemical accidents or explosives. The district enjoys sub-tropical to temperate climate with 80 per cent of the total rainfall through southwest and northeast monsoons. During southwest monsoon, the velocity of the wind is high. The steep hilly terrain and high rainfall coupled with the biotic factors make the district highly vulnerable to the floods, landslide and land slips. Sometimes the district faces drought leads to crop failures. Forest fire, cyclonic winds and storms are other types of disasters leading to uprooting of trees and sedimentation in the reservoirs. Landslides are very common, is an annual recurring phenomenon during northeast monsoon period. These landslides have recorded loss of lives, properties, disruption of communication and cut off the district from access to outsiders. Flash floods is another form disaster the district experiences. It is aggravated due to the encroachment of the river channels by human beings that lead to heavy damages to properties, livestock and human lives.

There are five rivers, which pass through the district and there are six dams present in the district. There are 110 villages, which are present closer to the rivers highly prone to flood. The frequent occurrence of different disasters leads to heavy damages not only to the lives and livestock, properties but also to the environment. Due to the disasters, the occurrence of uproot of trees, loss of fertile lands, and sedimentation in the reservoirs lead to heavy investment on rehabilitation and restoration of livelihoods of the affected families.



## Chapter 7

### SUMMARY

1. The concept of Human Development has been popularised through Human Development Reports at global, regional, national and state level by United Nations Development Project (UNDP) integrating the human development measures such as Human Development Index (HDI), Gender Development Index (GDI), Gender Empowerment Index (GEI) and Human Poverty Index (HPI) since 1990. In India, the National Planning Commission facilitated bringing out of National and state level HDRs among which Tamil Nadu is one in its pioneering efforts of bringing out State Human Development Report (SHDR) since 2003. The State Planning Commission (SPC) of Tamil Nadu with the financial assistance of UNDP initiated the preparation of District Human Development Report (DHDR) since 2005. The respective district administration provides support in data collection from its different departments through the planning cell.
2. DHAN (Development of Humane Action) Foundation, is a national level professional led non-governmental organisation working for the grassroots development by implementation of various development programmes with the collaboration of government, banks and other academic and research institutions including corporate organisations. It has prepared DHDR for two districts – Thiruvannamalai and Sivaganga and conducted dissemination workshops on DHDR for three districts such as Thiruvannamalai, Sivaganga and Dindigul with the support of SPC, Tamil Nadu. Based on this experience, the SPC has requested DHAN Foundation to prepare DHDR for two districts such as Kanniyakumari and The Nilgiris districts with the respective District Collector as nodal officer.
3. Tata-Dhan Academy, a Development Management education institute of DHAN Foundation, has undertaken the assignment of preparing DHDR for both Kanniyakumari and The Nilgiris by deputing its faculty team. The DHDR of The Nilgiris district is mostly based on the secondary data collected from various departments. It was clearly articulated that the findings in the DHDR in Human Development and Gender Development perspective would be integrated into the district development planning process to facilitate the effective implementation of various development schemes and projects.

4. The Nilgiris is one of the hilly districts located in Western Ghats with abundant waterfalls, rivers and streams. It has natural wealth of forest. It is in the elevation of 900 to 2636 metres above the Mean Sea Level. The topography is rolling and steep. The normal rainfall ranges from 1500 mm to 3000 mm. It has six taluks located at the altitude ranging from 3000 feet to 6500 feet. Doddabetta is the highest elevation in the South India with an altitude of 2595 metres. There are number of botanical gardens in different tourist spots. It has a famous sanctuary – Mudumalai wild life. It has two revenue divisions, six revenue taluks and 55 revenue villages. It has 11 special village panchayats, 35 village panchayats, four panchayat unions and four municipalities as part of the development units.
5. The sex ratio in the district is 1014. The decadal population growth is 7.31 percent. The district is highly characterised by the urban culture. The SC population ranges from 24.8 percent to 39.3 percent and ST population ranges from 0.20 percent to 7.60 percent. There are Hindus, Christians, Muslims, Jain and Buddhists living in the district.
6. The district enjoys both Northeast and Southwest monsoons, which favours cultivation of cold vegetable crops, spice crops, high yielding and local rice varieties. The main source of irrigation is wells. The people in the district depend on animal husbandry for their livelihoods. Milk cooperatives and chilling centres are present in the district. There is not much fishery activity. The area under forest is 1,42,577 ha of which 96.2 percent belong to reserve forest. Forest resources are the main income sources for the district. There are 223 registered factories with 126 registered trade unions in the district.
7. The district has the presence of 21 tourist places which generate income for the district. Despite good literacy rate, the presence of colleges are limited. The district enjoys good road connection with national and state highways. 184 km. length of forest roads provide better access to forest resources for the people to enjoy their livelihoods. The district has good communication facilities. Existence of financial institutions and security services provide better access to finance and security for the people.
8. The district ranks 6<sup>th</sup> in Human Development Index in Tamil Nadu which is 0.685. The Gender Development Index is 0.686. Both HDI and GDI are higher than the state and the country.

9. As far as the flow of funds in the district is concerned, the social expenditure was analysed for twelve heads of social services which are categorised under nine heads such as (i) education, (ii) medical, public health and family welfare, (iii) water supply and sanitation, (iv) housing, (v) urban development, labour and employment (vi) welfare of SC, ST and OBC, social security and welfare, (vii) nutrition, (viii) other social services, information and publicity; and (ix) relief on account of natural calamities. The finding shows the rate of increase on total expenditure in the district was lower – 3.83 percent than the state – 7.03 percent during the years 2008-09 and 2009-10. The increase of social expenditure of 27.45 percent was observed in the district. The rate of increase in expenditure was high in relief expenditure on account of natural calamities (devastative cyclone)
10. The rate of increase in expenditure was 10.10 percent in education, but declined by 8.43 percent point in different heads of social services expenditures. On the other hand, the share of expenditure increased in medical, public health and family welfare both in The Nilgiris and Tamil Nadu.
11. The total population in the district is 9.06 lakhs. The percent of SCs is 30.59 and ST is 3.19. ST population is high in Kotagiri (6.26 percent) and Gudalur (6.90 percent). There is an increase in SC population and decrease in ST population during 1991 and 2001. The density of population in the district has witnessed an increasing trend from 274 in 1991 to 350 in 2001. It is the highest in Coonoor and the lowest in Ooty. There was increase in urban population from 49.76 percent in 1991 to 59.65 percent in 2001. The overall sex ratio as per the district handbook 2001 is 1016. All the four blocks and two municipalities have sex ratio more than 1000. Sex ratio of ST in Coonoor block is 978. It is found that it is less than 1000 in the age group of 0-14 and 0-6 population. Juvenile sex ratio is 979, which is higher than other districts.
12. It is found that the life expectancy at birth is 69.19 years which is higher than the state (66.74 years) and the country (63.4 years, 2007) and stands fifth in the state among the districts. As per the Vital Events Status, the birth rate in the district has declined from 15.2 to 13.0 (2003 – 2008) which is lower than the state (19.20). With reference to VES, 1998, it is found that in rural areas the birth rate is higher (18.50) than in the urban (12.60) areas. There is gender inequality, the female birth rate is lower (16.90) than the male (17.70). With reference to VES, 2003 and 2008, the death rate has increased from 5.2 to 5.7 and Maternal Mortality Rate (MMR) has increased from 0.5 to 1.1. The yearwise analysis reveals the inconsistency in MMR. It is a matter of concern and the reasons for the same are to be explored. Other



indicators such as IMR and Still birth rate show declining trend and indicate good performance. It is found that IMR has decreased from 26.1 to 17.1. Still birth rate has decreased from 13.4 to 9.2, but still the number of deaths matter. It is found as 100 in 2009-10, among which the male still birth rate is very high. The abortion rate has declining since 2005-06.

13. The neonatal deaths in the district since 1999-2000 is high with 76.2 percent followed by early neonatal deaths with 60.8 percent and it shows an increasing trend and post-neonatal deaths with 26.6 percent shows declining trend. Among the blocks, Gudalur has recorded the highest infant death of 42 in 2008-09. the infant death is almost equal in both male and female infants. The reasons for infant death with 23 percent are due to birth asphyxia, 14 percent is due to congenital heart disease and rest are due to congenital anomalies, acute respiratory distress syndrome, pneumonia etc.
14. The institutional deliveries in the year 2009-10 are high – 99.53 percent and dependency on private nursing home is coming down. The analysis reveals that the low birth weight is increasing in the district, that too between 2.0 k.g. and 2.5 kg
15. According to the Health department, there are 26 hospitals with modern medicines. The total bed capacity of government, private and PHCs is 809 in the district. There are 75 doctors and 105 nurses are available in the hospital to service (2007-08).
16. It is realised that understanding of human development perspective of various economic indicators are very important as economy and human development are mutually dependent. During 2006-07, the net district domestic product (NDDP) of the Nilgiris was Rs. 199,083 lakh. During the same year the NSDP of Tamil Nadu was Rs. 18,530,974 lakh. In spite of the fact the district is endowed with natural resources and ample opportunity of tourism sector, the overall NDDP growth rate continued to be lower in the district over the state during 2000-01 and 2006-07 (except the years 2002-03 and 2003-04).
17. Despite the lower population growth rate in the district, its per capita income (Rs. 25,542) was lower than that of the state (Rs. 28,320), though it has been increasing over the years. It reveals that as compared to the state, the lower population growth rate of the district did not outweigh lower economic growth. Moreover, it is found that this gap of per capita income between the district and the state has been increasing.

18. During 2006-07, the contribution of primary sector to the total NDDP of Tamil Nadu was 14 per cent. But in the Nilgiris, this contribution was much higher, i.e. about 20 per cent. It might be due to the contribution of tea crops in the district, which is unique in the state. However, the annual growth rate of the primary sector shows a declining trend over the years. Again, it could be due to the sluggish growth in the index number of tea production and tea yield.
19. The contribution of secondary sector to NDDP is lower in the district (21.15 per cent) than that of the state (27.08 per cent) in 2006-07. This share in the district has been increasing at a very sluggish rate during 1999-00 and 2006-07, while it has become almost stagnant at the state level. Moreover, the secondary sector growth rate in the district was much inconsistent. It is observed that the agriculture and manufacturing sectors in the Nilgiris go together. It could be due to the extensive tea cultivation and tea factories in the district.
20. The tertiary sector contributes 58.95 per cent to the total district's NDDP. This share of the district was almost the same to that of the state. Unlike in the state, the contribution of tertiary sector in the district has been increasing consistently particularly since 2003-04. It was mainly because of the fast growing trade, hotels and restaurants sector of the district. One can associate the tourism with such growth of trade, hotels and restaurants in the district.
21. The overall work participation rate (WPR) of the Nilgiris was 45.06 per cent in 2001, which was marginally higher than that of the state (44.67 per cent) and much higher than that of India as a whole (39.13 per cent). Talukwise, it varies from 39.07 per cent in Gudalur to 51.96 per cent in the Kotagiri. The overall gender disparity of work participation rate in the district (19.47) was lower than that in the state as a whole (26.10). Moreover, it was found that this disparity was more with the taluks with municipalities than those without.
22. The share of main workers to the total workers in the district (90.30 per cent) was found to be more than that in the state (85.25 per cent) and the country as a whole (77.81 per cent). The opposite is the case found with marginal workers. In fact, it is a good from economic perspective. Talukwise, Gudalur had as low as 82.74 per cent of main workers to total workers as against 93.52 per cent in Kotagiri).

23. Despite the higher share of main workers, the district's NDDP as well as its growth was found to be lower, which implies the overall lower productivity of workers in the district.
24. The actual wages across the categories of works particularly for males in the district were more than the minimum wages fixed by the government. But it was not similar among the female workers. In most of the blocks and work categories, the actual female wages were less than the minimum wages fixed by the government.
25. About 35 per cent of rural households were living below the poverty line. It was as high as 42.17 per cent in Coonoor block and as low as 32.41 per cent in Kotagiri block. Social groupwise, the percentage of BPL households among scheduled caste (SC), scheduled tribe (ST) and 'others' were 32.56 per cent, 40 per cent and 41.50 per cent respectively in the district.
26. Poverty in the district and in different blocks has been characterised on the basis of: (i) income; and (ii) size of operational landholding. On each indicator, the overall as well as social group wise blocks from bottom (poorest) to top (better) have been identified and presented. It is found that 40.35 per cent of total BPL households were living with less than Rs 499 monthly income. Among the social groups, this was highest among ST (78.57 per cent) followed by SC (51.15 per cent) and OBC (44.66 per cent). As mentioned in the education chapter, Gudalur block is backward in important educational parameters. Similarly, it is observed that in the same block ST households suffer most from income poverty. Overall, around 83 per cent of rural BPL households in the district were found landless.
27. The district is endowed with more than 80 per cent of its area under forest and rivers. The district is known for its tea production. Tourism is another area of development in the district. The district is also known for its hill area with more than three per cent of tribal population. Both flora and fauna are abundant in the district.
28. The overall net sown area of the district was found to be declining from 2001-02 to 2008-09, though not consistently ( $R^2=0.11$ ). Ooty (Udhagamandalam), being the biggest taluk (in area) in the district, the decline in the net sown area in this taluk was more prominent. It indicates that agricultural lands are being converted to non-agricultural uses in the district.

29. Forest cover of the district based on the remote sensing (satellite) data in 2005 was 2071 sq. km. (including 404 sq. km. of very dense forest) constituting 81.25 per cent of its total geographical area. But over a period of two years, in 2007, the forest area in the district declined to 2048 sq km which constitutes 80.35 per cent of its total geographical area. Moreover, the very dense forest area has declined from 404 sq. km. to 240 sq. km. (41 per cent) during the same period. But, subsequently the percentage of both overall forest cover and very dense forest cover in the state has increased from 17.72 per cent and 2.03 per cent to 17.94 per cent and 2.25 per cent respectively.
30. Merely 298.42 hectares of land was irrigated by different sources in the Nilgiris district during 2008-09. Dug wells (799 numbers) cover 272.49 hectares of land and the remaining 25.93 hectares of land was covered by the flow irrigation in the district.
31. As mentioned earlier, the area under irrigation is limited to 298.42 hectares and the area sown more than once is meagre, irrigation intensity<sup>1</sup> in the district is obviously very low. Similar case was observed with respect to the cropping intensity in the district.
32. The favourable climatic condition in the district allows to grow different horticultural crops. Among others, the important vegetable crops in the district include carrot, potato, cabbage, beans and banana. Similarly, the important spices and condiments produced in the district are pepper, ginger and garlic. Besides, the district has an extensive area (more than 90 per cent of net area sown) under tea and coffee crops.
33. Overall around one-fourth of the total farmers in the Nilgiris had taken institutional credit in 2001-02, as against 46.58 per cent in 1996-97. This shows a significant decrease in availing institutional credit during a period of five years. It was further observed that the percentage of marginal farmers availing institutional credit for agricultural purposes had declined from 43.73 per cent in 1996-97 to only 21.55 per cent in 2001-02.
34. The manufacturing sector is mostly agro based, i.e. tea. It was found that out of the total 282 working factories in the district, 205 are tea factories. These factories together provide direct employment to 4512 persons. Among the other working factories, needles manufacturing and packing (23 nos.), automobile workshops (14 nos.), general engineering (7 nos.) and

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<sup>1</sup> Irrigation intensity is calculated as gross area irrigated divided by net area irrigated multiplied by 100.

power houses (8 nos.) are important in terms of generating employment. It is to be noted here that one working explosive (Ammunition) factory in the district alone provides the employment to 3200 persons. The employment generated by these industries in the district was found to be not enough.

35. Based on the above analysis, the following suggestions are made:

(a) An independent study could be taken up to understand the reasons and dynamics of the stagnant secondary sector as whole, declining unregistered manufacturing segment of the secondary sector in particular, and declining primary sector in the district, which is almost dependent on the tea cultivation.

(b) The district has to focus more on decentralised micro- enterprises to generate better livelihoods.

(c) Tourism, transport and communication are other potential areas of further development, which could be approached with livelihood promotion perspective.

(d) An independent study could also be taken up to understand the employment potentiality and market dynamics of tea cultivation in the district, as one can find the district has a large proportion of area under very old tea plants.

(e) Given the skill and basic resources, the SHGs have the greater potential to take up the entrepreneurship. Clustering of SHGs on the basis of common activity and forming panchayat level federations would be helpful to produce the identified items with a minimum risk, and establish the market linkage (both forward and backward) for their products.

36. The district has abundant natural resources with bio-reserves. The concern is natural growth of the indigenous population is low compared to the migrants from outsiders into the district. Another major concern is decrease of forest cover over the years in the district. The forest ecosystem in the district is currently under pressures due to intensive crop cultivation, felling and logging of tree plantations. Monoculture of tea and potato, overgrazing of lands, using organic fertilizers, increase of water pollution and environment degradation due to visits by many tourists, erratic and aggravated rainfall, frequent disasters etc. lead to heavy threat to the environment and ecosystem. Relief and restoration of livelihoods for the people affected by natural disasters create pressure on administration to spend heavily.