District Human Development Report - 2017

Tiruvannamalai District

State Planning Commission
Tamil Nadu

TIRUVANNAMALAI

DISTRICT HUMAN DEVELOPMENT REPORT 2017

**District Administration, Tiruvannamalai, and
State Planning Commission, Tamil Nadu
in association with DHAN Foundation**

Contents

Chapters

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MESSAGE

Tamil Nadu is a pioneer in implementing welfare programmes. The State's Twelfth Five Year Plan insists upon the betterment of Human Development status. Tamil Nadu is on the path of development for achieving accelerated, innovative and inclusive growth.

The State Planning Commission had earlier published Human Development Reports for the State and 8 districts. The analysis on the inter district and intra district disparities has led to policy recommendations and formulation of specific schemes like State Balanced Growth Fund to address backwardness. As a sequel, State Planning Commission has taken up the preparation of Human Development Reports for all districts.

This report is prepared with an objective to address Human Development concerns at the block level. An in-depth analysis on the Human Development status through Health, Education, Standard of living, Gender, Demography, Social Security sectors has been made to study the performance of blocks at the sub-district level. This could play as an effective tool for grassroots level planning.

I take this opportunity to place on record my sincere appreciation to the District Collector and Line Department Officials for sharing data on various parameters for the preparation of District Human Development Report. I thank all the stakeholders for their contributions to this report.

ANIL MESHRAM
MEMBER SECRETARY
STATE PLANNING COMMISSION

Preface

Tamil Nadu government envisaged the Vision 2023 document that aims at making the state as leader of development to achieve the levels of Human Development on par with the developed countries. According to the United Nation Development Programme (UNDP), the human development is "about creating an environment in which people can develop their full potential and lead productive, creative lives in accord with their needs and interests. People are the real wealth of nations. With this perspective, our State Planning Commission (SPC) has successfully brought out State Human Development Report in the year 2003 and also experimented the concept of bringing Human development reports for few districts of Tamilnadu. These reports has thrown light on the achievements and intra district disparities in human development that calls for the stake holders' attention in developing the basic infrastructures at habitation level. It also demands for innovative programs to address the backwardness of the selected blocks in the district. The preparation of DHDR would form a basis for the presparation of the Perspective plan for the backward blocks with a human development perspective to have contextualized interventions.

Human Development is a continuous process of enlarging people's choices relating with, to lead a long and healthy life, to acquire knowledge and to have access to resources needed for a decent standard of living. The present report strives to measure, compare and document the extent of development in blocks relating to the above said choices to the local community. It has captured the status of Human Development of Tiruvannamalai District through Human development index (HDI), Gender Inequality Index (GII), Child Development Index (CDI) and Multidimensional poverty index (MPI), which is a composite index highlighting both the benchmarks and concerns in the district.

The process of preparation of the DHDR has enabled the district administration to have a core committee to review the progress and to set the basis for rasing proposals under State Balanced Growth Fund. I thank the State Planning Commission for this excellent opportunity and record my sincere appreciations to District Planning Cell and DHAN Foundation, for their tireless efforts in preparing the DHDR for Tiruvannamalai by taking constant inputs from SPC and through a systematic process of validation with the relevant line departments of the district.

Having completed the District Human Development Report, the challenge now is to build the ownership among the stakeholders by disseminating the findings of the report and thereby setting the goals for each block to achieve the deisired results. I look forward for all the departments and stakeholders to take advantage of the investment made in preparing this report and we strive our best to improve the human development in the district that could be a model for the State.

A.Gnanasekaran IAS

District Collector

Acknowledgement

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Tata-Dhan Academy

Madurai

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CHAPTER 1

TIRUVANNAMALAI DISTRICT - A PROFILE

1. District Profile

Tiruvannamalai is one of the most venerated places in Tamil Nadu. It is a temple town and a major pilgrimage centre in the State. The Annamalaiyar Temple is the most prominent landmark of Tiruvannamalai. In ancient times, the term "Annamalai" meant an inaccessible mountain. The word "Thiru" was prefixed to signify its greatness, and coupled with the two terms, is called Tiruvannamalai.

Topography

Tiruvannamalai is one of the northern districts of Tamil Nadu with Vellore, part of Chengalpattu and South Arcot districts as northern, southern and western boundaries. It is the administrative headquarters of Tiruvannamalai District. This district comprises of Tiruvannamalai, Chengam, Polur, Arni, Cheyyar and Vandavasi taluks. It came into existence on 30th September 1989 after the bifurcation of North Arcot district. The district lies between 11.55^0 and 13.15^0 North latitude and 78.20^0 to 79.50^0 East longitude. The topography of Tiruvannamalai is almost plain sloping from west to east. Tiruvannamalai experiences hot and dry weather throughout the year. The temperature ranges from a maximum of 40 °C (104 °F) to a minimum of 20 °C (68 °F). It is mostly comprised of plain lands except for the Eastern Ghats in the north-western part of the district and small hills in Polur and Chengam taluks. Palar, Cheyyar and Pennaiyar are the rivers running through this district. They are seasonal in nature and there is no perennial river in the district. This chapter presents an overview of historical, physical and economic facets of the district and places it in an appropriate context in relation to human development. It would help in better understanding of various issues taken up in the following chapters.

History

The history[1] of Tiruvannamalai district shows that Cholas ruled the district from AD 871 to AD 1120 followed by Pandyas. French ruled the district during the 17th century followed by Nayaks. After Nayak rule, the district was taken over by Britishers during the 18th century.

In the Sangam age the region was part of Aruva Nadu. Later it became part of Thondai Mandalam. It has passed through the hands of various rulers like Pallava, Chola, Rashtrakuta, Vijayanagara, Maratha, Nawabs, French and British. During Chola dynasty this district was ruled by Sambuvarayas with Padavedu near Arni as head quarters. They were known for quick, efficient and able administration. Originally this district was part of North Arcot, which got its

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[1] It has been extracted from the website (http://www.Tiruvannamalai.tn.nic.in) from District Handbook

name as it was carved out of northern part Subah of Arcot lying north of Palar river. During 1901-11 North Arcot was bifurcated and new Chittoor district (now in Andhra Pradesh) was formed. After independence, Tiruvannamalai was under North Arcot District. After many changes there were four revenue divisions with thirteen taluks during 1971. The civil district of North Arcot was divided into Vellore district and Tiruvannamalai district in October 1989. Thiru. P.Kolappan IAS was the first Collector of Tiruvannamalai District. In 1989 the present Tiruvannamalai district was formed with Cheyyar and Tiruvannamalai revenue divisions with Tiruvannamalai as the district capital.

Religious Importance[2]

The name 'Tiruvannamalai' instantaneously brings to mind the picture of *Karthigai Deepam* to many as this festival is well known throughout Southern India. Every year lakhs of devotees visit this district during the festival. Among the five '*Panchalinga Sivasthalams*', '*Agnilingam*' is one of the famous places in Tiruvannamalai. According to the religious story *Lord Siva* took the form of '*Jyothi*' (light) here to solve the dispute between *Lord Brahma* and *Lord Vishnu*. It is one of the *sthalams* (holy place) quoted in various *Puranas. Girivalam*, meaning going around the Annamalai Hill once in every month during *Pournami* (full moon day) is very famous in this district. Due to the religious importance of Annamalai temple in Tiruvannamalai, religious tourism has been one of the major income sources for the district.

Geography and Administrative set up

The total geographical area of the district is 6191 sq. km. (ranks eleventh among the districts) comprising the Revenue Divisions of Tiruvannamalai and Cheyyar. The district has six taluks, eighteen blocks including tribal block of Jawadhu Hills and 1067 revenue villages (http://www.Tiruvannamalai.tn.nic.in) and 860 panchayat villages. One sixth area of the district is covered by reserve forest and hills which are parts of Eastern Ghats. The Javadis are the loftiest mountains of the region. They cover the north-western portion of Chengam taluk and the western part of Polur taluk. The general elevation of Jawadhu Hills is 2500 ft. with peaks rising up to 4200 ft. in some parts. Other important peaks of the district are Tiruvannamalai (2668 ft.) and Kalasagiri (2743 ft.). The general slope of the region is from west to east.

The soil is mostly of red ferruginous variety, both sandy and loamy with black clay. Black soil is mostly found in the neighbourhood of the rivers of Palar, Pennaiyar and Cheyyar. Red series of sand is predominant in Tiruvannamalai and Vandavasi taluk. Pirrohotite is said to be available in

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[2] It has been extracted from the website (http://www.Tiruvannamalai.tn.nic.in) from District Handbook

Polur. Black and multi-coloured marvel stones are available in plenty in the regions of Chengam and Vandavasi. These were made use of by the Sambuvarayas in the past, exhibiting their architectural skills.

The general climate of the district is tropical. The district receives rainfall from North East and South West monsoons. North East monsoon is somewhat stronger except in the southern taluks of Cheyyar and Vandavasi. The average rainfall during 2002-2011 in this district was 1038 mm (http://www.Tiruvannamalai.tn.nic.in). Palar, Cheyyar and Pennaiyar are the rivers running through this district. At Sathanur, about 30 km west of Tiruvannamalai, a dam has been constructed across Pennaiyar river. About 21000 hectares are irrigated through 106 channels from these three rivers.

Language

The native as well as the official language of Tiruvannamalai is Tamil and most of the village people speak Tamil for communication. .

Art, Architecture and Culture

The Annamalaiyar Temple is the most prominent landmark of Tiruvannamalai. The temple complex covers an area of 10 ha (25 acres), and is one of the largest temples in India. It houses four gateway towers known as gopurams. The tallest is the eastern tower, with 11 stories and a height of 66 m (217 ft), making it one of the tallest temple towers in India. The temple has numerous shrines, with those of Annamalaiyar and Unnamulai Amman being the most prominent. The temple complex houses many halls; the most notable is the thousand-pillared hall built during the Vijayanagar period.

The Annamalaiyar temple is one of the Pancha Bhoota Stalas, or five Shiva temples, with each a manifestation of a natural element: land, water, air, sky and fire. In Annamalaiyar temple, Shiva is said to have manifested himself as a massive column of fire, whose crown and feet could not be found by the Hindu gods, Brahma and Vishnu. Aathara Stala are Shiva temples which are considered to be personifications of the Tantric chakras of human anatomy. The Annamalaiyar temple is called the Manipooraga stalam, and is associated with the Manipooraga chakra.The temple is revered in Tevaram, the Tamil Saiva canon and classified as Paadal Petra Sthalam, one of the 276 temples that find mention in the Saiva canon.

The most important festival of the Annamalaiyar temple is celebrated during the Tamil month of Karthikai, between November and December, concluding with the celebration of Karthikai Deepam. A huge lamp is lit in a cauldron, containing three tons of ghee, at the top of

the Annamalai hills during the Deepam. To mark the occasion, the festival deity of Annamalaiyar circumambulates the mountain. Inscriptions indicate that the festival was celebrated as early as the Chola period (850–1280) and was expanded to ten days in the twentieth century.

Every full moon, tens of thousands of pilgrims worship Annamalaiyar by circumambulating the Annamalai hill barefoot.The circumambulation covers a distance of 14 kilometres (8.7 mi), and is referred as Girivalam.According to Hindu legend, the walk removes sins, fulfils desires and helps achieve freedom from the cycle of birth and rebirth.Offerings are made in a string of tanks, shrines, pillared meditation halls, springs and caves around the hill. Tirumalai is an ancient Jain temple complex in the outskirts of Tirvannamalai that houses three Jain caves, four Jain temples and a 16 feet (4.9 m) high sculpture of Neminatha dated from the 12th century and the tallest Jain image in Tamil Nadu.

The Ramana Ashram and ashram of Yogi Ramsuratkumar, located around the Annamalai hill are popular visitor attractions of Tiruvannamalai. The Sathanur Dam over the Thenpennair river located 20 km (12 mi) southwest of the town is a prominent picnic spot. This 786.37 m Dam is 44.81m high and can store 7,321,000,000 cu ft or 207,300,000 cubic meters of water. A scenic park is also present adjacent to this dam. Ulagalantha Perumal Temple in Tirukoyilur and Thiruvarangam, situated 20 km (12 mi) south of Tiruvannamalai are prominent Vishnu temples that are located around Tiruvannamalai.
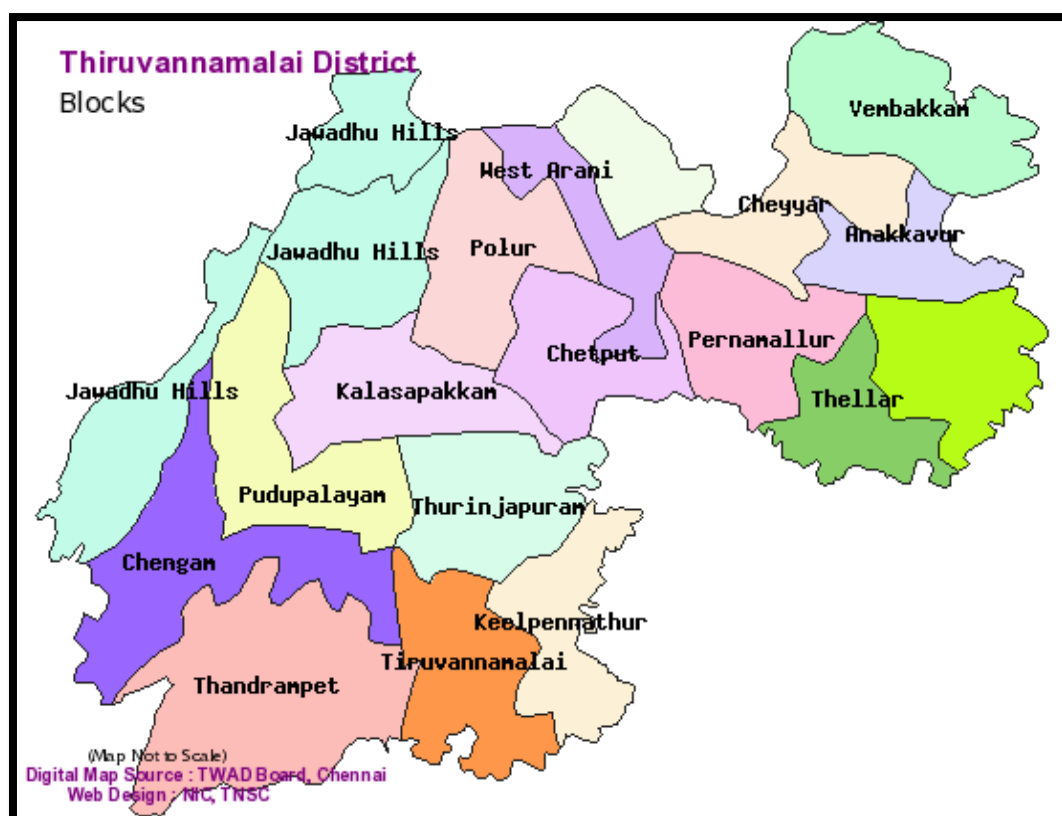
Demography

As per Census 2001 and 2011, the table 1.1 shows that the district population is approximately 2.47 million as opposed to 2.19 million in 2001. The decadal growth rate of the population in the district is 12.75 percent. The density of the population in the district is 473 persons per sq.km in 2011, as against 424 in 2001 which is due to the increased population. Tiruvannamalai stands 13th in population among the districts Tamil Nadu in 2011, as against 15th in position in 2001. The district has 79.9 percent of its population living in rural areas and 20.1 percent living in urban areas, and the district has four municipalities. The percentage variation since the previous census is 10.48 in rural and 23.85 in urban areas. It shows that the increase of urban population is comparatively at a faster rate than the rural population.

Table 1.1: District Basic Demographic Indicators

Sl.. No.	Indicators	2001	2011
1	Population	2,186,125	2,464,875
2	Decennial growth (percent)	7.01	12.75
3	Density of population per sq. km	424.	473
4	Urban population (percent)	NA	20.08
5	Sex ratio	995	994
6	Percentage of 0–6 years old	11.95	11.06

Source: Census documents 2001 and 2011; NA – Not Available

The sex ratio works out to 994 (12,38,688 – men and 12,30,277 - women) in 2011 as compared to 995 (10,95,859 men and 10,90,266 women) in 2001 in the district, which is slightly lower than the sex ratio of the State which is 996. The Child Sex Ratio as per census 2011 was 930 compared to 948 of Census 2001. In 2011, Children in the age group of 0-6 were 11.06 percent as against 11.95 percent in 2001.

Among the social groups, the percentage share of Scheduled Caste (SC) is 22.93, as per Census 2011 as against 21.4 percent of Census 2001 and that of Scheduled Tribes (ST) is 3.67 percent in 2011 as against 3.33 percent of Census 2001. There is a positive change observed with regard to increase of SC and ST population. Except Jawadhu Hills, all other blocks are with a considerable number of SC population and in Jawadhu hills the ST population is 83.58 percent which is reduced by 6 percent since 2001. But overall in the district the ST population has increased by 2.5 percent in 2011. There is a possibility of migration of ST population to the plains in the district, which needs to be studied.

Economy

Agriculture

The majority of the population in the district derives their livelihood from activities related to agriculture and livestock rearing. Wells and tanks are the major sources of irrigation. Taluks like Tiruvannamalai, Cheyyar, Polur and Vandavasi enjoy better irrigation facilities. Nearly 50 percent of Net Cropped Area of this district depends mainly on rainfall. The major crops grown in the district are paddy, groundnut, pulses and sugarcane. The area under major crops and their production have been declining in the recent years. The major sources of water supply in the district are canals (144) which irrigate 356 ha, open wells (1,73,971 includes 19,866 wells for domestic purpose) that irrigate 1,19,924 ha and tanks (1966) that irrigate 26,925 ha. It can be seen that agriculture depends on open wells and tanks as major source of irrigation which again depends on the rainfall. In addition to food crops there are a few horticulture crops such as banana, turmeric and tapioca which are cultivated in the district.

Animal Husbandry

The district had 7,17,336 (4,97,929 in 2005) cattle, 3,66,752 (1,98,118 in 2005) sheep, 2,72,823 (1,50,141 in 2005) goats and 1,84,874 (2,52,314 in 2005) poultry in 2007 which have increased by 114 percent, 185 percent, 182 percent respectively and poultry population has reduced to 73 percent as against the livestock population of 2005. The district had considerable number of buffalo i.e. 22,686. The district had increased number of farm poultry i.e. 31,6678 in 2007 which

shows that poultry is one of the promising activities that provides income generation for the people in the district. The district was ranked 5th in having veterinary institutions and was ranked 6th in veterinary dispensaries in the State in 2007. The district is the leader in white revolution and stands next to Salem and Vellore at 3rd position in milk production among the districts of Tamil Nadu. The production of milk during the year 2011-12 was 4,24,118 tonnes litres which was approximately 11.62 lakhs litres per day as against 2.33 lakh litres per day in 2005 in both flush and lean seasons. Two cooperative milk-chilling plants are in operation at Tiruvannamalai and Anakavur besides three private milk-chilling plants.[3]

Industry

Before bifurcation North Arcot district gained a fair momentum regarding industries during the 70's and 80's from special measures taken by the Government, consequent on its being declared as backward district. But after the bifurcation almost all the industrial areas in North Arcot district fell in Vellore district except silk industries in Arni. Currently SLS Cotton Spinning Mills in Arni is the only major industry besides sugar mills in Anakkavur, Polur and Tiruvannamalai. However medium and small scale industries as well as cottage industries such as modern rice mills, weaving factories, cotton, silk and mat weaving, coir manufacturing and *beedi* manufacturing are flourishing here. Arni is known for affordable silk saris throughout India. In the district, there are food and allied manufacturing industries and non-food manufacturing industries of which grain mills and food products manufacturing play a major role in contributing to the income in the district.

Other sector

The service sector includes trade, hotels, restaurants, railway, transport, storage, communication, banking and insurance, real estate, public administration and other services. The service sector is a growing sector that provides more employment opportunities particularly booming of real estates, hotels and restaurants. The contribution to Net Domestic Product is increasing due to growth of the sector.

Transport and Communication

Tiruvannamalai district is not much connected with rail routes except for a 93 km. meter gauge route between Katpadi and Villupuram segment. It is utilized for both passenger and goods transportation. The district enjoys a road network of 2596.91 kms length of roads in 2011-12 as

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[3] (Source: Statistical handbook Tamil Nadu, 2013, Department of Animal Husbandry and Veterinary Services).

against 1600 km. length of various kinds of roads. The district has two head Post Offices, 81 sub-offices, and 458 branch Post Offices. There are two telephone divisions, 63 telephone exchanges, and 57,661 telephone connections in 2011-12, which is lower in number as that of 66,348 telephone connections in 2004-05.

Income

The Gross District Domestic Product (GDDP) of the district at constant prices (2004-05) during the year 2010-11 shows that the contribution of tertiary sectors to GDDP is higher than that of the secondary and primary sectors which is presented in Table 1.2.

Table 1.2: Sectoral Distribution of Gross District Domestic Product at Constant Price

Sl. No.	Year	Tiuvannamalai - District (Rs. In lakhs)			State – Tamil Nadu (Rs. In lakhs)		
		Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
		GDDP	GDDP	GDDP	GDDP	GDDP	GDDP
1	2009-2010	108665	209994	430797	3279727	10857492	21525966
2	2010-2011	128137	244380	484406	3516987	12542302	24282284
3	2011-2012	145522	270513	522325	3872767	13039248	26411788

Source:Does, Tiruvannamalai

The average growth rate of per capita income of the district is 9.32 at constant prices (2011-12), which is higher than that of the average growth rate of the per capita income of the State (6.72) in the same year.

Table 1.3: Per Capita Income at Constant Prices

Sl. No.	Year	District		State	
		Percapita Income	Growth rate	Percapita Income	Growth rate
1	2009 - 2010	33322	6.31	53359	10.08
2	2010 - 2011	38026	14.12	59967	12.38
3	2011 - 2012	41569	9.32	63996	6.72
Average Growth Rate			9.65		9.52

Source: Department of Economics and Statistics

During the year 2010-11, the growth rate has increased more than that of the previous year, which might be due to increased employment opportunities in the district particularly Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and in service sectors.

Social Sector

Health

The district has seven Government hospitals, 31 health providers including siddha, unani, aurvedic and homeopathy. Equally there are more than 50 private hospitals, dispensaries and clinics that provide healthcare services in the district. The health scenario of the district is analysed based on the health indicators such as Infant Mortality Rate, Maternal Mortality Ratio, Crude Birth Rate and provision of vaccinations. The crude birth rate in the district is showing a positive change but not much drastic compared to the State, which shows that still there is prevalence of local practices in attending deliveries.

Figure 1.1: Crude Birth Rate
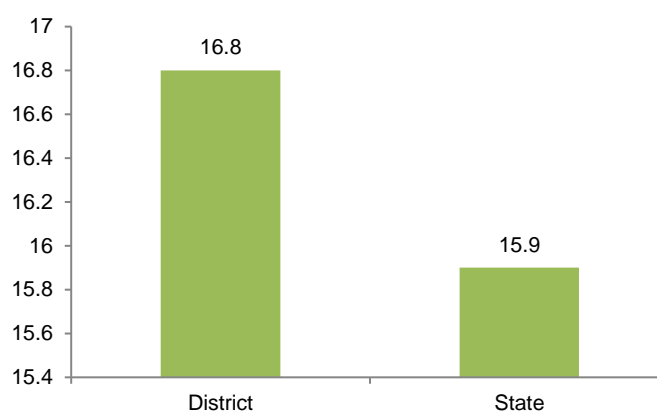
Source: Deputy Director of Health Services, Tiruvannamalai

The Infant Mortality Rate (IMR) as a core indicator of human development which reflects not just the state of health, nutrition and caring accessible to infants below one year of age, but also the general well being of society.

Figure 1.2: Infant Mortality Rate
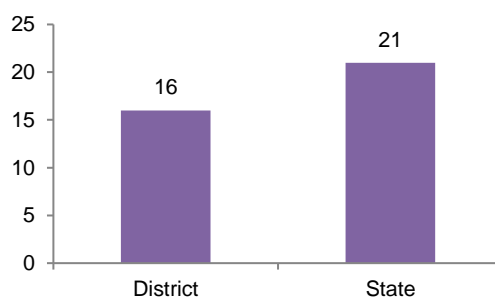
Source: Deputy Director of Health Services, Tiruvannamalai

As per 2013-14 data, the IMR in the district (16) is lower than the State of 21, this shows that district administration has taken necessary steps in reducing infant deaths in the district. District

administration has taken efforts in preventing child marriages, controlling anaemia among the adolescent girls and ensuring institutional deliveries which might be the reason for reducing anaemia in the district. Mostly poor health condition prevails in remote blocks and Jawadhu Hills and it shows very poor performance in most of the health indicators. The areas of concern are MMR, IMR and low birth weight and under five mortality which need attention in the district.

Literacy and Education

One of the important human development indicators is literacy and education. The literacy rate of the district was rising during 1991 – 2001. The district was ranked 23rd among the 30 districts in 2001 which was 65.71 percent whereas it has increased to 73.36 percent in 2011 which shows the improvement in the education status. There is significant improvement among the male female literacy rates from 2001 to 2011. The male and female literacy rates were 80.74 and 63.37 respectively in the year 2011 compared to 77.78 and 53.63 in 2001in the district. The combined gross enrolment at primary and secondary level in the district was 100.24 in the year 2013-14, whereas it was 98.36 and 99.24 at primary and upper primary levels respectively.

Regarding higher education, there are 16 Government and private colleges offering arts and science courses, 11 professional colleges of engineering and 13 polytechnic institutes, and five special education institutions that offer nursing and pharmacy courses in the district. In addition to this, there are 40 teachers training institutions, and nine computer centres offer job oriented courses. It shows that the district had more number of education institutions which contributed to the increased literacy and education ratios. There is lot of scope for further improving the education status of the children and schools and colleges level through quality education.

Tourism

Tiruvannamalai is a world renowned pilgrim centre located at the foot hills of Annamalai hills. Sathanur dam is a famous cine location in Tamil Nadu for many years. It is located a few kilometers away from Tiruvannamalai. It was built in the year 1958 which attracts thousands of people towards its nature. The other plilgrimage centre which is to be visited is Ashram of Ramana Maharishi near Tiruvannamalai which attracts thousands of devotees. The other sites which can be visited are Gingee Fort, Melmalyanur, Jawadhu hill and Pada veedu. On the whole, Tiruvannamalai is traditionaly rich in historic and spiritual values but lacks in industrial growth.

Conclusion

The name 'Tiruvannamalai' instantaneously brings to mind the picture of *Karthigai Deepam* to many as this festival is well known throughout Southern India. Tiruvannamalai district is one of the developing districts in Tamil Nadu and it is located in northern part of the State. The total geographical area of the district is 6191 sq. km. (ranks eleventh among the districts) comprising the Revenue Divisions of Tiruvannamalai and Cheyyar. The district has the famous pilgrim place Annamalai hills and Sathanur dam. The majority of the population in the district depends on agriculture and allied activities. Wells and tanks are the major sources of irrigation.The district has a large populace of weavers from Sengunthar caste, who are specialized in making Silk sarees. Hand looms are often engaged for weaving, although recently some have turned to mechanized methods of using Power looms. Arni is the most important revenue earning town in the district. Though the town is not popular off the State, a bulk of India's Silk apparels is produced by the people of Arni.

CHAPTER 2

STATUS OF HUMAN DEVELOPMENT

2. Status of Human Development In Tiruvannamalai District

Introduction

Human Development concept evolved in 1980s as a measure of overall development of the country or region. It places people at the core of development and emphasizes that peoples' development is an end in itself and not a means for development. Human development is about people and is a process of enlarging choices related to leading a long and healthy life, to acquire knowledge, and to have access to resources needed for a decent standard of living. Amartya Sen's work on human development concept focuses on building human capabilities, enhancing freedom of choices and ensuring process of outcomes for happy and healthy living of human beings. Human development is characterized by its dynamic and evolving process, multi-dimensional focus, inter-disciplinary nature and pragmatic approach leads to action. There are four principles which guide the human development process – efficiency (efficient use of resources), equity (distributive justice for choices and opportunities), freedom and empowerment and sustainability of the outcomes of human development process for the benefit of future generations.

Human Development Index (HDI) is a measure of overall status of human development in a region or country. The UNDP's HDI has three dimensions such as life expectancy, education, and income. The HDI at the district level is to understand the quality of life of the people which is being measured by three dimensions of HDI, as per the direction of State Planning Commission, Tamil Nadu, such as standard of living, Health and Education. There are 11 indicators for calculating the indices for all the three dimensions. There are five indicators under the dimension of standard of living; three indicators under health; and three indicators under education. The HDI has been calculated for 18 blocks of Tiruvannamalai district. The HDI is being used with gender perspective to understand the gender gaps in accessing and utilizing resources for bettering their lives.

UNDP has introduced two measures to assess the gender dimension of human development – Gender Development Index and Gender Empowerment Measure. At district Gender Inequality Index (GII) has been used as a measure of gender gaps. The GII includes three dimensions such as health, empowerment and labour market with 15 indicators. There are three indicators for health; six indicators under empowerment; and six indicators under labour market.

Human Development Index – Inter-Block Variations

HDI is a composite index measuring the average achievement in three dimensions such as standard of living, health and education at the district level. The HDI value is between 0 and 1. Since it focuses on human development perspective, it is seen as a positive index. Higher the value better is the human development. The indicators which are seen in Human development index are given below:

Dimensions	Indicators
Standard of living	Access to cooking fuel Access to toilet facilities Access to drinking water Access to electricity Access to Pucca houses
Health	Infant Mortality Rate Maternal Mortality Ratio Under 5 Mortality Rate
Education	Literacy rate Gross enrollment in Primary Gross enrollment in secondary

With regard to Human Development Indicators under three dimensions, the district performs better in access to drinking water and electricity compared to the State which is due to provision of drinking water facilities for the habitation. This indicator does not consider the household tap connections and habitation has been taken into consideration. Though the literacy rate, GER in primary and upper primary level is progressing well in the district still the performance is lower than the State.

In general, Tiruvannamalai is known for its backwardness with regard to education, health and poverty. The HDI has been computed for 18 blocks and the inter-block variations are analysed to understand the contributing factors for better and lower performance of blocks with regard to standard of living, health and education. The HDI value varies from 0.37 to 0.92 among the 18 blocks. Among the blocks Thellar takes the top position. The high index value of Standard of Living, Health and Education has influenced its HDI value in Thellar. The next three positions are taken by Arni, Tiruvannamalai and Chetpet where the index value in standard of living and education has contributed significantly for the high value of HDI. The top performance of four blocks is due to high standard of living particularly access to the basic needs and education facilities which can be well related with the high income which gives ability for the people to access those basic facilities. Surprisingly the Health index shows lower performance of the top ranked blocks. Jawadhu Hills is placed at the lowest ranking in bottom five category, which is

followed by four other blocks namely Thandrampet, Pudupalayam, Chengam and Kalasapakkam with HDI value ranging between 0.37 and 0.63. The index value of standard of living and health contributes for lower ranking in all the five blocks especially Jawadhu Hills which stands low in health index (0.39) in the district, and the education index is very low in Jawadhu Hills (0.26).

Regarding the Standard of living, among the five indicators, most of the blocks perform better in accessing electricity, drinking water and pucca houses (except in Jawadhu Hills which is 54.93 percent). The performance is low with two indicators namely access to toilets and cooking fuel. The access to toilet facilities is very low in two blocks – Thandrampet and Anakkavur (20.92 percent and 36.87 percent respectively). This is a general problem in most of the blocks except Arni stands first in access to toilets (69.09) percent. As far as access to cooking fuel is concerned the data shows that Jawadhu Hills block performs very low with 8.96 percent, where as Arni stands top rank (57.75 & and 77.86%) in better access to cooking fuel and toilet facility. The better performance of Arni is due to its urban characteristics and ability of the people to access LPG fuel and toilet facilities.

With regard to Health dimension, three indicators are considered namely IMR, MMR and U5MR. The analysis of those indicators shows that the IMR is 13.20 in Jawadhu Hills. As per 2014 data also Thandrampet (21.9), West Arni (19.2) and Cheyyar (20.6) shows higher IMR in the district. The reasons for high IMR in those blocks are poor road facility, lack of awareness on institutional delivery, accessibility to healthcare services, poor transport facilities, unit of population coverage and socio-cultural reasons. These blocks need special attention. Around 9 blocks have more IMR than the district average of 16. There is a need for special study to be undertaken in Jawadhu Hills as it is a remote tribal block with low record of IMR. According to 2014 data, 5 blocks have more MMR, where Jawadhu hills stands first (330), followed by Vandavasi (230). Special attention is needed for the blocks like West Arni, Pudhupalayam and Kalasapakkam. The MMR is found to be zero in 6 blocks.

Table 2.1: Top and Bottom three blocks in Human Development Indicators

Top 3 block	Value	Bottom 3 block	Value
Thellar	0.92	Jawadhu hills	0.37
Arni	0.90	Thandrampet	0.43
Tiruvannamalai	0.85	Pudhupalayam	0.49

The Education dimension includes literacy rate and gross enrolment rate at primary and secondary level. The performance of the block shows lowest literacy rate in Jawadhu Hills (41.64 percent) and highest in Tiruvannamalai (71.65 percent). Gross enrolment is about 100 percent at the primary level in all the blocks where as the gross enrolment at the secondary level is found to be lowest in Jawadhu Hills (59.93 percent) and highest in Polur block (85.03 percent).

Overall it can be seen that the district performs better in accessing drinking water except Anakavur and Polur. The district needs attention on MMR, IMR and U5MR, special attention towards education and standard of living in Jawadhu Hills. The MMR is very high in Jawadhu hills and Vandavasi which also needs special attention. The access to cooking fuel and toilet facilities also need attention as most of the blocks have not performed well in those indicators. With regard to education, the district needs to focus on improving the enrolment status at the secondary level.

The district has to pay attention in creating accessibility and affordability of services related to standard of living, health and education to improve the overall human development at the district level.

Gender Inequality Index (GII)

Gender Inequality Index (GII) is a measure to assess the gender gaps against the human development variables. The State Planning Commission, Tamil Nadu has prescribed GII with three dimensions such as health, empowerment and labour with 15 indicators.

Dimension	Indicators
Health	MMR Share of institutional delivery Share of Antenatal coverage
Empowerment	Female literacy rate Male literacy rate Share of female children 0 – 6 years Share of male children 0 – 6 years Share of male elected representatives in RLBs and ULBs Share of female elected representatives in RLBs and ULBs
Labour market	Female work participation rate Male work participation rate Female work participation rate in non Agri. Sector Male work participation rate in non Agri. sector Female Agri. wage rate Male Agri. wage rate

Since GII measures the human development performance in terms of gender gaps, it is

considered as a negative index. In such case lower is the index value (closer to 0) better is the performance of human development with low gender gap.

The GII is constructed for 18 blocks and the values for the blocks in the district vary from 0.01 to 0.11. The Peranamallur block performs with lowest GII and Chetpet ranks 18 with high GII. The range shows high disparity (0.11) in the district. The blocks which show low GII are Peranamallur, Thellar and Ankavvur, where as the other blocks with high GII are Jawadhu hills, Pudhupalayam and Vandavasi. Surprisingly Jawadhu Hills ranks 13 in GII. Despite the urban characteristics in Tiruvannamalai, it ranks 10th rank respectively with high GII, which shows that there are huge gender gaps.

Under health dimension, it is found that the institutional delivery is about 100 percent in all the blocks except in Jawadhu Hills which is 93.0 percent. Similarly the antenatal coverage is 100 percent except three blocks which shows the increased awareness of the people in accessing the Government and private healthcare services and the reach of institutional services to the women. The major concern is high MMR that is found in Jawadhu hills (330),Vandavasi (230) and Pudhupalayam (190) when compared to the State average (68). The district average being 93 indicates that (2013-14), there is need for immediate attention from the district administration.

The empowerment dimension includes six indicators of which the female literacy rate is 65.3 percent which is very low, when compared to that of male literacy rate of 83.1. The gap in literacy rate between female and male is found to be very high, which is one of major contributing factors for high GII. Despite the female literacy rate is found to be low in Jawadhu Hills, the GII is found to be low which is due to the similar situation of male in the block and low in gender gap. The share of female children to male in the district is found to be better when compared to that of the State and the share of female and male elected representatives was found to be better among the blocks but lower than that of the State.

Regarding the labour market dimension, the low female work participation rate in agriculture in Arni, Tiruvannamalai, West Arni, Cheyyar and Vandavasi is found to be another major contributing factor for high GII in those blocks. As far as the female wage rate is considered, it is 44 percent to the wage rate of male in the district and found the same situation in all the 18 blocks, which is the third contributing factor for GII in the district

Overall in the district it is found that the high MMR, low female literacy in around 12 blocks (below 60%) and disparity in wage rates between female and male and huge gender gap in literacy rates are the contributing factors for GII in the district, which needs greater attention.

Table 2.2: Top three and Bottom three blocks in Gender Inequality Indicators

Top 3 blocks	Value	Bottom 3 blocks	Value
Peranamallur	0.006	Jawadhu Hills	0.11
Thellar	0.007	Pudhupalayam	0.10
Anakkavur	0.007	Vandavasi	0.10

The district shows clear distinction between the blocks having urban characteristics and the blocks which are intense with agriculture operations in its GII index value. Overall from the analysis, it can be seen that the gender gap is low in agriculture based blocks and the gap is high in urbanized blocks, as most of the women obviously do not participate in the agriculture based works and show more interest towards non- agriculture sector as they get more employment opportunities in it.

Child Development Index (CDI)

Child Development Index is computed based on the performance measures with respect to child health, education and nutrition status in the district. The indicators, which make up the index, were chosen because they are easily available, commonly understood, and clearly indicative of child wellbeing. Under health, rate of under-five mortality and sex ratio are taken for analysis. Percentage of malnourished children is considered under nutritional status and enrolment of students and transition rate are considered under education.

Child Development Indicators in the district

Among the eight indicators, the education indicators show better performance particularly the Gross Enrolment in primary schools, children never enrolled, transition rate from primary to upper primary and upper primary to secondary though it differs marginally with the State performance. The concern is Gross Enrolment in secondary schools which is found to be low when compared to that of the State. The three health and nutrition indicators and GER at secondary level education contribute for varied levels of child development across the blocks in the district. Indicators used for assessment of Child development index is given below:

Dimension	Indicators
Health	U5MR Child sex ratio Percentage of malnourished children
Education	Gross enrollment ratio in primary Gross enrollment ratio in secondary Children never enrolled in schools Transition rate from primary to upper primary Transition rate from upper primary to secondary

The concerned factor is child sex ratio which is very low when compared to the State. In five blocks, malnourishment and sex ratio contribute for low child development in the district. In Jawadhu Hills four indicators – Juvenile sex ratio, Malnourishment, enrolment in secondary education and transition from upper primary to secondary contribute for the low CDI, which needs special attention to understand the reasons. In Pudhupalayam block, under five mortality rate which is very high amongst all other blocks contribute to low CDI next to Jawadhu Hills. Child sex ratio varies due to the indicators contributing more to the discrepancies. E.g. Jawadhu Hills (857), Chengam (900), Kilpennathur (924), Thurinjapuram (906). Malnourishment is very high in four blocks: the highest in Jawadhu (41.65) followed by Kilpennathur (38.83), Cheyyar (36.65) and Chengam (34.85). Secondary enrollment contributes in two blocks. Jawadhu leading the gap (59.93) and Thurinjapuram (67.39).

Top three and Bottom three blocks in Child Development Index

Top 3 blocks	Value	Bottom 3 blocks	Value
Thellar	0.85	Jawadhu hills	0.14
West Arni	0.81	Chengam	0.43
Vembakkam	0.81	Thurinjapuram	0.47

Based on overall index, the blocks are ranked on their CDI in the district. Thellar and West Arni occupy the 1st and 2nd positions with 0.85 and 0.81 respectively in the district, whereas Jawadhu Hills ranks 18th with 0.14. The difference is 0.66 between the highest and the lowest CDI. It can be said that except in Jawadhu hills where 4 indiators were poor, the variations in CDI can be attributed to one or two of the indicators.

The overall index developed based on the data conveys that Thellar (0.85), West Arni (0.81), and Vembakkam (0.81) rank in the top three positions. Jawadhuhills (0.14), Chengam (0.43), and Thurinjapuram (0.47) occupy the last three positions in the district.

Health: Within the district under five child mortality prevails more in Pudhupalayam, Thandrampet and Kilpennathur. Under-five mortality is a very critical indicator that conveys the accessibility to health services and good health of the younger generation. Children born in poor families are almost twice as likely to die before the age of five as those from wealthier families. Children of educated mothers - even mothers with only primary schooling - are more likely to survive than children of mothers with no education[4].

The sex ratio of the Country, State, and district represent the mindset of the earlier generation.

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[4] Source: National Family Health Survey, India

Whereas the child sex ratio represent the mindset of the present generation passing through the productive stage. There is a wide gap in child sex ratio, which means the block will have more surplus men than women in near future. The child sex ratio of Jawadhuhills, Pudupalayam, Chengam, Polur, Thurinjapuram, and Kalasapakkam is alarming, which is lower than the district, State, and the Nation. The data stated above clearly necessitates Government intervention in addressing the issues and restrict access to modern technologies to prevent sex selective abortions.

Nutrition: Childhood stage is very critical for growth and development of the children. As per UNICEF, about 43 percent of Indian children under five years are underweight and 48 percent (i.e. 61 million children) are stunted due to chronic under nutrition, India accounts for more than 3 out of every 10 stunted children in the world. As per NFHS, 30 percent of the children in Tamil Nadu were under weight. Socioeconomic status of the household also has a major role in increasing rate of malnourishment.

Jawadhu hills, Kilpennathur, Cheyyar, Anakkavur, Chengam, Arni, Kalasapakkam, Peranamallur and Thurinjapuram blocks have higher proportion of malnourished children compared with the State. Polur, Thandrampet and Thellar occupy first three positions within the district. Lower malnutrition among children indicates the better future for the block. There is a need for shifting food habits and behavior of the community. People of this block have already shifted from traditional food to consuming polished rice. After the Government intervention, poor households were able to access food grains through public distribution system. However, the question before us is that whether the food is nutritious. We need to focus on mother's education also where pros and cons can be shared with them. An awareness campaign to schools, particularly in villages to be focused more on improving the nutritional status of the children.

Education: The district has ensured 100 percent enrolment of all children in primary schools. Though percentage of never enrolled children is very negligible, the district has to identify those families and ensure education through remedial schools. The enrolment rate in secondary schools is of much concern. The district has to ensure better enrolment in secondary and higher secondary education to have higher percentage of educated citizens. Jawadhu Hills, Chengam and Thurinjapuram occupy the last three positions in enrolling students in secondary schools.

Multidimensional Poverty Index – An analysis

Poverty is not only based on the economic condition of the people. It includes socio-economic perspective. Multidimensional Poverty Index is a new measure introduced to measure poverty in a comprehensive way with three dimensions such as standard of living, health and education having 10 indicators in the district.

Dimensions	Indicators
Health	IMR Higher order birth rate Malnourishment among children
Education	Drop out in primary Drop out in secondary
Standard of living	Access to cooking fuel Access to toilet facilities Access to drinking water Access to Pucca houses Access to electricity

Inter-block variations in Multidimensional Poverty indicators

Regarding the health indicators Thandrampet (21.9), West Arni (19.2) and Cheyyar (20.6) shows higher IMR in the district. The reasons for high IMR in those blocks are poor road facility, lack of awareness on institutional delivery, accessibility to healthcare services, poor transport facilities, unit of population coverage and socio-cultural reasons. Around 9 blocks have more IMR than the district average of 16.

Higher Order Birth rate is found to be high in Chengam (21.4), followed by Pudupalayam (20.19) and Tiruvanamalai(18.34). This leads to health setback of women and preference for boys. Malnourishment is another factor which generally contributes to severity of poverty particularly in Jawadhu Hills (41.69) and Chengam (34.85). Higher order birth is found to be very low which contributes to low MPI in Vandavasi despite it being with the same level of IMR and high malnourishment.

With regard to education, the drop out in secondary education is found to be high in Jawadhu Hills (2.34), Pudupalayam (2) and Chengam (1.53). The drop out at the primary level education is found to be very low except Jawadhu Hills (11.64). It shows that discontinuing education after

the primary level might be due to child labour, lack of availability and accessibility and economic reasons. However detailed study needs to be taken up to find the location specific reasons and measures have to be taken to address it. As far as the standard of living is concerned, access to cooking fuel is found to be low in Pudupalayam (12.74), Jawadhu hills (15.35) and Chengam (19.95) and access to pucca houses is found to be low in (54.93) Jawadhu Hills.

Top three and Bottom three blocks in Multi Dimensional Poverty Index

Top 3 blocks	Value	Bottom 3 blocks	Value
Vandavasi	0.17	Jawadhu hills	0.67
Thellar	0.19	Pudhupalayam	0.55
Arni	0.21	Thandrampet	0.53

Overall the performance of blocks with respect to MPI shows that the range is very high (0.50). Out of 18 blocks, Vandavasi , Arni, and Thellar , are in top three ranks, where as Jawadhu hills, Pudhupalayam and Thandrampet fall at bottom. Jawadhu Hills shows high MPI (0.67) due to high drop out at both primary level and secondary level education, low access to cooking fuel and pucca house and high malnourishment. Jawadhu Hills needs special attention to understand the specific reasons for poverty, as it also categorized as backward block under State Balanced Growth Fund programme.

Table 2.3: Overall Index Rankings

S. No.	Block	HDI		GII		CDI		MPI	
		Index value	Rank	Index value	Rank	Index value	Rank	Index value	Rank
1	Anakkavur	0.71	9	0.01	3	0.68	9	0.43	12
2	Arni	0.90	2	0.04	8	0.68	10	0.21	3
3	Chengam	0.63	15	0.04	7	0.43	17	0.51	15
4	Chetpet	0.81	4	0.09	15	0.76	4	0.33	8
5	Cheyyar	0.73	7	0.02	5	0.66	12	0.30	6
6	Jawadhuhills	0.37	18	0.11	18	0.14	18	0.67	18
7	Kalasapakkam	0.67	14	0.08	14	0.69	8	0.48	14
8	Kilpennathur	0.68	12	0.05	9	0.51	14	0.41	11
9	Peranamallur	0.72	8	0.01	1	0.66	11	0.48	13
10	Polur	0.69	11	0.05	11	0.75	5	0.39	9
11	Pudupalayam	0.49	16	0.10	17	0.50	15	0.55	17
12	Thandrampet	0.43	17	0.01	4	0.62	13	0.53	16
13	Thellar	0.92	1	0.01	2	0.85	1	0.19	2
14	Thurinjapuram	0.70	10	0.06	12	0.47	16	0.30	7
15	Tiruvannamalai	0.85	3	0.05	10	0.74	6	0.22	4
16	Vandavasi	0.79	5	0.10	16	0.70	7	0.17	1
17	Vembakkam	0.67	13	0.03	6	0.81	3	0.41	10

| 18 | West Arni | 0.77 | 6 | 0.07 | 13 | 0.81 | 2 | 0.29 | 5 |

Summary and conclusion

As per the Tamil Nadu State Human Development Report 2003, Tiruvannamalai district was categorised under bottom five districts with regard to per capita income, and literacy rate next to Dharmapuri district. Surprisingly the district performed well both in HDI and GDI, as both rankings were equal. It shows that the income was lower and gender equality was better in the district. However the blocks need attention with regard to performance of specific indicators with regard to HDI and GII. Jawadhu Hills needs special attention as the block has unique characteristics with regard to culture, socio – economic conditions and gender practices, as it is the only tribal block with poor road access and other infrastructure facilities. The analysis shows that high MMR, low female literacy and low female wage rate contribute to high gender inequality. However there are inter-blocks variations observed due to many other reasons such as low female work participation rate in agriculture sector compare to that of male, low female literacy, poor perfromance of certain blocks in health indicators in IMR, MMR and SBR also contribute to inter block varation in the indicators. There are four blocks that have been proposed for considering under State Balanced Growth Fund Project to improve the human conditions with regard to health, education, and standard of living. Those blocks are Jawadhu Hills, Chengam, Thandrampet and Pudupalayam.

CHAPTER 3
EMPLOYMENT, INCOME AND POVERTY

3. Employment, Income and Poverty

Introduction

Employment, income and poverty are three interrelated factors that contribute in defining the quality of life which has greater influence on human development of the communities living in a particular country or region. Three sectors namely primary, secondary and tertiary sector create employment opportunities and the average per capita income provided by the primary sector is significantly lower than that of the other two sectors. The Gross Domestic Product (GDP) of the nation or the region is highly influenced by the contribution of secondary and tertiary sectors. This chapter details the employment, income and poverty status of the Tiruvannamalai district, their inter relation and influence on human development in the district.

Employment

Size of work force and work participation rate (WPR)

The Census of India defines work as 'participation in any economically productive activity with or without compensation'. The workers are classified as main worker and marginal workers. The main workers are those who have worked for the major part of the reference period (i.e. 6 months or more). Marginal workers are those who have not worked for the major part of the reference period (i.e. less than 6 months). The share of workers, main, and marginal workers to the total population clearly indicates the economic conditions of a given area. In Tiruvannamalai district, agriculture is the main source of bread for a large share of households. It is the major source of employment and seasonal.

While looking at the trend, the percentage of total workers in Tiruvannamalai has increased from 48.99 percent to 50.23 percent during 2001 – 2011. It shows a positive trend in employment in the district, which is due to the increase in proportion of main workers from 36.87 percent to 39.36 percent and reduction of marginal workers from 12.11 percent to 10.88 percent. This might be due to creation of additional employment in the primary sector and secondary sector. Overall the work participation rate in the district is higher than Tamil Nadu which is 44.7 in 2011.

Table 3.1: Total Workers and Non workers

Category	2001	percent	2011	percent
Workers	1,046,669	48.99	1,238,177	50.23
(i) Main	787,884	36.87	970,072	39.36
(ii) Marginal	258,785	12.11	268,105	10.88

Category	2001	percent	2011	percent
Non-workers	1,090,011	51.01	1,226,698	49.77
Population	2,136,680	100.00	2,464,875	100.00

Source: Census 2001 and 2011.

The percentage of non-workers has reduced from 51.01 to 49.77 but the absolute number is increased during the decade. Overall the increase in workers is due to increase of main workers in the district. Over all, the work participation rate has increased during the decade (2001-11), but the increase is very marginal (2.24 percent), more over the marginal workers rate is stabilized (at 10.88percent) and main workers rate is increased by 2.48 percent. There is a need for increasing employment opportunities so that the work participation rate can be increased particularly the main workers category as it has direct relation to income and poverty.

Table 3.2: Distribution of workers

Sl. No.	Block wise/ District/State	Total Workers		Main Workers		Marginal Workers		Non-Workers		Total Population	
		2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
1	Tiruvannamalai	107539	139567	88564	117464	18975	22103	163758	187537	270535	327104
2	Kilpennathur	68147	64075	55529	48646	12618	15429	42492	65455	110639	129530
3	Thurinjapuram	48182	69393	37855	57361	10327	12032	52938	55809	111647	125202
4	Polur	92072	95183	74931	67972	17141	27211	64567	88485	156939	183668
5	Kalasapakkam	42940	64888	29516	52554	13424	12334	51579	54814	107943	119702
6	Chetpet	52283	58166	17716	44564	34567	13602	51972	51897	102714	110063
7	Chengam	87644	85669	69406	63183	18238	22486	92676	84957	180320	170626
8	Pudupalayam	41668	50013	30924	37727	10744	12286	42441	50252	84109	100265
9	Thandrampet	83338	96021	61740	70106	21598	25915	69126	83532	152464	179553
10	Jawadhu hills	22463	28906	18268	22230	4195	6676	20857	21782	43320	50688
11	Cheyyar	44372	63322	34463	49904	9909	13418	43246	68898	122819	132220
12	Anakkavur	38771	41679	30329	30967	8442	10712	36704	33302	75475	74981
13	Vembakkam	38621	69707	21993	54540	16628	15167	55232	60469	55232	130176
14	Thellar	50511	52134	37223	45932	13288	6202	47758	44319	98269	96453
15	Vandavasi	61450	72872	48292	58046	13158	14826	70793	75520	132243	148392
16	Peranamallur	35570	51846	26218	37482	9352	14364	41075	39430	86047	91276
17	Arni	81771	78932	66927	65440	14844	13492	88986	99661	159224	178593
18	West Arni	49327	55804	37990	45954	11337	9850	53811	60579	103138	116383
	District	1046669	1238177	787884	970072	258785	268105	1090011	1226698	2153077	2464875

Source: Census 2001 and Census 2011.

Work Participation Rate in Rural and Urban areas

The following table shows that the work participation rate has increased in the last decade, both in rural and urban areas across the gender.

Table 3.3: Work Participation Rate

Rural/ Urban	WPR (percent)		Workers (in lakhs)	
	2001	2011	2001	2011
Rural				
Male	58.79	60.62	5.26	6.10
Female	44.75	45.78	3.98	4.58
Persons	51.80	53.23	9.25	10.48
Urban				
Male	53.24	56.49	1.06	1.39
Female	16.68	20.29	0.33	0.50
Persons	34.94	38.29	1.40	1.89
Total				
Male	57.78	59.79	6.33	7.39
Female	39.59	40.62	4.32	4.99
Persons	48.71	50.23	10.64	12.38

Source: Census 2001 and 2011.

The census data of 2001 and 2011 shows that there is an increase in both male and female work participation rate both in rural and urban areas. But the difference in increase is by about 1 percent in rural and about 3 percent in urban. This is due to urbanization and increased employment opportunities in the industrial sector.

Inter-block variations in male and female work participation rate

Male work participation rate is reduced in 11 blocks in which Arni, Kalasappakkam, Thurinjapuram and Peranamallur shows higher reduction during 2001-11. Only in Kilpennathur and Cheyyar, the increase in male WPR is about 5-6 percent. Regarding the female WPR, only in seven blocks, the reduced female WPR is observed during 2001-11 which is found to be high in Kilpennathur and Cheyyar with about 4-5 percent. Other than this, the general growth rate of female WPR is higher than the male WPR among the blocks. This might be due to successful implementation of MGNREGA in the district which normally attracts female workers.

Female Work Participation Rate

Economic participation of women is the foundation for all other forms of empowerment. Female participation is essential to reduce dependency, besides addressing the family economic needs. During the last decade, the female participation has increased from 38.72 percent to 40.32 percent. The net increase in participation is 1.60 percentage points. While looking at the absolute figures, female participation in the district has increased by 93,933, which accounts to 23.18 percent (growth rate). The growth rate is significant and the trend has to be maintained. The male female participation ratio is 1: 0.68 in 2011, whereas in 2001 the ratio was 1: 0.63 that shows there is not much change when compared to the total population. The growth rate of male workers participation for the same period with regard to the absolute number (73,317) is 15.21 percent. The ratios and figures clearly indicate that the growth rate of female is higher than the growth rate of male in work participation.

The economic participation of female in urban areas is comparatively lower than female in rural areas. The gap between male and female work participation is very wide in urban areas. The difference between male and female participation rate in urban areas is 36.20, which indicates the necessity for investing more to promote female work participation. In rural areas, female participate is in unskilled works like skilled labour, agri coolie etc. Moreover, such employment was available within their village or in nearby villages. Such opportunities are very low in urban areas.

Box 3.1: Child Labour in the District

Child labour is a sin. Children have right to a joyful childhood. As per UNICEF 12.6 million children are engaged in hazardous occupations. The Child Labour (Prohibition and Regulation) Act 1986 prohibits engaging children under the age of fourteen in listed activities. In Tamil Nadu State, the status of Child Labour is almost at extinct stage. Somehow, its presence is insignificant in numbers. Though it is in negligible numbers, its seriousness cannot be ignored.

In Tiruvannamalai district, the presence of child labour is found in nine blocks and the remaining nine blocks are declared as child labour free. Jawadhu Hills, being a hilly block and a place of tourism, has the highest number of child labour within the district. The total number of child labour engaged in the district is 688.

Regarding gender perspective, the number of male child labour is higher (359) than the female child labour (329), which is one of the causes for creating problematic future generations in the district. Efforts have to be taken to eradicate the child labour and protect child rights. Strikingly, the highest number of child labour is found in Jawadhu Hills which accounts for 47.82 percent, of which the male child labour is greater than the female child labour. The prevalence of child labour is due to poor economic conditions of the families in the block. About 49 percent of the male children out of the total male child labour and 46 percent of the female children out of the total female child labour present in the Jawadhu Hills block; hence greater attention is needed to eradicate the child labour in the block.

Distribution of workers in the district

The distribution of workers in the district between main workers and marginal workers which includes further classification into four categories cultivators, agricultural labourers, household workers and other workers.

Table 3.4: Distribution of Main Workers

Sl. No.	Blocks	Main workers			
		Cultivators	Agri. Lab.	HH workers	Workers
1	Tiruvannamalai	15.65	19.52	1.48	47.52
2	Kilpennathur	21.26	26.80	1.80	21.37
3	Thurinjapuram	35.64	30.73	1.19	15.10
4	Polur	22.20	25.05	2.52	24.80
5	Kalasapakkam	24.41	41.23	1.65	13.70
6	Chetpet	22.36	29.83	2.79	21.63
7	Chengam	26.53	24.30	1.41	21.51
8	Pudupalayam	25.57	29.53	1.14	19.19
9	Thandrampet	24.78	32.40	1.04	14.79
10	Jawadhu Hills	34.32	35.40	1.16	6.03
11	Cheyyar	15.15	21.01	6.19	36.46
12	Anakkavur	21.21	32.64	1.32	19.12
13	Vembakkam	16.78	33.90	4.42	23.14
14	Thellar	28.80	40.14	3.11	16.05
15	Vamdavasi	13.67	33.08	1.38	31.53
16	Peranamallur	27.37	28.08	2.13	14.71
17	Arni	9.91	18.35	10.10	44.55
18	West Arni	15.52	28.82	9.89	28.12
	District	21.42	28.37	2.99	25.57

Source: Census 2011.

The district has more agricultural labourers with 28.37 percent, other workers with 25.57 percent followed by cultivators with 21.42 percent. The percentage of total household industrial workers is very low (2.99 percent) in the district. Overall, 78.35 percent of the main workers are in the district. The data shows clearly that the poverty in the district is due to the absence of

employment opportunities and presence of more agricultural labourers and marginal workers.

Among the 18 blocks the agricultural labourers, is found to be more than 40 percent in Kalasapakkam and Thellar. Except Chengam, in all the blocks, the agricultural labourers are found to be higher than the cultivators and other workers, which clealry shows as an indicator for prevalence of more poverty.

Table 3.5: Distribution of Workers and Output (in Numbers)

Cultivator			Agricultural Labourers			Household workers			Other workers		
Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
265183	177826	87357	351310	165315	185995	37020	24020	13000	316559	252049	64510

Source: Census 2011.

The sectoral composition of workers includes cultivators, agricultural labourers, household workers and other workers. Among the distribution, agricultural labourers are comparing more to other sectors. Of which female agricultural labourers are more than the male agricultural labourers. It shows that the poverty is due to more marginal female workers in agriculture sector. Other workers constitute non-agriculture sector which engages more male workers to that of the female workers. Household industrial workers constitute more male workers than the female workers. Regarding the cultivator, mostly male workers are engaged in the cultivation compared to female but most of the operations are done by female only. It shows that the control over agriculture is still with males. MGNREGA also plays a vital role in generating employment for female workers hence more female marginal workers are engaged in the agriculture and allied sectors.

Employment and Registration

As an impact of growth in literacy rate, many people are registering in employment exchange expecting a better job opportunity. The figures given below indicate the employment registration which varies year by year from 2007 to 2012. As per the data, the percentage of placement has never crossed 1percent for the past four years except in 2008.

Table 3.6: Registration and Placement in Public Sector

Year	Registration	No. of Placement
2007	38747	227
2008	34311	373
2009	35483	264
2010	38523	247
2011	37051	231
2012	47451	248
Total	231566	1590

Source: District Employment Office.

The overall placement is 0.69 percent during last six years. To improve the track record the placement has to increase which can happen only when there is creation of more employment opportunities in the forth coming years.

Box 3.2: MGNREGA – Employment and Income

Government of India formulated Mahatma Gandhi National Rural Employment Guarantee Act to address poverty and create employment opportunities for the rural poor in India. The act provides livelihood security for 100 days in a financial year, for those who are interested in doing the unskilled jobs. MGNREGA is a boon for the rural households. In Tamil Nadu, MGNREGA facilitated better wage rate for the labourers.

Employment - During the year 2010-11, employment provided through MGNREGA was 397,404 out of 466,962 which accounts for 85.10 percent in the district. Out of the 18 blocks, three blocks have namely Cheyyar, Vembakkam and Peramanallur top first three ranks by providing more than 90 percent employment. Jawadhu Hills stands last (18th rank) in creating employment through MGNREGA. It can be seen that the district administration and local Panchayat institutions could not identify required works to engage 44 percent of the households in Jawadhu Hills block. During the financial year 2011 – 2012, the Government was able to spend Rs. 3000 crores and achieved 110 percent in generating man days of employment. In Tiruvannamalai district, Rs. 439.25 crores worth of works were implemented, 5.7 crore person of employment were created and 9591 works were completed in Tiruvannamalai district. Next to Villupuram, Tiruvannamalai district has spent more funds to create employment. It is one of the top five districts in distributing job cards.

Impact - During 2012-13, eight type of activities were taken up and created assets on (i) water conservation and harvesting in which 1971 assets were created worth of Rs 9369.03 lakhs through digging of new tanks and ponds and percolation ponds, construction of small check dams; (ii) drought proofing through afforestation and tree plantation; (iii) micro irrigation works through micro irrigation canals; (iv) provision of irrigation facility to land owned by SC and ST category; (v) renovation of traditional water bodies in which 2854 assets were created worth of Rs 13897.38 lakhs through desiting of tanks, ponds, old canals, and traditional open wells; (vi) land development through land leveling and plantation; (vii) flood control and protection through drainages in water logged areas and construction and repair of embankment and (viii) rural connectivity through 1681 roads with the length of 12695 kms worth of Rs 6347.27 lakhs.

In the year 2013-14, the employment provided through MGNREGA was 4,47,181 out of 5,05,388 which accounts for 88.5 percent in the district. Out of 18 blocks Cheyyar, Thurinjapuram and Permanallur takes top third position in providing more than 90% employment followed by Vembakkam and Vandavasi.

Income

Per Capita Income

Per capita income is an important indicator of the standard of living. Often this indicator is used to compare between two different areas to understand the economic well-being of the community. Low per capita income may indicate that the local economy does not adequately support individuals and families. However, per capita income is not an isolated indicator and it must be related with natural, financial and social capital of the region.

The per capita income of the district, which was Rs. 24,711 in 2005-06, has increased to Rs

41,569 in 2012 and average growth rate of the district 9.65 which is slightly higher than the State average of 9.52. Compared to the State, the per capita income is better, growth over a decade is though lesser than the State but closer to the State figure. Among the districts, Tiruvannamalai ranks 26th in its per capita income in 2011-12, this indicates the level of poverty in the district. Other comparable districts are Theni and Nagapattinam which also maintains the same rank as Tiruvannamalai. Kanniyakumari stands first in per capita income among all the districts.

Table 3.7: Per Capita Income in the District (In Constant price)

Sl. No.	Year	District		State	
		Percapita Income	Growth rate	Percapita Income	Growth rate
1	2004 -2005	21893		33998	--
2	2005 - 2006	24711	12.87	38435	13.05
3	2006 - 2007	27444	11.06	43941	14.33
4	2007 - 2008	30309	10.44	46293	5.35
5	2008 - 2009	31345	3.42	48473	4.71
6	2009 - 2010	33322	6.31	53359	10.08
7	2010 - 2011	38026	14.12	59967	12.38
8	2011 - 2012	41569	9.32	63996	6.72
	Average Growth Rate		9.65		9.52

Source: Department of Economics and Statistics, GoTN.

As per Tamil Nadu State Human Development Report, 2003, the per capita income of the district was below Rs 10,000 (1996-97). The growth of the per capita income is more than 4 times within 15 years. However, the per capita income of the district in 2011-12 (Rs.41,569) is lower than the State (Rs 63,996). The present level of income is well above ($1.48 @ $1=Rs65) the millennium development goal, which aims to ensure minimum $1.25 per person per day. Somehow, the disparities within the region and social segments have to be assessed. The probability of existence of extreme poverty may be high in backward areas where the per capita income is low.

Sectoral distribution of Gross District Domestic Product

The contribution from the primary sector to district Gross District Domestic Product has been declining over the years due to higher productivity and production in non-agricultural sectors. The agriculture accounted for 17.67percent of Gross District Domestic Product in 2005-06, it accounts only 13.57 percent in 2011-12. On the other hand, the share of the secondary and tertiary sectors also shows decreasing trend in growth rate .But the share of workers depending on this sector to total workers has not declined much.

Table 3.8: Sectoral Distribution of Gross District Domestic Product at Constant Price

Sl. No.	Year	Tiuvannamalai - District (Rs. In lakhs)			State – Tamil Nadu (Rs. In lakhs)		
		Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
		GDDP	GDDP	GDDP	GDDP	GDDP	GDDP
1	2004-2005	94183	132865	258332	2599508	6767931	12532883
2	2005-2006	110828	148106	290843	2914561	7751784	14290360
3	2006-2007	118046	159752	334769	3286591	8807824	16658553
4	2007-2008	133870	177911	366667	3150807	9151736	18213138
5	2008-2009	113974	184607	404845	3079411	8962975	20136950
6	2009-2010	108665	209994	430797	3279727	10857492	21525966
7	2010-2011	128137	244380	484406	3516987	12542302	24282284
8	2011-2012	145522	270513	522325	3872767	13039248	26411788

Source: Department of Economics and Statistics,Go TN.

The district is famous for handloom silk and cotton weaving industries almost in all the blocks. Average minimum of 50 to maximum of 1000 families engaged in the handloom activities in the blocks. Regarding manufacturing industries, there are existence of food and non-food manufacturing industries which provide employment for the people in the district, particularly grain mills and weaving industries. In addition, there are more than 7000 small scale industries in the district which provides high employment opportunities. Hence the contribution of secondary

sector in the GDDP was significant compared to the primary and tertiary sectors.

GDDP and agriculture growth

The district has about 1/4th forest area out of the total geographical area and 2/3rd of agriculture lands. The net area sown has decreased in the year 2012 when compared to 2011, fallows, current fallows and cultivable waste lands remain stagnant and not being put under cultivation, hence the agriculture growth in the district remains the same. The major crops cultivated in the district are cereals and millets which account for 46.46 percent of the total area sown, followed by oil seeds and other crops.

Still the technological interventions have not been made in the district and farming families use the traditional agriculture technologies such as wooden and iron ploughs and very limited use of tractors. Most of the farmers in the district are small landholders holding less than 4 ha of land. Sericulture is another prominent activity being that has been taken by the people in all the blocks which provide good income and employment.

The growth of GDDP in agriculture and allied sector has got stabilized and stagnated up to 2009 and it has been increased in 2010 by about 20 percent, followed by forestry.

GDDP and industrial growth

Tiruvannamalai district is known for silk weaving and small scale industries particularly food and non-food industries. The GDDP contribution through manufacturing sector is in increasing trend during the year 2005-12 and similar is the case in construction sector. But the contribution is very small and highly fluctuating with regard to electricity, gas and water supply. Overall, the growth of industrial sector and the contribution of GDDP at constant prices by the construction sector are significant followed by the manufacturing sector.

GDDP and Service sector

The service sector includes trade, hotels, restaurants, railway, transport, storage, communication, banking and insurance, real estate, public administration and other services. The growth of the service sector and its contribution to GDDP for the six years from 2005-12 is highly contributed by trade, hotels and restaurants, followed by other services and real estates. The booming sector is the real estate in the district. The second set of important services such as banking and insurance, transport and public administration contributes to the GDDP at current prices in the district.

All the sub sectors in the service sector have grown and contributed to the overall

GDDP of the district except communication which has got reduced during 2010-11. As the district is known for place of worship particularly with Annamalaiyar temple and Ramana Maharishi ashram and it has places of tourist attraction in seven blocks such as Tiruvannamalai, Polur, Thandrampet, Kalasapakkam, Jawadhu Hills, Chetpet and Vandavasi having the presence of more restaurants, the GDDP growth through service sector is observed as positive. But growth rate of service sector is lower than the State despite the district having number of tourism places.

Poverty and inequality

Poverty is one of the dimension lowers the development process. It is multidimensional and includes economic, social, political and psychological deprivations. There are many common measures of poverty such as Head Count Ratio, Poverty Gap Ratio and Squared Poverty Gap Ratio. Those measures are consumption based which are not accurate measures in assessing the deprivation of the particular segment of the community. The recent measure being introduced for assessing poverty is multidimensional poverty index. It helps to understand the deprivation of the families in three dimensions such as health, education and quality of life/standard of living. It directly does not assess the income status but indirectly makes the researcher to understand the purchasing power of the families and accessing the Government services to meet their basic needs.

BPL Households

As per the planning commission of India, 21.9 percent of the households lives under poverty in India. About 25.7 percent of households in rural areas and 13.7 percent of households in urban areas are living under poverty.

Table 3.9: Percentage of Below Poverty Line (BPL) Households-2013

Sl. No.	Block wise	Total No. of HHs	Total No. of BPL HHs	Percent of PPL families
1	Tiruvannamalai	33374	14517	43
2	Kilpennathur	22683	8022	35
3	Thurinjapuram	28872	7383	26
4	Polur	28902	10362	36
5	Kalasapakkam	26805	8795	33
6	Chetpet	24612	8287	34
7	Chengam	30251	10014	33
8	Pudupalayam	16477	5991	36
9	Thandrampet	27931	9494	34
10	Jawadhu hills	9895	3958	40
11	Cheyyar	21575	7479	35
12	Anakkavur	21052	5668	27
13	Vembakkam	26490	7527	28
14	Vandavasi	24453	7878	32
15	Thellar	40433	8400	21
16	Peranamallur	21548	7186	33
17	Arni	23008	7318	32
18	West Arni	23578	7184	30
	District	451939	145463	32.18

Source: Project Director, Mahalir Thittam.

Two decades ago, more than 45 percent of the households were living in poverty. The percentage of households, living under poverty in Tiruvannamalai district is 32.18 percent.

The households which are below poverty line are, surprisingly, high in Tiruvannamalai block which is one of the urbanised blocks. Jawadhu Hills tops second in the rank, while Thellar block has the lowest BPL households of 21 percent. Table 3.4 it can be seen that there are 12 blocks

with BPL households higher than the district average which includes two blocks, Thiruvaannamalai and Vandavasi, having urban characterisation.

It clearly indicates the disparity within the district. 12 blocks have BPL households more than the district average (32.19) indicates that the district needs to provide better employment opportunities for the families and it reduces the marginal workers by increasing the main workers share to the total workers. As per SHDR, 2003, Tiruvannamalai district was classified as high intense poverty (above 40 percent) district, despite its closeness to the State capital, Chennai. The range of BPL among the blocks is 21 percent to 43 percent.

Public Distribution System

The district administration was able to reach most of the households to ensure their entitlements. There are about 6.64 lakhs families were provided with Family cards, who have access to availing the basics things from the public distribution system.

Conclusion

In Tiruvannamalai district, the dependence of workforce is found to be mainly on agriculture with higher work participation rate by main workers over marginal workers. The contribution of secondary sector to the district GDDP is found to be better, and the manufacturing sector tops first in its contribution. There is a scope for transforming non workers into workers by creating employment opportunities in the industrial sector. MGNREGA plays a vital role in generating more than 90 percent employment for the women. Child labour is found to be a threat as the drop out is found to be in the secondary level. The wage rates across the blocks are found to be less than Rs 200 and the average wage rate at the block level in the agriculture sector is Rs 266. The female wage rate is very much lower than the male wage rate which is one of the reasons for poverty. Creation of more employment opportunities is one of the solutions to address poverty and drop out issues in the block. In all the blocks, the agricultural labourers was found to be higher in percentage. Efforts have to be taken to shift and distribute the workers through employment in industrial and service sectors, introducing new skills to promote opportunities in the service sector through tourism based livelihoods and textiles industries. Special study has to be undertaken related to livelihoods opportunities in Jawadhu Hills.

CHAPTER 4
DEMOGRAPHY, HEALTH AND NUTRITION

4. Demography, Health and Nutrition

Introduction

Demographic trend is an important indicator that deals with change in wide range of areas including size of population over a period of time, population density, sex, age etc. The demographic alignment in a given area conveys the availability of resources and opportunities for development. High concentration of population in one particular area conveys the high scope of survival, better living environment and employment opportunities. On the other side, low concentration conveys the scarcity of resources. The population trend analysis along with sectoral growth would help to understand the reason behind the change. Demographic trends stated in the chapter include population size, sex ratio, child sex ratio, density, crude birth rate and crude death rate. Better health standards reflect the better services of Government. The wide range of health indicators dealt in this chapter include Infant Mortality Rate (IMR), Maternal Mortality Ratio (MMR), Still Birth Rate (SBR), place of delivery, immunization, child development, access to iron folic tablets, nutritional status, water and sanitation, prevalence of HIV AIDS, Tuberculosis, and public healthcare services. To gain better human development, it is essential to achieve better health standards.

Demographic Trends and Health Indicators

Population and Demographic Transition

Tiruvannamalai district is ranked 13th among the districts by population as per 2011 census. The total population of the district in 2001 was 2,186,125 and in 2011 is 2,464,875. The population of the district has increased by 12.75 percent. Out of 18 blocks in the district, the population of 15 blocks has increased at various rates and population of remaining three blocks is in declining trend. Tiruvannamalai, Pudupalayam and Thandrampet blocks occupy first three positions in the district. Chengam, Thellar and Anakkavur blocks occupy last three positions in the district with negative growth. The probability of negative growth might be due to migration that cannot be neglected. The population growth of the district is 12.75 percent. Out of 18 blocks, six have higher growth rate when compared with the district and two have almost equal to the district growth rate.

Table 4.1: Demographic Profile

Sl. No.	Block / District	Population		Density		SC Population (%)		ST Population (%)	
		2001	2011	2001	2011	2001	2011	2001	2011
1	Anakkavur	75,475	74,981	290	288	26.71	26.43	1.60	1.66
2	Arni	159,224	178,593	726	814	15.37	17.98	0.21	0.43
3	Chengam	180,320	170,626	301	285	31.62	34.89	1.15	1.50
4	Chetpet	102,714	110,063	418	447	25.50	12.19	0.32	0.47
5	Cheyyar	122,819	132,220	472	509	22.52	24.31	1.03	1.01
6	Jawadhu Hills	43,320	50,688	287	336	2.08	3.67	89.58	83.58
7	Kalasapakkam	107,943	119,702	487	540	24.20	26.23	0.78	0.44
8	Kilpennathur	110,639	129,530	400	469	24.50	25.74	1.94	2.45
9	Peranamallur	86,047	91,276	305	324	39.96	21.84	2.65	1.31
10	Polur	156,939	183,668	563	658	19.10	17.39	0.22	1.89
11	Pudupalayam	84,109	100,265	238	284	29.52	32.05	0.69	2.83
12	Thandrampet	152,464	179,553	287	338	21.56	23.36	7.50	9.51
13	Thellar	98,269	96,453	326	320	27.73	29.94	1.58	2.28
14	Thurinjapuram	111,647	125,202	392	440	20.18	22.44	1.28	1.35
15	Tiruvannamalai	270,535	327,104	825	997	23.77	19.63	1.44	1.67
16	Vandavasi	132,243	148,392	439	493	26.00	27.44	2.08	1.58
17	Vembakkam	119,648	130,176	361	393	25.20	25.37	0.89	1.07
18	West Arni	103,138	116,383	513	579	15.99	17.87	0.32	0.34
	District	2,186,12	2,464,87	424	473	23.42	22.71	6.40	6.41

Sl. No.	Block / District	Population		Density		SC Population (%)		ST Population (%)	
		2001	2011	2001	2011	2001	2011	2001	2011
		5	5						

Source: Census 2011

Regarding the social groups, the SC population is decreased with 0.71 percent in the district and ST population is increased with 0.01 percent. The decrease of SC population is very high in Pernamallur and Chetpet, where as the increase is found in Chengam, Arni and Pudupalayam. Regarding ST population, the increase is found in Pudupalayam, Thandrampet and Polur and decrease is found high in Jawadhu Hills. The decrease of ST population is due to migration to nearby districts for seeking employment opportunities and implementation of family planning measures. The inter-block migration also takes place due to better education opportunities and employment.

The density of population of the district is 473 per sq.km, which is lower than State (555 per sq.km) and higher than the country (382 per sq.km). In a period of 10 years the population density is increased by 11.56 percent. Pudupalayam (284), Chengam (285) and Anakkavur (288) blocks have low-density of population. Tiruvannamalai (997), Arni (814) and Polur (658) occupy first three positions with high density of population. Presence of high density indicates the availability of resources, employment opportunities and infrastructure facilities.

Crude Birth Rate and Crude Death Rate

The birth rate is the total number of births per 1,000 in a specified community or area over a specified period of time. The birth rate is used to calculate population growth *(along with mortality and migration rate)*. Crude Birth Rates of more than 25 per 1000 are considered as high and rates of less than 18 per 1000 are considered as low. The global Crude Birth Rate in 2005 is 20.15 per 1000. The CBR of the nation is 21.8, Tamil Nadu is 15.9, and Tiruvannamalai district is between 15 and 18.4 in Cheyyar Health unit Division (HUD) and Thirvannamalai HUD in 2011. As per 2013-14, the CBR of the district is 15.9.

Figure 4.1: Crude Birth Rate
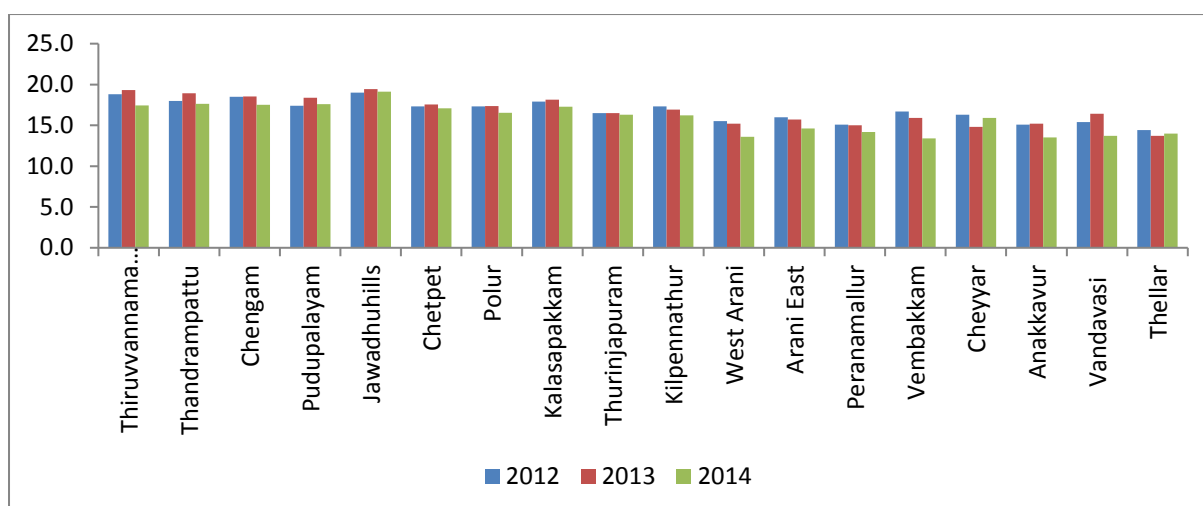
Source: Crude Birth Rate

Fig 4.1 gives CBR for three years where the birth rate has reduced from 16.8 (2012) to 15.9 (2014). The decline in birth rate is an outcome of awareness level and birth control efforts of the Government. Moreover, the economic condition of the families and cost of living has become major factors in deciding the growth in birth rate. As per 2014 data, within district Jawadhu Hills (19.1),Thandrampet (17.64) and Pudhupalayam (17.59) occupy first three positions. Anakkavur (13.5), Vembakkam (13.4) and West Arni (13.6) blocks are occupying the last three positions in the CBR. Figures stated in table 4.1 indicates the CBR has declined in all the blocks when compared with the status on 2009 where CBR at district level was 17.6 during that period. 2013 and 2014 data reveals that at district level CBR has reduced from 16.8 to 15.9, out of 18 blocks, 9 have low birth rate, which means the population growth will decline in future.

Crude Death Rate (CDR)

The CDR of Tiruvannamalai district is 5.9 in Tiruvannamalai HUD and 6.7 in Cheyyar HUD in 2011. As per the census, 2001 the CDR of the district was 5.9 in Tiruvannamalai HUD and 6.0 in Cheyyar HUD respectively and increase over a decade clearly conveys the efforts of the Government is to be improved in providing improved healthcare services and better living condition of the people.

Figure 4.2: Crude Death Rate
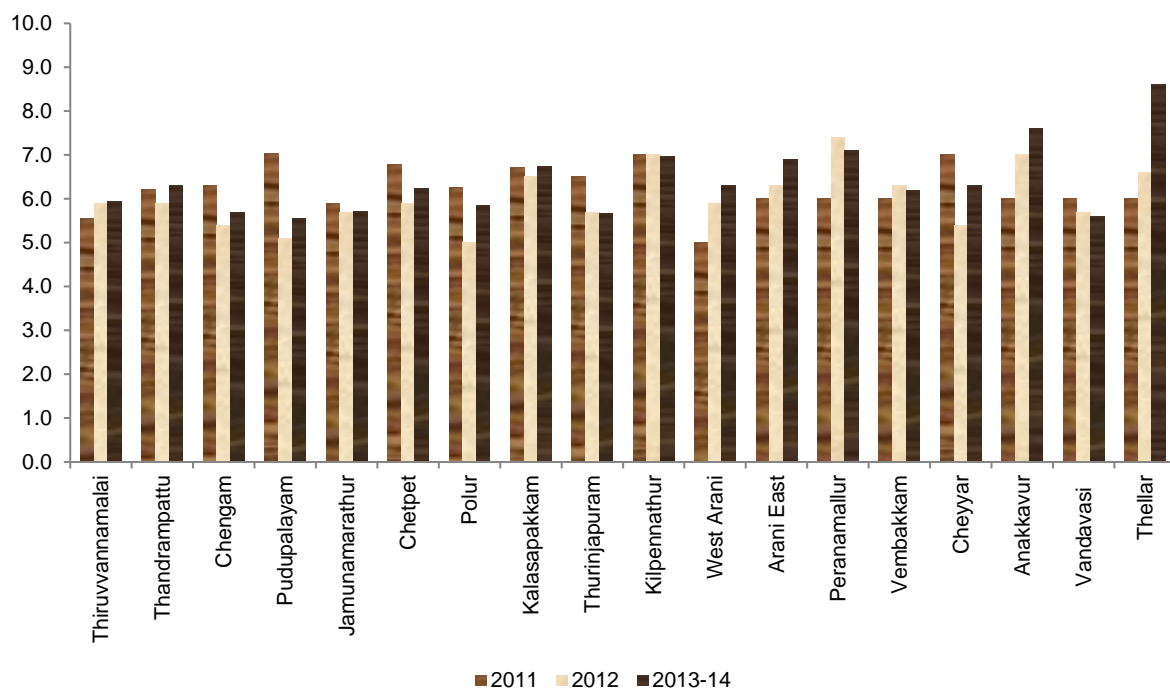
Source: DDHS, Thirvannamalai

As per 2013-14 data, within the district Vandavasi (5.6), Pudhupalayam (5.6) and Thurinjapuram (5.7) blocks occupy first three positions with low CDR. Thellar (8.6), Anakkavur (7.6), and Peramanallur (7.1) blocks occupy last three positions with high death rates.

Sex Ratio

Sex ratio is an outcome that indicates the level of prevailing discrimination against women. It is a fundamental indicator of gender inequality. The sex ratio at birth is defined as the number of live female births per 1,000 live male births. Technological advances in medicine allow for sex-selection and determination and so there emerges a need for close monitoring as per PCPNDT Act.

The sex ratio of the district is 994, which is little lower than the State (996) and higher than the country (940). It shows that the district has better position in terms of sex ratio. Out of 18 blocks, seven blocks (Arni, Chetpet, Cheyyar, Kilpennathur, Peranamallur, Polur and West Arni) have the sex ratio of more than 1000. Jawadhu Hills (961), Pudhupalayam (974) and Chengam (978) occupy last three positions in the district. As per 2011 data, the sex ratio of eight blocks (Anakkavur, Chetpet, Cheyyar, Kalasapakkam, Kilpennathur, Peranamallur, Pudhupalayam, and West Arni) has declined when compared with the sex ratio in 2001, which needs to be monitored very closely. Access to technology could have been a major reason for the decline in sex ratio.

The sex ratio of Jawadhu Hills has increased from 942 (2001) to 961 (2011), which is very high in the district. Overall the sex ratio in the district almost remains the same.

As per the Census 2011, the sex ratio of the Nation is 940 and Tamil Nadu State is 996. In both the cases, the sex ratio has improved when compared to the census in 2001. Tiruvannamalai district has a sex ratio of 994, which is equal and in better position compared to the nation. Somehow, the sex ratio of the district has declined marginally when compared to the census 2001. Out of 18 blocks in the district, the sex ratio is found to have improved in 10 blocks and declined in 8 blocks.

Table 4.2: Sex Ratio

Sl. No.	Block wise	Sex ratio (General)		SC Sex ratio	ST Sex ratio
		2001	2011	2011	2011
1	Tiruvannamalai	983	994	1054	1002
2	Kilpennathur	1017	987	983	976
3	Thurinjapuram	989	990	1011	976
4	Polur	1002	1008	1024	994
5	Kalasapakkam	989	985	993	989
6	Chetpet	1016	1000	1000	912
7	Chengam	977	978	987	1038
8	Pudupalayam	982	975	989	944
9	Thandrampet	986	992	1013	978
10	Jawadhu Hills	942	961	934	962
11	Cheyyar	1007	999	988	1026
12	Anakkavur	997	981	972	1030
13	Vembakkam	993	996	999	1083
14	Thellar	988	999	1011	1015
15	Vandavasi	996	1000	992	1024
16	Peranamallur	1024	1009	1013	1085
17	Ar ni	1006	1012	1025	964
18	West Arni	1009	1005	1041	1031
	District	995	994	1003	978

Source: Census 2001 and 2011.

The declining trend of sex ratio might be high MMR, poor maternal healthcare, child marriage and early pregnancies, and out-migration. The percentage of population decrease is found to be

high in Kilpennathur (-2.95) which needs to be studied. The gap between the best performing block and low performing block within district is very high. Arni block stands first in the district with sex ratio of 1012 and Jawadhu Hills ranks last with 961 despite the increase in population growth is high compared to the other blocks which is 1.95 percent, which means the level of disparity varies between area-to-area and community to community within the district.

Regarding social group wise, the sex ratio of SC people is found to be high in Tiruvannamalai (1054) followed by West Arni (1041). Overall, in the district sex ratio of SC is 1003 when compared to overall sex ratio of 994. Jawadhu Hills stands last with 934 among the 18 blocks. Nine blocks show better sex ratio which is more than 1000, which is a good sign with regard to women's status and gender improvement. With regard to ST communities, although the sex ratio is found better in nine blocks and is more than 1000, the over all sex ratio at the district level average is less than the average sex ratio of general population. Pernamallur tops in ST sex ratio with 1085 followed by Vembakkam with 1083. Attention needs to be given to Chetpet (912) and Pudupalayam (944).

Child Sex Ratio

The child sex ratio conveys the mindset of the present generation, who have access to advanced technologies to choose sex of the child the variations in child sex ratio will have huge implications after a period of 20 years. Child Sex Ratio is defined as the number of girl children per thousand boys in the age group 0–6 years in a population. The district, State and national statistics show that the child sex ratio is much lower than the sex ratio, which is a very serious issue of our time. Notable issue is that the nation, State and district have surplus men than women and aggravating this will have serious gender imbalance in the future.

There were 272, 569 children found to be in the district under age of 0-6 against 261,295 in 2001 as per the census data. Of the total child population in 2011, the male children were 141,205 (share of male children is 51.80 percent) and female children were 131,364 (share of female children is 48.20 percent). The percentage of 0-6 age group population to the total population in the district is 11.06 in 2011 compared to that of 11.95 percent in 2001. The net change of -0.89 percent is observed which needs to be studied for the reasons of decrease in children population.

The DHDR report of the Tiruvannamalai district published in 2009 indicates that between 1991 and 2001, the child sex ratio declined from 964 to 948 in the district. The reversing trend was more favorable to boys.

Table 4.3: Child Sex Ratio

S. No.	Block / District	Population in the age group of 0-6		Sex ratio
		Male	Female	
1	Anakkavur	3864	3623	938
2	Arni	9642	9057	939
3	Chengam	11020	9919	900
4	Chetpet	6049	5817	962
5	Cheyyar	6820	6496	952
6	Jawadhu Hills	3767	3227	857
7	Kalasapakkam	6993	6373	911
8	Kilpennathur	7520	6948	924
9	Peranamallur	4598	4388	954
10	Polur	10408	9400	903
11	Pudupalayam	6397	5690	889
12	Thandrampet	11724	10782	920
13	Thellar	4712	4494	954
14	Thurinjapuram	7357	6666	906
15	Tiruvannamalai	19182	17812	929
16	Vandavasi	7726	7592	983
17	Vembakkam	7104	6976	982
18	West Arni	6322	6104	966
	District	141205	131364	930

Source: Census 2011

The report also mentions about prevalence of better child sex ratio in urbanised areas and low in rural areas. As per Census 2011, the child sex ratio further declined from 948 to 930 which is much lower than the State (946). The trend in the past two decades indicates the alarming seriousness of the issue. If the decline is at birth then it is obvious that it was due to sex selective

abortion. The possibility of female infanticide and poor healthcare for girl children cannot be ruled out. A study by Venkatesh Athreya and Sheela Rani Chunkath (2000) documented the practice of female infanticide in the district. Government has to work out mechanisms to reach out rural households and build awareness to reduce sex selective abortions. Notable that Tamil Nadu Government has already implemented a package of programmes to reduce imbalance and it should ensure reach in all the areas.

Sex Ratio in rural and urban areas

Out of total population, 20.08 percent of the population lives in urban areas in the district as per 2011 Census, which amounts to 494,945. Of the total population, men constitute 246,163 and females are 248,782. The sex ratio in the urban area is 1011. The child sex ratio is found to be 943 in the urban regions in the district as per 2011 census. The child population to the total urban population is 10.91 percent which is marginally higher than the district population. As far as the rural area is concerned, 79.92 percent of the population lives in villages. The sex ratio is found to be 990 which is higher than the average sex ratio in the district. The child sex ratio in the rural areas is 927 which is a alarming needs attention from the district administration. The child population is 11.55 percent to the total population in the rural areas which is found to be better compare to that of the urban areas and the district as a whole.[5] Block wise the Child Sex Ratio in 2011 shows that the lowest CSR is found to be in Jawadhu Hills (857) block followed by Pudupalayam (889) and Chengam (900). The highest CSR is found to be in Vandavasi (983), Vembakkam (982) and West Arni (966) of which two blocks are urbanized blocks.

Life Expectancy at Birth

According to the World Bank, Life expectancy at birth indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life. LEB has imperfect association with health and its improvement cannot be taken as improvement in general health situation. LEB is a composite indicator and outcome of mortality pattern of different age groups. The increase in life span is an outcome of improved survival of young and old aged people. The life expectancy in the district for the year 2011 for male is 70 which is higher than the State (68.6) and female is 67 which is lower than the State (71.8), 2013-14 data shows that life expectancy of female have increased while for male it has decreased to 69.6 which shows the health, hygiene and sanitation issues experienced by the people in the district.

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[5] Ref: http://www.census2011.co.in/census/district/26-Tiruvannamalai.html downloaded on March 11, 2014)

Table 4.4: Life Expectancy at Birth

Sl. No.	Block wise/ District /State	2011		2013-14	
		Male	Female	Male	Female
1	District	70	67	69.6	73.3
2	State	68.6	71.8	71.8	75.2

Source: Report on Technical Group on Population projections – May 2006 (National Commission on Population) MoHFW.

Infant Mortality Rate

As per UNICEF, the Infant Mortality Rate (IMR) lies between birth and exactly one year of age expressed per 1,000 live births. The Maternal Mortality Ratio (MMR) also contributes to IMR. In 1970, the IMR of Tamil Nadu was 125 and India was 129. In a period of four decades, the State was able to reduce it to one-fifth, whereas in 2008, the IMR of the nation was 53/1,000 live births. The plan was to reduce the IMR to 28 per 1000 live births. The State has already achieved the target. The IMR at the State level is 21.

As per 2009 the IMR of Tiruvannamalai district is 28, which is high compared to that of the State (21). Access to institutional delivery services and subsequent healthcare services has yielded positive results, but still there is a practice of traditional healthcare services which causes IMR. Jawadhu Hills of the district shows zero IMR, whereas the Pudupalayam block has 32.44, which is high when compared with the district and State and highest among the blocks. The data confirms the existence of disparity within the district. While comparing trend, the IMR of the district declined by 3.43, which is positive. Except Pudupalayam and Kilpennathur, the IMR has declined in all the blocks while comparing 2011 data with 2007.

Figure 4.3: Infant Mortality Rate
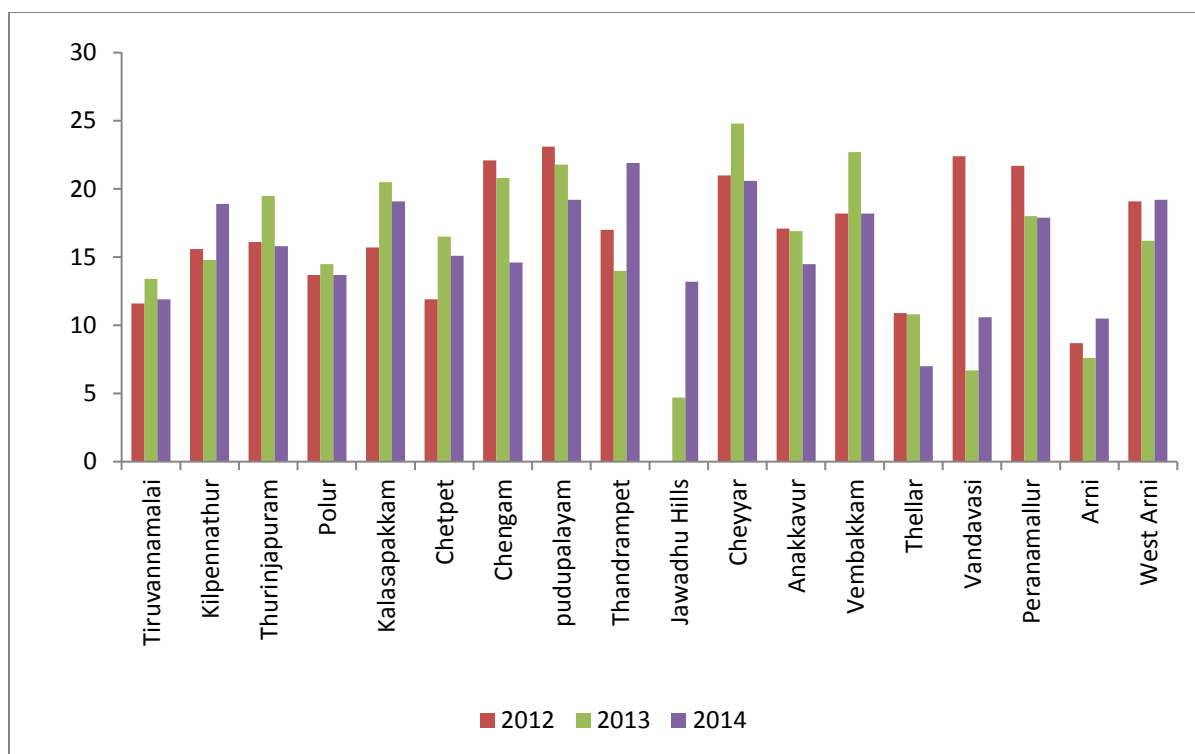
Source: DDHS, Tiruvannamalai and Cheyyar Divisions

As per 2014 data Thandrampet (21.9), West Arni (19.2) and Cheyyar (20.6) has higher IMR in the district. The reasons for high IMR in those blocks are poor road facility, lack of awareness on institutional delivery, accessibility to healthcare services, poor transport facilities, unit of population coverage and socio-cultural reasons. These blocks need special attention. Around 9 blocks have more IMR than the district average of 16.

Maternal Mortality Ratio

World Health Organization defines Maternal Mortality (MMR) as the death of a woman during pregnancy or in the first 42 days after the birth of the child due to causes directly or indirectly linked with pregnancy. As per UNICEF each year, more than 500,000 women die in childbirth or from complications during pregnancy. Babies whose mothers have died during childbirth have a much greater chance of dying in their first year than those whose mothers remain alive. Ninety nine percent (99 per cent), of maternal and newborn mortality occurs in the developing world. Eighty percent of maternal deaths are caused by direct obstetric causes such as haemorrhage, infection, hypertensive disorders of pregnancy and complications of unsafe abortion. And for every woman who dies from complications related to childbirth, approximately 20 more suffer injuries, infections and disabilities that are usually untreated and ignored, and that can result in life-long pain and social and economic exclusion. Most of these complications cannot be

predicted and prevented.

India continues to contribute about a quarter of all global maternal deaths. The Maternal Mortality Ratio (MMR) in India is 254 per 100,000 live births according to Sample Registration System (SRS) Report for 2004-2006. This is a decline from the earlier ratio of 301 during 2001-2003 (Reference UNICEF). Notable is that MMR of Sri Lanka is 58 and China is 45. Though the progress at the national level is slow, the State of Tamil Nadu has performed very well and has low MMR compared with many other states and nation. Government has ensured better access to healthcare services which includes establishment and certification of Comprehensive Emergency Obstetric and Newborn-Care centres, 24-hour x 7-day delivery services through posting of three staff nurses at the primary health centre level, and attracting medical officers to rural areas through incentives in terms of reserved seats in postgraduate studies and others.

The MMR rate of Tiruvannamalai district is 128.8 in 2009 which has declined to 83 in 2009-10, and which is lower than the State average (85).

Table 4.5: Maternal Mortality Ratio

Sl. No.	Block wise	2009	2014
1	Anakkavur	170.36	0
2	Arni	273.22	50
3	Chengam	148.54	30
4	Chetpet	50.28	60
5	Cheyyar	72.20	0
6	Jawadhuhills	116.01	330
7	Kalasapakkam	87.53	140
8	Kilpennathur	130.72	50
9	Pernamallur	433.21	0
10	Polur	166.44	40
11	Pudupalayam	113.83	190
12	Thandrampattu	86.58	0
13	Thellar	74.18	0
14	Tiruvannamalai	144.86	50
15	Thurinjapuram	96.68	70
16	Vandavasi	54.32	230
17	Vembakkam	99.50	0
18	West Arni	0.00	120

Source: Health Department, 2009, Tiruvannamalai.

The IMR and MMR reflect the availability of quality healthcare services to the people. Somehow there is disparity within the district. In the year 2009, MMR of Peranamallur block was 433.2, which is highest among the blocks. Age and community of women must be analysed to know the prevalence of early marriage, which could result in maternal deaths. In the year 2014, 5 blocks have more MMR, where Jawadhu hills stands first (330), followed by Vandavasi (230). Special attention is needed for the blocks like West Arni, Pudhupalayam and Kalasapakkam. The MMR is found to be zero in 6 blocks which might be due to the problem associated with recording of

the data. As the district has a high MMR, a special study needs to be taken up to identify the reasons for the maternal deaths.

Place of Delivery

Institutional delivery reduces the risk of maternal deaths. Government has established hospitals and rural health centres along with necessary facilities to facilitate access to institutional deliveries. The percentage of institutional delivery in Tiruvannamalai district is 100. The district administration had taken sincere efforts in increasing institutional deliveries. Place of delivery and assistance had significant impact on reduction of MMR and IMR. It helps to prevent unsafe delivery practices. In Tiruvannamalai district, almost all the deliveries have occurred in either Government or private hospitals. The figure stated below proves that Government is able to reach the community more effectively. The Government of Tamil Nadu has already announced attractive schemes, which encourages poor and vulnerable women to select institutional deliveries.

Figure 4.4: Percentage of Institutional Delivery-2013-14
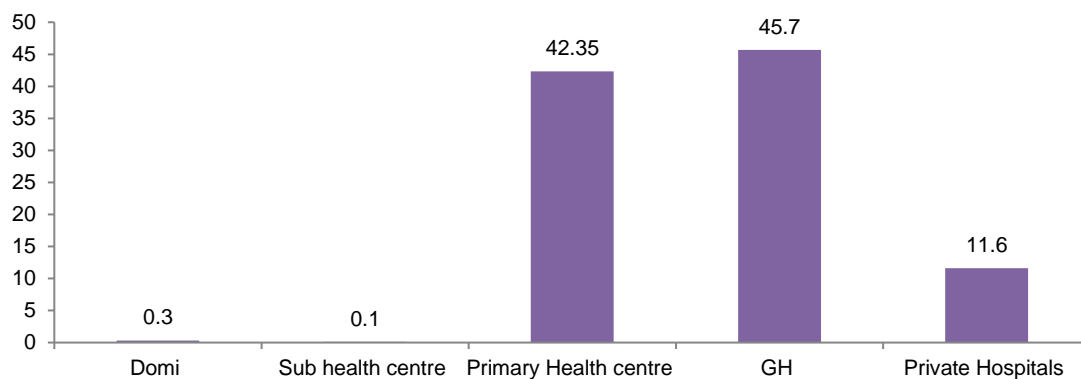
Source: DDHS, Tiruvannamalai and Cheyyar.

Primary health centres play a critical role in providing better healthcare services in the district. The highest percent of deliveries was recorded as 37.78 in PHCs followed by Government hospitals with 35.65 percent in 2012-13. People also approach private hospitals which accounts 9.37 percent. In 2013-14, the percentage of increase is more in PHC's (42.35%) and GH (45.7%) have been recorded. Despite better health care services, in five blocks home deliveries are taking place of which, Jawadhu Hills block finds the first place (2.57 percent) which reveals the poor access to healthcare services, also poor road and transport facilities. It might also be due to non availability of the doctors and nurses in a remote block.

Still Birth Rate

Still Birth Rate (SBR) is defined as "Number of still births per thousand live births and stillbirths

during the year". Pre-partum stillbirths are those, which are occurring before labor, may reflect genetic or gestation conditions, including maternal nutritional status and exposure to infection and toxins during pregnancy. Intra-partum deaths, those occurring during the birth process, can reflect the circumstances of the birth (Including position of the foetus, multiple births, premature delivery, placenta praevia, pelvic deformation and accidents due to interference). The SBR of Tiruvannamalai district is 18 in 2011. In a period of five years from 2010 to 2014, the SBR declined from 18.8 to 14.9. The SBR of the district is far lower when compared to the State and nation. The reasons for stillbirths include placental abruption, asphyxia, low birth weight, prematurity and congenital heart diseases.

Table 4.6: Still Birth Rate

Sl. No.	Block/District	2010	2011	2012	2013	2014
1	Thiruvvannamalai	19.7	14.7	14.9	18	17.2
2	Thandrampattu	20.8	23.2	18.1	21.2	16.7
3	Chengam	20.0	13.7	25.1	16.3	15.9
4	Pudupalayam	15.7	17.9	20.9	23.6	11.5
5	Jawadhuhills	69.1	40.9	20.1	39.8	44
6	Chetpet	18.8	20.2	14.2	13.3	15.7
7	Polur	18.4	16.6	15.6	15.2	13.7
8	Kalasapakkam	16.2	22.7	23.6	24.2	16.2
9	Thurinjapuram	15.8	19.9	12.5	9.8	15.8
10	Kilpennathur	16.8	17.8	17.5	19.9	9.7
11	Cheyyar	22.5	13	9.8	12.4	6.8
12	Anakkavur	9	14	9	8.4	10.9
13	Vembakkam	26.1	14	13	16	14.5
14	Vandavasi	11.8	7	5.1	14.7	14
15	Thellar	23.3	20	17.6	11.6	12.8
16	Peranamallur	20.7	12	9.8	5.7	9.7
17	Arni	19.2	17	14.2	17.1	11.1
18	West Arni	20.4	15	14.8	10.6	11.8
	District	18.8	18.0	15.3	16.5	14.9

Source: DDHS, Tiruvannamalai and Cheyyar

2014 data shows that six blocks in the district have higher SBR above the district average and remaining 12 blocks have lower SBR. The Jawadhu Hills block has recorded high SBR of 44 which has increased in past three years. Blocks like Thandrampattu, Cheyyar, Vembakkam, and West Arni have taken efforts in reducing still birth rate where we could observe improvement in the year 2014. The bottom six blocks is having higher SBR of above the district average, but other blocks show declining trend which is a positive indicator.

Immunization

Immunization secures better future for the children and mothers. It is a vital tool to reduce IMR and U5MR. It has influence on human development index and multidimensional poverty index. As per National Rural Health Mission, Tamil Nadu, started immunization programme against six Vaccine Preventable Diseases viz. Diptheria, Pertusis (Whooping Cough), Tetanus, Measles, Poliomyelitis and Tuberculosis during 1978. Annually around 12.5 lakh pregnant women and 11.5 lakh infants have benefited under Immunization Programme. Because of effective implementation of Immunization services, there is a drastic reduction in the incidence of vaccine preventable diseases. There is no case of Diphtheira, Pertusis, Neonatal Tetanus and Poliomyelitis for the past five years.

The State has achieved 95 to 100 percent coverage under different vaccinations and sustained the same coverage over the years. Special efforts have also been taken to provide immunization services to all children of the slums and remote areas through Mobile Medical Units. Tiruvannamalai district has achieved 100 percent immunization as per the data. All the blocks of the district have made 100 percent achievement and there is no disparity within the district. Immunization services are provided throughout the State under the Supervision of Medical Officers from May 2008. Only Auto Disabled (AD) syringes are used for all vaccinations to ensure injection safety. The efforts of the health department have contributed to a better younger generation.

Female Infanticide

Killing female infants has been happening in India for several centuries. Since there is low child sex ratio found in many blocks, particularly in Jawadhu Hills, Pudupalayam, Chengam, Polur, Thurinjapuram and Kalasappakam, one of the possible reasons might be female infanticide. As this is a very sensitive issue and evidence may not be available, a separate study needs to be undertaken.

Nutritional Status

Nutritional level and Trend

The nutritional status of under-five children is categorized into four such as normal, severely under weighed, moderately under weighed and over weighed. For calculating the poor nutritional status, children under categories of severely and moderately under weighed to the total children in the under-five age is calculated. At the district level, the severely under weighed children are 69 and moderately under weighed children are 50017 as per the 2011 data, which is very significant

number compared to the total children of 169343. As per SPC, Tamil Nadu, 29.58 percent of the children suffer due to malnourishment. As per SHDR 2003 of Tamil Nadu, Tiruvannamalai ranks 15 in prevalence of Grade III and IV malnourished children among other districts during 1996-99.

Figure 4.5: Status of Malnourished Children (0-5 Years)
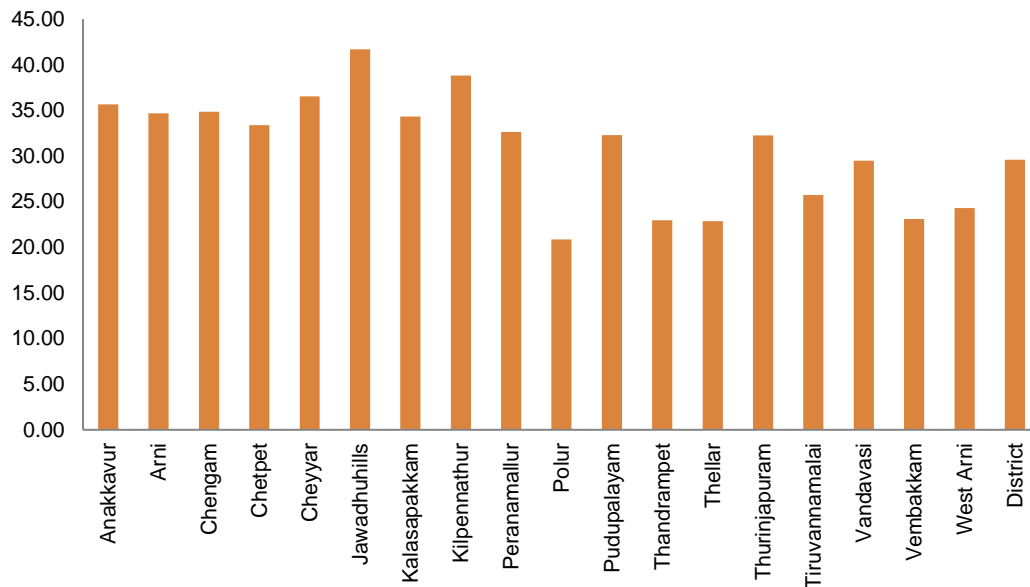
Source: ICDS, Tiruvannamalai, 2013 - 14

The inter-block variations show that the highest proportion of malnourished children is found to be in Jawadhu Hills with 41.69, followed by Kilpennathur with 38.83 percent. The lowest percent of malnourished children is found to be in Polur with 20. 85. There are seven blocks which have malnourished children lower than the district average of 29.58 percent. Remaining 11 blocks need district administration support to improve the status. The concentration of malnourished children is very high in rural areas than in urban areas. Tiruvannamalai urban area rank first in the district with least number of children with underweight. In Tiruvannamalai rural areas, more than 52 percent of the children are underweight. By comparing the status, it is clear that the children in urban areas have better access to nutritional food. In Jawadhu hills block, 7 out of 10 children are underweight, which is a very severe issue. Though the district average reflects the national status, level of issue varies from block to block. Apart from building awareness, the district has to focus on behavioural and food habits change in the district, which has huge impact on nutritional status of the younger generation. The traditional foods, which are nutrient rich, have vanished from the routine life of the community. Moreover, the present generation's fates are more towards fast food which are calorie rich but not nutritious.

Box 4.1: Anaemia Reduction at Jawadhu Hills for Adolescent girls

Since Jawadhu hills is of remote nature, lack of infrastructure facilities such as roads, communication, etc., the access to medical services are some of the major problems. Tribal community's knowledge towards healthcare practices and personal hygiene is poor in Jawadhu. Girls used to get married at the age between 14 and 16, which leads to various health related issues. The health indicators such as institutional delivery, early registration, and immunization are ensured by push factor rather than pull efforts. In general, the distance between habitations and villages are very high in this hill. Around 50 percent habitations is not reachable through transport facilities; it is possible only through walk/ two-wheeler. Even though there are two Primary Health Centers and 13 Health Sub Centers, the service is not penetrated to all habitations due to poor transportation, non-availability of enough staff and poor infrastructure facilities. The existence of quacks (unqualified/untrained in handling medicines) is becoming a severe problem in this area. It leads to health complications (sometimes death) which create unnecessary expenditure to them. It is found that there is an existence of home deliveries handled by 'untrained Thais' which may lead to Maternal Mortality and Infant Mortality. As per the report of Reproductive Child Health, District Level Household Survey, 2002-04, Tamil Nadu, IIPS, MOHFW, GOI, PRC Gandhi gram, the maternal and child health indicators were critical in Tiruvannamalai district especially hill areas like Jawadhu.

It was noticed that the prevalence of anaemia among adolescent girls was 95.5 percent and 45.4 percent of children under three are malnourished. The exclusive breast feeding recorded only at 16.0 percent, institutional delivery was recorded at 63.7 per cent and the percentage of full ante-natal check-up recorded was 25.8 percent. Without awareness of health issues, most tribal populations tend to fall ill more frequently and wait too long before seeking medical help, or are referred too late by untrained village practitioners. The healthcare expenses per household also increased over a period of time. Mobile Van Coverage of remote tribal areas was found to be low. The prevalence of anaemia among the adolescent girls is mounting concern and it proved in sample survey among the adolescent girls of Jawadhu hills. In Palamarathur Panchayat of Jawadhu hill, 15 habitations were selected and through the random sampling method, 162 samples, HB tested among adolescent girls. Rigorousness of the anaemia prevalence is furnished below. As per the field survey, 6.79 percent of the adolescent girls only fall on normal HB level. The rest of them are anaemic. NRHM's programme of anaemia control and reduction was implemented in Jawadhu hills and DHAN Foundation was part of the programme. 50,000 adolescents and 12,000 pregnant women were covered and there was a significant reduction among pregnant women and adolescent girls.

Table 4.7: Prevalence of Anaemia among adolescent girls in Jawadhu hills

Anemic status	HB level	No. of Adolescent Girls	Percentage (%)
Normal	12 and above	11	6.79
Mild	10-11.9	43	26.54
Moderate	8-9.9	64	39.51
Severe	4-7.9	44	27.16
Very Severe	Below 4	0	0.00
Total		**162**	**100.00**

Source: Sample survey, 2013

Provision of IFA Tablets

Anaemia is a condition in which haemoglobins or their oxygen-carrying capacity is insufficient to meet physiologic needs, which vary by age, sex, altitude, smoking, and pregnancy status. It is the most prevalent nutritional problem worldwide and it is mainly caused due to iron deficiency. Its prevalence is higher among young children and women of childbearing age; particularly in pregnant women. According to Department of Women and Child Development, 20 – 40 percent of the maternal deaths are due to anaemia. In order to prevent anaemia, the Iron and Folic acid (IFA) tablets are given to pregnant women, adolescent girls and the children of one to five years.

Table 4.8: Provision of IFA Tablets-2013-14

Sl. No.	Block wise/ District / State	% of Women took IFA tablets	% of Children took IFA tablets	% of Adolescent girls took IFA tablets
1	Anakkavur	103.30	33.20	97.90
2	Ar ni	89.70	41.90	94.50
3	Chengam	100.0%	50.0%	75.4%
4	Chetpet	100.0%	50.0%	69.1%
5	Cheyyar	107.00	14.70	97.60
6	Jawadhu Hills	100.0%	50.0%	31.5%
7	Kalasapakkam	100.0%	50.0%	84.7%
8	Kilpennathur	100.0%	50.0%	70.6%
9	Peranamallur	87.00	41.80	97.10
10	Polur	100.0%	50.0%	80.4%
11	Pudupalayam	100.0%	50.0%	82.5%
12	Thandrampet	100.0%	50.0%	56.2%
13	Thellar	103.70	36.10	95.70
14	Thurinjapuram	100.0%	50.0%	78.3%
15	Tiruvannamalai	100.0%	50.0%	85.6%
16	Vandavasi	100.40	15.00	95.10
17	Vembakkam	94.20	27.60	98.80
18	West Ar ni	84.60	13.20	85.80

Source: Deputy Director of Health Services, Tiruvannamalai

Table 4.8 indicates that the district has to find innovative ways to reach all rural areas in the district. Jawadhu Hills, which is occupying last position in child development index is occupying the last position in the district with only 9.10 percent of women accessing IFA tablets. Chengam and Thurinjapuram are the other two blocks occupying the bottom three positions. Anakkavur,

Cheyyar and Vandavasi blocks occupy the first three positions in ensuring access to IFA tablets to women. The district was only able to reach 52.78 percent of the women with IFA tablets.

Kilpennathur, Kalasapakkam and Chetpet occupy first three positions in the district in ensuring IFA tablets to children. Anakkavur, Thellar and Vembakkam occupy the last three positions in the district. Only 67.82 percent of children have access to IFA tablets. The district has to identify innovative methods to reach children. Approach through schools will be a more effective measure to reach children.

Vembakkam, Peranamallur, Cheyyar and Thellar occupy the first five positions in ensuring IFA tablets to adolescent girls. The intervention at adolescent stage would reduce the incidence of maternal and infant deaths. Chengam, Jawadhuhills and Chetpet occupy the last three positions in the district. About 91.51 percent of adolescent girls have access to IFA tables, which is higher to women and children in the district. Besides ensuring IFA tablets, the district has to promote shift in food habits and behavioral change.

Box 4.2: Nutrition Programmes of Government

"A child's growth rate reflects, better than any other single index, his state of health and nutrition, and often indeed his psychological situation also. Similarly, the average value of children's height and weight reflect accurately the state of a nation's public health and average nutritional status of its citizens, when appropriate allowance is made for differences, if any, in genetic potential. This is especially true in developing and disintegrating countries." Eveleth, P.G. and J.M. Tanner, 1976. Worldwide Variations in Human Growth. Cambridge University Press

Through the 50s-60s Tamil Nadu, the then Madras State, had a number of initiatives addressing nutrition through mid-day meals, central kitchens and assistance from CARE. In 1982, the then chief minister, M.G.Ramachandran, expanded the scheme to become the Noon Meals Program (NMP) to ensure that no child went hungry. The 1979 ICDS programme and the 1980 Tamil Nadu Integrated Nutrition Programmes (TINP) (later renamed WB-ICDS-III) were integrated into the NMP infrastructure. The noon meal feeds children and adults hot rice meals cooked on the spot. The project started by covering children in school in rural areas but realised it was hard to access the below 5 age group. NMP began setting up a number of centres to cover the 2+ to 4+ age group in rural areas. It also expanded to urban pre-school and schoolchildren up to age 15. In 1995 the project expanded to cover pregnant mothers for a period of 4 months. Hence, under NMP schoolchildren eat their noon meal at school while preschoolers, pensioners and pregnant and lactating women eat at the pre-school centres. In 2000-2001, there were 71,721 centres under the combined ICDS, WB-ICDS-III and NMP schemes including school centres. The programme is feeding 77.25 lakhs children and 5.23 lakhs adults every day.

The Government of India has launched several programs to converge the growing rate of under nutrition children. They comprise mid-day meal scheme, Integrated Child Development Scheme, National Children's Fund, United Nations Children's Fund and the National Rural Health Mission-"Improve the availability of and access to quality health care by people, especially for those residing in rural areas, the poor, women, and children." In Tiruvannamalai district, there are 2015 Puratchi Thalaivar MGR Nutritious Noon Meals Programme centres functioning and 2127 ICDS and 1709 are TINP centres. From these centres, 176985 children in different age groups including six months baby are getting benefits. There are 67590 children in the age group of 3-5 avail noon meals benefits, which is very significant activity in encouraging children to attend the school education. 109395 children from six months up to 36 months availed weening food benefits during 2012-13. The type of food is planned for seven days which include variety rice with three days boiled egg served to the children in noon meals centres (Source: PO, ICDS).

The prevalence of anaemia is disproportionately high in the developing countries, due to poverty, inadequate diet, worm infestations, pregnancy/lactation and poor access to healthcare services. According to Department of Women and Child Development, 20 – 40 percent of the deaths are due to anaemia. Prevalence of Anaemia is very high in rural areas when compared to urban areas. Tiruvannamalai district has 55.23 percent of anaemic pregnant women in the district as per 2013-14 data, which means three out of 10 women in the district are anaemic. In Vembakkam and West Arni, highest percentage of anaemic mothers exists, which is in alarming state. Besides providing IFA tablets, the district has to ensure the consumption of tablets. Necessary awareness programmes and counseling have to be initiated to improve the health condition of pregnant women in the district.

Non-nutritional factors and their impact on Nutrition

Water Supply

Supply of drinking water is a basic human right. Access to safe drinking water and sanitation facilities prevents health risks and it is a matter of dignity. As per UNICEF, 88 percent of the households out 1.2 billion population have access to drinking water from improved sources in 2008, compared with 68 percent in 1990. The NFHS – 3 confirms the above statement. Women, who have to fetch drinking water, are vulnerable to a number of unsafe practices. Only 13 per cent of adult males collect water. About 25 percent of the population has drinking water facility in their premise. In Tamil Nadu 94 percent of households have improved access to drinking water, which is higher than the nation. About 25 percent of the households have piped water connection to their homes.

Figure 4.6: Block wise Drinking Water Supply for Habitations-2013-14
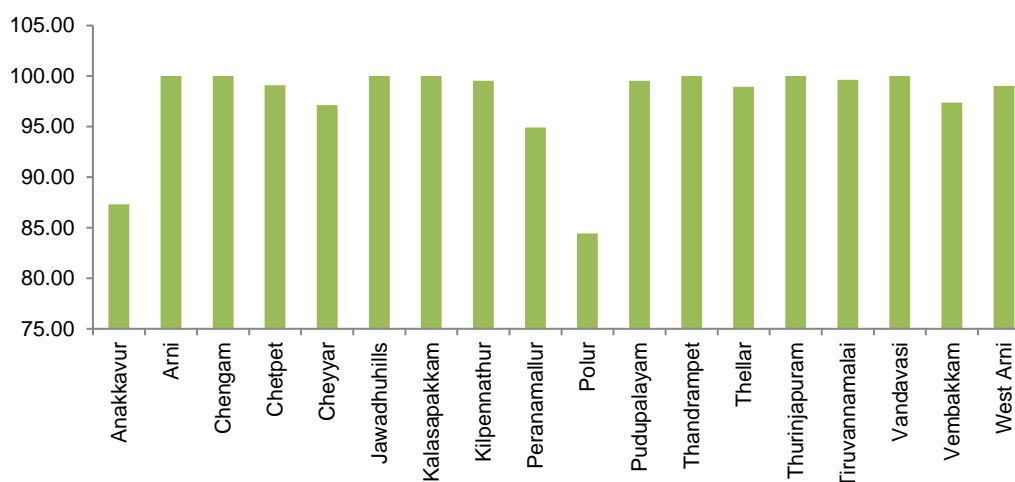
Source: www.mdws.gov.in

In Tiruvannamalai district, 97.61 percent of the households have access to water from improved sources, which is higher than the nation and lower than the performance of the State. Around 7 blocks like Arni, Chengam, Jawadhu, Kalasapakkam, Thandrampet, Thurinjapuram, Vandavasi ensured 100% drinking water coverage to its habitations. Polur, Anakkavur and Peranamallur blocks occupy the last three positions in the district. Access to water from improved sources reduces the unwanted health risks. The district has to work out mechanisms to reach all the habitations in the villages. Besides quality of water supplied, it must also be tested.

Sanitation

According to the Census 2011 data in India 638 million people defecating in the open fields; over 50 percent of the population, which is very high compared to the neighboring nations like

Bangladesh and China, which has less than 10 percent of the population defecating in open area. Open defecation is the riskiest sanitation practice, which is one of the main causes of diarhoea. Every day, about 3,000 children at the age of four and less, die due to diarrhoea, most before their second birthday. The NFHS survey confirms that about 55 percent of the households in India do not have toilet facilities. According to UNICEF, 31 percent of the population use improved sanitation in India. In rural areas, it is only 21 percent. The concentration of households without toilet is very high in rural areas (74 percent).

Table 4.9: Access to Toilet -2013-14

Sl. No.	Block wise	No. of HH	No. of HH with toilet	Percentage of HHs provided with toilet
1	Ankkavur	24516	9039	36.87
2	Arni	42616	33181	77.86
3	Chengam	40299	17587	43.64
4	Chetpet	26880	17193	63.96
5	Cheyyar	32173	20888	64.92
6	Jawadu Hills	11778	5864	49.79
7	Kalasapkkam	29308	15176	51.78
8	Kilpennathur	29871	16450	55.07
9	Peranamallur	22564	10870	48.17
10	Polur	44763	23011	51.41
11	Pudupalayam	23398	10963	46.85
12	Thandrampet	37279	7799	20.92
13	Thellar	24060	17812	74.03
14	Thurinjapuram	26236	16182	61.68
15	Tiruvannamalai	74133	46448	62.65
16	Vandavasi	36057	22999	63.79
17	Vembakkam	26337	14147	53.72
18	West Arni	28051	18551	66.13
	District	**580319**	**324160**	**55.86**

Source: DRDA /AD (TP) All Municipalities, www.mdws.gov.in

Tamil Nadu has 50 percent of the population resort to open defecation. In most of the rural areas, toilet utility is not in practice. Many of the Government-constructed toilets are abandoned. Unfortunately, the percentage of rural households without access to toilet is 83 percent (NFHS 3), which is higher than the country.

Nearly 55.86 percent of households in Tiruvannamalai district have access to toilet facilities, which means remaining 44.14 percent do not have access. Thandrampet (20.92%), Anakkavur (36.87%) Chengam (43.64%) blocks occupy the last three positions in accessing toilet facilities.

Arni, Thellar and West Arni blocks occupy the first three positions. The gap between the first and last blocks is very wide, which conveys the imbalanced growth within the district. In the blocks where the houses do not have access to toilet is due to the cultural preference leads to not being interested to construct the toilets among the rural people. In most of the panchayat offices, the toilets are not clean and not being utilized by the women panchayat presidents or workers. In schools most of the toilets are not being utilized by the female teachers lead to urinary tract infections. Hence there is a need for not only creating access to toilets but also keeping them clean and hygiene is very important.

Box 4.3: Utilization of Public Healthcare Services and Health Programmes of State and Central Governments

The Tamil Nadu Government has established and improved the infrastructure facilities in rural and urban areas. Once the trend was favoring the private hospital and these days Government hospitals have gained the goodwill of the community. Annually, about 46 lakh out patients get treatment from Government hospitals. Besides, more than 50,000 in-patients are admitted and treated. Hospital in Kilpennathur has recorded highest number of outpatients, whereas the lowest is recorded in Jawadhu Hills.There are health infrastructures such as Primary Health Centres (PHC) and Health Sub Centres (HSC) in the district provide healthcare services to the people. There are 91 PHCs and 410 HSC provided healthcare services to 67,728 in patients and 5033872 out patients during 2013-14 in the district. In the district, there are several health programmes being implemented by the department which are as follows:

- School children health camp programme is to provide good health and promote healthy practices among the children studying in Government and Government aided schools
- Adolescent girls anaemia programme is to correct the anaemia among the adolescent girls and in turn to prevent maternal and infant mortality
- Dr Muthulakshmi Reddy Maternity Benefit Fund Scheme is to improve health status of pregnant and post natal mothers through providing financial assistance of Rs 6000 to the poor families. During 2011, 19112 beneficiaries availed maternity benefits through the scheme.
- Janani Suraksha Yojana is to improve the institutional delivery by ensuring fund flow, reach of public and private services and compliance to citizen's chart
- Speciality Medical Camps are conducted in every block. A team of special doctors visit villages for diagnosis, treatment and counseling. Wherever needed the referral services are provided. Scan, urine, blood and ECG tests are conducted in the camp sites itself and referred cases are given mobile health services. 89 diseases are to be diagnosed 68types and of allopathy and 18 types of siddha medicines are used in the camp sites.
- National vector borne disease programme is implemented to control Malaria fever and prevent malarial deaths.
- Epidemic control to control communicable diseases.
- National Blindness Control Programme is implemented to prevent night blindness vitamin A is given to 6-month babies to 60-month children and post-natal mothers.

Special Programmes

AIDS Control

Human immunodeficiency virus infection/acquired immunodeficiency syndrome is a disease affecting human immune system caused by viruses. There is currently no curative measure or effective HIV vaccine. Therefore, the best medicine for this disease is "Prevention is better than Cure". The Government of India estimates that about 2.40 million Indians are living with HIV with an adult prevalence of 0.31 percent (2009). Children (<15 yrs) account for 3.5 percent of all infections, while 83 percent are the in the age group of 15-49 years. Of all HIV infections, 39 percent (930,000) are women. India's highly heterogeneous epidemic is largely concentrated in only a few states — in the industrialized south and west, and in the north and east. The four high prevalence states of South India (Andhra Pradesh – 500,000, Maharashtra – 420,000, Karnataka – 250,000, Tamil Nadu – 150,000) account for 55 percent of all HIV infections in the country. West Bengal, Gujarat, Bihar and Uttar Pradesh are estimated to have more than 100,000 PLHA each and together account for another 22 percent of HIV infections in India.[6]

Table 4.10: HIV Positive Persons

Sl. No.	Age-Group wise	Positive persons in 2007		Positive persons in 2011		Positive persons in 2013-14	
		Male	Female	Male	Female	Male	Female
1	0-14	27	17	8	6	7	8
2	15-19	17	11	1	1	4	5
3	20-24	19	32	9	27	5	14
4	25-29	59	63	50	36	21	29
5	30-39	136	97	104	67	74	52
6	40-49	81	36	69	36	52	27
7	50 & above	58	16	44	16	35	15
	Total	397	272	285	189	198	150

Source: Deputy Director of Health Services, Tiruvannamalai

HIV has declined notably in Tamil Nadu to attain 0.33 percent in 2009 down from 0.58 percent in 2007. According to the data sources, the incidence of HIV AIDS of various age groups declined. The number of positive persons, between the ages of 0 to 14 has almost declined by two-third and between the ages of 15 – 19 had declined by more than 10 times in a period of five years. Table 4.10 indicates that the age group from 30 – 39 is highly vulnerable, as more number of persons were noticed at this stage. The number of positive male declined from 285 (2011) to 198 (2013-14) and female also reduced from 189 to 150 in the same year.

[6] (Sources: World Bank).

Tuberculosis and Leprosy Incidents

India is the second-most populous country in the world. One-fourth of the global incident TB incidents occur in India annually. In 2012, out of the estimated global annual TB incidence of 8.6 million, 2.3 million were estimated to have occurred in India. There is 42 percent reduction in TB mortality rate by 2012 as compared to 1990. Similarly, there is 51 percent reduction in TB prevalence rate by 2012 as compared to 1990. Tuberculosis prevalence per lakh population has reduced from 465 in year 1990 to 230 in 2013-14. In absolute numbers, prevalence has reduced from 40 lakhs to 28 lakhs annually.

In Tamil Nadu, every year about 1.4 lakhs persons develop Tuberculosis, among which 48,000 have TB Bacilli in their sputum. There are 8 TB Hospitals in Tamil Nadu – 2 under the control of the Directorate of Medical and Rural Health Services, 4 under the control of Directorate of Medical Education and 2 Private (Source: State Rural Health Mission). (Epidemiology of tuberculosis: Current status in India). The total number of positive persons in Tiruvannamalai district is 1309 in 2014, which is higher than the status in 2007 (1226). After 2007, the number of TB incidents is found to have increased in the next two years and presently it is in declining trend. The TB unit at Tiruvannamalai has detected highest number of positive TB incidence. Government must also have mechanism to identify the entire TB persons.

Conclusion

The performance of the district in most of the health indicators seem to be better compared to that of the State and the nation. The population growth rate is 12.75 percent and kept under control due to better family planning initiatives by the district administration. The Crude Birth Rate is lower than the State and the nation which is an indicator for keeping the population growth under control. The sex ratio is better 994 compare to the country (940). IMR is higher in Thandrampet (21.9), West Arni (19.2) and Cheyyar (20.6) where the issues have to be addressed, because across the blocks there are high variations found. More MMR is found in Jawadhu hills (330), followed by Vandavasi (230). Special attention is needed for the blocks like West Arni, Pudhupalayam and Kalasapakkam.

The still birth rate is also found to be in a declining trend and 100 percent Immunization is ensured for all children by the district administration. Regarding the Child Development is concerned, the major issue is found to be in Jawadhu Hiils. Despite its better performance related to IMR, but child sex ratio is very low (857) which is alarming one and low in general sex ratio 960. Malnourished children in the district is fairly high (29.58 percent) and very high in Jawadhu Hiils (41.69 percent) which needs greater attention from the district administration.

The performance with regard to IFA tablets distribution is less than 50 percent as far the women are concerned, but it is more than 90 percent with adolescent girls which is a positive trend in the district. Prevalence of anaemia is found to be high with pregnant women (55.27 percent), which need to be further reduced through appropriate behavioral change process and initiatives towards healthcare practices.

In the district, 97.61 percent of the households have access to safe water but the access to sanitation is found to be low with 55.8 percent only. Two blocks – Thandrampet and Anakkavur perform very poor in accessing sanitation facilities. In the district, prevalence of HIV/AIDS and TB is found which needs special attention to be reduced and eradicated completely. Though there are different healthcare programmes and services provided by the district administration, the inter block variations need to be given attention to ensure equity in accessing the Government services and programmes for achieving good health for all particularly the children, adolescent girls, pregnant and lactating mothers and under five children.

CHAPTER 5

LITERACY AND EDUCATION

5. Literacy and Education

Introduction

Literacy is one of the indicators of Human Development to understand the level of knowledge and communication of the people in the country or region. Literacy enables the people to acquire knowledge and it promotes self-confidence in them to identify opportunities and decide the choices for bettering their lives. Literacy and education is a tool for building the capability to handle the choices. Tamil Nadu is one of the developed States in its literacy rate with 80.33 percent as per SHDR Tamil Nadu, 2003, it is ranked 3rd among the States behind Kerala and Maharashtra in both overall and female literacy levels in India according to Census 2001. This chapter deals with performance of Tiruvannamalai district in total literacy rate and educational attainment of different demographic groups; male and female literacy rates, drop outs, transition rates and causes for low literacy performance in some blocks.

Literacy

In Tamil Nadu, Tiruvannamalai district ranks 25 in total literacy rate in 2011 among 32 districts.

Table 5.1: Total Literacy Rate

Sl. No.	Block wise	2001	2011
1	Tiruvannamalai	74.05	78.94
2	Kilpennathur	68.42	75.79
3	Thurinjapuram	64.55	73.13
4	Polur	70.15	77.61
5	Kalasapakkam	62.70	71.87
6	Chetpet	67.96	76.42
7	Chengam	61.64	67.95
8	Pudupalayam	60.45	68.45
9	Thandrampet	57.82	65.43
10	Jawadhu Hills	38.17	46.70
11	Cheyyar	70.85	77.76
12	Anakkavur	66.83	75.41
13	Vembakkam	67.96	76.63
14	Vandavasi	70.75	77.00
15	Thellar	67.47	75.58
16	Peranamallur	67.46	76.79
17	Arni	74.42	80.49
18	West Arni	71.04	78.60
District		**65.71**	**73.36**

Source: Census 2001 & 2011.

The total literacy rate in the district in 2001 was 65.71 percent which is increased to 73.36 percent in 2011. The total literates in the district are 16,26,813 to the total population of 24,64,875. The literacy rate of the district is 73.36% lower than that of the State 80.1%.

Inter-block variations in Total literacy rate

Increased literacy rate is observed in all the blocks except Thiruvannmalai where the increase is only 4.89 percentage points which is an urbanized block. The highest increase in total literacy rate is found to be in Peranamallur (9.33 percent) and Kalasappakam (9.17 percent). The increase in literacy rate ranges between 4.89 percent and 9.33 percent. It shows the efforts of the district administration in improving the enrolment at the primary level education. Jawadhu Hills shows the lowest literacy rates consistently in 2001 and in 2011, and it ranks 18th. The factors that contribute for reduced literacy rates are remoteness, non availability of teachers, lack of adequate schools and facilities, and lack of awareness about the importance of education. Increased literacy rates are due to adequate facilities and presence of educational institutions and road facilities. Despite many Government programmes, still the district lacks in total literacy which needs to be studied. All the four urbanized blocks (Tiruvannamalai, Arni, West Arni and Cheyyar) fall in the top five categories.

The growth rate in literacy in the district is fluctuating but shows a positive trend. The overall decadal growth rate is 10.83. Thiruvannmalai, Arni and Cheyyar show low growth rates in literacy, despite them being urbanised blocks, during the decade 2001-2011. The district administration needs to give attention to all the backward blocks and special attention to Jawadhu Hills.

Literacy and Gender

The increased literacy rate is found both in male and female categories but the growth percentage is higher in female literacy compared to that of the male. The male literates are 9,09,803 and female literates are 7,17,010 in the district. It is interesting to see that the female literacy rate has increased by 9.74 percentage points from 53.63 percent in 2001 to 63.37 percent in 2011 which is much lower than the Tamil Nadu (73.40 percent) whereas the male literacy rate is increased by 2.96 percentage points (from 77.78 percent in 2001 to 80.74 in 2011), which is also lower than the State male literacy rate (86.81 percent).

Table 5.2: Male and Female literacy rate (in %)

Blocks	Decadal growth in male literacy rate (%)			Decadal growth in female literacy rate (%)		
	2001	**2011**	**Change in %**	**2001**	**2011**	**Change in %**
Tiruvannamalai	83.70	96.81	13.11	64.31	75.99	11.68
Kilpennathur	80.36	85.48	5.12	56.78	67.09	10.31
Thurinjapuram	77.54	77.50	-0.04	51.48	60.83	9.35
Polur	82.28	87.60	5.32	58.19	68.76	10.57
Kalasapakkam	76.20	74.02	-2.18	49.17	58.10	8.93
Chetpet	81.02	83.13	2.11	55.22	65.25	10.03
Chengam	72.04	76.76	4.72	50.99	60.25	9.26
pudupalayam	72.57	72.64	0.07	48.25	57.01	8.76
Thandrampet	69.37	69.25	-0.12	46.00	54.36	8.36
Jawadhu Hills	49.51	39.47	-10.04	26.22	30.98	4.76
Cheyyar	82.44	89.38	6.94	59.37	70.15	10.78
Anakkavur	79.95	80.85	0.90	53.71	63.47	9.76
Vembakkam	81.25	82.28	1.03	54.66	64.59	9.93
Vandavasi	81.64	90.16	8.52	59.89	70.77	10.88
Thellar	80.13	82.33	2.20	54.69	64.62	9.93
Peranamallur	81.42	81.10	-0.32	53.87	63.66	9.79
Arni	85.34	95.77	10.43	63.62	75.18	11.56
West Arni	83.33	88.77	5.44	58.97	69.68	10.71
District	77.78	80.74	2.96	53.63	63.37	9.74

Source: SSA

The growth of male literacy is found to have increased over a decade except Jawadhu Hills which shows only a marginal increase. The overall decadal growth of male literacy in the district is positive.

Literacy rate Male/Female

	2001			2011		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**
District	77.78	53.63	65.71	80.74	63.37	73.36
State	82.42	64.43	73.45	86.8	73.4	80.1

Source: Census 2001 and 2011

Male Literacy Rate in 2001 and 2011 (in %)

Female Literacy Rate in 2001 and 2011 (in%)
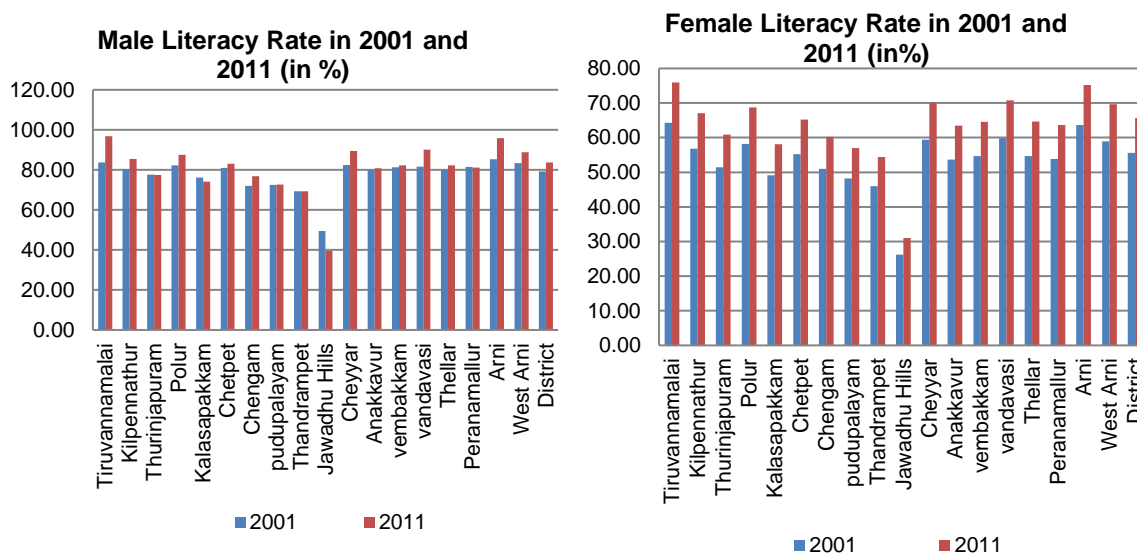
Source: Census 2001 and 2011

It is found to be positive in all blocks except Jawadhu Hills, Kalasapakkam, Peranamallur, Thandrampet and Thurinjapuram which show the negative growth. Among these five blocks in Jawadhu Hills, the data shows high reduction in male literacy rate. Increasing male literacy rate is found in Tiruvannamalai, Arni and Vandavasi which are urbanised blocks in the district. The decadal growth rate of female literacy is found to be on an increasing trend in all the blocks which show that the district administration gives more attention towards female literacy. At the district level the growth of the female literacy rate is found to be higher than the male literacy rate. The lowest growth in female literacy is found in Jawadhu Hills. All the urbanized blocks also show better performance in the female literacy rate over the decade. All the urbanized blocks in the district in both male and female literacy rates fall under top five category, whereas the bottom five blocks in both male and female literacy rates show the literacy rate between 39 percentage and 76 percentage; 30 percentage to 60.25 percentage respectively.

Elementary Education

Education is one of the basic human rights and Tamil Nadu Government has declared education to all at primary level up to the age of 14 years. The State has taken a lot of initiatives to ensure 100 percent enrolment of children of school going age in to the schools through providing noon meals, uniform, books, slippers and other necessary things. This is particularly to ensure the enrolment of children from poor households particularly in rural areas. The indicators for success of the education programme are 100 percent enrolment of children in primary and upper primary education, retention rate (through assessing drop out and repetition rates), completion rate and quality of education with regard to ability of reading, writing and arithmetic.

Primary Education

The Gross Enrolment in primary education in the district is more than 100 percent during 2011-12, which is decreased by 0.15 percent in 2013-14. The district shows the lowest GER of 99.34 percent in Jawadhu Hills block and the highest with 101.97 percent in Pudupalayam block. Four blocks in the district maintained less than 100 percent GER in 2011-12 have improved with 100 percent and above in 2013-14. Overall, except two blocks – Peranamallur and Jawadhu Hills, all other blocks maintain the GER with more than 100 percent during the year 2013-14.

Inter-block variations shows that the GER at primary education level is reduced in 13 blocks out of 18, hence the overall reduction in GER at the district level. It is due to lack of interest of the children and ignorance of parents. In Cheyyar, Kalasappakkam, Polur followed by Thellar and Peranamallur, the GER has increased significantly.

Table 5.3: Enrolment in Primary Education

Block / District	Primary					
	Boys		Girls		Total	
	2011-12	2013-14	2011-12	2013-14	2011-12	2013-14
Tiruvannamalai	100.62	100.47	100.64	100.49	100.63	100.48
Kilpennathur	100.19	100.04	100.14	99.99	100.17	100.02
Thurinjapuram	100.04	100.02	100.16	100.12	100.10	100.05
Polur	99.72	101.03	99.64	101.01	99.68	101.02
Kalasapakkam	99.52	101.04	99.37	101.03	99.44	101.03
Chetpet	101.58	101.43	101.41	101.26	101.50	101.35
Chengam	100.19	100.04	100.43	100.28	100.31	100.16
Pudupalayam	102.29	102.14	101.94	101.79	102.12	101.97
Thandrampet	100.96	100.81	100.93	100.78	100.94	100.79
Jawadhu Hills	99.63	99.64	99.18	99.21	99.40	99.34
Cheyyar	99.37	101.01	99.24	101.03	99.30	101.02
Anakkavur	100.32	100.17	100.71	100.56	100.51	100.16
Vembakkam	100.21	100.11	100.18	100.29	100.19	100.24
Vandavasi	100.29	100.14	100.25	100.10	100.27	100.12
Thellar	100.01	100.02	99.79	101.01	99.90	101.01
Peranamallur	99.62	99.98	99.59	99.99	99.60	99.98
Arni	100.59	100.44	100.87	100.72	100.73	100.58
West Arni	100.50	100.35	100.30	100.15	100.40	100.25
District	100.28	100.13	100.20	100.05	100.24	100.09

Source: EER 2013 & DISE 2011

With regard to Gross Enrolment of boys and girls is concerned, the GER of both is reduced by 0.15 percent from the year 2011-12 to 2013-14. Except six blocks, Polur, Kalasappakkam,

Jawadhu Hills, Cheyyar, Thellar and Peranamallur, in other blocks the GER of both boys and girls is reduced. Out migration is also one of the reasons for poor enrolment, as the children lose their interest and get into the economic activity. One of the indicators of Millennium Development Goals is to ensure 100 percent gross enrolment at primary level and this is achieved by the district especially in the six blocks in which the district has taken efforts to improve the boys and girls GER. The efforts should continue till these blocks achieve 100 percent GER. Overall in the district Pudupalayam ranks the first and Jawadhu Hills ranks the last in GER. None of the urbanized blocks are found in the top five blocks in the district in the year 2013-14.

Completion rate and Dropout rate in Primary Education

As per SHDR of Tamil Nadu, 2003, eight districts werecovered under the World Bank Project of District Primary Education Programme (DPEP) to achieve the goal of universal primary education in the backward districts. Tiruvannamalai is one of the districts covered in Phase I out of four – Cuddalore, Dharmapuri and Villupuram. The project study during 1994-95 and 1998-99 revealed the highest Actual Completion Rate (ACR) of 60.44 percent for the primary classes out of the seven districts. It shows that the district has taken initiatives to address the issues of reducing the drop outs.

The Completion Rate in the Primary Education has increased from 98.57 percent to 98.62 percent at the district level from 2011-12 to 2013-14. The increase is found in almost all the blocks by 0.5 percentage points except three blocks- Kilpennathur, Thurinjapuram and Chetpet decreased from 0.1 to 0.8 percentage points. Chetpet shows the higher difference in percentage which is 0.8. By gender, the Completion Rate has increased by 0.5 percentage points in both boys and girls from 2011-12 to 2013-14. As far as the inter-block variations are concerned, the Completion Rate is found to be higher in girls when compared to that of boys in both the years 2011-12 and 2013-14 in four blocks. Around 7 blocks including Jawadhu hills, Chetpet the completion rate of boys is slightly higher than the girls that too from 0.1 to 0.3 percentage. Two blocks – Kilpennathur, and Chetpet performed 100 percent in girls Completion rate in 2013-14, which has little lowered in the subsequent year. This is due to the lack of facilities and distance of the schools. Jawadhu Hills shows the overall increased rate in 2013-14 and the same is the case with both boys and girls, but overall at the district level, it ranks the last in the completion rate with 87.81 percent, despite good performance in enrolment rate. It needs special attention.

The Drop out rate at the Primary Education in the district has decreased from 1.12 percent (2011-12) to 1.10 percent in 2013-14, which seems to be good in retention of the students,

though this is not much significant, but higher than the State (0.98 percent). However, the inter-block variations show the highest drop out rate of 11.64 percent in 2013-14 in Jawadhu Hills despite the reduction from the previous year. Thandrampet and Chengam also show higher drop outs. Migration is also one of the reason which affects continuity in school education. The drop out rate has increased in five blocks over the previous year (2011-12), of which two blocks – Vembakkam and Chetpet have highest drop outs next to Jawadhu Hills.

Table 5.4: Completion Rate and Drop Out Rate in Primary Education (in percent)

Block wise/ District	Completion						Drop Out					
	Boys		Girls		Total		Boys		Girls		Total	
	2011-12	2013-14	2011-12	2013-14	2011-12	2013-14	2011-12	2013-14	2011-12	2013-14	2011-12	2013-14
Tiruvannamalai	98.39	98.44	98.95	99.00	98.67	98.72	1.09	1.04	0.59	0.56	0.84	0.80
Kilpennathur	99.78	99.83	100.00	99.91	99.89	99.88	0.11	0.10	0.00	0.00	0.06	0.06
Thurinjapuram	99.77	99.62	99.88	99.84	99.83	99.81	0.00	0.26	0.12	0.11	0.06	0.14
Polur	99.47	99.52	99.83	99.88	99.65	99.70	0.36	0.34	0.09	0.22	0.22	0.21
Kalasapakkam	99.44	99.32	99.74	99.57	99.58	99.56	0.56	0.53	0.26	0.25	0.42	0.40
Chetpet	99.76	99.81	100.00	99.72	99.87	99.79	0.00	0.15	0.00	0.27	0.00	0.18
Chengam	97.04	97.09	97.34	97.39	97.19	97.24	2.26	2.15	1.85	1.76	2.06	1.96
Pudupalayam	98.26	99.31	98.52	99.54	98.39	99.42	0.25	0.24	0.12	0.11	0.19	0.18
Thandrampet	97.27	97.32	97.37	97.42	97.32	97.37	2.45	2.33	2.42	2.30	2.43	2.31
Jawadhu Hills	87.16	88.20	86.84	87.56	87.01	87.81	12.27	11.66	12.23	11.62	12.25	11.64
Cheyyar	99.64	99.69	99.64	99.69	99.64	99.69	0.24	0.23	0.12	0.11	0.18	0.17
Anakkavur	99.66	99.71	99.50	99.55	99.58	99.63	0.00	0.12	0.33	0.24	0.17	0.16
Vembakkam	99.57	99.62	99.54	99.59	99.55	99.60	0.00	0.30	0.11	0.28	0.06	0.29
Vandavasi	99.29	99.34	99.65	99.70	99.47	99.52	0.47	0.45	0.23	0.22	0.35	0.33
Thellar	99.80	99.85	99.63	99.68	99.71	99.76	0.00	0.13	0.00	0.04	0.00	0.05
Peranamallur	99.11	99.16	99.82	99.87	99.46	99.51	0.72	0.68	0.18	0.17	0.45	0.43
Arni	99.48	99.53	99.38	99.43	99.43	99.48	0.35	0.33	0.26	0.25	0.31	0.29
West Arni	99.20	99.25	100.00	99.48	99.58	99.63	0.23	0.22	0.00	0.12	0.12	0.15
District	98.45	98.59	98.65	98.71	98.55	98.67	1.19	1.18	1.05	1.04	1.12	1.10

Source: EER 2013 & DISE 2011

At the district level the drop out of both boys and girls is reduced which is insignificant, but the inter-block variations show the increase of drop outs among the girls in three blocks- Polur, Vembakkam and West Arni (urbanised block).

In the district, only one urbanized block – West Arni falls under the top five category and Tiruvannamalai block falls under bottom five category. Jawadhu Hills, Thandrampet and Chengam need attention in addressing the drop out issues.

Box 5.1: Education – a concern of Jawadhu hill

In tribal locations, despite the existence of sufficient public infrastructure for primary education, there are issues of poor enrolment of children in primary schools, high incidence of drop out of children and poor quality of education. These are attributed to the scattered nature of the villages and poor road transport infrastructure. Education is one of the weakest areas in all the tribal blocks of the Tiruvannamalai district. Though sufficient infrastructure is established, the enrolment rate and the quality of education are very low. There are sufficient numbers of Government schools in the district and sufficient numbers of teachers are appointed by the Government. But due to the scattered nature of the villages the approach roads and transport facilities are very low. Hence the teachers are not able to reach the villages in time and spend quality time with the children. The percentage of children attending school are 50 percent and during the agriculture season and festivals it is less than 20 percent. The assessment on the attainment level of children shows that the children studying in middle school are not able read and write. The girl children are dropped even at primary level to take care of the siblings. Moreover the girl children are getting married by 12-13 years immediately after attaining puberty.

Most of the children now go to the Government schools in spite of the difficulties in reaching the school and poor quality of the facility. Most Government schools have one or two rooms staffed with one or two teachers. Teachers mostly live in urban cities (40 km away) and their work schedule is guided by bus timings, they come around 10.30 a.m to 11 a.m and leave by 3 p.m. Quality of education imparted is generally very poor. The system of education in these areas is not up to the mark. Out of total enrolment, the dropout rate is alarmingly touching 60 percent after middle schooling due to unorganized education system, inadequate infrastructure, irregularity of teachers in the classrooms, non-involvement of the parents etc. lead to high percent of dropouts at school level.

Last two year's percentage of pass in higher secondary school at Jawadhu hill is low and quality of education is under declining stage. 35 Primary schools, 18 middle schools, 2 high schools and 3 higher secondary schools are present in Jawadhu hills as per education department. The villages have no transport facilities due to non availability of proper roads or hill paths. It is possible to walk in the plains for a child, but difficult to climb up hills for education. This makes the children stay at home and engage in parental occupation.Teachers do not reside in hills due to lack of facilities in all spheres of life, especially their own children's education. They need better school for their children.

Availability of buses on a continual basis to the hills is also an issue. If a teacher misses a particular bus, he/she could not attend his/her duty on the day. On the day of presence, they concentrate on IV and V standard students since they are outgoing students to other schools. They fail to bother about the lower class performance. The concern echoes with census 2011, where literacy rate of Jawadhu hill, 41.64 percent. For the same period, the male and female literacy rate is of 50.07 and 32.86 percent respectively. The gender gap in literacy is noticed as 17.21 percent. Promotion of the remedial education in each village could improve literacy rates, reducing literacy gap, and tempting school attendance and enhanced education quality.

Upper Primary/Middle School Education

The age at which the children enroll for Upper Primary Education would be 11-14 after completion of the Primary Education. The GER at Upper Primary level is increased among girls compare to that of the boys from the year 2011-12 to 2013-14. But over all GER at the district level is decreased from 103.85 percent to 102.79 percent. The GER of the boys has reduced by 1.03 percentage points and GER of girls has increased by 0.47 percentage points. It is found that the preference for girls' enrolment seems to be positive and increasing over a period when compared to that of the boys in the district. This might be due to awareness about the importance of girl children education and economic reasons for reduced GER of boys. The GER at Upper Primary Education is higher than the GER at Primary Education among both boys and girls in the district.

Table 5.5: Gender Wise Enrolment in Upper Primary Education

Block / District	Upper Primary					
	Boys		Girls		Total	
	2011-12	2013-14	2011-12	2013-14	2011-12	2013-14
Tiruvannamalai	102.88	101.85	104.92	103.87	103.9	102.86
Kilpennathur	103.49	102.46	104.28	103.24	103.89	102.85
Thurinjapuram	102.35	101.33	104.82	103.77	103.58	102.54
Polur	103.66	102.62	104.33	103.29	104	102.96
Kalasapakkam	103.67	102.63	104.49	103.45	104.08	103.04
Chetpet	103.81	102.77	104.47	103.43	104.14	103.1
Chengam	102.07	101.05	104.82	103.77	103.45	102.42
Pudupalayam	103.59	102.55	104.37	103.33	103.98	102.94
Thandrampet	103.35	102.32	104.2	103.16	103.77	102.73
Jawadhu Hills	103.57	102.53	104.1	103.06	104.1	102.79
Cheyyar	103.04	102.01	104.1	103.06	103.57	102.53
Anakkavur	103.65	102.61	104.2	103.16	103.92	102.88
Vembakkam	103.19	102.16	104.19	103.15	103.69	102.65
Vandavasi	103.25	102.22	103.96	102.92	103.6	102.56
Thellar	103.37	102.34	104.34	103.3	103.86	102.82
Peranamallur	103.3	102.27	104.36	103.31	103.83	102.79
Arni	102.63	101.6	105.45	104.4	104.04	103
West Arni	103.47	102.44	104.15	103.11	103.81	102.77
Total	103.24	102.21	104.42	103.38	103.85	102.79

Source: Source: EER 2013 & DISE 2011.

Growth rate in enrolment ratio is negative in all the blocks and found to be high in Jawadhu Hills (-1.26). Despite the negative growth rate, the district and all the blocks maintain more than

100 percent gross enrolment in upper primary education. However efforts have to be taken to understand the net enrolment which will give the real status of the blocks and the district as a whole. Regarding gender perspective, the gross enrolment is reduced across the district and there is no much variation in the percentage decrease.

Completion and Dropout rate

The Completion rate in Upper Primary Education in the district has increased from 93.97 percent to 95.63 percent. It is good to see that in all the blocks, the completion rate has increased positively. Among the blocks, the lowest completion rate is found to be in Jawadhu Hills which is 80.85 percent in 2013-14. In Vembakkam, highest completion rate is found as 98.62 percent. The difference in transition rate at the district level is 1.66 percentage points.

Table 5.6: Completion Rate in Upper Primary Education (in Percent)

Block wise/ District	Upper Primary					
	Boys		Girls		Total	
	2011-12	2013-14	2011-12	2013-14	2011-12	2013-14
Tiruvannamalai	91.88	95.8	94.08	95.54	92.98	95.64
Kilpennathur	93.25	97.02	94.88	96.21	94.07	96.52
Thurinjapuram	94.85	97.51	94.76	97.23	94.81	97.41
Polur	93.87	97.14	94.45	96.94	94.16	95.10
Kalasapakkam	94.77	96.71	94.48	95.42	94.63	95.58
Chetpet	92.77	97.12	95.75	97.51	94.26	97.23
Chengam	96.46	97.02	94.83	95.78	95.64	96.6
Pudupalayam	96.43	97.39	94.81	95.76	95.62	96.58
Thandrampet	91.98	96.23	95.82	95.24	93.9	96.12
Jawadhu Hills	82.93	83.76	77.16	77.93	80.05	80.85
Cheyyar	93.18	96.13	98.54	97.21	95.86	96.82
Anakkavur	94.88	96.83	94.07	95.01	94.48	96.42
Vembakkam	95.97	98.51	97.84	98.82	96.91	98.62
Vandavasi	94.87	96.82	93.88	96.64	94.38	96.72
Thellar	95.87	96.83	94.42	95.36	95.15	96.10
Peranamallur	95.77	96.73	92.87	96.52	94.32	96.61
Ar ni	95.88	96.84	94.88	95.83	95.38	96.33
West Arni	94.88	96.43	94.88	95.83	94.88	96.12
District	93.92	96.16	94.02	95.27	93.97	95.63

Source: EER 2013 & DISE 2011

In the district, drop out has increased from 0.87 percent in 2011-12 to 1.67 percent in 2013-14. It is in increasing trend in both boys and girls but with the boys, the dropout rate difference is greater than that of girls. Similar is the case with male dropout rate and female dropout rate at

the district level. Inter-block variations show the difference in the drop out ratio across the district. The dropout rate is prevailing across the blocks but higher in percentage among the girls. Among the blocks, Jawadhu Hills stands first with highest dropout ratio 24.12 which is higher than the State average which is due to poor infrastructure, cultural and economic reasons.

Table 5.7: Drop Out Rate in Upper Primary Education (in Percent)

| Block/District | Drop out in Upper Primary Education in 2011-12 and 2013-14 (in percent) | | | | | |
| | Boys | | Girls | | Total | |
	2011-12	2013-14	2011-12	2013-14	2011-12	2013-14
Anakkavur	0	1.02	0	1.04	0	2.06
Arni	0	1.01	0	1.21	0	2.22
Chengam	0.14	1.08	0	1.47	0.14	2.55
Chetpet	0	0.23	0	0.27	0	0.5
Cheyyar	3.7	2.01	0.44	2.43	4.14	4.44
Jawadhu Hills	9.07	8.81	15.76	15.31	24.83	24.12
Kalasapakkam	0	0.81	0	0.71	0	1.52
Kilpennathur	0	0.23	0	0.14	0	0.37
Peranamallur	0	0.81	0	0.82	0	1.63
Polur	0	1.01	0	1.02	0	2.03
Pudupalayam	0	0.48	0	0.49	0	0.97
Thandrampet	0	3.12	0	3.54	0	6.66
Thellar	0	1.49	0	1.52	0	3.01
Thurinjapuram	0	0.18	0	0.27	0	0.45
Tiruvannamalai	0	1.01	0	1.04	0	2.05
Vandavasi	0	1.02	0	1.03	0	2.05
Vembakkam	0.91	0.88	0.84	0.82	1.75	1.7
West Arni	0	1.01	0	1.02	0	2.03
District	0.77	1.46	0.95	1.90	0.87	1.67

Source: EER 2013 & DISE

Transition rate from Primary to Upper Primary Education

There is a marginal increase in the Transition Rate from 99.27 percent in 2011-12 to 99.29 percent in 2013-14 in the district which is higher than the average transition rate – 98.59 of the State. By sex, the transition rate of both boys and girls is with marginal increase by 0.01 percentage point during the years 2011-12 and 2013-14. Among the boys and girls, the girls' transition rate is higher than that of the boys with 0.10 percentage points difference. The inter-block variations show the increased transition rate in Cheyyar block with 0.54 percentage point, where as there is a marginal increase in other blocks. In seven blocks negative trend is observed from 0.04 to 0.11 percentage point difference. This is due to the parents preference for early

marriage of girls, distance, safety etc.

Table 5.8: Transition Rate from Primary to Upper Primary

Sl. No.	Block wise/District	2011-12			2013-14		
		Boys	**Girls**	**Total**	**Boys**	**Girls**	**Total**
1	Tiruvannamalai	99.06	99.35	99.21	99.11	99.08	99.10
2	Kilpennathur	98.26	98.96	98.61	98.32	99.06	98.71
3	Thurinjapuram	99.28	99.33	99.31	99.33	99.31	99.32
4	Polur	99.26	99.92	99.59	99.32	99.93	99.64
5	Kalasapakkam	98.17	99.15	98.66	98.21	99.17	98.62
6	Chetpet	99.41	99.38	99.39	99.46	99.40	99.44
7	Chengam	98.26	99.25	98.76	98.30	99.26	98.71
8	Pudupalayam	98.05	99.77	98.91	98.11	99.79	98.85
9	Thandrampet	99.16	99.16	99.16	99.23	99.19	99.21
10	Jawadhu Hills	98.46	99.25	98.86	98.57	99.32	98.91
11	Cheyyar	99.91	98.27	99.10	99.94	99.51	99.64
12	Anakkavur	99.95	99.25	99.59	99.96	99.37	99.52
13	Vembakkam	99.93	98.37	99.15	99.94	98.51	99.18
14	Vandavasi	99.93	99.15	99.54	99.95	99.32	99.47
15	Thellar	99.94	99.25	99.59	99.97	99.43	99.51
16	Peranamallur	99.92	99.92	99.92	99.96	99.92	99.93
17	Arni	99.47	99.92	99.69	99.48	99.93	99.74
18	West Arni	99.57	99.92	99.74	99.59	99.92	99.79
District		99.22	99.31	99.27	99.26	99.41	99.29

Source: EER 2012 & DISE 2011

Transition Rate from Upper Primary to Secondary Education

The Transition Rate from Upper Primary to Secondary Education in the district is 85.45 percent, which shows the reduced status. The transition rate of boys was 91.94 and the girls were 97.56 in 2013-14. In all the blocks, the girls transition rate is increased except Jawadhu Hills which might be due to lack of interest of the boys in continuing their education and preference to go for employment. The boys transition rate is better in three blocks namely Cheyyar, West Arni and Kilpennathur with 100 percent and above and the girls transition rate is better in 11 blocks with 100 percent and above.

Table 5.9: Transition Rate from Upper Primary to Secondary Education

S. No.	Block Name	Transition Rate	
		2013-14 (Boys)	2013-14 (Girls)
1	Anakkavur	94.61	102.68
2	Arni	89.4	98.33
3	Chengam	98.95	101.02
4	Chetpet	80.2	97.95
5	Cheyyar	100	102.7
6	Jawadhu hills	51.03	50.70
7	Kalasapakkam	99.44	100.44
8	Kilpennathur	100.49	100.89
9	Pernamallur	99.19	103.33
10	Polur	97.88	104.46
11	Pudupalayam	96.72	98.24
12	Thandrampet	81.2	87.12
13	Thellar	90.52	93.86
14	Thurinjapuram	99.32	103.13
15	Tiruvannamalai	90.73	108.66
16	Vandavasi	92.36	103.09
17	Vembakkam	91.03	93.34
18	West arni	101.93	106.09

Source: CEO, Tiruvannamalai

The highest girls transition rate is found in Tiruvannamalai block with 108.66 percent in 2013-14, where as the lowest is found in Jawadhu Hills with 50.70 percent. But overall at the district level it is very positive which shows the efforts of the district administration towards improving the girl children education. However Jawadhu Hills needs special attention to improve the transition rate of both boys and girls drastically.

Access to Schools

Accessibility to school is an important factor to be considered for universalization of primary education. The State policy says that the habitation with 300 and more population should have a primary school within a distance of one km. As per Tamil Nadu Social Development Report 2000, 87.8 percent of the habitations and 96.8 percent of their population were covered by primary education in the State.

Table 5.10: Availability of Schools-2013-14

Sl. No.	Block wise/District	Number of habitations	Number of primary School	Primary with upper primary school	No.of habitations/ primary and Upper Primary schools
1	Tiruvannamalai	272	142	51	1
2	Kilpennathur	232	87	20	2
3	Thurinjapuram	274	88	21	3
4	Polur*	286	97	28	2
5	Kalasapakkam	241	79	22	2
6	Chetpet	198	70	22	2
7	Chengam	311	94	27	3
8	Pudupalayam	230	56	22	3
9	Thandrampet	267	78	32	2
10	Jawadhu Hills	284	70	25	3
11	Cheyyar	272	91	23	2
12	Anakkavur	196	79	11	2
13	Vembakkam	231	100	20	2
14	Vandavasi	276	90	19	3
15	Thellar	290	95	22	2
16	Peranamallur	230	77	19	2
17	Ar ni	233	81	34	2
18	West Arni	213	62	18	3
	District	**4536**	**1536**	**436**	**2**

Source: SSA, Tiruvannamalai

*Polur includes one upper primary school, hence the total is 436.

In the district there are 4536 habitations with 1536 primary schools, and 436 primary schools with upper primary education with the ratio of 1:2 (one schools for two habitations). The number of schools is inadequate to cover the population in the habitations. This is one of the causes for the low enrolment and child labour. As per the DPO, Gross Access Ratio, better access could found in most of the blocks as they have one primary/upper primary schools for every two habitations. West Arni, Vandavasi, Jawadhu Hills, Pudupalayam, Chengam, and Thurinjapuram blocks have one primary/upper primary school for every three habitations which show poor access to education.

Pupil-Teacher Ratio in Primary and Upper Primary Education

The sanctioned strength as per the SSA norms is 1:40. From the table 5.11, it is inferred that the Pupil-Teacher Ratio is 26.98 at the primary education level, whereas it is 30.05 at the upper primary level education, which is very much lower than the standard of the SSA. The quality of the education depends on the number of students accessing the teachers' guidance. The lower

the ratio, better the quality of the education, as it gives opportunities for both students and the teachers to have more interaction during the class and outside class hours. As per the State HDR, Tamil Nadu, 2003 the Pupil-Teacher Ratio at the primary level is 37.19 and middle level is 42.22 and the status of Tiruvannamalai is better as per the report though it is educationally backward.

Table 5.11: Pupil-Teacher Ratio-2013-14

Sl. No.	Block wise/ District	Primary School		Upper Primary School	
		Pupil Teacher Ratio	Pupil School Ratio	Pupil Teacher Ratio	Pupil School Ratio
1	Tiruvannamalai	26.53	96.30	26.56	137.20
2	Kilpennathur	24.88	73.86	26.11	135.84
3	Thurinjapuram	23.70	61.08	28.23	117.03
4	Polur	25.89	79.58	29.72	154.23
5	Kalasapakkam	29.45	75.11	31.56	131.08
6	Chetpet	25.48	65.90	25.01	145.87
7	Chengam	30.77	91.37	35.78	138.32
8	Pudupalayam	29.25	84.88	37.18	133.29
9	Thandrampet	31.55	114.19	36.22	139.77
10	Jawadhu Hills	40.92	72.08	21.17	95.03
11	Cheyyar	24.48	55.46	33.44	143.34
12	Anakkavur	23.01	43.83	30.05	111.09
13	Vembakkam	26.95	62.89	37.40	136.08
14	Vandavasi	23.76	60.29	32.39	150.09
15	Thellar	19.92	41.80	25.94	81.72
16	Peranamallur	20.91	43.81	24.83	93.00
17	Arni	30.02	79.77	28.30	146.84
18	West Arni	28.27	67.04	31.09	132.00
	District	485.74	1269.2	540.98	2321.8

Source: DISE 2013

Among the blocks, the inter-block variations are observed as Jawadhu Hills block shows highest ratio of 40.92 at the primary level and the lowest ratio of 21.17 at the upper primary level. It is an issue to be addressed as it clearly correlates with the low transition rate at the upper primary level. Except Arni, Thandrampet, Chengam, West Arni, Pudupalayam, and Kalasappakam other blocks maintain the ratio lower than the district average ratio at the primary education level of which Thellar and Peranamallur maintain very low ratio of 19.92 and 20.91 which also needs an attention for reasons. At the upper primary level, nine blocks fall above the district average ratio of which two are urbanized blocks – Vandavasi and West Arni.

Special study has to be done to understand the ground reality in terms of availability of the teachers, vacancies exist and infrastructure facilities available as it is one of the important indicators of educational performance.

Regarding Pupil-School Ratio, which is also directly connected with the quality of the education as not only the number of teachers available for the students but also the facilities made available to them. It can also be related with the capacity of the schools to accommodate more students. In the district level, the district average is 70.51 and 128.99 at the primary and upper primary level respectively. The inter-block variations at the primary level show that nine blocks maintain above the district average and the highest ratio is found in Thandrampet followed by Tiruvannamalai and Chengam. The lowest ratio is found in Thellar, Peranamallur and Anakkavur. The reasons have to be studied in detail. At the upper primary level it is found that except four blocks Jawadhu Hills, Thellar, Peranamallur and Anakkavur all other blocks show the Pupil-School ratio higher than the district average. These four blocks need attention to find the reasons. The highest ratio is found in Vandavasi.

Secondary Education

In the district the average secondary enrolment ratio is much lower compare to that of the upper primary which is 76.64 during 2013-14 and almost the same among the boys and girls. As per SHDR Tamil Nadu, 2003, the concern was steep decline of enrolment at the secondary level which was 37.22, despite the incentives such as free noon meals, books and uniforms provided upto 8th standard. Despite lower enrolment ratio, it was very impressive as far as girls' enrolment is concerned as per the report. Also the report says that although Tiruvannamalai showed poor performance among all the districts but better performance was recorded as far as girls are concerned.

Table 5.12: Enrollment in Secondary Education (2013-14)

Sl. No.	Block wise	Enrollment rate in Secondary Education		
		Male	Female	Total
1	Ankkavur	79.95	80.12	80.03
2	Arni	85.01	85.02	85.01
3	Chengam	66.01	58.21	62.48
4	Chetpet	80.04	80.12	80.08
5	Cheyyar	69.08	68.78	68.96
6	Jawadu Hills	59.76	60.20	59.93
7	Kalasapkkam	80.05	79.97	80.01
8	Kilpennathur	79.96	75.00	77.79

Sl. No.	Block wise	Enrollment rate in Secondary Education		
		Male	Female	Total
9	Peranamallur	80.03	80.00	80.02
10	Polur	84.94	84.98	85.03
11	Pudupalayam	69.94	77.43	73.96
12	Thandrampet	64.96	78.23	72.49
13	Thellar	80.04	79.94	79.98
14	Thurinjapuram	64.98	69.96	67.39
15	Tiruvannamalai	85.00	77.07	80.84
16	Vandavasi	85.00	85.00	85.00
17	Vembakkam	80.05	74.53	77.32
18	West Arni	84.92	85.05	85.00
	District	76.65	76.65	76.64

Source: DISE, Tiruvannamalai

Table 5.12 shows that enrolment ratio among the blocks. Jawadhu Hills and Chengam show the lower enrolment ratio about 60, but other blocks show better performance. Gender disparity is observed in Chengam, Pudupalayam, Thandrampet, Tiruvannamalai and Vembakkam. But overall there is no disparity at the district level.

Box 5.2: Initiatives for improvement in quality of Education

Improving enrolment - The special schemes implemented by the State Govt mainly to improve the enrolment and the quality of education at the primary, upper primary, secondary and higher secondary level. Those schemes include free supply of bicycles to the students, text books, uniforms, slippers, and lap tops. During 2011-12, the students supplied with free uniform are 1,79,310 at primary education, 56,897 at upper primary education and 73145 students at secondary and higher secondary level of which the number of girls children are more compare to that of the boys which show the encouragement given by the district administration for girls children enrolment and education. Similarly there are 153609 boys and 160978 girls children are supported with free text books and 18301 students include both boys and girls studying in secondary and higher secondary education are given bicycles. Toilet facilities for children and in special schools are with special children toilets, and provisions of napkins for girl children are other schemes to ensure enrolment and retention of the children in higher education.

Improving quality of education through systems and facilities - Special coaching for writing exams to get National Merit Scholarship, and scholarship benefits for social groups' children are encouraging factors. SSA tracks the children from migrant families to ensure continuity of their education. It has found 1560 students were out of school due to migration of the parents and ensured enrolment of them in schools at their destinations. Television and computer facilities are made available in the schools to enhance the students learning. Computer training and motivational training programmes are conducted regularly for the teachers to ensure quality in teaching. Career counselling is being conducted for 10th and +2 students to show them availability of different employment opportunities. The Pupil-Teacher Ratio is kept at 1:30 at primary level; 1:35 at upper primary level and 1:40 for standard 9th and above. For Jawadhu Hills coachng centres are started for potential teachers to compete through TET exams. Mock exams are conducted for them. All these initiatives are taken for ensuring quality of education.

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Improving quality of education at primary level - Quality Education for all children is one of the main motto of Sarva Shiksha Abhiyan. The children should learn with interest and with full involvement in a good atmosphere. Activity Based Learning is implemented to encourage every student to participate actively in the learning process, which is now modified as Simple Activity Based Learning (SABL) to change from rote memory of learning to experiential learning. Homogenous, based on the age, groups are formed among the students to enhance their learning through the group activities. In order to ensure continuous learning term system is introduced, which enhances the motivation of each students learn with goal focus, also it motivates teachers to focus on the students learning. SABL tries to improve the self confidence of the students and reduces the dropout level. There are Maths kit, Science kit, and Hello English being used to enhance the students' subject knowledge.

Monitoring the performance of the students - The monitoring teams consisting of CEO, APO, supervisor, AEEO and BRTEs visit all schools regularly. Teachers are given in-service training to get well equipped with new teaching methodologies. During the visit the officials guide the teachers to implement the innovative methodologies introduced by the Government. SSA found solutions to various problems in the field of education. It has introduced variety of schemes to provide quality education for all children irrespective of caste, creed, race, or social status. It aims at the all-round development of children and helps children to realize their skills, utilize their knowledge and lead their life with self confidence. Considering the above factors SSA has brought a desirable and tremendous change which will support student to cope up with the learning demands of the subjects. Availability of infrastructure facilities such as adequate buildings, compound walls, toilets, safe drinking water facilities, etc. are monitored and efforts are taken to provide such facilities in the schools.

CCE Evaluation - CCE evaluation method has been implemented in all the 2143 schools in the district. Formative Assessment (FA (a) & FA(b)) are conducted for 40 marks throughout the Term. The marks are converted into grades and they are recorded in CCE records by teachers. Separate records are maintained for scholastic and co-scholastic activities. Summative Assessment is conducted in all subjects for 60 marks at the end of each term. After that FA & SA marks are added and grades are awarded to students.

There are issues pertaining to the quality of education found in some of the blocks. The interior blocks – Thellar, Pudupalayam and Vembakkam are not performing well in the education. High dropout rates are found in Thandrampet, Thellar, Vembakkam and Jawadhu Hills due to migration of the families to Kerala, Andhra Pradesh, Karnataka and Thiruppur, a nearby district for construction works.

Jawadhu Hills has a unique character with hilly terrain. The main reason found for poor performance of education is unfilled vacancies. There are less number of Government schools which need to be increased. To increase the completion rate in the block, higher secondary schools need to be constructed with hostel facilities both for students and the teachers. Same is applicable for Thellar and Vembakkam. Prevalence of child labor in these blocks may be arrested through filling vacancies by placing the teachers. Regular motivational trainings for teachers are to be given to improve their social concern and sensitize them on need for imparting quality education. Teachers do not prefer to work in the remote blocks which needs to be addressed through other motivational factors such as promotions and special incentives. Local teachers

have to be given coaching on TET continuously to compete in the exams through them the vacancies could be filled up in the remote areas. Teachers need to maintain patience while teaching the tribal students as most of children are first generation and would be slow learners. More over there are many children with mental retardation who may need special coaching.

Culturally the people in Tiruvannamalai district do not give importance for education due to lack of awareness and poverty conditions. The district is comparable with Villupuram, Vellore and Cuddalore for poor performance in education. Wherever the presence of Headmasters for long years is found the quality of education is found to be good in those schools. Similarly urbanized blocks are performing well in education.

Box 5.3: Reading and Writing skills among primary and upper primary school children

Under SSA, weekly test for improving reading and writing skills is initiated in all schools. CDs on spoken English developed by Azim Premji institution has been introduced in 900 schools, which would further expanded. Education Management Information System has been introduced by District Information on Education for tracking the performance of the students.

SSA has framed three innovative methodologies, such as ABL, SALM, and ALM. These methodologies manifest the perfection and the innate potentials in the children and develop their confidence, skills of both physical and mental. Cent percent enrolment, reduced dropout rate, absolute computer education, up gradation of schools, establishing new schools, alteration of girls education through KGBV and NPEGEL, special attention to SC, ST pupils are the leading steps forward Universalities of Elementary Education. SSA shapes every child by providing them with all needed facilities, providing equal opportunity in all learning activities, initiating innovative thoughts, encouraging innovative ideas, improving Listening, Speaking, Reading, Writing skills and etc.

Basic Infrastructure

The basic facilities particularly toilet facilities and drinking water play a vital role in improved enrolment ratio particularly the girls' enrolment ratio.

Schools with adequate classroom facilities: The following table 5.16 shows that the district has 1918 schools of which 925 schools (about 50 percent) are functioning with three classrooms and 993 with more than three classrooms. The inter-block variations show that Jawadhu Hills block has less 93 schools of which 29 percent of the schools (27 schools) only functioning with more than three classrooms which is an indicator for space constraint to accommodate the students into the schools. Similarly Vandavasi, Thellar and Anakkavur blocks show that the number of schools with more than three classrooms is lower than that of the schools with more than three classrooms.

Schools with toilet facilities: In the district 40.51 percent of the schools are provided with toilets. Out of 1918 schools, 1141 schools (457 boys' schools and 684 girls' schools) which accounts to 59.49 percent do not have (important and basic) toilet facilities. It is one of the crucial factors to be observed for poor enrolment and drop out in the schools. It is a common problem in all the blocks. The district administration has to give attention to ensure that the toilet facilities are provided and maintenance is taken care in both boys and girls schools.

Schools with electricity facilities: It is interesting to note that the district has provided electricity facilities for more than 80 percent of the schools. Only 17.15 percent of the schools do not have electricity facility. In Chetpet, Anakkavur, Vandavasi and Arni only 3-5 schools do not have the electricity facility. It shows that the district administration has given due importance for ensuring electricity to facilitate using of electrical and electronic devices to improve the quality of education. Among the block Jawahu Hills also show better performance in providing electricity facility in schools. The highest number of schools do not have electricity is found in Chengam (41 schools).

Schools with compound walls: It is also interesting to observe 66 percent of the schools have compound wall and only 33.99 percent of the schools (652 schools) do not have compound wall which is very important for providing security for the children as well as the assets of the schools. Among the blocks, Jawadhu Hills and Thriuvannamalai shows that 61 and 59 schools respectively, do not have compound walls which are the highest numbers in the district.

Schools with drinking water: In the district, 88.95 percent of the schools are adequately provided with drinking water facilities. The number of schools without drinking water facility is only 212 which accounts to 11.05 percent in the district. Though it seems to be lower in percentage, but it is a very crucial factor to be considered to improve the enrolment ratio.

Table 5.13: Basic school Infrastructure-2013-14

Sl. No.	Block wise/ District	Total No. of schools	With 3 class rooms	More than 3 class rooms	With out toilet (Boys)	With out girls toilet	Without electricity	Without compound wall	Without drinking water	Without desk and chair
1	Tiruvannamalai	157	78	79	42	52	15	59	23	0
2	Kilpennathur	104	52	52	23	32	35	45	8	0
3	Thurinjapuram	105	55	50	12	37	29	42	13	0
4	Polur	115	48	67	22	43	31	40	19	0
5	Kalasapakkam	98	46	52	29	32	16	38	25	0
6	Chetpet	80	31	49	25	42	3	29	16	0
7	Chengam	127	50	77	36	42	41	36	13	0
8	Pudupalayam	81	32	49	17	30	17	28	12	0

Sl. No.	Block wise/ District	Total No. of schools	With 3 class rooms	More than 3 class rooms	With out toilet (Boys)	With out girls toilet	Without electricity	Without compound wall	Without drinking water	Without desk and chair
9	Thandrampet	120	50	70	43	47	24	37	12	0
10	Jawadhu Hills	93	66	27	21	26	12	61	10	0
11	Cheyyar	111	54	57	28	46	24	32	10	0
12	Anakkavur	98	53	45	13	24	3	32	6	0
13	Vembakkam	132	56	76	23	34	26	45	9	0
14	Vandavasi	101	54	47	41	51	4	21	10	0
15	Thellar	118	67	51	21	38	15	32	11	0
16	Peranamallur	98	49	49	27	21	17	13	4	0
17	Arni	97	49	48	14	41	5	36	7	0
18	West Arni	83	35	48	20	46	12	26	4	0
	District	**1918**	**925**	**993**	**457**	**684**	**329**	**652**	**212**	**0**

Source: DISE 2013.

It is interesting to note that none of the schools is without desk and chair. Overall the school infrastructure is concerned, the district administration has made efforts to provide basic facilities in the schools. However there are a few number of schools that need attention to ensure better condition for the children to continue their education and improve the performance of education system in all the blocks.

Box 5.4: Building confidence in students through Spoken English

The students in Lakshmipuram school, Thellar and Colony School in Anakavur show high confidence in competing with matriculation students and English medium students through spoken English. They speak grammatically correct English. The Headmaster, who is teaching English, has taken personal interest to develop a new method of larning through Tamil, Mother Language. He prepared a course book – bi-lingual and teaches the students through proper pronounciation. It is a continuous effort of last three years. The district administration has recognized the impact of such initiative and would like to scale it up through printing the course material developed by the school headmaster and distribute it to other schools. It is a self learning material.

In Vembakkam, technology based education is introduced by establishing computer facilities with learning materials through CDs. These CDs are introduced in 900 middle schools to improve the quality of the students.

Hostel Facilities

The hostel facilities are made available for different communities to access the education services for the school going children. There are 49 hostels for both boys and girls from SC and ST communities, 33 hostels for most backward communities, and 14 hostels for back ward communities in which 2516 students are staying which includes both boys and girls.

Table 5.14: Hostel Facilities-2013-14

Blockwise/District	Hostel Facilities			
	No of schools (Hr + Hr.Sec)	Total Students	No of students in hostels	% of students stay in hostels
Tiruvannamalai	17	18087	503	2.78
Kilpennathur	13	9728	347	3.57
Thurinjapuram	23	7702	110	1.43
Polur	15	12046	110	0.91
Kalasapakkam	16	6391	105	1.64
Chetpet	18	11759	110	0.94
Chengam	13	9622	232	2.41
Pudupalayam	14	6761	100	1.48
Thandrampet	23	9844	165	1.68
Jawadhu Hills	3	519	0	0.00
Cheyyar	16	11589	245	2.11
Anakkavur	12	4185	0	0.00
Vembakkam	17	10926	0	0.00
Vandavasi	17	11185	287	2.57
Thellar	18	5918	109	1.84
Peranamallur	16	6362	220	3.46
Arni	31	5234	100	1.91
West Arni	13	12046	55	0.46
District	295	159904	2798	1.75

Source: DBC Welfare Officer, Tiruvannamalai

This is one of the important services provided by the district administration to encourage the students from poor families to continue their studies. Out of 1,59,904 students studying in 295 high and higher secondary schools, only 1.75 percent of the students availed hostel facilities. In three blocks – Jawadhu Hills, Anakkavur and Vembakkam none of the students availed hostel facilities, which might be due to lack of facilities, poor condition and lack of interest among the students. But in remote places, such as Jawadhu Hills there is need for more facilities, both for students and teachers to encourage them, so that the teachers will be able to effectively use their time in teaching the children.

There are some special schools which are functioning for the children who are differently abled in the district and to provide opportunities for those children to access the education. There is one Govt. Music School with 45 students and seven teachers; one school for deaf with 212 students and 26 teachers and one speech and hearing impaired functioning in the district, as per the statistical handbook of the district.

Higher Education

In Tiruvannamalai district, there are 20 arts and science colleges which includes Government, Government aided and private institutions in which 15,830 students are studying. In eight engineering colleges, about 13300 students are studying which is almost equivalent to the students in arts and science colleges. It shows that the access to professional education in addition to the arts and science is available for the students after schooling.

Figure 5.1: Arts and Science Colleges -2013-14
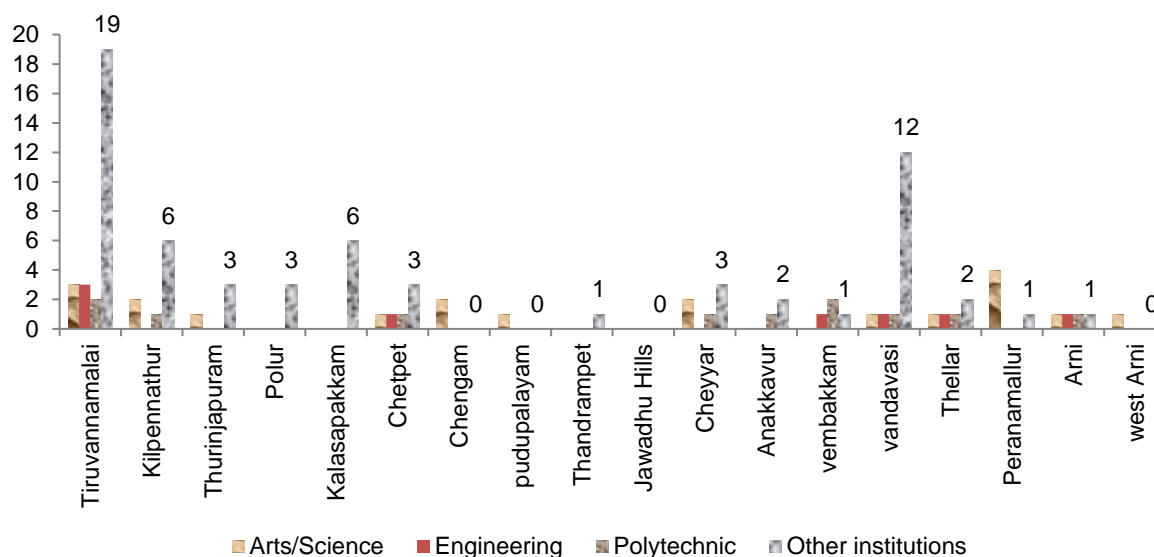
Source: DD (Statistics) 2013, District Statistical Handbook

There are 11 poly-technic institutions that offer diploma education in which 9949 students are studying who also have opportunities to get into engineering education as lateral entries or they have access for getting into self employment. In addition there are 63 other institutions in which 6863 students are studying in the district. Though there are number of education institutions, the quality of education, and employability of the students need attention to address the backwardness of the district.

Conclusion

The literacy rate in the district in general and gender wise in particular is progressing well. Particularly the female literacy and girls enrolment is in a positive trend. Growth rate of female literacy is found to be higher than the male in almost all the blocks and overall in the district. Most of the urbanized blocks perform well in the literacy rates. Gross enrolment is more than 100 percent in all blocks at the primary level, but upper primary, higher and higher secondary level needs attention. Jawadhu Hills needs special attention with regard to drop out, completion rate, transition rates and access to schooling. In most of the schools infrastructure particularly

toilet facilities are found to be an issue in both the boys' and girls' schools.

Though there are good number of arts and science colleges and professional colleges, one needs to study the access for rural children for higher education. There are a good number of polytechnic institutes present, but again access, employability and access to further study in the engineering colleges need to be studied.

The pupil-teacher ratio seems to be good compared to the State and the nation, but still one needs to study lot for its connectivity with the basic infrastructure facility which might in turn cause drop out or non-enrolment of children in the schools.

Hostel facilities are made available for different communities to ensure continuity of the education by the children from poor families. However one needs to understand whether all the eligible students have got access for residential facilities.

CHAPTER 6
GENDER

6. Gender

Introduction

Gender parity can be defined in terms of human rights specifically women's rights, economic growth of the women, opportunities and protection against crime. Hence, promoting gender equality is considered as a back up to greater prosperity. The current chapter attempts to glance at the degree of disparity in status of women in Tiruvannamalai district, access and control over resources, trend in female employment in different sectors, trend in political participation and analysis of outcome of gender inequality index across the blocks of Tiruvannamalai District. The study uses data from census 2011 and 2001, different line departments of Tiruvannamalai District through the District Planning Cell.

Status of Women

Gender inequality defines to the uneven handling of individuals depends on their gender. It arises from diversity in socially built gender role as well as biological differences. Gender differences are persisting in Tiruvannamalai district in terms of female literacy and the percentage of women in non-agricultural sector. The total number of women population in Tiruvannamalai district is 12,28,986 and the male population is 12,35,889. It shows 49.85 percent of the female population in total district population as of the 2011 census. District level general sex ratio is 994, slightly less than that of State's general sex ratio 996 for the same period.

Female literacy rate, 63.37 percent which is lesser than the male literacy rate of 80.74 percent. There is a gender inequality in the literacy rate of Tiruvannamalai, which is higher than the State (73.4 and 86.77) and female literacy is lower than the State. While comparing the literacy gap between district and State, it shows higher than the State. Particularly in Jawadhu Hills, the female literacy rate is 32.86 percent which contributes for high gender gap and lower female literacy in the district. It is nearly twofold lower than that of State female literacy rate of the district. The female literacy rate in the district is the need of the hour to address the issue of female empowerment. In 2012-13, the girls' gross enrolment in primary education is 100.24, which is equal with the boys'enrolment.

Table 6.1: Status of Women

Sl. No.	Particulars	District
1	Female	12,28,986
2	Percentage in Total population	49.85
3	Sex-ratio	994

Sl. No.	Particulars	District
4	Female literacy rate	63.37
5	School enrollment	100.24
6	MMR	60
7	Percent of women working in agriculture sector	78.98
8	Percent of women in non-Agri. Sector	20.90

Source: Census 2011, Health and Education Department.

MMR for the district is 60 which are lower than that of the State. The percentage of women's participation in the agricultural sector is 78.98 percent and in the non agricultural sector is 20.90 percent as of 2011 census.

Child Marriage

In the district, the IMR and MMR data is not getting recorded due to local cultural reasons in remote blocks particularly Jawadhu Hills, Chengam, Thandrampet and Arni. There is a prevalence of child marriage/early marriage in the district with minimum 25 -30 cases out of 300 marriages in a year. There is a monitoring system established by the district administration to prevent it. The causes for child marriage are migration by the parents leaving the children at home leads to insecurity for the girl children, hence child marriage is happening with security perspective, where as in Arni most of the parents migrate for business and employment purpose and not interested to leave their children at home, hence the practice of child marriages is there in Thandrampet and Arni. In Jawadhu Hills due to lack of education, mass marriage system is practiced. There is a unique cultural and behavioral practices in selecting the girls by boys leads to polygamy and infection of girls/boys with HIV/AIDS. The early marriage also leads to giving birth of differently abled children with deaf and dumb or mentallly retarded, which in turn aggravates the situation into abandoning of such children. Early pregnancy leads to abortion or death of the mother or still birth of the children. The district administration has taken initiative of creating homes for girl children and encouraging their schooling with all necessary support for their stay, food, and education. The district administration also conducts series of awareness programmes among the village people about the consequences of girl child marriages. The marriage assistance schemes are well implemented in the district to encourage girl children education and prevent the girl child marriages. Low female literacy is one of the critical reasons for high IMR and MMR in backward blocks. Stopped breast feeding and application of oil into the eyes and ears (practice is prevailing particularly in Chengam) lead to IMR in remote areas.

Box 6.1: Status of Gender Inequality Index in the district

GII measures the human development performance in terms of gender gaps and it is considered as a negative index. In such case, lower is the index value (closer to 0) better is performance of human development with low in gender gaps. Gender Inequality Index (GII) is a measure to assess the gender gaps against the human development variables.

The GII is constructed for 18 blocks and the values of the blocks in the district vary from 0.01 to 0.11. Peranamallur block performs the best and Jawadhu hills performs the worst. The other blocks which show low GII are Thandrampet, Cheyyar and Vembakkam, where as the other blocks with high GII are Vandavasi, Chetpet, and Pudhupalayam. Despite the urban characteristics Tiruvannamalai ranks 10th high GII, it shows that there are high gender gaps.

Figure 6.1: Gender Inequality Index in Tiruvannamalai
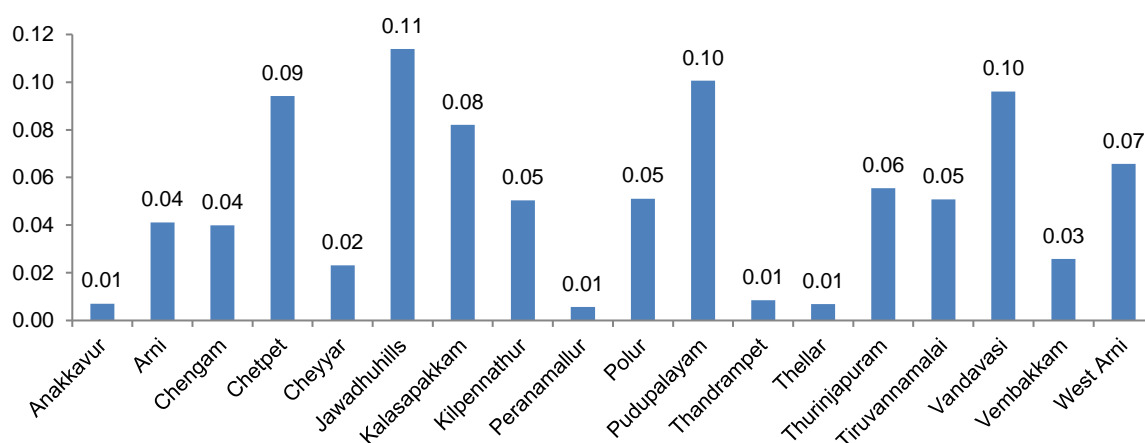
Source: Computation of indices of departmental data and Census 2011

The district shows a clear distinction between the blocks having urban characteristics and the blocks which are intense with agriculture operations in its GII index value. From the analysis the gender gap is low in agriculture based blocks and the gap is high in urbanized blocks is observed. In the district it is found that the high MMR, low female literacy in around 12 blocks (below 60%) and disparity in wage rates between female and male and huge gender gap in literacy rates are the contributing factors for GII in the district, which needs greater attention.

Access and Control over Resources

Women's access and control over financial resources is fundamental for the success of gender equality. It reveals realistic growth of the family/block as well as the district. Gender equality in the allocation of resources has positive proposals for human development with poverty reduction. Subsequent to the access of self-help group concept, the micro level efficient access and control over resource of women draw closer. The status of self-help groups, access and control over resources, in Tiruvannamalai district, by the women are in detail.

Box 6.2: Self Help Groups in Tiruvannamalai

Self help groups were proven to be the best vehicle for organizing poor, particularly women to address micro credit needs, gender issues and social issues. It is one of the effective low cost development interventions which can be simultaneously used for poverty reduction, women empowerment and empowerment of vulnerable social groups. Due to its proven success, State Government has been promoting it for more than a decade and most of the State projects were implemented through them. Many development organizations either with or without the support of State has been promoting SHGs for various related objectives. As SHGs contribute significantly to human development, it is important to look into their status in the district. As data were available for only financial support provided through SHGs, it is only presented.

Total number of SHGs running in the district, in the year 2011, was 13480 with 194233 members. Average member size in the SHG is 14. As of 2011, the credit availed by the SHG, 13618.6 Lakhs with an average of 1.01 Lakhs per SHG. In the urban area the highest number of SHG's was observed in the block of Tiruvannamalai (1607) followed by Chengam (1208) and Polur (1082). On the other hand, the lowest numbers of SHG's were noticed in the block of Thurinjiapuram (200), Kilpennathur (202) and Chetpet (282). Linkage performance was particularly good in Thurinjiapuram followed by West Arni.

Figure 6.2: SHG status of the District, 2013-14
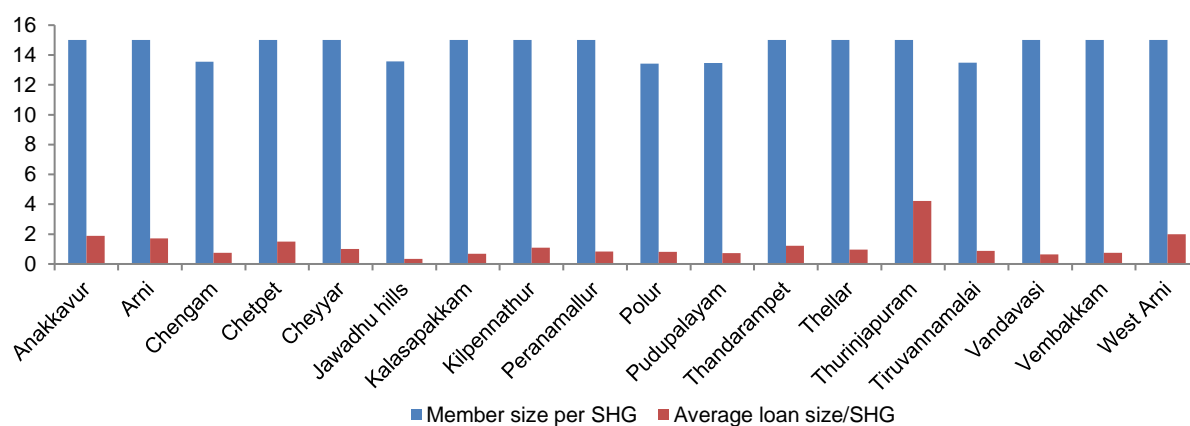
Source: Tamil Nadu Women Development Corporation

During the year 2011-12, the Pudhu Vazhvu Project has facilitated the SHGs in Chengam, Pudupalayam and Tiruvannamalai in accessing credit services for an amount of Rs 292.65 lakhs for initiating economic activities such as dairy, brick making, garment making and sheep rearing. The SHGs support the women in taking up many farm based and nonfarm based economic activities through grants and loans facilitated from banks.

Employment

Economic participation of women is the foundation for all other forms of empowerment.

Women participation is essential to reduce dependency, besides addressing the family economic needs. During the last decade, women's participation has increased from 38.72percent to 40.32 percent. The net increase in participation is 1.60. While looking at the absolute figures, women's participation in the district has increased by 93,933, which accounts for 23.18 percent (growth rate). The growth rate is significant and the trend has to be maintained. The male female participation ratio is 1: 0.68 in 2011, whereas in 2001 the ratio was 1: 0.63 that shows there is not much change when compare to the total population. The growth rate of male workers participation for the same period with regard to the absolute number (73,317) is 15.21percent. The ratios and figures clearly indicate that the growth rate of female is higher than the growth rate male in work participation.

The economic participation of women in urban areas is comparatively lower than women in rural areas. The gap between male and female work participation is very wide in urban areas. The difference between male and female participation rate in urban areas is 36.20, which indicates the necessity of investing more to promote women work participation. In rural areas, women participate in unskilled works like a mason, Agri coolie etc. Moreover, such employments are available within their village or in nearby villages. Such opportunities are very feeble in urban areas.

Figure 6.3: Female Employment in Different Sectors
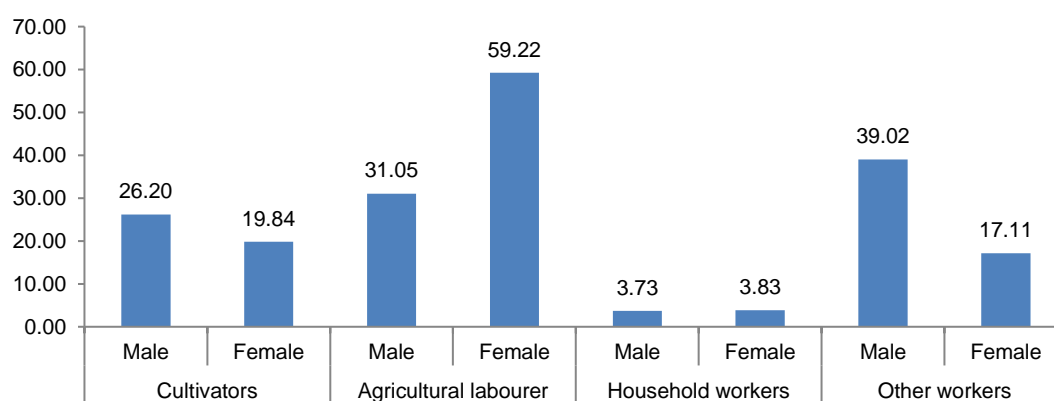
Source : Census 2011

Participation of female agricultural workers is higher than that of male agricultural workers. In which, female agricultural labourers, 59.22 percent is nearly two folds higher than that of male agricultural laborers, 31.05 percent. It shows that the female workers in Tiruvannamalai district are socially and economically vulnerable. In case of cultivators, female cultivators, 19.84 percent, is lower than that of male cultivators, 26.20 percent. In case of non-agricultural sector, male and female household industrial workers are equal and male other workers are higher than that of

female other workers. By seeing overall worker composition, female contribution is higher as agricultural labourers compare to male workers as other workers.

Figure 6.4: Female Work Participation Rate in Blocks
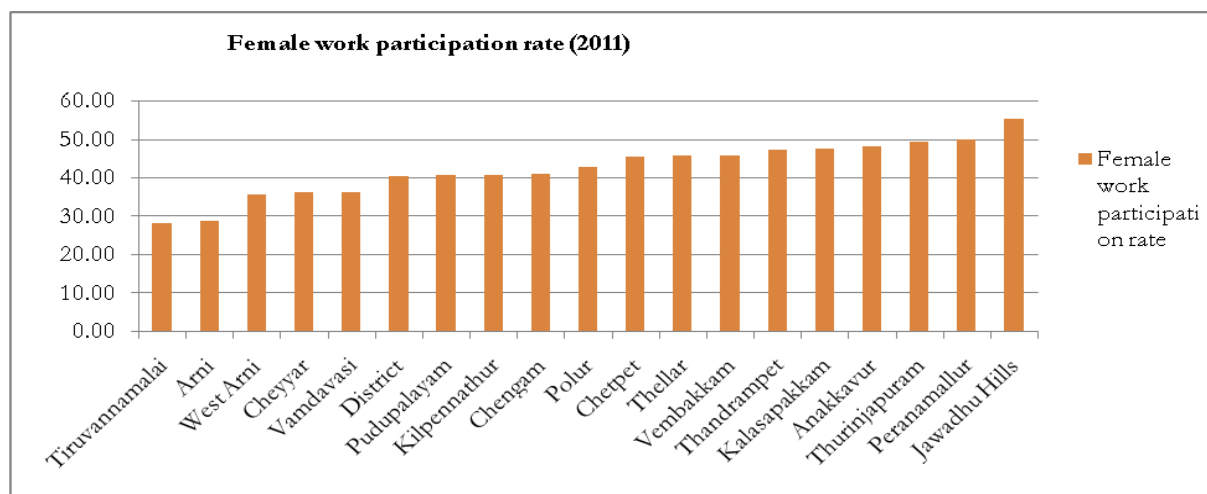
Source: Census 2011

Among the 18 blocks the female work participation rate is very high in Jawadhu Hills and it is observed that except urbanized blocks in all the blocks the work participation rate is high, as they fall in the agricultural belt.

Trends in Political Participation

In all the blocks more than 35% of women participation in local bodies is observed. Inter – block disparity ranges from Peranamallur (45.98 percent) to the Jawadhu hill (36.84 percent).

Table 6.2: Membership in Assembly, Local Bodies, 2011

Sl. No.	Membership of women in State Assembly and Local Body	Number of Male	Number of Female	Total	Percent of female participation
1	Anakkavur	41	30	71	42.25
2	Arni	57	37	94	39.36
3	Chengam	53	36	89	40.45
4	Chetpet	50	37	87	42.53
5	Cheyyar	58	43	101	42.57
6	Jawadhu hills	12	7	19	36.84
7	Kalasapakkam	41	28	69	40.58
8	Kilpennathur	59	39	98	39.80
9	Peranamallur	47	40	87	45.98
10	Polur	63	38	101	37.62
11	Pudupalayam	40	27	67	40.30

Sl. No.	Membership of women in State Assembly and Local Body	Number of Male	Number of Female	Total	Percent of female participation
12	Thandarampet	48	30	78	38.46
13	Thellar	57	38	95	40.00
14	Thurinjapuram	41	28	69	40.58
15	Tiruvannamalai	84	55	139	39.57
16	Vandavasi	64	43	107	40.19
17	Vembakkam	55	33	88	37.50
18	West Arni	43	30	73	41.10
	District	**913**	**619**	**1532**	**1532**

Source: RD department, Tiruvannamalai

Conclusion

Female literacy rate, 65.30 percent, is lower than the male literacy rate of 83.10 percent. There is a gender inequality in the literacy rate of Tiruvannamalai, which is higher than the State (73.4 and 86.77) and female literacy is lower than the State. While comparing the literacy gap between district and State, it shows higher than the State. Focus for Female literacy has to be given in Pudhupalayam, Thandrampet, Chengam, Kalasapakkam and particularly in Jawadhu Hills, where the female literacy rate is 32.86 percent which contributes for high gender gap and lower female literacy in the district. It is nearly twofold lower than that of State female literacy rate of the district. The female literacy rate in the district is the need of the hour to address the issue of female empowerment.

Participation of female agricultural workers is higher than that of male agricultural workers. In which, female agricultural labourers, 59.22 percent is nearly two folds higher than that of male agricultural labourers, 31.05 percent. It shows female workers in Tiruvannamalai district is socially and economically vulnerable.

Overall in the district it is found that the high MMR, disparity in wage rates between female and male and huge gender gap in literacy rates are the contributing factors for GII in the district, which needs greater attention.

CHAPTER 7

SOCIAL SECURITY

7. Social Security

Introduction

In a country like India, with vast sections of the population surviving at subsistence levels, social security and social safety nets are very crucial. The issues pertaining to social security assume overwhelming importance, especially in the context of the new economic policy regime of market-driven growth, initiated in India in mid-1991. Social security in Tamil Nadu has been mostly at two levels such as nutrition and some assistance schemes for the unorganized poor[1]. India has a very basic social security system catering to a fairly small percentage of the country's workforce. Traditionally, Indians relied on their extended families for support in the event of illness or other misfortunes. But now-a-days there is no joint family system and most of the aged people are left alone/abondaonded by their family members. Growing old age homes are the sign of growing population of elderly people. Other socially vulnerable groups looking for the support are abandoned children, differently-abled, child labour, children/adults affected by HIV/AIDS, destitute and women headed poor families. The Government of Tamil Nadu is implementing the following Pension schemes, through Revenue Department, to provide social security for the old aged / destitute persons in the State who neither have any means of subsistence nor any relative to support them. The concept of Social Security is usually referred to the action programs of Government intended to promote the welfare of the population through assistance measures for food and shelter and to promote health and well-being of the population at large and potentially vulnerable segments such as children, the elderly, the sick and the unemployed. As a welfare country, every State has the responsibility of supporting and securing the lives and livelihoods of the poor and marginalized communities in the State. The State alone implements different welfare schemes and also implements the Centrally-sponsored social security schemes for the needy.

The present chapter deals with the ageing profile of Tiruvannamalai, financial security for the aged poor and old age pension schemes for the elderly, crime against women, maternity assistance to women and other social benefits for the marginalized communities.

Demographic profile of the Aged

As per the State Human Development Report of Tamil Nadu, 2003, the proportion of 60 and above elderly population including both males and females to the total population with age 15-59, as per 1991 census in Tamil Nadu was 7.4 percent. Tiruvannamalai had male and female, 7.71 percent to the total population. The census 2001 data shows that the district had 214,386

number of 60 plus elderly population which accounts for 9.81 percent including both males and females. The trend shows that every decade the elderly population increases by about two points percentage.

Table 7.1: Demographic profile of aged

District/ State	Total population	Male	Female	Total population	Male	Female
	Numbers			Share of total population		
District	259,118	126,559	132,559	10.51	10.24	10.79
State	72147030	36137975	36009055	10.41	10.13	10.69

Source: Census 2001.

The State Government defines the elderly people as "Senior Citizens" and provide them financial security, healthcare services, concessions and specific facilities, shelter and welfare measures to protect their life by ensuring safety and security. The increasing elderly population creates financial stress and pressure to protect the life of them. Most of the ageing population, particularly women are not in the organized sector, having low literacy rate and engaged as marginal workers lead further more burden on the State to respond. The State implements various schemes for elderly people are National Old Age pension for 65 and above category being shared, equally by both State and Central. Other benefits such as concessions in train fares, tax exemptions etc are provided.

Table 7.2: Demographic Profile

Category	Tiruvannamalai			Tamil Nadu		
	Persons	Male	Female	Persons	Male	Female
No.of aged people						
60-64	93070	45574	47496	2782608	1378039	1404569
65-69	64865	30697	34168	1868370	896412	971958
70-74	50102	24667	25435	1406529	693167	713362
75-79	24993	12855	12138	710241	353746	356495
80+	26088	12766	13322	742010	339862	402148
Total	261074	127538	133536	7509758	3661226	3848532
Proportion to Total Population						
60-64	3.8	3.7	3.9	3.9	3.8	3.9
65-69	2.6	2.5	2.8	2.6	2.5	2.7
70-74	2.0	2.0	2.1	1.9	1.9	2.0
75-79	1.0	1.0	1.0	1.0	1.0	1.0
80+	1.1	1.0	1.1	1.0	0.9	1.1
Total	10.6	10.3	10.9	10.4	10.1	10.7

Source: Census 2011

As per 2011 Census, the total aged population in Tiruvannamalai district is 261074 which is 10.6% of the total population of the district. It is observed that the female population is higher than the male age old in the district, whereas it is also same in the case of Tamil Nadu, that indicates that the elderly female lives longer than the male at the State level which is the same in the district too. With respect to age wise category of the age old, 3.8 % of the total population of the district fall under 60-64 category, followed by 2.6 % by 65-69 category and 1% of the 75-79 and 80+ category. The trend is also same at State level for all the age group expect 75-79 category where the State average is high when compared to that of the district. The share of elderly aged of the district is almost close to the State.

The proportion of aged population to the total population in the district is 10.6, which constitutes about 10.3 percent and 10.9 percent of male and female population respectively in 2011. The aged population in the district is comparatively higher than that of the State.

Financial assistance to old age people

Considering the longevity of life, the population at the age of 60 or above is considered as ageing in India. Taking care of this ageing population is taken as the moral responsibility of the respective family members and the society. But given the socioeconomic limitations of the family or society, the role of the Government as a welfare State to protect the ageing population is very important. The higher longevity of life does not ensure the healthy life, especially of an ageing population. In today's context due to urbanization and nuclear family, many old people are left behind who are suffering for financial and moral support. Though the ageing of the population is an obvious consequence of the progress of demographic transition, it has brought to the core of the financial insecurity among the aged.

Table 7.3: Taluk Wise Financial Assistance to Old Age People (2013-14)

Sl. No.	Taluk	OAP	Destitute widows	Differently Abled Persons
1	Tiruvanamalai	7732	10901	1558
2	Chengam	4719	4812	858
3	Thandarampattu	2750	3496	473
4	Polur	5543	9632	1181
5	Kalasapakkam	2739	4380	611
6	Arni	6342	10097	932
7	Cheyyar	6675	4485	1413
8	Vandavasi	7656	6542	1600
	Total	**44156**	**54345**	**8626**

Source: PA (Gen) Deputy Collectors (SSS).

Table:7.2 shows about the financial assistance provided to 44,156 of old age people followed by 54,345 destitute widows and 8626 disabled persons during the year. During the year 2011-12, 170500 persons were given with the assistance of Old Age Pension. Among different categories, destitute women and old age people are more in numbers assisted with the pension by the district.

Table 7.4: Financial Assistance to Old Age People-2013-14

Sl. No.	Category	Number of People Assisted
1	OAP	42431
2	Differently-abled	7175
3	Destitute widows	71308
4	Agricultural labourers	35382
5	Destitute Deserted wives	12986
6	IGN Widow pension scheme	13056
7	IGN Deserted widow pension scheme	487
8	Unmarried women	468
Total		**183293**

Source: District Revenue Office, DSHB, Tiruvannamalai

The SHDR - 2003, of Tami lNadu reveals that the number of OAP beneficiaries was high in Tiruvannamalai district which is higher than the State average by 20 percent and more, and also the poverty level is closer to the State average. The reason stated was that the destitution criteria enabled the elderly below poverty line to access OAP. It is also stated in the SHDR that the district had higher elderly Work Participation Rates than State average and the inference drawn was that the wages earned led to subsistence level of living which was highly correlated with high level of poverty in Tiruvannamalai district with 32.18 percent.

As per the data given destitute widows have received more assistance followed by OAP and agricultural labourers. In total 1,83,293 people were assistance through various schemes in the district. As per the Social Welfare Department in the district, there are seven old age homes are being run in the district of which three are assisted by the State and Central in which the old age population registered is in increasing trend.

The district administration also implements other relief measure and pension schemes such as Nalinthor Nalathittam, Freedom fighter pension scheme, Chief Minister's Relief Fund, Mozhikavalar Pension Scheme, Nalintha Kazhaignar Pension Schemes for the needy people.

Differently Abled

Disability, as one of the important form of vulnerability, is assumed to have multiple dimensions, including physical, psychological, poverty, gender and contexts such as rural and urban. More than twenty four different schemes are being implemented for the welfare of the disabled called as the differently abled population at different levels in the district. The following are the important among them in terms of the volume of fund allocation: (i) maintenance allowance for severely disabled or mentally retarded persons; (ii) scholarship for the physically handicapped students; (iii) free bus pass; (iv) marriage assistance to persons marrying orthopedically handicapped persons; and (v) self-employed subsidy.

Table 7.5: Differently abled persons in different categories

Details	Total number of disabled persons			In seeing	In Hearing	In Speech	In Movement	Mental Retardation	Mental Illness	Any Other	Multiple Disability
	Persons	Males	Females	Persons	Persons	Persons	Persons	Persons	Persons	Persons	Persons
Numbers	38172	21400	16772	4524	6080	3373	9790	3374	860	6838	3333
Percentage	-			11.85	15.93	8.84	25.65	8.84	2.25	17.91	8.73

Source: Census 2011

The total population of the district is 2,464,875 in 2011, out of 38172 persons are differently abled, which shows, nearly 1.55 percent of the total population are differently abled.

Table 7.6: Differently abled beneficiaries

Sl. No.	Block	No. of beneficiaries
1	Anakkavoor	1265
2	Arni	1223
3	Chengam	995
4	Chetpet	1121
5	Cheyyar	1572
6	Jamunamarathur	576
7	Polur	1279
8	Kalasapakkam	642
9	West Arni	1548
10	Kilpennathur	1916
11	Peranamallur	1510
12	Pudupalayam	1201
13	Thandrampet	497
14	Thellar	1598
15	Thurinjapuram	1059
16	Tiruvannamalai	1793
17	Vandavasi	1747
18	Vembakkam	1231
Total		**22773**

Source: District Differently-abled Welfare Office, Tiruvannamalai, 2013.

Table 7.6 shows that 22773 disabled persons are identified for assistance and extended the support of the district administration in 2013. There are 38,172 differently abled people live in the district. The highest number of disabled is found to be in Tiruvannamalai block (4378) followed by Chengam and Polur. Regarding the beneficiaries Kilpenathur (1916) has the highest number of beneficiaries followed by Thriuvannamalai (1793) and Vandavasi (1747). The district administration assists them through different schemes for their survival and livelihoods.

Box 7.1: Marriage and Maternity Assistance Programme

The eligibility criteria for accessing Marriage Assistance is that the annual income of the beneficiary family should not exceed Rs 72,000 (06.09.2013 as per Govt rule) and the age of the girl is 18 and above. Only one girl per family will be assisted. According to the level of education, the grant assistance is provided as 10th and 12th pass will get Rs 25,000 plus 4 grams gold coin, graduates and post graduates would be given Rs 50,000 plus 4 grams gold coin, where as for tribal communities the education upto 5th is the eligibility criteria.

Table 7.7: Marriage and maternity Assistance provided to women – 2013-14

Sl. No.	Category Marriage Assistance	No. of women assisted
1	Moovalur Ramamirdham Ninaivu Thirmana Thittam	5000
2	EVR Maniammai Ninaivu Widow's daughters Thirumana Thittam	289
3	Annai Theresa Destitute girls Thirumana Thittam	72
4	Dr.Dharmambal widow remarriage Thittam	6
5	Dr.Muthu lakshmi reddy ninaivu inter caste marriage thittam	79
	Total	**5446**

Source: Social Welfare Department, Tiruvannamalai

Totally 5446 women are given financial assistance for marriage, out of which 5000 are benefitted under Moovalur Ramamirdham Ninaivu Thirmana Thittam.

In Tamil Nadu, every year about 11.0 lakhs deliveries are occurring in Rural & Urban areas. 99.8percent deliveries are institutional deliveries. Out of which 67percent of the deliveries are conducted in Government institutions. In Thiruvanamalai, the district data shows that 100percent institutional deliveries are happening, the implementation of the maternity assistance scheme by the Government may also be one of the main reasons to attain hundred percent institutional deliveries in Thiruvanamalai. The State Government has introduced Dr. Muthulakshmi Reddy Maternity Benefit Scheme where benefit fund is enhanced to Rs.12,000/- per child. This financial assistance is given in three installments which is restricted for two deliveries.

Under Maternity assistance totally 23468 women are benefitted through this programme, out of which highest number of (2319) women are benefitted in Thandrampet, block followed by Thiruvanamalai (2033) block, whereas Jawadhu Hills has recorded only 668 in numbers. This has to be taken into concern and data verification has to be done in Jawadhu hills.

Crime against Women

Crimes such as murder, robbery and theft are not only considered as the legal violation of human rights but also the extreme obstacles of human development. Crimes against women are of various types as crimes involving sex for economic gains, including prostitution, kidnapping and abduction keeping of brothel seduction, wrongful confinement, trafficking, dowry extortion, murder etc.

Table 7.8: Crime against Women in Year 2013-14

Sl. No.	Category	Number of cases registered
1	Rape (Sec 376 IPC)	21
2	Attempt to rape (Sec 376,511, IPC	6
3	Molestation (Sec.354 IPC)	19
4	Kidnapping (Sec.363 to366 IPC)	36
5	Sec.4 of women Harassment	48
6	Sec.4 of Dowry prohibition Act	18
7	Cruelty by Husband	24
Total		**172**

Source: District Police Office.

Overall 172 cases are registered among which women harassment is 48 cases followed by kidnapping 36 cases in the district during 2011. In 2011-12, there are more than 7000 cases, of which 2594 cases are cognizable under IPC as per the District Police Head Office. There are also three dowry deaths and 114 harassments are registered at the police station during the year 2013-14. It shows that every year the crime against common man and women particularly is increasing trend which needs special attention.

The district administration has taken some initiatives through Social Welfare Office on addressing issues such as dowry harassment through counseling without reporting to police station or courts, creation of awareness about the functioning of Social Welfare Office and its role in the district among public, running and supporting old age care centres, addressing domestic issues through counseling, attending rape cases which are not reported or recorded through confidential process, and preventing child marriages which are found to be more in Thandrampet, Vandavasi, Arni and Chengam through awareness creation and stopping the marriage arrangements, if found in the places through well established systems. The Social Welfare Office also supports orphanages run by NGOs and Government and provides employment opportunities on tailoring particularly for widows.

Conclusion

There are a lot of issues and cases unregistered in the district. The issues pertaining to dowry harassment, child marriages, abandoning of old age people, rape cases and domestic violence need greater efforts to address them and prevent them. The district administration takes lot of efforts, but the challenge is unregistered cases are many to be dealt with. Maternity and marriage assistance schemes are successfully implemented in the district to prevent the child marriages which indirectly encourages girl children education. Now on-line registration is introduced to ensure the reach of benefits to the need directly. There are homes run by NGOs and the Government for old age people, orphan children particularly girls and destitute. The district is characterized by socially vulnerable communities in most of the blocks particularly the remote blocks even in the urbanized centres, other NGOs and volunteers need to be involved to address the intensity of the problem. The Government implemented schemes to be reached to the poor. Focus to be given for the backward blocks. These benefits have to be availed by the concerned persons in right time, which will give physical as well as mental support for the needy. Access to these schemes can be made simpler and sanctioning can be made promptly.

CHAPTER 8

INFRASTRUCTURE

8. Infrastructure

Introduction

Infrastructure plays an important role in human development. The infrastructure can be either private like a house or public in nature. Major public infrastructural facilities are road and telecommunication, electrification, Public Distribution System and banking services. Social infrastructure like self help groups (SHG) also plays a crucial role in achieving human development through building social capital and taking up economic activities. Mobility of the people across the areas is increased for improving their economic condition due to improved infrastructure facilities such as roads and communication. Infrastructure plays a crucial role in ensuring the reach of Government services to the needy people in remote areas, better marketing of the products, easy access to communication, bettering the education status and more importantly provides opportunities for the people to make informed choices with regard to employment, education, health and other basic services. This chapter focuses on the status of different types of infrastructure and their role (road, railways, electricity, transport and communication) in the economic development which has a direct impact or implication on human development.

Roads

The analysis of block wise road infrastructure indicates that there is greater disparity among the blocks of Tiruvanamalai district in the case of road infrastructure. The block of Thandrampet had the highest length of mud road (192.54 sq.km) followed by Kalasapakkam, Thurinjapuram and Polur. Lowest road infrastructure among all the block is Jawadhu Hills, which seems to have poor access to road facilities as it is a hilly block and it has less access to bituminous road where the length is very low (56 sq.km). In addition to this, the blocks of Thandrampet and Pudupalayam also exhibited a low level of road infrastructure. Water Bound Macadam (WBM) road length was higher in Tiruvanamalai 125.20 km and lower in Vembakkan (17.69 km). When looking at Cement concrete (CC) road length, Kalasapakkam had the highest road length followed by Polur and Thurinjapuram.

The given table shows that Thiruvannamali seems to have better access of road infrastructure and specific focus needs to be given to improve road infrastructure in Polur and Jawadhu Hills.

Table 8.1: Distribution of Total Road Length (in km)-2013-14

Sl. No.	Name of the Block	No of roads	Mud	WBM	BT	CC	Total
1	Tiruvannamalai	518	151.696	127.513	250.127	4.110	533.446
2	Kilpennathur	283	72.252	73.455	132.081	5.654	283.442
3	Thurinjapuram	321	75.488	84.915	188.353	17.213	365.969
4	Polur	327	117.392	45.779	169.211	25.857	358.239
5	Kalasapakkam	358	135.595	64.98	159.550	32.830	392.955
6	Chetpet	282	119.710	62.599	135.524	9.399	327.232
7	Chengam	297	89.460	96.755	238.610	3.520	428.345
8	Pudupalayam	212	74.190	93.75	150.810	0.000	318.750
9	Thandarampattu	312	240.995	25.51	263.895	0.070	530.470
10	Jawadhu Hills	97	61.123	1.78	56.758	8.742	128.403
11	Cheyyar	174	29.844	36.339	160.391	6.601	233.175
12	Anakkavoor	248	98.475	23.34	137.885	14.960	274.660
13	Vembakkam	163	30.040	16.15	164.885	8.175	219.250
14	Vandavasi	203	82.320	15.315	150.827	12.246	260.708
15	Thellar	179	81.324	34.75	161.140	1.200	278.414
16	Peranamallur	288	106.808	28.892	190.608	10.804	337.112
17	Arni	210	89.628	36.137	106.522	8.350	240.637
18	West Arni	220	85.680	23.225	139.137	9.037	257.079
	Total	**4692**	**1742.02**	**891.184**	**2956.314**	**178.768**	**5768.286**

Source: DRDA, EE Highways, Tiruvannamalai

The total road length in the district is 5768 kms in 51 percent of them covered by Bituminous roads followed by mud road of 30 percent and Cement concrete road covers the least of 3.09 percent and WBM occupies 15.4 percent of the road. But the district data doesn't show Saralai types of road which is commonly seen in villages.

The district administration has taken initiatives to benefit the villages which do not have road access otherwise. During the year 2013-14, eight new routes were introduced which benefitted 36 new villages and 48,000 village people got benefitted by adding 22 new buses. As on date, the district has 261 routes and 4692 roads with the length of 5768.286 kms. This would have greater impact on people by enhancing their mobility.

Electricity

Lack of electrification is also an indicator of various dimensions of poverty as it is negatively influencing the current living condition of the households and also the future well being of the people through hampering education of the children.

As per District Human Development Report of Tiruvanamalai in 2007, 69 percent of the total villages in the district of Tiruvannamalai was electrified and another 14 villages in this district need to be electrified to achieve the 100 per cent electrification of the villages in Tiruvanamalai.

Table 8.2: Status of Electrification-2013-14

Sl. No.	Block wise	Revenue Village	Population covered	No.of street lights
1	Tiruvannamalai	88	327104	6235
2	Kilpennathur	63	129530	4111
3	Thurinjapuram	60	125202	4800
4	Polur	54	183668	4131
5	Kalasapakkam	49	119702	4035
6	Chetpet	60	110063	3692
7	Chengam	61	170626	4633
8	Pudupalayam	41	100265	2720
9	Thandrampet	62	179553	6363
10	Jawadhuhills	38	50688	1261
11	Cheyyar	67	132220	4241
12	Anakkavur	61	74981	3856
13	Vembakkam	90	130176	5762
14	Vandavasi	69	148392	5008
15	Thellar	68	96453	5361
16	Peranamallur	67	91276	3538
17	Arni	28	178593	4712
18	West Arni	26	116383	4230

Source: District Electricity Board, Tiruvannamalai.

The electrification is found to be better in all the blocks. The coverage of population per street light is found to be better in Thellar (17.99percent) and Anakkavur (19.45 percent). Tiruvanamalai seems to be focused by providing adequate street facilities as the coverage of population is 52 per street light. followed by Polur and Jawadhu hills with 44 persons and 40 persons respectively. Being the remote village and hill terrain, these two blocks need to be given additional electrification to ensure the benefit for all. The percentage of revenue villages also show better improvement of street lights placed in the villages. Arni and West Arni seem to have more street lights per revenue village benefitting 27 – 37 people per light which is moderate. The district administration has to focus on Jawadhu hills, Peranamallur, Chetpet, Anakkavur, Cheyyar and Vembakkam. In providing adequate street light facilities. So, in general on this front, the district had fared well and with minimum investment it can easily claim to be a 100 per cent electrified district.

Communication system

Communication is an effective tool which has rapidly increased in today's world. Wide usage of the phone has increased the portfolio of trade and business and we could see the development in other sectors. Communication becomes the vital tool in connecting the people for socio-economic reasons.

Table 8.3: Telecommunication

Sl. No.	Taluk wise	No. of Telephone exchanges	No. of pco	No. of land line	No. of HH with connection	Number of Mobile phone towers
1	Tiruvanamalai	13	312	9524	5762	44
2	Chengam	8	218	1677	1022	22
3	Thandarampattu	4	410	913	673	9
4	Polur	7	153	2422	1872	24
5	Kalasapakkam	3	36	435	362	8
6	Arni	9	282	4846	3200	8
7	Cheyyar	9	95	3110	2100	14
8	Vandavasi	9	62	2187	1600	15
	Total	**62**	**1568**	**25114**	**16591**	**144**

Source: DE (Telecomm) 2012-13.

Residential telephone was considered as a household amenity of the affluent a decade earlier. Telephones that way do not stop with serving as a communication device, but go beyond that by serving many other purposes like a tool for livelihood. A decade ago, usage of public booths and office landline services were more, but now usage of cell phones is widely increased in and around the world. Villages are also having this access which has increased the business portfolio also. But as the data could not provide cellular services here we are, looking about the usage of landline connections only. The district data during 2013-14 shows that there are 63 exchanges providing 57,661 numbers of landline connections and equipped with the capacity of 86644 landlines. Taluk wise data shows that, except the Kalasapakkam rest of the 7 taluks showed good progress in communication.

Financial Institutions

Banking services perform a key role in improving the economic condition of the people. It is the main tool for human development in terms of offering credit services with low interest rate and enhances secure livelihood, higher education, and helped in creating employment opportunities among the poor.

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

Table 8.4: Commercial and Cooperative Banks-2013-14

Sl. No.	Block wise	Number of co-operative societies	Number of Members	Commercial Banks	Number of account holders
1	Tiruvanamalai	9	21485	11	175407
2	Kilpennathur	9	34368	6	31437
3	Thurinjapuram	10	29950	10	19303
4	Polur	8	46758	10	25411
5	Kalasapakkam	8	38153	9	23758
6	Chetpet	6	31948	9	88143
7	Chengam	13	46937	6	30412
8	Pudupalayam	7	20441	3	44816
9	Thandrampet	11	39177	8	13353
10	Jawadhuhills	2	13688	4	4893
11	Cheyyar	12	23663	7	36427
12	Anakkavur	7	20302	6	84623
13	Vembakkam	11	31021	4	17960
14	Vandavasi	9	29823	4	19546
15	Thellar	8	22946	9	27853
16	Peranamallur	9	21485	8	7245
17	Arni	8	19415	10	59369
18	West Arni	8	3673	8	31983
	District	155	495233	132	741939

Source: Lead Bank

The district data shows that 155 co-operative societies with 4,95,233 holders and 132 banks are functioning with 7,41,939 account holders. After the introduction of the financial inclusion programme in 2007, there has been a significant increase in households availing bank services in both rural and urban areas of the district.

Tiruvannamalai being a city has the highest number of commercial banks (11) with 1.75 lakhs of account holders exists in the area. Vembakkam, Jawadhu hills, Pudhupalayam and Vandhavasi have lower number of banks but account holders seem to be more. But in the case of Peranamallur block only eight commercial banks exist with minimum number of coverage of

7,245 account holders. On the other hand, the rural-urban disparity in terms of percentage of coverage will be there in availing banking services.

The Reserve Bank of India and National Bank for Agriculture and Rural Development steer the process of financial inclusion through financial literacy, Know Your Customer Services, Opening of No Frill Savings Bank Account, Bio Metric system for secure banking transactions, remittance facilities, simplified documentation procedures for accessing banking services, flexible lending and repayment systems, exclusive bank branches for dealing financial matters with SHGs, Kissan Card System, reaching households in remote areas through banking correspondents and banking facilitators system and encouraging SHG-Bank Linkage through Cash Credit system for easy access of banking services by the poor people. The NGOs are playing critical role to reach of banking services to the poor people.

Insurance

Access to insurance is also one of the risk improvement measures to people especially to the poor. This could be measured by the insurance coverage in terms of number of policies subscribed.

Table 8.5: Insurance Companies

Sl. No.	Name of the companies	No. of branches	Policies Issued(2011)	Policies issued (2013-14)
1	LIC	Tiruvannamalai-1	34,167	19072
	LIC	Polur – 1	11,959	11959
	LIC	Cheyyar -1	21,113	12460
	LIC	Arni -1	12,090	12090
2	PLI (Rural)	468	23,071	13130
3	Oriental Insurance	1	10,560	18373
4	New India Assurance	2	3,35,111	12567

Note: LIC – Life Insurance Corporation of India; PLI – Postal Life Insurance

Source: District Statistical Hand Book -2011.

Insurance plays a major role in protecting livelihoods from sudden and unexpected losses and thereby giving continuity to livelihoods, even after the incidence of accidents and other such situations. It is also an instrument to any individual or business who can use them strategically to protect them from adversities. In the district, the penetration had been poor as depicted by the data given above. The number of policies was nowhere closer to the need. In the district 7 branches were offering insurance services through LIC, Oriental and New India Assurance. Branches of Postal Life Insurance (PLI) seems to be more (468) covering 23,071 policies in 2011

and at present 13,130 policies. The reach of New India Assurance is more in the district in 2011 whereas in 2013-14 policies under LIC is more. Even the number of policies taken does not reflect the reality as many policy holders enrolled in insurance for income tax reasons. As the demand was low, the number of branches was also low. Insurance education is very much essential to improve the dissemination of various insurance products.

Transport Facilities

Tiruvannamalai district came into existence on 30th September 1989 after the bifurcation of the erstwhile North Arcot District. The temple at Tiruvannamalai is one of the biggest and the grandest temples in South India. As it is a temple town, commuting of people is more in the city especially during Girivalam. The number of buses operated in the district is 549 which carry about 326000 passengers every day. There are eight railway stations with broad gauge and meter gauge in the district.

Irrigation sources

There are 1250 minor irrigation tanks in the district of which 1012 are rainfed tanks and remaining are system tanks managed by Public Works Department. They irrigate 24919.53 ha of ayacut areas. 953 tanks are already taken up by PWD for improving the functioning of the tanks.

Sathanur Dam[7]

Sathanur Dam is one of the major dam constructed across Pennaiyar River. The dam can be reached by road 30 km from Tiruvannamalai Town. This Dam was constructed during the year 1958. A large Crocodile farm and a fish grotta is maintained here.

Sathanur Dam is constructed across the Thenpennai River in Chengam Taluk among Chennakesava Hills. It has a capacity of 7321 million cubic feet (Full level 119 feet).   An area of 7183 hec. of Land is benefited by the left bank canal and 905 hec. of land is benefited by the right bank canal in Thandrampet and Tiruvannamalai Blocks. This is one of the best picnic place in the District. A beautiful garden with colorful statues has been developed. This garden is one of the famous cine shooting spot in South India.

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[7] http://www.tiruvannamalai.tn.nic.in/dam.html

Conclusion

On the infrastructure front, the district had fared well in the case of roads and electrification of villages. The district administration needs to be appreciated for improvement in above mentioned public infrastructure. The recent efforts to identify infrastructural needs and planning for the same at the village level through various schemes are a very positive move.

But there were variations across the blocks regarding roads. Specific reasons for the poor performance in the blocks like Jawadhu hill, Polur, and Kalasapakkam can be identified and based on that necessary interventions, need to be planned. With such targeted interventions the district can easily attain appreciable levels of road infrastructure. Poor quality of roads is a widespread problem and it is usually not reported. There should be a system for continuous monitoring of quality of roads and for timely action. As mentioned above the local bodies can be given the responsibility for this task for village roads.

The penetration of banking services, insurance and telephone services to be improved. As far as insurance is concerned much need to be done to make it serve as an important instrument for poverty reduction in various spheres of life and thereby making it significantly contribute to human development. Intensive insurance education needs to be given with the specific focus to rural areas along with designing suitable insurance products for various sections of the population. The banks should take necessary steps to reach the currently unreached households. Self Help Groups as a social capital can be strengthened to access different financial services from banks and insurance companies.

The district administration can take up initiatives to intensify livestock insurance and crop insurance to protect the farming families from the risks of low yield and reduced income, which never gets reported in the district. Initiatives to be taken in making available financial products that are attractive to a large section of the population. Still various measures have to be taken in improving the infrastructure of the district so that the quality of the life of the people and the economic condition of the families could be improved.

CHAPTER 9
SUMMARY AND WAY FORWARD

9. Summary and Way Forward

Introduction

The preceding Chapter have made an attempt to summarize the status of Human Development on different aspects in Tiruvannamalai district. As per the guidance of the State Planning Commission, Tamil Nadu, the Human Development Index, Gender Inequality Index, Child Development Index and Multi-Dimensional Poverty Index have been worked out based on the secondary data provided by the District Planning Office, Tiruvannamalai. The first District Human Development Report was prepared in 2007 for the district with interesting findings. Some of the Human Development aspects were taken as reference in appropriate places to understand the positive changes and challenges. The district administration has made efforts to bring positive changes with regard to health, education and quality of life in the district. Though the district is still in backward situation with gaps and challenges in achieving the human development indicators, there are significant changes observed on many human development aspects. The following section summarizes the achievements made in various sectors and other developmental aspects of the district and also suggest ways for overcoming the current challenges.

Human Development Status

- Human Development is all about creation of choices and opportunities and build the capabilities of the people to utilise the opportunities and exercise the choices for their well being.

- The Central and State Governments play greater role in providing basic amenities and other welfare programmes to ensure the reach of benefits to the needy. They also make interventions time to time to provide access to different services and benefits through district administration.

- The recent introduction of State Balanced Growth Fund is one of the opportunities for the district administration to address the human development gaps and challenges through innovative development projects.

- The Human Development Index has been computed based on the three dimensions such as health, education and standard of living and found inter-block variations. It is a positive index.

- Out of 18 blocks, Thellar ranks first with 0.92 and Jawadhu Hills ranks 18 with 0.37 which

shows high disparity among the blocks. Vandavasi and Thellar fall under the top three categories, and in all the three indices such as standard of living, health and education it performs better than the other blocks. Surprisingly Jawadhu Hills falls in the bottom three blocks and ranks 18th (lowest) among the blocks, but tops better in health index (0.78)

- The people cultivate and consume small millets and traditional food grains which are found to be nutrient rich might be one of the reasons for better health conditions.

- Regarding Gender Inequality Index, which is a negative index, Peranmallur block performs better under top three categories with 0.01 and Chetpet ranks 18th with high inequality of 0.11.

Employment, Income and Poverty

- Employment, income and poverty are three interrelated factors that contribute in defining the quality of life which has greater influence on the human development of the communities living in a particular country or region.

- Three sectors namely primary, secondary and tertiary sector create employment opportunities and the average per capita income provided by the primary sector is significantly lower than that of the other two sectors.

- The work participation rate has increased from 48.99 percent to 50.23 percent during 2001-2011 in the district, which is due to increase in the percentage of main workers, reduction in the marginal workers percentage and creation of additional employment in the primary and secondary sector.

- The overall WPR is higher than Tamil Nadu, which is 44.7 percent. The increase in WPR among males and females is observed both in rural and urban areas but by 1 percent in rural and 3 percent in urban which is due to urbanisation and increased employment opportunities in the secondary sector.

- The Inter-block variations show that Jawadhu Hills ranks first with high WPR of 57.03 percent and Tiruvannamalai block ranks 18th with WPR of 42.67 percent.

- All urbanized blocks fall under bottom five category with WPR of less than 49 percent and top five rural blocks were with WPR of 54 percent .

- The Child Labour is found in the block which needs attention from the district administration.

- The per capita income of the district, which was Rs. 24,711 in 2005-06, has increased to Rs

41,569 in 2012 and average growth rate of the district 9.65 which is slightly higher than the State average of 9.52. Compared to the State, the per capita income is better, growth over a decade is though lesser than the State but closer to the State figure. Among the districts, Tiruvannamalai ranks 26th in its per capita income in 2011-12, this indicates the level of poverty in the district.

▪ The contribution from the primary sector to district Gross District Domestic Product has been declining over the years due to higher productivity and production in non-agricultural sectors. The agriculture accounted for 17.67percent of Gross District Domestic Product in 2005-06, it accounts only for 13.57 percent in 2011-12. On the other hand, the share of the secondary and tertiary sectors also shows decreasing trend in growth rate (2011-2012).

▪ The sector-wise Gross Domestic Product shows that the growth rate is lower than the State with regard to the Tertiary sector, whereas the growth rate is better than the State in Primary and Secondary sector over a period of six years from 2005-06 to 2010-11.

▪ It shows that the area under cultivation is shrinking and the service sector has scope to improve its performance as the district has pilgrimage and tourist places. The industrial sector shows growth and significant contribution to GDDP.

▪ The wage rate is found to be very low across the blocks particularly the female wage rate which needs to be given special attention.

▪ Jawadhu Hills need special focus on all dimensions of poverty and in particular with regard to creation of access to cooking fuel, toilet facilities and housing to promote better improvement in human development.

▪ Distribution of workers across the sectors though skill building, promoting tourism based livelihoods and employment opportunities in the textile industries to increase the per capita income in the district.

Demography, Health and Nutrition

▪ Better health standards reflect the better services of Government. The wide range of health indicators dealt in the chapter – Demography, Health and Nutrition include Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR), Still Birth Rate (SBR), place of delivery, immunization, child development, access to iron folic tablets, nutritional status, water and sanitation, prevalence of HIV AIDS, Tuberculosis, and public health services. To gain better human development, it is essential to achieve better health standards.

▪ The population growth rate is 12.75 percent and kept under control due to better family

planning initiatives by the district administration.

- The Crude Birth Rate is lower than the State and the nation which is an indicator for keeping the population growth under control.

- The sex ratio is better at 994 compare to the nation (940). The IMR is lower than the State, but across the blocks there are huge variations found. MMR also to be addressed where it is more in Jawadhu Hills, Vandavasi, West Arni. The still birth rate is found to be in a declining trend which is positive and 100 percent immunization is also ensured for the children in all the blocks by the district administration.

- Regarding the Child Development is concerned the major issue is found to be in Jawadhu Hiils. Child sex ratio is also very low (857) which is alarming one and low in general sex ratio 960.

- Malnourished children in the district is fairly high (29.58 percent) and very high in Jawadhu Hiils (41.69 percent) which needs greater attention from the district administration.

- The performance with regard to IFA tablets distribution is less than 50 percent as far the women are concerned, but it is more than 90 percent with adolescent girls which shows a positive trend in the district. Prevalence of anaemia is found to be high among the pregnant women, which needs to be further reduced through appropriate behavioural change process and initiatives towards healthcare practices.

- In the district, 97.61 percent of the habitations have access to safe water but the access to sanitation is found to be low with 55.86 percent only. Two blocks – Thandrampet and Anakkavur perform very poor in accessing sanitation facilities.

- In the district prevalence of HIV/AIDS and TB is found which needs special attention to reduce and eradicate completely.

- Though there are different healthcare programmes and services provided by the district administration, the inter block variations needs to be given attention to ensure equity in accessing the Government services and programmes for achieving good health for all particularly the children, adolescent girls, pregnant and lactating mothers and under five children.

Literacy &Education

- Literacy is one of the indicators of Human Development Index to understand the level of knowledge and communication of the people in the country or region. Lack of educational

acess and illiteracy can lead to poverty. Literacy enables the people to acquire knowledge and it promotes self-confidence in them to identify opportunities and decide the choices for bettering their lives. Literacy and education is a tool for building the capability of the people to handle the choices.

- The literacy rate (73.36 percent) in the district in general and gender wise in particular is progressing well. Particularly the female literacy (63.37 percent) and girls enrolment show a positive trend. Growth rate of female literacy is found to be higher than the male in almost all the blocks and overall in the district. Most of the urbanised blocks perform well in the literacy rates.

- Gross enrolment is more than 100 percent in all blocks at the primary level, but upper primary, higher and higher secondary level needs attention.

- Jawadhu Hills needs special attention with regard to drop out (24.12 percent), completion rate (80.85 percent), transition rates (50.70 percent) and access to schooling.

- In most of the schools infrastructure particularly toilet facilities (59.49 percent schools do not have toilet facilities) are found to be an issue in both the boys' and girls' schools.

- Though there are good number of arts and science colleges and professional colleges, one needs to study the access to higher education among the rural children. There are good number of polytechnic institutes present, but again access, employability and access to further studies in the engineering colleges need to be studied.

- The pupil-teacher ratio seems to be good compared to the State and the nation, but still one needs to study for its connectivity with the basic infrastructure facility which might in turn cause the drop out or non-enrolment of children in the schools.

- Hostel facilities are made available for different communities to ensure continuity of the education by the children from poor families. However one needs to understand whether all the eligible students have got the access for residential facilities.

Gender

- Gender parity can be defined in terms of women rights, female work participation, economic empowerment, female literacy, health aspects, female political participation and protection against crime. The Gender Inequality Index is a measure to assess the status of women against men on health, education, work participation, political participation and wages.

- The district has 49.85 percent of female population with sex ratio of 994. The female literacy

rate is 63.36 percent which is lower than the State level female literacy rate of 73.4 percent. Among the 18 blocks, Jawadhu Hills ranks 18 with lowest female literacy of 30.98 percent which is much lower than the female literacy rate of the State. It is an issue of empowerment that needs attention from the district.

- The average Maternal Mortality Rate in the district is 74 (as per 2014 data) which has been decreased. The gross enrolment of girls children at primary level is 100 percent.

- The female work participation rate in 2011 is 40.62 percent compared to that of the male work participation rate of 59.70 percent. The female participation rate is increased in agriculture sector which is 78.98 percent and in non-agriculture sector is 21.05 percent as per Census 2011. The growth of female participation in the work is higher than the male. In urban blocks the female participation is much lower and that needs to be attended. New skills may be introduced and new employment opportunities to be created to improve the economic status of the women in the district.

- The Gender Inequality Index ranges from 0.01 to 0.11, which shows high disparity in the district. Rural blocks perform better with low GII where as it is much higher in urbanised blocks of Vandavasi (16th rank) and Tiruvannamalai (10th rank). The findings show that the MMR, standard of living and female literacy contribute to varied GII in the district.

- Regarding access to resources and control over them through participation in Self Help Groups, the district has 13,480 SHGs with 1,94, 233 women members. They have had an access to credit of Rs 13,618.6 lakhs with an average of Rs 1.01 lakhs per SHG through SHG-Bank Linkage programme. Though there are differences in number of groups and access to bank loans, overall the district is progressing well. The SHGs programme in one of the best instrument to promote women economic empowerment and better livelihoods options for improving their quality of life.

- Membership in local bodies shows that the district maintains 40.40 percent of female participation. Jawadhu Hills has the lowest rank with 36.84 percent. Since SHGs are growing in numbers and function as platforms to promote women leadership, the scope for improves the female participation in local PRI is high in the district.

Social Security

- The concept of Social Security is usually referred to the action programs of Government intended to promote the welfare of the population through assistance measures for food and shelter and to promote health and well-being of the population for large and potentially

vulnerable segments such as children, the elderly, the sick and the unemployed.

- The elderly population are in increasing trend as the Census 1991 shows that it was 7.71 percent and in 2001, it has increased to 9.81 percent in the district. It would increase the burden on the district administration to ensure the reach of welfare programmes to the growing population of the elderly people. As per SHDR, 2003 in Tamil Nadu the Old Age Pension beneficiaries are high in number in the district compared to that of the State, particularly male elderly population. Also the work participation rate is high among the elderly population which leads to subsistence level of poverty. This can be witnessed in MGNREGA programme.

- Though the district has provided financial security for the elderly people, destitute widows and disabled people, still the data was not adequate to understand the real status of the assistance. Still a segment of the population would have been left without them accessing the benefits through assistance of financial security.

- The district also implements marriage assistance and maternity assistance for the poor families, but there should be data made available at the department level to understand the percentage of reach of the benefits against the allocated funds.

- In the district there were 172 crimes observed in 2013 which might be the case every year which needs attention from the district to ensure safety and security to women. Of the crimes, women harassment and kidnapping are the major cases found in the district.

Infrastructure

- Infrastructure plays an important role in human development. It can be public or private related to road, telecommunications, electrifications, public distribution system and banking and insurance services. The district has varied disparity in presence of road facility.

- The Jawadhu Hills has the lowest road infrastructure of 97 roads with 128.4 sq.km. Tiruvannamalai and Thandrampet have 533.44 sq km and 530.47 sq.km length of roads. Thandrampet has highest length of mud road with 240.99 sq.km and also 263.89 sq.km of BT road. It shows better access to road facilities in the district except Jawadhu Hills block.

- The electricity services was only 69 percent in the district as per DHDR 2007, of Tiruvannamalai district which also showed the status of 14 villages had to be electrified to achieve 100 percent electrification. As per Census 2011, it was found that the district has reached 93.33 percent in electrifying the households in the district.

- Regarding the street lights, the percentage of street lights with the population data shows that

lowest percentage of electrification is observed in Thellar (17.99 percent) and Anakkavur blocks (19.45 percent). Tiruvannamalai is better with 52.46 percent followed by Polur with 44.46 percent. Jawadhu Hills performs better with 40.20 percent electrification. Overall the district performs better in electrifying the households.

- Regarding the telecommunications, except Kalasappakkam taluk, other taluks perform better in accessing telecommunication services.

- Financial services are provided by 155 cooperatives with the membership of 495,233 and 132 commercial bank branches with 741,939 account holders. After introducing financial inclusion concept there is a significant increase in number of households accessing banking services.

- Tiruvannamalai block shows the highest number of bank branches with large number of account holders where the lowest is found in Pudupalayam, Jawadhu Hills, Vembakkam and Vandavasi.

- It seems to be rural and urban disparity in the district which needs to be addressed by strengthening the SHG movement. The district has to do a lot with insurance particularly for the rural masses through banks and SHGs.

- It can also focus on designing appropriate livestock insurance and crop insurance to protect the farming families from the risks of death of animals, low yield and income.

Way forward

Strategies for Impacting Human Development (HD) in the district

- Targeting may be in two ways – (i) Targeting backward blocks and (ii) Targeting hot spots regarding various social and economic issues; Ensuring community ownership of development interventions; Learning from success stories regarding various socio-economic developments in the district and taking the learning to other parts in the district; and Proactively responding to issues in both rural and urban areas.

- Following demand based approach with community participation through people organizations and NGOs for effectively improving the reach of development schemes and programmes; Building strong accountability in the system to improve efficiency of service delivery; and Increasing the participation and investment from private sector with necessary regulation.

ANNEXURES

Annexures

Annexure 1: Human Development Index

S. No.	Block	Standard of Living					Health			Education		
		Access to Cooking Fuel	Access to Toilet Facilities	Access to Drinking Water	Access to Electricity	Access to Pucca Houses	IMR	MMR	U5MR	Literacy Rate	GER Primary	GER Secondary
		2011	2013-14	2013-14	2011	2013-14	2014	2014	2013-14	Census 2011	Edcn Dept	Edcn Dept
		census		(habitation)	census					2011	2013-14	2013-14
1	Anakkavur	26.50	36.87	87.32	92.00	90.97	14.50	10	2.11	66.60	100.16	80.03
2	Arni	57.75	77.86	100.00	96.00	79.61	10.50	50	2.37	70.84	100.58	85.01
3	Chengam	18.19	43.64	100.00	89.47	76.69	14.60	30	1.95	61.23	100.16	62.48
4	Chetpet	23.24	63.96	99.09	91.00	81.00	15.10	60	0.53	66.66	101.35	80.08
5	Cheyyar	49.05	64.92	97.13	96.00	83.92	20.60	10	0.69	69.81	101.02	68.96
6	Jawadhuhills	8.96	49.79	100.00	89.00	54.93	13.20	330	0.00	41.64	99.34	59.93
7	Kalasapakkam	20.67	51.78	100.00	90.00	76.21	19.10	140	2.28	63.29	101.03	80.01
8	Kilpennathur	20.32	55.07	99.53	93.00	86.05	18.90	50	4.77	67.57	100.02	77.79
9	Peranamallur	15.95	48.17	94.90	93.00	76.15	17.90	10	2.17	67.21	99.98	80.02
10	Polur	34.90	51.41	84.42	94.00	61.73	13.70	40	3.54	66.83	101.02	85.03
11	Pudupalayam	14.95	46.85	99.52	90.00	78.72	19.20	190	7.07	59.35	101.97	73.96
12	Thandrampet	14.82	20.92	100.00	91.00	76.31	21.90	10	4.77	58.45	100.79	72.49
13	Thellar	17.34	74.03	98.95	91.39	87.71	7.00	10	0.00	65.44	101.01	79.98
14	Thurinjapuram	22.02	61.68	100.00	93.00	95.29	15.80	50	4.11	64.15	100.05	67.39
15	Tiruvannamalai	43.94	62.65	99.64	97.00	88.13	11.90	70	2.62	71.65	100.48	80.84
16	Vandavasi	32.21	63.79	100.00	97.00	88.32	10.60	230	2.56	68.06	100.12	85.00
17	Vembakkam	26.40	53.72	97.39	94.00	54.45	18.20	10	0.52	66.89	100.24	77.32
18	West Arni	37.03	66.13	99.02	93.00	78.31	19.20	120	0.62	69.92	100.25	85.00

Annexure 1: Human Development Index contd…

S. No.	Block	Standard of Living					Health			Education			Standard of Living Index	Health Index	Education Index	Overall Index	Rank
		Access to Cooking Fuel	Access to Toilet Facilities	Access to Drinking Water	Access to Electricity	Access to Pucca Houses	IMR	MMR	U5MR	Literacy Rate	GER Primary	GER Secondary					
1	Anakkavur	0.58	0.31	0.47	0.70	0.91	0.46	0.57	0.73	0.85	0.86	0.84	0.56	0.58	0.85	0.65	11
2	Arni	1.40	1.00	1.00	0.94	0.66	0.87	1.00	0.70	0.98	0.89	1.00	0.97	0.85	0.95	0.92	1
3	Chengam	0.72	0.42	1.00	0.55	0.60	0.29	0.90	0.75	0.70	0.86	0.27	0.63	0.58	0.55	0.58	14
4	Chetpet	1.13	0.76	0.96	0.64	0.69	0.48	0.52	0.93	0.85	0.95	0.84	0.82	0.62	0.88	0.76	5
5	Cheyyar	1.14	0.78	0.88	0.94	0.75	0.11	0.57	0.91	0.95	0.92	0.48	0.89	0.39	0.75	0.64	12
6	Jawadhuhills	0.84	0.52	1.00	0.53	0.13	1.00	0.48	1.00	0.12	0.79	0.19	0.49	0.78	0.26	0.47	18
7	Kalasapakkam	0.88	0.56	1.00	0.59	0.59	0.30	1.00	0.71	0.76	0.93	0.84	0.70	0.60	0.84	0.70	7
8	Kilpennathur	0.95	0.61	0.98	0.76	0.80	0.55	0.14	0.39	0.88	0.84	0.77	0.81	0.31	0.83	0.59	13
9	Peranamallur	0.81	0.50	0.79	0.76	0.59	0.41	1.00	0.72	0.87	0.84	0.84	0.68	0.67	0.85	0.73	6
10	Polur	0.87	0.55	0.35	0.82	0.27	0.57	0.86	0.54	0.86	0.92	1.00	0.52	0.64	0.93	0.68	8
11	Pudupalayam	0.78	0.47	0.98	0.59	0.64	0.24	0.48	0.09	0.64	1.00	0.64	0.67	0.22	0.74	0.48	16
12	Thandrampet	0.26	0.04	1.00	0.64	0.59	0.59	0.48	0.39	0.61	0.91	0.60	0.32	0.48	0.69	0.47	17
13	Thellar	1.33	0.94	0.96	0.67	0.84	0.73	0.57	1.00	0.82	0.92	0.84	0.92	0.75	0.86	0.84	3
14	Thurinjapuram	1.08	0.73	1.00	0.76	1.00	0.34	0.81	0.47	0.78	0.85	0.43	0.90	0.51	0.66	0.67	9
15	Tiruvannamalai	1.10	0.74	0.99	1.00	0.85	0.61	0.71	0.66	1.00	0.88	0.87	0.93	0.66	0.91	0.82	4
16	Vandavasi	1.12	0.76	1.00	1.00	0.85	0.91	0.57	0.67	0.90	0.85	1.00	0.94	0.70	0.91	0.85	2
17	Vembakkam	0.92	0.59	0.89	0.82	0.12	0.20	0.10	0.93	0.86	0.86	0.75	0.54	0.26	0.82	0.49	15
18	West Arni	1.17	0.80	0.96	0.76	0.63	0.49	0.10	0.92	0.95	0.86	1.00	0.85	0.35	0.94	0.65	10

Annexure 2: Gender Inequality Index

Sl. No.	Block	Health			Empowerment						Labour					
		1	2	3	4	5	6	7	8	7	9	10	11	12	13	14
		MMR	Share of Institutional Deliveries	Share of Ante Natal Coverage	Female Literacy	Male Literacy	Share of female Children (0-6) years	Share of male Children (0-6) years	Share of Female Elected Representatives in RLBs and ULBs	Share of Male Elected Representatives in RLBs and ULBs	Female Work Participation Rate	Male Work Participation Rate	Female Work Participation Rate in Non-Agri Sector	Male Work Participation Rate in Non-Agri Sector	Female Agri. Wage rate	Male Agri. Wage rate
		2013-14	2013-14	2013-14	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2013-14	2013-14
	Source	Health Department			Census				RD&PR Department		Census				DOES	
	Unit	rate	%	nos	%	%	%	%	%		%	%	%	%	%	%
1	Anakkavur	10	99.9	100	57.79	75.25	48.39	51.61	42.25	57.75	48.34	62.70	10.25	28.16	125	250
2	Arni	50	99.9	100	63.88	77.88	48.44	51.56	39.36	60.64	28.96	59.62	35.62	64.00	150	300
3	Chengam	30	99.8	99.8	54.36	67.96	47.37	52.63	40.45	59.55	41.24	58.99	13.03	29.69	125	300
4	Chetpet	60	100.0	100	58.16	75.16	49.02	50.98	42.53	57.47	45.72	59.97	13.38	32.85	100	300
5	Cheyyar	10	99.7	98.4	62.38	77.24	48.78	51.22	42.57	57.43	36.31	59.47	26.17	52.70	125	300
6	Jawadhuhills	330	93.0	99.6	32.86	50.07	46.14	53.86	36.84	63.16	55.58	58.41	5.51	8.71	100	250
7	Kalasapakkam	140	99.9	100	54.51	71.95	47.68	52.32	40.58	59.42	47.77	60.55	8.46	20.71	125	300
8	Kilpennathur	50	100.1	100	60.33	74.71	48.02	51.98	39.80	60.20	40.93	57.89	13.45	29.96	125	300
9	Peranamallur	10	99.9	100	57.79	76.73	48.83	51.17	45.98	54.02	50.30	63.37	8.38	23.63	125	250
10	Polur	40	99.8	99.8	58.74	74.99	47.46	52.54	37.62	62.38	43.01	103.4	14.39	21.46	125	300
11	Pudupalayam	190	99.5	99.8	51.40	67.10	47.08	52.92	40.30	59.70	40.78	58.75	11.41	26.36	100	250
12	Thandrampet	10	100.0	100	51.10	65.75	47.91	52.09	38.46	61.54	47.39	59.51	8.03	21.99	125	250
13	Thellar	10	99.8	100	56.35	74.53	48.82	51.18	40.00	60	45.84	62.25	10.75	25.35	125	250
14	Thurinjapuram	50	83.9	100	55.48	72.74	47.54	52.46	40.58	59.42	49.66	61.13	8.80	22.32	125	300
15	Tiruvannamalai	70	100.0	100	65.86	77.41	48.15	51.85	39.57	60.43	28.22	57.01	29.92	58.38	150	300
16	Vandavasi	230	99.9	94.1	60.60	75.53	49.56	50.44	40.19	59.81	36.46	61.75	16.01	42.89	150	300
17	Vembakkam	10	99.8	98.2	58.43	75.32	49.55	50.45	37.5	62.5	46.09	60.98	15.03	36.98	125	300
18	West Arni	120	99.8	100	61.60	78.27	49.12	50.88	41.10	58.90	35.92	60.03	21.37	48.02	150	300

Annexure 2: Gender Inequality Index contd…

S. No	Block	MMR	Share of Instituti onal Deliveri es	Share of Ante Natal Coverag e	Female Literac y	Male Literac y	Share of female Childre n (0-6) years	Share of male Child ren (0-6) years	Share of Female Elected Representati vies in RLBs and ULBs	Share of Male Elected Representati vies in RLBs and ULBs	Female Work Participat ion Rate	Male Work Particip ation Rate	Female Work Participat ion Rate in Non-Agri Sector	Female Agri. Wage rate	Male Agri. Wage rate
1	Anakkavur	0.10	1.00	1.00	0.58	0.75	0.48	0.52	0.42	0.58	0.48	0.63	0.10	0.28	0.58
2	Arni	1.00	1.00	1.00	0.64	0.78	0.48	0.52	0.39	0.61	0.29	0.60	0.36	0.64	1.00
3	Chengam	0.33	1.00	1.00	0.54	0.68	0.47	0.53	0.40	0.60	0.41	0.59	0.13	0.30	0.58
4	Chetpet	0.09	1.00	1.00	0.58	0.75	0.49	0.51	0.43	0.57	0.46	0.60	0.13	0.33	0.17
5	Cheyyar	0.10	1.00	0.98	0.62	0.77	0.49	0.51	0.43	0.57	0.36	0.59	0.26	0.53	0.58
6	Jawadhuhills	0.08	0.93	1.00	0.33	0.50	0.46	0.54	0.37	0.63	0.56	0.58	0.06	0.09	0.17
7	Kalasapakkam	1.00	1.00	1.00	0.55	0.72	0.48	0.52	0.41	0.59	0.48	0.61	0.08	0.21	0.58
8	Kilpennathur	0.05	1.00	1.00	0.60	0.75	0.48	0.52	0.40	0.60	0.41	0.58	0.13	0.30	0.58
9	Peranamallur	1.00	1.00	1.00	0.58	0.77	0.49	0.51	0.46	0.54	0.50	0.63	0.08	0.24	0.58
10	Polur	0.25	1.00	1.00	0.59	0.75	0.47	0.53	0.38	0.62	0.43	1.03	0.14	0.21	0.58
11	Pudupalayam	0.08	1.00	1.00	0.51	0.67	0.47	0.53	0.40	0.60	0.41	0.59	0.11	0.26	0.17
12	Thandrampet	0.08	1.00	1.00	0.51	0.66	0.48	0.52	0.38	0.62	0.47	0.60	0.08	0.22	0.58
13	Thellar	0.10	1.00	1.00	0.56	0.75	0.49	0.51	0.40	0.60	0.46	0.62	0.11	0.25	0.58
14	Thurinjapuram	0.20	0.84	1.00	0.55	0.73	0.48	0.52	0.41	0.59	0.50	0.61	0.09	0.22	0.58
15	Tiruvannamalai	0.14	1.00	1.00	0.66	0.77	0.48	0.52	0.40	0.60	0.28	0.57	0.30	0.58	1.00
16	Vandavasi	0.10	1.00	0.94	0.61	0.76	0.50	0.50	0.40	0.60	0.36	0.62	0.16	0.43	1.00
17	Vembakkam	0.05	1.00	0.98	0.58	0.75	0.50	0.50	0.38	0.63	0.46	0.61	0.15	0.37	0.58
18	West Arni	0.05	1.00	1.00	0.62	0.78	0.49	0.51	0.41	0.59	0.36	0.60	0.21	0.48	1.00

Annexure 2: Gender Inequality Index contd…

S. No.	Block	Female Health Indices	Male Health Indices	Female Emp Indices	Male Emp Indices	Female LF Indices	Male LF Indices	GF	GM	GFM	Health Bar	Emp Bar	LF Bar	GFM Bar	GII	Rank
1	Anakkavur	0.46	1	0.49	0.61	0.31	0.39	0.41	0.62	0.49	0.73	0.55	0.35	0.52	0.05	6
2	Arni	1.00	1	0.50	0.62	0.47	0.73	0.61	0.77	0.68	1.00	0.56	0.60	0.69	0.02	2
3	Chengam	0.69	1	0.47	0.60	0.32	0.56	0.47	0.69	0.56	0.85	0.53	0.44	0.58	0.04	4
4	Chetpet	0.45	1	0.49	0.60	0.22	0.58	0.36	0.71	0.48	0.72	0.55	0.40	0.54	0.11	18
5	Cheyyar	0.46	1	0.51	0.61	0.38	0.68	0.45	0.75	0.56	0.73	0.56	0.53	0.60	0.07	12
6	Jawadhuhills	0.43	1	0.38	0.55	0.17	0.26	0.30	0.52	0.38	0.71	0.47	0.21	0.42	0.08	13
7	Kalasapakkam	1.00	1	0.47	0.61	0.29	0.50	0.51	0.67	0.58	1.00	0.54	0.39	0.60	0.02	3
8	Kilpennathur	0.37	1	0.49	0.62	0.32	0.56	0.39	0.70	0.50	0.69	0.55	0.44	0.55	0.09	16
9	Peranamallur	1.00	1	0.51	0.60	0.29	0.37	0.53	0.60	0.56	1.00	0.55	0.33	0.57	0.01	1
10	Polur	0.63	1	0.47	0.63	0.33	0.61	0.46	0.72	0.56	0.81	0.55	0.47	0.59	0.05	8
11	Pudupalayam	0.44	1	0.46	0.60	0.20	0.37	0.34	0.61	0.44	0.72	0.53	0.29	0.48	0.08	15
12	Thandrampet	0.44	1	0.45	0.60	0.28	0.35	0.38	0.59	0.47	0.72	0.53	0.32	0.49	0.06	9
13	Thellar	0.46	1	0.48	0.61	0.31	0.37	0.41	0.61	0.49	0.73	0.55	0.34	0.51	0.05	5
14	Thurinjapuram	0.55	1	0.47	0.61	0.29	0.51	0.43	0.68	0.52	0.78	0.54	0.40	0.55	0.06	10
15	Tiruvannamalai	0.52	1	0.50	0.62	0.44	0.69	0.49	0.76	0.59	0.76	0.56	0.57	0.62	0.05	7
16	Vandavasi	0.45	1	0.49	0.61	0.39	0.64	0.44	0.73	0.55	0.73	0.55	0.52	0.59	0.07	11
17	Vembakkam	0.37	1	0.48	0.62	0.34	0.61	0.39	0.72	0.51	0.68	0.55	0.48	0.56	0.10	17
18	West Arni	0.37	1	0.50	0.62	0.42	0.66	0.43	0.74	0.54	0.68	0.56	0.54	0.59	0.08	14

Annexure 3: Child Development Index

S. No.	Block name	Health			Education				
		U5MR	Juvenile Sex Ratio	Percentage of Malnourished Children	Enrollment in Primary2013-14	Enrollment in Secondary-2013-14	Childrens Never Enrolled in Schools 2013-14	Transition Rate from Primary to Upper Primary 2013-14	Transition rate from Upper Primary to Secondary 2013-14
		SPC	19	SPC	36	46	41	38	39
		1	2	3	4	5	6	7	8
1	Anakkavur	2.11	938	35.65	100.16	80.03	0.00	99.84	102.68
2	Arni	2.37	939	34.70	100.58	85.01	0.00	98.90	98.33
3	Chengam	1.95	900	34.85	100.16	62.48	0.01	97.77	101.02
4	Chetpet	0.53	962	33.37	101.35	80.08	0.01	99.06	97.95
5	Cheyyar	0.69	952	36.55	101.02	68.96	0.00	98.64	102.70
6	Jawadhuhills	0.00	857	41.69	99.34	59.93	0.03	95.75	50.70
7	Kalasapakkam	2.28	911	34.34	101.03	80.01	0.00	99.39	100.44
8	Kilpennathur	4.77	924	38.83	100.02	77.79	0.00	98.22	100.89
9	Peranamallur	2.17	954	32.63	99.98	80.02	0.00	98.55	103.33
10	Polur	3.54	903	20.85	101.02	85.03	0.00	99.45	104.46
11	Pudupalayam	7.07	889	32.30	101.97	73.96	0.01	97.70	98.24
12	Thandrampet	4.77	920	22.96	100.79	72.49	0.00	98.15	87.12
13	Thellar	0.00	954	22.85	101.01	79.98	0.00	99.19	93.86
14	Thurinjapuram	4.11	906	32.26	100.05	67.39	0.01	98.32	103.13
15	Tiruvannamalai	2.62	929	25.74	100.48	80.84	0.00	99.84	108.66
16	Vandavasi	2.56	983	29.47	100.12	85.00	0.01	98.21	103.09
17	Vembakkam	0.52	982	23.10	100.24	77.32	0.00	98.98	93.34
18	West Arni	0.62	966	24.29	100.25	85.00	0.01	99.43	106.09

Annexure 3: Child Development Index contd…

S. No.	Block name	Health		Nutrition	Education					Overall index	Rank
		U5MR	Juvenile Sex Ratio	Percentage of Malnourished Children	Enrollment in Primary	Enrollment in Secondary	Children's Never Enrolled in Schools	Transition Rate from Primary to Upper Primary	Upper Primary to Secondary		
		1		2	3	4	5				
1	Anakkavur	0.70	0.65	0.29	0.31	0.80	1.00	1.00	0.90	0.68	9
2	Arni	0.66	0.66	0.34	0.47	1.00	0.84	0.77	0.82	0.68	10
3	Chengam	0.72	0.34	0.33	0.31	0.10	0.70	0.49	0.87	0.43	17
4	Chetpet	0.93	0.83	0.40	0.76	0.80	0.77	0.81	0.82	0.76	4
5	Cheyyar	0.90	0.76	0.25	0.64	0.36	1.00	0.71	0.90	0.66	12
6	Jawadhuhills	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	18
7	Kalasapakkam	0.68	0.43	0.35	0.64	0.80	1.00	0.89	0.86	0.69	8
8	Kilpennathur	0.33	0.53	0.14	0.26	0.71	1.00	0.60	0.87	0.51	14
9	Peranamallur	0.69	0.78	0.43	0.24	0.80	1.00	0.68	0.91	0.66	11
10	Polur	0.50	0.37	1.00	0.64	1.00	0.84	0.90	0.93	0.75	5
11	Pudupalayam	0.00	0.26	0.45	1.00	0.56	0.75	0.48	0.82	0.50	15
12	Thandrampet	0.33	0.50	0.90	0.55	0.50	1.00	0.59	0.63	0.62	13
13	Thellar	1.00	0.77	0.90	0.63	0.80	1.00	0.84	0.74	0.85	1
14	Thurinjapuram	0.42	0.39	0.45	0.27	0.30	0.80	0.63	0.90	0.47	16
15	Tiruvannamalai	0.63	0.57	0.77	0.43	0.83	0.93	1.00	1.00	0.74	6
16	Vandavasi	0.64	1.00	0.59	0.30	1.00	0.79	0.60	0.90	0.70	7
17	Vembakkam	0.93	0.99	0.89	0.34	0.69	1.00	0.79	0.74	0.81	3
18	West Arni	0.91	0.86	0.83	0.35	1.00	0.78	0.90	0.96	0.81	2

Annexure 4: Multidimensional Poverty Index

S. No.	Block Name	Negative	Negative	Negative	Negative	Negative	Positive	Positive	Positive	Positive	Positive
		Health			Education		Living Standards				
		IMR-14	HOB-13-14	Malnourshied Children-2013-14	Drop out in primary-2013-14	Drop out secondary-2013-14	Access to cooking fuel-2011	Access to toilet facilities-2013-14	Access to drinking water-2013-14	Pucca house-2013-14	Access to Electricity-2011
		SPC			39		54	33	32	52	50
		1	2	3	4	5	6	7	8	9	10
1	Anakkavur	14.50	10.5	35.65	0.16	1.17	26.50	36.87	87.32	90.97	92
2	Arni	10.50	11.0	34.70	0.29	1.48	57.75	77.86	100.00	79.61	96
3	Chengam	14.60	21.4	34.85	1.96	1.53	19.52	43.64	100.00	76.69	89
4	Chetpet	15.10	11.42	33.37	0.18	0.99	23.24	63.96	99.09	81.00	91
5	Cheyyar	20.60	10.5	36.55	0.17	1.00	49.05	64.92	97.13	83.92	96
6	Jawadhuhills	13.20	10.9	41.69	11.64	2.34	15.35	49.79	100.00	54.93	89
7	Kalasapakkam	19.10	17.9	34.34	0.4	1.55	20.67	51.78	100.00	76.21	90
8	Kilpennathur	18.90	14.67	38.83	0.06	1.23	20.32	55.07	99.53	86.05	93
9	Peranamallur	17.90	14.00	32.63	0.43	1.53	15.95	48.17	94.90	76.15	93
10	Polur	13.70	12.63	20.85	0.21	0.98	33.19	51.41	84.42	61.73	94
11	Pudupalayam	19.20	20.19	32.30	0.18	2.00	12.74	46.85	99.52	78.72	90
12	Thandrampet	21.90	18.1	22.96	2.31	1.57	14.82	20.92	100.00	76.31	91
13	Thellar	7.00	10.03	22.85	0.05	1.00	17.34	74.03	98.95	87.71	91
14	Thurinjapuram	15.80	14.34	32.26	0.14	1.01	22.02	61.68	100.00	95.29	93
15	Tiruvannamalai	11.90	18.34	25.74	0.8	1.00	43.94	62.65	99.64	88.13	97
16	Vandavasi	10.60	5.33	29.47	0.33	1.02	32.21	63.79	100.00	88.32	97
17	Vembakkam	18.20	10.67	23.10	0.29	1.52	26.40	53.72	97.39	54.45	94
18	West Arni	19.20	13.11	24.29	0.15	1.01	37.03	66.13	99.02	78.31	93

Annexures

Annexure 4: Multidimensional Poverty Index contd…

S. No.	Block Name	Health			Education		Living Standards					Overall index	Rank
		IMR	HOB	Malnourished Children	Drop out in primary	Drop out in secondary	Access to cooking fuel	Access to toilet facilities	Access to drinking water	Pucca house	Access to Electricity		
		1	2	3	4	5	6	7	8	9	10		
1	Anakkavur	0.39	0.68	0.29	0.99	0.86	0.31	0.28	0.19	0.89	0.70	0.44	12
2	Arni	0.86	0.65	0.34	0.98	0.63	1.00	1.00	1.00	0.62	0.94	0.20	2
3	Chengam	0.20	0.00	0.33	0.84	0.60	0.15	0.40	1.00	0.54	0.55	0.54	16
4	Chetpet	0.41	0.62	0.40	0.99	1.00	0.23	0.76	0.94	0.65	0.64	0.34	8
5	Cheyyar	0.00	0.68	0.25	0.99	0.99	0.81	0.77	0.82	0.72	0.94	0.30	6
6	Jawadhuhills	1.00	0.65	0.00	0.00	0.00	0.06	0.51	1.00	0.01	0.53	0.62	18
7	Kalasapakkam	0.21	0.22	0.35	0.97	0.58	0.18	0.54	1.00	0.53	0.59	0.48	15
8	Kilpennathur	0.50	0.42	0.14	1.00	0.82	0.17	0.60	0.97	0.77	0.76	0.39	9
9	Peranamallur	0.34	0.46	0.43	0.97	0.60	0.07	0.48	0.67	0.53	0.76	0.47	13
10	Polur	0.51	0.55	1.00	0.99	1.00	0.45	0.54	0.00	0.18	0.82	0.40	10
11	Pudupalayam	0.15	0.08	0.45	0.99	0.25	0.00	0.46	0.97	0.59	0.59	0.55	17
12	Thandrampet	0.54	0.21	0.90	0.81	0.57	0.05	0.00	1.00	0.54	0.64	0.48	14
13	Thellar	0.69	0.71	0.90	1.00	0.99	0.10	0.93	0.93	0.81	0.67	0.23	3
14	Thurinjapuram	0.26	0.44	0.45	0.99	0.98	0.21	0.72	1.00	1.00	0.76	0.32	7
15	Tiruvannamalai	0.57	0.19	0.77	0.94	0.99	0.69	0.73	0.98	0.82	1.00	0.23	4
16	Vandavasi	0.90	1.00	0.59	0.98	0.98	0.43	0.75	1.00	0.83	1.00	0.15	1
17	Vembakkam	0.10	0.67	0.89	0.98	0.61	0.30	0.58	0.83	0.00	0.82	0.42	11
18	West Arni	0.43	0.52	0.83	0.99	0.98	0.54	0.79	0.94	0.58	0.76	0.26	5

Annexure 1.1: Crude Birth Rate

District/State	2013-14
District	16.8
State	15.9

Source: Deputy Director of Health Services, Tiruvannamalai.

Annexure 1.2: Infant Mortality Rate

District/State	2013-14
District	16
State	21

Source: Deputy Director of Health Services, Tiruvannamalai.

Annexure 3.1: Work participation rate

Blocks	2011	2001	Growth Rate
Tiruvannamalai	139567	107539	29.78
Kilpennathur	64075	68147	-5.98
Thurinjapuram	69393	48182	44.02
Polur	95183	92072	3.38
Kalasapakkam	64888	42940	51.11
Chetpet	58166	52283	11.25
Chengam	85669	87644	-2.25
Pudupalayam	50013	41668	20.03
Thandrampet	96021	83338	15.22
Jawadhu Hills	28906	22463	28.68
Cheyyar	63322	44372	42.71
Anakkavur	41679	38771	7.50
Vembakkam	69707	38621	80.49
Thellar	52134	50511	3.21
Vamdavasi	72872	61450	18.59
Peranamallur	51846	35570	45.76
Arni	78932	81771	-3.47
West Arni	55804	49327	13.13
District	**1238177**	**1046669**	**18.30**

Source: Census 2001 and 2011.

Annexure 3.2: Distribution of workers

Sl. No.	Blocks	Main workers				Total main workers	Total Marginal workers	Total Workers
		Total Cultivator	Total Agri. Labou-rers	Total Household work-ers	Other workers			
1	Tiruvannamalai	21841	27239	2064	66320	117464	22103	139567
2	Kilpennathur	13624	17172	1155	13695	45646	18429	64075
3	Thurinjapuram	24733	21321	829	10478	57361	12032	69393
4	Polur	21132	23840	2399	23601	70972	24211	95183
5	Kalasapakkam	15840	26752	1070	8892	52554	12334	64888
6	Chetpet	13006	17350	1625	12583	44564	13602	58166
7	Chengam	22726	20818	1209	18430	63183	22486	85669
8	Pudupalayam	12789	14771	568	9599	37727	12286	50013
9	Thandrampet	23796	31111	995	14204	70106	25915	96021
10	Jawadhu Hills	9920	10234	334	1742	22230	6676	28906
11	Cheyyar	9593	13306	3919	23086	49904	13418	63322
12	Anakkavur	8839	13605	552	7971	30967	10712	41679
13	Vembakkam	11699	23633	3081	16127	54540	15167	69707
14	Thellar	15014	20929	1622	8367	45932	6202	52134
15	Vamdavasi	9959	24105	1003	22979	58046	14826	72872
16	Peranamallur	14191	14557	1105	7629	37482	14364	51846
17	Arni	7820	14487	7969	35164	65440	13492	78932
18	West Arni	8661	16080	5521	15692	45954	9850	55804
	District	**265183**	**351310**	**37020**	**316559**	**970072**	**268105**	**1238177**

Source: Census 2011.

Annexure 4.1: CBR and CDR

Crude Birth Rate

S. No.	Block	2012	2013	2014
1	Thiruvvannamalai	18.8	19.3	17.5
2	Thandrampattu	18.0	18.9	17.6
3	Chengam	18.5	18.5	17.5
4	Pudupalayam	17.4	18.4	17.6
5	Jamunamarathur	19.0	19.4	19.1
6	Chetpet	17.3	17.5	17.1
7	Polur	17.3	17.4	16.5
8	Kalasapakkam	17.9	18.2	17.3
9	Thurinjapuram	16.5	16.5	16.3
10	Kilpennathur	17.3	16.9	16.2
11	West Arani	15.5	15.2	13.6
12	Arani East	16.0	15.7	14.6
13	Peranamallur	15.1	15.0	14.2
14	Vembakkam	16.7	15.9	13.4
15	Cheyyar	16.3	14.8	15.9
16	Anakkavur	15.1	15.2	13.5
17	Vandavasi	15.4	16.4	13.7
18	Thellar	14.4	13.7	14.0

Source: Deputy Director of Health, Tiruvannamalai

Crude Death Rate

S. No.	Block	2011	2012	2013-14
1	Thiruvvannamalai	5.5	5.9	5.9
2	Thandrampattu	6.2	5.9	6.3
3	Chengam	6.3	5.4	5.7
4	Pudupalayam	7.0	5.1	5.6
5	Jamunamarathur	5.9	5.7	5.7
6	Chetpet	6.8	5.9	6.2
7	Polur	6.3	5.0	5.8
8	Kalasapakkam	6.7	6.5	6.7
9	Thurinjapuram	6.5	5.7	5.7
10	Kilpennathur	7.0	7.0	7.0
11	West Arani	5.0	5.9	6.3
12	Arani East	6.0	6.3	6.9
13	Peranamallur	6.0	7.4	7.1
14	Vembakkam	6.0	6.3	6.2
15	Cheyyar	7.0	5.4	6.3

S. No.	Block	2011	2012	2013-14
16	Anakkavur	6.0	7.0	7.6
17	Vandavasi	6.0	5.7	5.6
18	Thellar	6.0	6.6	8.6

Source: Deputy Director of Health, Tiruvannamalai.

Annexure 4.2: Infant Mortality Rate

S. No.	Block	2011	2012	2013	2014
1	Tiruvannamalai	14.37	11.6	13.4	15.8
2	Kilpennathur	13.86	15.6	14.8	13.7
3	Thurinjapuram	15.42	16.1	19.5	19.1
4	Polur	12.87	13.7	14.5	15.1
5	Kalasapakkam	13.16	15.7	20.5	14.6
6	Chetpet	11.12	11.9	16.5	19.2
7	Chengam	26.78	22.1	20.8	21.9
8	pudupalayam	28.87	23.1	21.8	13.2
9	Thandrampet	15.77	17	14	20.6
10	Jawadhu Hills	2.27	0	4.7	14.5
11	Cheyyar	24.4	21	24.8	18.2
12	Anakkavur	11.4	17.1	16.9	7
13	Vembakkam	19.2	18.2	22.7	10.6
14	Thellar	9.2	10.9	10.8	17.9
15	Vandavasi	16.2	22.4	6.7	10.5
16	Peranamallur	19.7	21.7	18	19.2
17	Arni	6.6	8.7	7.6	15.8
18	West Arni	15.7	19.1	16.2	13.7

Source: Deputy Director of Health Services, Tiruvannamalai.

Annexure 4.3: Percentage of Institutional Delivery 2013-14

Sl. No.	Block wise/District	Domi	Sub health centre	Primary Health centre	GH	Private Hospitals
1	Thiruvvannamalai	0.0	0.2	40.7	48.3	10.8
2	Thandrampattu	0.0	0.3	51.0	40.5	8.2
3	Chengam	0.3	0.4	36.4	52.3	10.7
4	Pudupalayam	0.5	0.2	44.3	46.0	9.0
5	Jamunamarathur	7.0	1.1	76.2	11.8	3.9
6	Chetpet	0.0	0.1	43.3	38.1	18.5
7	Polur	0.2	0.0	38.4	36.7	24.7
8	Kalasapakkam	0.0	0.1	50.6	39.7	9.5
9	Thurinjapuram	0.1	0.0	26.0	48.9	9.0

Sl. No.	Block wise/District	Domi	Sub health centre	Primary Health centre	GH	Private Hospitals
10	Kilpennathur	0.2	0.0	39.1	50.4	10.6
	Tiruvannamalai HUD	0.4	0.2	43.2	44.0	12.2
11	Cheyyar	0.0	0.0	30.0	58.0	11.7
12	Anakkavur	0.0	0.0	32.5	59.1	8.3
13	Vembakkam	0.1	0.0	43.1	51.2	5.5
14	Vandavasi	0.0	0.0	45.7	51.1	3.1
15	Thellar	0.0	0.0	46.5	47.7	5.6
16	Peranamallur	0.0	0.0	44.6	43.0	12.3
17	Arni	0.0	0.0	42.0	40.8	17.1
18	West Arni	0.0	0.0	42.7	32.2	24.9
	Cheyyar HUD	0.1	0.0	41.5	47.3	11.0

Source: Deputy Director of Health Services, Tiruvannamalai

Annexure 4.4: Percentage of HH provided with Safe Drinking water 2013-14

S. No.	Block	Total Habitations	Total Habitations covered	Percentage
1	Anakkavur	213	186	87.32
2	Arni	172	172	100.00
3	Chengam	257	257	100.00
4	Chetpet	222	220	99.09
5	Cheyyar	244	237	97.13
6	Jawadhuhills	282	282	100.00
7	Kalasapakkam	225	225	100.00
8	Kilpennathur	216	215	99.53
9	Peranamallur	216	205	94.90
10	Polur	276	233	84.42
11	Pudupalayam	212	211	99.52
12	Thandrampet	315	315	100.00
13	Thellar	288	285	98.95
14	Thurinjapuram	273	273	100.00
15	Tiruvannamalai	282	281	99.64
16	Vandavasi	283	283	100.00
17	Vembakkam	269	262	97.39
18	West Arni	205	203	99.02

Source:TWAD/AD(TP) All Municipalities

Annexure 5.1: Percentage of Literacy

Sl. No.	Block wise	2001			2011		
		Male	Female	Total	Male	Female	Total
1	Tiruvannamalai	83.7	64.31	74.05	96.81	75.99	78.94
2	Kilpennathur	80.36	56.78	68.42	85.48	67.09	75.79
3	Thurinjapuram	77.54	51.48	64.55	77.5	60.83	73.13
4	Polur	82.28	58.19	70.15	87.6	68.76	77.61
5	Kalasapakkam	76.2	49.17	62.7	74.02	58.10	71.87
6	Chetpet	81.02	55.22	67.96	83.13	65.25	76.42
7	Chengam	72.04	50.99	61.64	76.76	60.25	67.95
8	pudupalayam	72.57	48.25	60.45	72.64	57.01	68.45
9	Thandrampet	69.37	46	57.82	69.25	54.36	65.43
10	Jawadhu Hills	49.51	26.22	38.17	39.47	30.98	46.7
11	Cheyyar	82.44	59.37	70.85	89.38	70.15	77.76
12	Anakkavur	79.95	53.71	66.83	80.85	63.47	75.41
13	vembakkam	81.25	54.66	67.96	82.28	64.59	76.63
14	vandavasi	81.64	59.89	70.75	90.16	70.77	77.00
15	Thellar	80.13	54.69	67.47	82.33	64.62	75.58
16	Peranamallur	81.42	53.87	67.46	81.10	63.66	76.79
17	Arni	85.34	63.62	74.42	95.77	75.18	80.49
18	west Arni	83.33	58.97	71.04	88.77	69.68	78.6
	District	79.20	55.60	67.40	83.70	65.70	74.70

Source : Census 2001 & 2011.

Status of Child Labour in the District, 2012-13 (in numbers)

Sl. No.	Block Name	Center Name	Boys	Girls	Total
1	Tiruvannamalai	Tiruvannamalai	18	8	26
		Kalvasal	10	18	28
2	Kalasapakkam	Kandhapalayam	15	14	29
3	Chengam	Melravandavadi	14	12	26
		Andipatti	9	14	23
		Porasapattu	19	6	25
		Valaiyampattu	16	9	25
4	Pudupalayam	Melapunji	10	20	30
		Veeranandhal Adivaram	10	17	27
5	Thandrampattu	Malayanur chekkadi	13	8	21
		Mothakal	11	18	29
6	Jawadhuhills	Athipattu	11	10	21
		Melor	16	25	41
		Kovilaur	20	14	34
		Marganur	19	15	34
		Pudupattu	15	14	29
		Eattimarathur	17	14	31
		Malai koil-1	19	17	36
		Malai koil-2	20	15	35
		Kondekoner	24	17	41
		palavannthangal	15	12	27
7	vandavasi	Kavaniyathur	13	7	20
8	West Arni	Devikapuram	12	8	20
9	Cheyyar	Munagapattu	13	17	30
		Total	**359**	**329**	**688**

Source: NICLP

Technical Notes

Construction of Indices

Introduction

The latest UNDP Report-2010 on HDI continues to adopt the same basic three indicators of education, health and standard of living/income for the calculation of HDI. Simultaneously, an effort was also made to arrive at Gender Inequality Index. To compute HDI, 10 indicators were used covering the area of living standard, education and health.

HDI presents information on the human development in three dimensions while GII provides information gender differentials in achievements.

Indicators for HDI

The indicators that may be used for deriving HDI at the block level are as follows:

Indicators for measuring HDI

Dimensions	Indicators
Living standards	Percentage of HHs having access to Cooking fuel
	Percentage of HHs having access to Toilet
	Percentage of habitations having access to Drinking Water
	Percentage of HHs having access to Electricity
	Percentage of HHs having access to Pucca house
Health	Infant Mortality rate
	Maternal Mortality Ratio
	Under 5 Mortality Rate
Education	Literacy Rate
	Gross Enrolment Rate (Primary And Gross enrollment in secondary) Schools

There are three indicators for measuring health, three for education and five for standard of living. All these indicators reflect human development.

Method of Estimating HDI

For the estimation of the HDI, the following steps may be followed:

1. All computations would be done at two stages. The first computation would help in understanding the relative positions of different blocks within the district. The second set of computation would relate to the position of a block with reference to other blocks

As a first step, a minimum and maximum value has to be set for each of the above 11 indicators to transform them into indices lying between zero and one. For this purpose, the observed minimum and maximum figures for each of the indicators will be taken. Since the Geometric Mean has to be calculated, in the case of a positive indicator, the minimum value would be taken as 10 per cent less than the observed minimum value in the block similarly, in the case of a negative indicator, the maximum value would be taken as 10 per cent more than the observed maximum value.

2. The index value (in the case of a positive indicator) can be calculated using the formula –

Index Value = (Actual Value – Min. Value) / (Max.Value – Min.Value)

Eg.: calculations will be based on highest values being assigned highest ranking

3. The index value (in the case of a negative indicator) can be calculated by using the formula –

Index Value = (Max. Value – Actual Value) / (Max.Value – Min.Value)

.For Computing sectoral indices (health, education and standard of living) geometric mean is to be used and the method of calculation is as below. Thus there will be three indices one for Standard of living, another for health and the last for education.

Sectoral Index = If I_1. I_2….. I_n are the n indices for a particular sector, then the Geometric mean for the sector = $(I_1 \times I_2 \times ….. I_n)^{(1/n)}$.

4. To compute HDI, aggregate the three sectoral indices using geometric mean with the following formula.

HDI= $(SI_l \times SI_h \times SI_e)^{(1/3)}$; where SI_l is the sectoral index for living standard, SI_h is the sectoral index for health and SI_e is the sectoral index for education.

Construction of Gender Inequality Index (GII)

Introduction

GII measures the loss in potential of human development due to inequality between female and male achievements. As it reflects an inequality situation, a value of zero represents no inequality and a value of one represents highest level of inequality in the society. The UNDP report of 2010 has brought out the GII index for all the countries.

Indicators considered for measuring GII

Dimensions	Indicators
Health	Maternal Mortality Rate (MMR)
	Share of Institutional deliveries (ID)
	Ante-natal coverage
Empowerment	Share of female and male elected representatives in Urban and Rural Local Bodies (PR_F and PR_M)
	Share of female and male literacy (LIT_F, LIT_M)
	Share of Female and Male Children (0-6) years
Labour market	Share of female and male Work Participation Rate (WPR_F, WPR_M)
	Share of female and male workers in the non agricultural sector (NAG_F, NAG_M)
	Female and male Agricultural wage rate ($WAGE_F$, $WAGE_M$)

Method

1. Aggregating across dimensions within each gender group using geometric mean.

For females

$$G_F = \sqrt[3]{\left[(\frac{1}{MMR}) \times ID \times ANE\right]^{1/3} * \left[PR_F \times CHLD_F \times LIT_F\right]^{1/3} * \left[WPR_F \times NAG_F \times WAGE_F\right]^{1/3}}$$

For Males

$$G_M = \sqrt[3]{1 * \left[PR_M \times CHLD_M \times LIT_M\right]^{1/3} * \left[WPR_M \times NAG_M \times WAGE_M\right]^{1/3}}$$

2. Aggregating across gender group using a Harmonic mean.

$$HARM(G_F, G_M) = \left[\frac{(G_F)^{-1} + (G_M)^{-1}}{2}\right]^{-1}$$

3. Calculate the geometric mean of the Arithmetic means of the each indicator

$$G_{\overline{F},\overline{M}} = \sqrt[3]{\overline{health}.\overline{empowerment}.\overline{LFPR}}$$

Where $$\overline{health} = \left[\frac{\left[(\frac{1}{MMR} \times ID \times ANE\right]^{1/3} + 1}{2}\right]$$

$$\overline{empowerment} = \frac{\left[PR_F \times CHLD_F \times LIT_F\right]^{1/3} + \left[PR_M \times CHLD_M \times LIT_M\right]^{1/3}}{2}$$

$$\overline{LFPR} = \frac{\left[WPR_F \times NAG_F \times WAGE_F\right]^{1/3} + \left[WPR_M \times NAG_M \times WAGE_M\right]^{1/3}}{2}$$

4. Calculating the GII by comparing the equally distributed gender index to the reference standard. The GII value ranges from zero (no gender inequality across dimensions) to one (total inequality across dimensions)

$$GII = 1 - \frac{HARM(G_F, G_M)}{G_{\overline{F}, \overline{M}}}$$

Construction of Child Development Index (CDI)

Introduction

Child Development Index (CDI) is an index combining performance measures specific to children - education, health and nutrition - to produce a score on a scale of 0 to 100. A zero score would be the best. The higher the score, the worse children are faring.

The Child Development Index (CDI) was developed by the campaign in UK, "Save the Children" in 2008 through the contributions of Terry McKinley, Director of the Centre for Development Policy and Research at the School of Oriental and African Studies (SOAS), University of London, with support from Katerina Kyrili.

The indicators which make up the index are chosen because they are easily available, commonly understood, and clearly indicative of child well-being. At the international level, the three indicators used for measuring child development index are.

Indicators for Child Development

In the preparation of District Human Development reports , the following indicators would be used to measure the CDI:

Dimension	Indicator
Health	U5MR
	Child Sex Ratio(0-6)
Nutrition	Percentage of Malnourished Children
	Enrollment in Primary and Secondary
Education	Children never enrolled in schools
	Transition rate from Primary to Upper Primary and Upper Primary to Secondary

Computation of Child Development Index

- The indicators have been broadly categorised under the 3 parameters that influence the HDI.

- All the above indicators are negative and positive in nature.

  The index value (in the case of a positive indicator) can be calculated using the formula –

  Index Value = (Actual Value – Min. Value) / (Max.Value – Min.Value)

  Eg.: calculations will be based on highest values being assigned highest ranking

  The index value (in the case of a negative indicator) can be calculated by using the formula –

  Index Value = (Max. Value – Actual Value) / (Max.Value – Min.Value)

- The index values for each of the indicators would range between 0 and 1 - 0 indicating the lowest ranking for the blocks and 1 indicating highest ranking of the block

- The Child Development Index would be the average of the index values of the three indicators – with highest value indicating better child development.

- The composite index is the average of the consolidated index values of all sectors and this is to be used to assign the ranks for the blocks within the district.

Multidimensional Poverty Index

Indicators

Dimension	Indicator
Health	IMR
	Higher order Birth
	Malnourished Children
Education	Drop out in primary and secondary
Living Standards	Access to cooking fuel
	Access to toilet facilities
	Access to drinking water
	Access to Electricity
	Pucca house

Computation of Multidimensional Poverty Index

- The indicators have been broadly categorised under the 3 parameters that influence the HDI.

- All the above indicators are negative and positive in nature.

- The index value (in the case of a positive indicator) can be calculated using the formula –

  Index Value = (Actual Value – Min. Value) / (Max.Value – Min.Value)

  Eg.: calculations will be based on highest values being assigned highest ranking

- The index value (in the case of a negative indicator) can be calculated by using the formula –

  Index Value = (Max. Value – Actual Value) / (Max.Value – Min.Value)

- The index values for each of the indicators would range between 0 and 1 - 0 indicating the lowest ranking for the blocks and 1 indicating highest ranking of the block
- The composite index is the average of the consolidated index values of all sectors and this is to be used to assign the ranks for the blocks within the district.

Abbreviations

ABL	Activity Based Learning
ACR	Actual Completion Report
AD (Statistics)	Assistant Director
AD	Anno Domini
AD	Assitant Director
ADS	Auto Disabled Sringe
AEEO	Assistant Elementary Education Officer
APO	Assistant Project Officer
BBC	British Broadcasting Corporation
BPL	Below Poverty Line
BRTE	Block Resource Teacher Educator
BT Road	Bituminous Road
CARE	Cooperative for Assistance and Relief Everywhere
CBR	Crude Birth Rate
CC	Cement Concrete
CCE	Child Care Education
CDI	Child Development Index
CDR	Crude Death Rate
CEO	Chief Education Office
CSR	Child Sex Ratio
DD	Deputy Director
DDHS	Deputy Director Health Services
DE (Telecom)	Divisional Engineer
DHAN Foundation	Development of Humane Action Foundation
DHDR	District Human Development Report
DISE	District Information System for Education
DPO	District Planning Office
DRDA	District Rural Development Agency
DTC	District Tuberculosis Centre
EBB	Educationally Backwardness
ECG	Electro Cardio Graph
EE	Executive Engineer
EER	Educational Effectiveness Research
FA	Formative Assessment
ft	Feet
GAR	Gross Access Ratio
GDP	Gross Domestic Product

GER	Gross Enrolment Ratio
GII	Gender Inequality Index
GOI	Government of India
GoTN	Government of Tamil Nadu
HB	Haemoglobin
HDI	Human Devleopment Index
HHs	Households
HIV	Human Immunodeficiency Virus
HOB	High Order Birth Rate
HUD	Health Unit Division
IAS	Indian Administrative Service
IBB	Indstrially Backward
ICDS	Integrated Child Development Scheme
IFA	Iron and Folic Acid
IGN	Indiragandhi National widow pension scheme
IIPS	International Instiutes of Population Sciences
IMR	Infant Mortality Rate
IPC	Indian Penal Code
ITP Act	Immoral Traffic Police Act
KGBV	Kasturba Gandhi Balika Vidyalaya
LEB	Life Expectancy at Birth
LIC	Life Insurance Corporation
LSRW	Listen, Speak, Read and Write
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MMR	Maternal Mortality Rate
MoHFW	Ministry of Health and Family Welfare
MPI	Multidimnesional Poverty Index
NCF	National Curriculum Framework
NDDP	Net District Domestic Product
NFHS	National Family Health Survey
NGO	Non Government Organisation
NMP	Noon Meal Scheme
NPEGEL	National Programme for Education of Girls at Elementary Level
OAP	Old Age Pension
OAP	Old Age People/Persons
PA	Personal Assistant
PHC	Primary Health Centre
PLHA	People Living with HIV/AIDS
PLI	Postal Life Insurance

PRIs	Panchayat Raj Institutions
PV	Poverty
PWD	Public Works Department
RD	Rural Development
RLBs	Rural Local Bodies
SSA	Sarva Siksha Abhiyan
SABL	Simplified Activity Based Learning
SALM	Simplified Activity Learning Methodology
SBR	Still Birth Rate
SC	Scheduled Caste
SHDR	State Human Development Report
SHG	Self Help Groups
SPC	State Planning Commission
sq.km	Square Kilometre
SRS	Sample Registration System
SSA	Sarva Shiksha Abhiyan
SSS	Social Security System
ST	Scheduled Tribe
TB	Tuberclosis
TET	Teachers' Eligibility Test
TINP	Tamil Nadu Integrated Nutrition Programme
U5MR	Under Five Mortality Rate
ULB	Urban Local Bodies
UNDP	United Nations Development Programme
UNICEF	United Nations International Children's Emergency Fund
WB	Worl Bank
WBM	Water Bound Macadam
WPR	Work Participation Rate

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